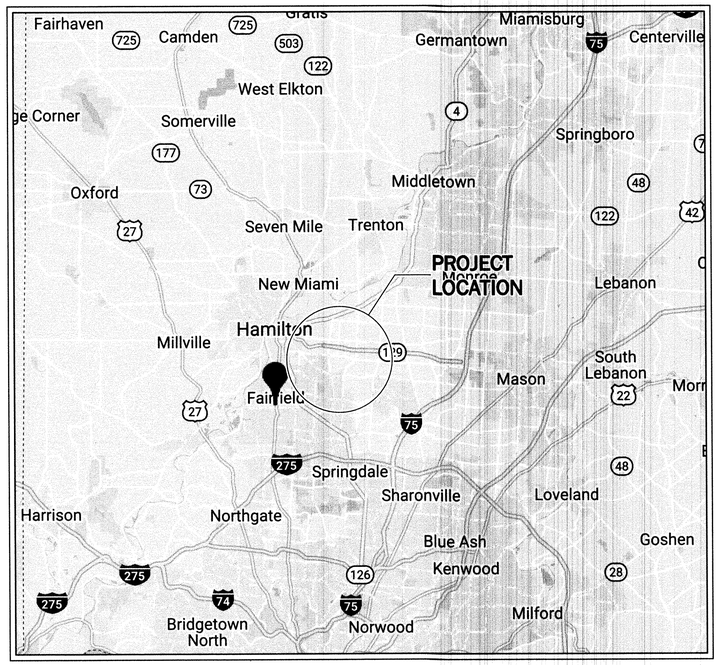
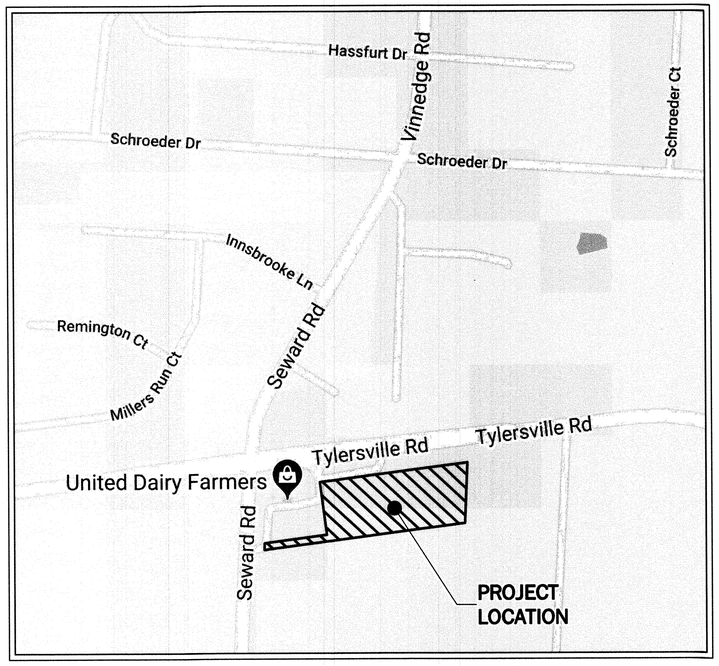
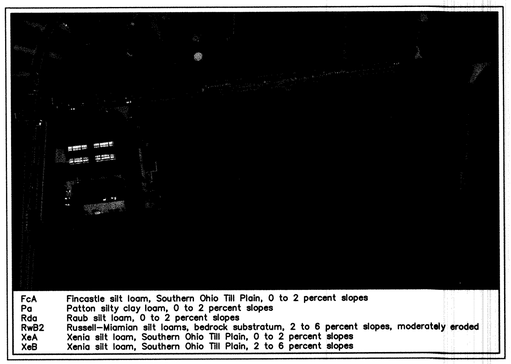
CONSTRUCTION PLANS
FOR
MINI STORAGE DEPOT
3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO



LOCATION MAP
NOT TO SCALE

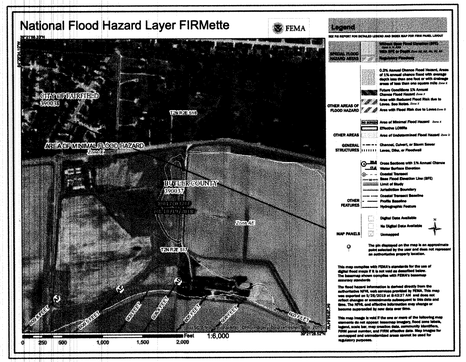


VICINITY MAP
NOT TO SCALE



FcA	Fincastle silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes
Pa	Patton silty clay loam, 0 to 2 percent slopes
Rda	Raub silt loam, 0 to 2 percent slopes
RwB2	Russell–Miamian silt loams, bedrock substratum, 2 to 6 percent slopes, moderately eroded
XeA	Xenia silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes
XeB	Xenia silt loam, Southern Ohio Till Plain, 2 to 6 percent slopes

SOILS MAP
NOT TO SCALE



FEMA MAP
NOT TO SCALE

INDEX	
DESCRIPTION	SHEET NO.
TITLE SHEET	C001
GENERAL NOTES	C002
SPECIFICATIONS	C003
OVERALL EXISTING TOPOGRAPHY	C100
EXISTING TOPOGRAPHY PLAN	C101
EXISTING TOPOGRAPHY PLAN	C102
DEMOLITION PLAN	C111
DEMOLITION PLAN	C112
OVERALL SITE PLAN	C200
SITE PLAN	C201
SITE PLAN	C202
GRADING PLAN	C301
GRADING PLAN	C302
UTILITY PLAN	C401
UTILITY PLAN	C402
STORM SEWER PLAN & PROFILE	C410
STORM SEWER PLAN & PROFILE	C411
STORM SEWER PLAN & PROFILE	C412
STORM SEWER PLAN & PROFILE	C413
STORM SEWER STRUCTURE DATA TABLE	C420
SANITARY SEWER PLAN & PROFILE	C430
OVERALL EROSION CONTROL PLAN	C500
STORM WATER POLLUTION PREVENTION PLAN	C510
EROSION CONTROL DETAILS	C520
EROSION CONTROL DETAILS	C521
SITE DETAILS	C600
SITE DETAILS	C601
SITE DETAILS	C602
LANDSCAPE PLAN	C700
LANDSCAPE DETAILS	C710

UTILITY CONTACTS

UTILITY	COMPANY	CONTACT	PHONE NO.
CABLE TELEVISION	-----	-----	(XXX) XXX-XXXX
ELECTRIC	DUKE ENERGY	TROY DITTMER	(513) 458-3844
INTERNET	SPECTRUM	KENT RIEGER	(513) 386-5499
GAS	DUKE ENERGY	BEN JOHNSON	(513) 287-1594
SANITARY SEWER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300
STORM SEWER	BUTLER COUNTY	JAMES FOX	(513) 867-4200
TELEPHONE	CINCINNATI BELL	BRECK COWAN	(513) 565-7043
WATER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-362-2764
– OHIO UNDERGROUND –

SITE PLAN CONSTRUCTION DRAWINGS APPROVED
01/22/2020 EJP

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

RECEIVED
JAN 22 2020
BY:

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

STATE OF OHIO
SHAWN L GOODWIN
E-27842
REGISTERED PROFESSIONAL ENGINEER
01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

Project Number 2019.01572

TITLE SHEET

C001

PLOT DATE: 1/21/2020 2:55 PM
PLOT SCALE: 1:2.3849
EDIT DATE: 1/6/2020
EDITED BY: HHORGAN
DRAWING FILE: P:\2019\01572\D_Drawings\Civil\Construction Documents\2019.01572.CE.C001.TS.dwg

GENERAL NOTES

1. ALL WORK TO CONFORM TO STATE AND LOCAL REGULATIONS.
2. CONTRACTOR SHALL KEEP ADJOINING PROPERTIES CLEAN OF CONSTRUCTION DEBRIS AND CONSTRUCTION TRAFFIC AT ALL TIMES.
3. THE CONTRACTOR SHALL PROTECT AND NOT DESTROY THE BASE SURVEY CONTROL POINTS DURING DEMOLITION AND CONSTRUCTION.
4. ALL UTILITY INFORMATION SHALL BE VERIFIED BY THE CONTRACTOR. CONTACT ENGINEER IMMEDIATELY IF ANY VARIATION EXISTS.
5. MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT AGAINST DAMAGE DURING DEMOLITION AND CONSTRUCTION OPERATIONS.
6. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD DIMENSIONS. IF ANY DISCREPANCIES ARE FOUND IN THESE PLANS FROM ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY.

EXISTING TOPOGRAPHY NOTES

1. EXISTING TOPOGRAPHY IS PROVIDED BY: AMERICAN STRUCTUREPOINT, INC. DATED: 08/09/2019

DEMOLITION NOTES

1. CLEAR AND GRUB ALL TREES AND VEGETATION NECESSARY FOR CONSTRUCTION.
2. PROTECT TREES TO REMAIN DURING CONSTRUCTION.
3. PLANT MATERIALS TO REMAIN, TO BE PROTECTED BY TREE FENCE WHICH ENCOMPASSES IT'S DRIP LINE. NO CONSTRUCTION EQUIPMENT, MATERIALS OR DEBRIS SHALL BE LOCATED WITHIN TREE PROTECTION BOUNDARIES. NO DEMOLITION CAN OCCUR UNTIL TREE PROTECTION IS APPROVED BY THE OWNER.
4. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, FENCES, CONCRETE, ASPHALT PAVEMENT AND OTHER MISCELLANEOUS APPURTENANCES OFF SITE, UNLESS NOTED TO REMAIN ON THE CONTRACT DRAWINGS.
5. DEMOLISH FOUNDATIONS AND OTHER BELOW-GRADE CONSTRUCTION, INCLUDING CONCRETE SLABS, TO A DEPTH OF NOT LESS THAN 48 INCHES BELOW LOWEST FOUNDATION LEVEL.
6. COMPLETELY FILL BELOW-GRADE AREAS AND VOIDS RESULTING FROM DEMOLITION OF STRUCTURES, WITH COMPACTED GRANULAR BACKFILL.
7. THE USE OF ANY TYPE OF EXPLOSIVES WILL NOT BE PERMITTED.
8. CONDUCT DEMOLITION AND CONSTRUCTION OPERATIONS TO ENSURE MINIMAL INTERFERENCE WITH STREETS, WALKS AND OTHER ADJACENT OCCUPIED FACILITIES.
9. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS OR OTHER OCCUPIED FACILITIES WITHOUT PERMISSION FROM THE LOCAL AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS, IF REQUIRED BY GOVERNING AUTHORITIES.
10. ENSURE SAFE PASSAGE OF PERSONS AROUND AREAS OF DEMOLITION AND CONSTRUCTION. CONDUCT OPERATIONS TO PREVENT DAMAGE TO ADJACENT STRUCTURES AND OTHER FACILITIES AND INJURY TO PERSONS.
11. PROMPTLY REPAIR DAMAGE TO ADJACENT FACILITIES CAUSED BY DEMOLITION AND CONSTRUCTION OPERATIONS.
12. ALL UTILITIES TO BE REMOVED SHALL BE DISCONNECTED AND CAPPED AT THE NEAREST CONNECTION POINT.
13. NO ON-SITE BURNING IS PERMITTED.
14. CONTRACTOR SHALL USE MEASURES TO CONTROL DUST AT ALL TIMES.
15. DEMOLITION ITEMS INCLUDE BUT ARE NOT LIMITED TO DEMOLITION ITEMS INDICATED ON THIS PLAN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE OR RELOCATE ITEMS WHICH INTERFERE WITH NEW CONSTRUCTION.
16. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCING DEMOLITION.

SITE NOTES

1. ALL PARKING STRIPES ARE TO BE 4" PAINTED (WHITE). ADA ACCESSIBLE PARKING STRIPES SHALL BE 4" PAINTED (BLUE).
2. ALL DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR FACE OF CURB, UNLESS NOTED OTHERWISE.
3. ALL DIMENSIONS ARE TO FACE OF BRICK OR FACING MATERIAL, WHERE APPLICABLE.
4. ALL DIMENSIONS ARE PARALLEL WITH, OR PERPENDICULAR TO BASE LINES, PROPERTY LINES OR BUILDING LINES, UNLESS OTHERWISE NOTED.
5. PROVIDE SMOOTH TRANSITIONS FROM NEW AREAS TO EXISTING FEATURES AS NECESSARY.
6. RESURFACE OR RECONSTRUCT AT LEAST TO ORIGINAL CONDITIONS ALL AREAS WHERE THE EXISTING PAVEMENT OR LAWNS ARE DAMAGED DURING CONSTRUCTION FROM TRAFFIC BY CONTRACTORS, SUBCONTRACTORS OR SUPPLIERS AFTER CONSTRUCTION WORK IS COMPLETE.
7. EXISTING PAVEMENT TO BE SAW CUT IN ALL AREAS WHERE INDICATED NEW PAVEMENT TO JOIN EXISTING.
8. THE EDGE OF THE EXISTING ASPHALT PAVEMENT SHALL BE PROPERLY SEALED WITH A TACK COAT MATERIAL IN ALL AREAS WHERE NEW ASPHALT PAVEMENT IS INDICATED TO JOIN EXISTING ASPHALT.
9. CONCRETE SAW CUTTING SHALL BE DONE AS SOON AS POURED CONCRETE HAS CURED AND CAN SUPPORT WEIGHT. PROVIDE A NEAT CUT WHICH IS TRUE IN ALIGNMENT.
10. ALL JOINTS ARE TO CONTINUE THROUGH THE CURB.
11. RADIAL JOINTS SHALL BE NO SHORTER THAN 1.5'.
12. CONTRACTOR SHALL USE A THICKENED EXPANSION JOINT AROUND THE PERIMETER OF ANY BLOCK OUT IN THE CONCRETE PAVING.
13. ALL CONSTRUCTION JOINTS SHALL BE SAWN, CLEANED OF DEBRIS, BLOWN DRY AND IMMEDIATELY SEALED WITH THE APPROPRIATE SEALANT ACCORDING TO MANUFACTURER'S DIRECTIONS.
14. ALL MATERIALS TO BE IN ACCORDANCE WITH LOCAL DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS RELATIVE TO MATERIAL, MIX, PLACEMENT AND WORKMANSHIP.
15. ALL SIDEWALKS SHALL COMPLY WITH ADA STANDARDS. MAXIMUM CROSS SLOPE OF 1:50 AND MAXIMUM LONGITUDINAL SLOPE OF 1:20.
16. CHAMFER ALL ENDS OF CURBS.

GRADING NOTES

1. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
2. THE EXCAVATING CONTRACTOR MUST TAKE PARTICULAR CARE WHEN EXCAVATING IN AND AROUND EXISTING UTILITY LINES AND EQUIPMENT. VERIFY COVER REQUIREMENTS BY UTILITY CONTRACTORS AND/OR UTILITY COMPANIES SO AS NOT TO CAUSE DAMAGE.
3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES 72 HOURS BEFORE CONSTRUCTION IS TO START TO VERIFY IF ANY UTILITIES ARE PRESENT ON SITE. ALL VERIFICATIONS (LOCATION, SIZE AND DEPTH), SHALL BE MADE BY THE APPROPRIATE UTILITY COMPANIES. WHEN EXCAVATING AROUND OR OVER EXISTING UTILITIES, THE CONTRACTOR MUST NOTIFY THE UTILITY COMPANY SO A REPRESENTATIVE OF THAT UTILITY COMPANY CAN BE PRESENT TO INSTRUCT AND OBSERVE DURING CONSTRUCTION. SUBCONTRACTORS ARE RESPONSIBLE FOR LOCATIONS OF UTILITIES FOR THEIR OWN WORK.
4. CONTRACTOR TO ADJUST ALL EXISTING SURFACE INFRASTRUCTURE (HYDRANTS, VALVES, HANDHOLES, CASTINGS, IRRIGATION SYSTEM, UTILITY PEDESTALS, ETC.) AS REQUIRED TO MEET PROPOSED GRADE AT HIS/HER OWN COST.
5. AFTER STRIPPING TOPSOIL MATERIAL, PROOFROLL SHALL BE PERFORMED BY A LOADED TANDEM PNEUMATIC TIRE DUMP TRUCK MINIMUM GROSS VEHICLE WEIGHT OF 15 TONS. THE TIRES SHALL BE OPERATED AT INFLATION PRESSURES BETWEEN 70-80 PSI UNLESS OTHERWISE NOTED BY THE GEOTECHINICAL ENGINEER. THE TIRES SHALL BE INFLATED WITH AIR ONLY, NO LIQUID SHALL BE USED. THE PROOFROLL SHALL BE COMPLETED UNDER INSPECTION OF SOILS FIRM TO DETERMINE LOCATIONS OF ANY POCKETS OF UNSUITABLE MATERIAL. THE NECESSITY FOR SUBDRAINS AND/OR REMOVAL OF ANY UNSUITABLE MATERIAL WILL BE DETERMINED AT THE TIME OF CONSTRUCTION.
6. PROVIDE POSITIVE DRAINAGE WITHOUT PONDING IN ALL AREAS. AFTER INSTALLATION, CONTRACTOR TO TEST FOR, AND CORRECT, IF ANY, STANDING WATER CONDITIONS.
7. ALL PROPOSED SPOT ELEVATIONS OR CONTOURS ARE THE FINAL PAVEMENT AND FINAL GRADE ELEVATIONS.
8. SEE APPROPRIATE DETAILS TO DETERMINE SUBGRADE ELEVATIONS BELOW FINISH GRADE ELEVATIONS INDICATED.
9. TRENCHES FOR ALL STORM DRAIN LINES SHALL BE BACKFILLED COMPLETELY WITH SELECT GRANULAR MATERIAL IF WITHIN 5 FEET OF PAVEMENT.
10. CONTRACTOR TO PERPETUATE ANY SUBSURFACE DRAIN TILES OR PIPES ENCOUNTERED DURING CONSTRUCTION AND PROVIDE POSITIVE OUTLET TO DOWNSTREAM RECEIVING SYSTEM. CONTRACTOR TO NOTIFY THE ENGINEER WITH ANY CIRCUMSTANCES WHERE THIS CANNOT BE ACCOMPLISHED.
11. DUE TO SITE CONSTRAINTS, THE EARTHWORK FOR THE SITE AS DESIGNED MAY OR MAY NOT BALANCE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW THE EXISTING CONDITIONS AND INCLUDE IN THEIR BID ALL EARTHWORK COSTS INCLUDING IMPORTS AND/OR EXPORTS NECESSARY TO MAKE THE SITE BALANCE.
12. CONTRACTOR TO STABILIZE EXPOSED EARTH AS INDICATED BY THE STORMWATER POLLUTION PREVENTION PLAN OR GOVERNING AUTHORITY.

UTILITY NOTES

1. SITE UTILITIES SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
2. THE EXCAVATING CONTRACTOR MUST TAKE PARTICULAR CARE WHEN EXCAVATING IN AND AROUND EXISTING UTILITY LINES AND EQUIPMENT. VERIFY COVER REQUIREMENTS BY UTILITY CONTRACTORS AND/OR UTILITY COMPANIES SO AS NOT TO CAUSE DAMAGE.
3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES 72 HOURS BEFORE CONSTRUCTION IS TO START TO VERIFY IF ANY UTILITIES ARE PRESENT ON SITE. ALL VERIFICATIONS (LOCATION, SIZE AND DEPTH), SHALL BE MADE BY THE APPROPRIATE UTILITY COMPANIES. WHEN EXCAVATING AROUND OR OVER EXISTING UTILITIES, THE CONTRACTOR MUST NOTIFY THE UTILITY COMPANY SO A REPRESENTATIVE OF THAT UTILITY COMPANY CAN BE PRESENT TO INSTRUCT AND OBSERVE DURING CONSTRUCTION. SUBCONTRACTORS ARE RESPONSIBLE FOR LOCATIONS OF UTILITIES FOR THEIR OWN WORK.
4. CONTRACTOR TO ADJUST ALL EXISTING SURFACE INFRASTRUCTURE (HYDRANTS, VALVES, HANDHOLES, CASTINGS, IRRIGATION SYSTEM, UTILITY PEDESTALS, ETC.) AS REQUIRED TO MEET PROPOSED GRADE.
5. ALL UTILITY MATERIALS AND INSTALLATION SHALL CONFORM TO LOCAL STANDARDS FOR EACH UTILITY AGENCY HAVING JURISDICTION.
6. TRENCHES FOR ALL UTILITY LINES SHALL BE BACKFILLED COMPLETELY WITH SELECT GRANULAR MATERIAL IF THE TOP OF THE TRENCH IS WITHIN 5 FEET OF PAVEMENT.
7. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES AND CONDUITS TO AVOID CONFLICTS AND PROVIDE REQUIRED MINIMUM DEPTHS OF COVER. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL BENDS WITH THRUST BLOCKS REQUIRED TO ASSURE PROPER INSTALLATION OF WATER MAINS AND LATERALS.
8. IN THE EVENT OF A CONFLICT BETWEEN WATER LINES AND STORM DRAINS, THE CONTRACTOR SHALL EITHER ADJUST THE WATER LINE DOWNWARD IN SUCH A MANNER SO THAT THE PIPE MANUFACTURER'S RECOMMENDATIONS ON PIPE DEFLECTION AND JOINT STRESS ARE NOT EXCEEDED OR THE CONTRACTOR SHALL PROVIDE APPROPRIATE BENDS AND CROSSINGS.
9. ALL COORDINATES AND DIMENSIONS ARE TO THE CENTERLINE OF UTILITIES AND STRUCTURES.
10. ALL PROPOSED STORM SEWER AND DRAINAGE APPURTENANCES SHALL BE IN CONFORMANCE WITH THE BUTLER COUNTY STORMWATER SPECIFICATIONS, LATEST EDITION. DISCREPANCIES BETWEEN THE PLANS AND THE STORMWATER SPECIFICATIONS SHALL NOT ALLEVIATE THE CONTRACTOR FROM ADHERING TO THE REQUIREMENTS AS SET FORTH IN THE STORMWATER SPECIFICATIONS.

EROSION CONTROL NOTES

1. CONTRACTOR SHALL INSTALL ALL PERIMETER SILT FENCE AND SEDIMENT CONTROL BARRIERS PRIOR TO CLEARING AND GRADING.
2. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE AS THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SOIL SEDIMENT FROM LEAVING THE SITE.
3. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION.
4. LAND ALTERATION WHICH STRIPS THE LAND OF VEGETATION, INCLUDING RE-GRADING, SHALL BE DONE IN A WAY THAT WILL MINIMIZE EROSION.
5. SEDIMENT LADEN WATER SHALL BE DETAINED BY EROSION CONTROL PRACTICES AS NEEDED TO MINIMIZE SEDIMENTATION IN RECEIVING WATER. NO STORM WATER SHALL BE DISCHARGED FROM THE SITE IN A MANNER THAT CAUSES EROSION AT THE POINT OF DISCHARGE.
6. WASTE AND UNUSED BUILDING MATERIALS SHALL NOT BE ALLOWED TO BE CARRIED FROM THE SITE BY STORM WATER RUNOFF. PROPER DISPOSAL OF ALL WASTE AND UNUSED BUILDING MATERIALS IS REQUIRED.
7. SEDIMENT BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS SHALL BE MINIMIZED. CLEARING OF ACCUMULATED SEDIMENT SHALL NOT INCLUDE FLUSHING WITH WATER. CLEARED SEDIMENT SHALL BE RETURNED TO THE SITE FOR DISPOSAL.
8. SOIL WHICH HAS ACCUMULATED NEXT TO EROSION CONTROL DEVICES SHALL BE COLLECTED AND RE-DISTRIBUTED ON SITE AFTER EACH RAINFALL EVENT, AND AT LEAST ONCE A WEEK.
9. IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
10. THE SOUTHEAST CORNER OF THE SITE IS LOCATED WITHIN A FLOODPLAIN, AS INDICATED ON THE FLOOD INSURANCE RATE MAP (FIRM) FOR BUTLER COUNTY, IN, MAP NUMBER 39017C0326F, DATED 10/19/2018.
11. SCHEDULE OF EARTHWORK ACTIVITIES:
    a. THE DURATION OF TIME WHICH AN AREA REMAINS EXPOSED SHALL BE KEPT TO A PRACTICAL MINIMUM. THE AREA SHALL BE STABILIZED AS SOON AS POSSIBLE. UN-VEGETATED AREAS THAT ARE SCHEDULED OR LIKELY TO BE LEFT INACTIVE FOR FIFTEEN (15) DAYS OR MORE MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITH MEASURES APPROPRIATE FOR THE SEASON TO MINIMIZE EROSION POTENTIAL. ALTERNATIVE MEASURES TO SITE STABILIZATION ARE ACCEPTABLE IF THE PROJECT SITE OWNER OR THEIR REPRESENTATIVE CAN DEMONSTRATE THEY HAVE IMPLEMENTED EROSION AND SEDIMENT CONTROL MEASURES ADEQUATE TO PREVENT SEDIMENT DISCHARGE.
    b. TOPSOIL REPLACEMENT SHALL TAKE PLACE FROM MARCH 1 TO OCTOBER 31. STOCKPILE TOPSOIL AT ALL OTHER TIMES OF THE YEAR. PERMANENT AND FINAL VEGETATION AND STRUCTURAL EROSION CONTROL DEVICES SHALL BE INSTALLED WITHIN SEVEN (7) DAYS AFTER FINAL GRADING OR AS SOON AS POSSIBLE.
    c. INSTALL INLET PROTECTION AROUND INLETS IMMEDIATELY UPON COMPLETION OF THE STRUCTURE. REMOVE INLET PROTECTION FOR PAVING OPERATION. REPLACE INLET PROTECTION AFTER PAVING IS COMPLETE. INLET PROTECTION SHALL REMAIN IN PLACE UNTIL VEGETATION IS ESTABLISHED ON SEEDED AREAS BEHIND THE CURB.
12. PRIOR TO COMPLETION OF THE PROJECT, CONTRACTOR SHALL CLEAN OUT ALL STORM DRAINAGE STRUCTURES AND RESTORE ALL DITCHES AND PONDS TO DESIGNED GRADES.
13. CONTRACTOR SHALL REMOVE ALL SEDIMENT CONTROL BARRIERS ONCE CONSTRUCTION IS COMPLETE AND THE SITE HAS BEEN STABILIZED.
14. ALL PROPOSED EROSION AND SEDIMENT CONTROL SHALL BE IN CONFORMANCE WITH THE BUTLER COUNTY STORMWATER SPECIFICATIONS, LATEST EDITION. DISCREPANCIES BETWEEN THE PLANS AND THE STORMWATER SPECIFICATIONS SHALL NOT ALLEVIATE THE CONTRACTOR FROM ADHERING TO THE REQUIREMENTS AS SET FORTH IN THE STORMWATER SPECIFICATIONS.
15. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED BY THE INSPECTOR.

EXISTING LEGEND

	Drainage Inlet Square		Power Pole
	Electric Transformer		Rock
	Fire Hydrant		Sanitary Manhole
+G	Gas Marker		Sign
	Gas Service Valve		Sprinkler Head
	Gas Valve		Storm Manhole
	Guy Wire		Telephone Manhole
	Iron Pin & Cap Found		Telephone Pedestal
	Iron Pin Found		Tree
	Iron Pin Set	+W	Water Marker
	Light Pole		Water Service Valve
• M.N.S.	Mag Nail Set		Water Valve
	Pine Tree		Zone "AE" (Special Flood Hazard Areas)
	Post		Zone "X" (within 0.2% Chance Annual Floodplain)
	Power & Telephone Pole		

BENCHMARK DATA

BASIS OF BEARING (HORIZONTAL)
BEARINGS DESCRIBED HEREIN ARE BASED ON NORTH 84 DEGREES 44 MINUTES 30 SECONDS EAST FOR THE CENTERLINE OF RIGHT-OF-WAY FOR TYLERSVILLE ROAD, MEASURED FROM GRID NORTH, REFERENCED TO THE OHIO STATE PLANE COORDINATE SYSTEM (SOUTH ZONE) AND THE NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT), AS ESTABLISHED UTILIZING A GPS SURVEY AND AN NGS OPUS SOLUTION.

ELEVATION DATUM (VERTICAL)
ELEVATIONS SHOWN HEREIN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, AS ESTABLISHED UTILIZING A LEVEL CIRCUIT ORIGINATING ON CONTROL POINT 1100 (ELEVATION = 615.28)

CP 1100
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED 161.65 FEET NORTHEAST OF A BRICK DUMPSTER STRUCTURE, 147.65 FEET SOUTHEAST OF THE SOUTHEAST CORNER OF A CAR WASH AND 182.85 FEET SOUTH OF LAMP POLE.
ELEV: 615.28

CP 1101
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED IN A GRASS AREA 26.36 FEET SOUTH OF TYLERSVILLE ROAD, 21.48 FEET NORTH OF AN ASPHALT DRIVE, EAST OF THE EXIT DRIVE AND 3.00 FEET EAST OF A CATCH BASIN.
ELEV: 616.63

CP 1102
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED ON THE WEST SIDE OF SEWARD ROAD, 34.75 FEET WEST OF THE EDGE OF PAVEMENT, 119.09 FEET SOUTHWEST OF A POWER POLE AND 130.53 FEET SOUTHWEST OF A FIRE HYDRANT ON THE SOUTH SIDE OF A DRIVE ON THE EAST SIDE OF SEWARD ROAD.
ELEV: 621.66

BM 50
CHISLED SQUARE ON THE SOUTHWEST CORNER OF A SQUARE CATCH BASIN LOCATED 25 FEET SOUTH OF TYLERSVILLE ROAD, 40.56 FEET EAST OF THE CURB FOR THE EXIT ONLY LANE FROM THE NORTHEAST CORNER OF THE ADJOINING UDF PROPERTY.
ELEV: 617.48

BM 51
CHISLED "X" ON THE NORTH BOLT OF A FIRE HYDRANT LOCATED ON THE EAST SIDE OF STEWARD ROAD, 144.80 FEET SOUTHWEST OF THE SOUTHWEST CORNER OF THE UDF BUILDING.
ELEV: 623.28

BM 53
CHISLED "X" ON THE NORTHEAST BOLT OF A FIRE HYDRANT LOCATED ON THE NORTH SIDE OF TYLERSVILLE ROAD.
ELEV: 613.15

GEOTECHNICAL & ENVIRONMENTAL NOTE:

1. CONTRACTOR SHALL REFER TO THE GEOTECHNICAL ENGINEERING REPORT FOR INFORMATION ABOUT SOIL CONDITIONS.
2. CONTRACTOR SHALL REFER TO THE ENVIRONMENTAL REPORT FOR INFORMATION ON ENVIRONMENTAL FINDINGS ON THE SITE.

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

UTILITY CONTACTS

UTILITY	COMPANY	CONTACT	PHONE NO.
CABLE TELEVISION	------	------	(XXX) XXX-XXXX
ELECTRIC	DUKE ENERGY	TROY DITTMER	(513) 458-3844
INTERNET	SPECTRUM	KENT RIEGER	(513) 386-5499
GAS	DUKE ENERGY	BEN JOHNSON	(513) 287-1594
SANITARY SEWER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300
STORM SEWER	BUTLER COUNTY	JAMES FOX	(513) 867-4200
TELEPHONE	CINCINNATI BELL	BRECK COWAN	(513) 565-7043
WATER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-362-2764
- OHIO UNDERGROUND -

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

STERLING

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

STATE OF OHIO
SHAWN L GOODWIN
E-68302
REGISTERED PROFESSIONAL ENGINEER

01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

Project Number 2019.01572

GENERAL NOTES

C002

PLOT DATE: 1/21/2020 2:55 PM
PLOT SCALE: 1:2.5849
EDIT DATE: 11/6/2019
EDITED BY: CLANGFORD
DRAWING FILE: P:\2019\01572\D Drawings\Civil\Construction Documents\2019.01572 GE C002 GN.dwg

EARTHWORK:

A. GENERAL

1. EARTHWORK INCLUDES CLEARING, GRUBBING, SUBGRADE PREPARATION, REMOVAL OF TREES AND VEGETATION (INCLUDING STUMPS), PROTECTION OF TREES TO REMAIN, STRIPPING AND STORAGE OF TOPSOIL, FILL COMPACTION AND ROUGH GRADING OF ENTIRE SITE AS INDICATED ON DRAWINGS.
2. THE CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING OF ANY CHANGES, ERRORS, OR OMISSIONS FOUND ON THE PLANS OR IN THE FIELD, BEFORE WORK IS STARTED OR RESUMED.
3. CONTRACTOR SHALL PROVIDE AND PLACE ANY ADDITIONAL FILL MATERIAL FROM OFF THE SITE AS MAY BE NECESSARY TO PRODUCE THE GRADES REQUIRED AS SHOWN ON THE DRAWINGS. FILL OBTAINED FROM OFF SITE MUST BE SUITABLE SOIL AS DEFINED IN THE SPECIFICATIONS OR AS OTHERWISE APPROVED BY OWNER.
4. THE CONTRACTOR SHALL ACCEPT THE SITE IN ITS CURRENT STATE AND SHALL REMOVE ALL TRASH, RUBBISH, AND DEBRIS FROM THE SITE PRIOR TO STARTING EXCAVATION.
5. EXCEPT FOR STRIPPED TOPSOIL AND OTHER MATERIALS INDICATED TO BE STOCKPILED OR OTHERWISE REMAIN OWNER'S PROPERTY, CLEARED MATERIALS SHALL BECOME CONTRACTOR'S PROPERTY AND SHALL BE REMOVED FROM PROJECT SITE.
6. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, DRIVES, FACILITIES, ETC. WITHOUT OWNER PERMISSION OR AUTHORITY HAVING JURISDICTION.
7. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCING EARTHWORK AND CLEARING OPERATIONS. EROSION CONTROL MEASURES SHOULD BE PROTECTED AND MAINTAINED THROUGHOUT CONSTRUCTION.
8. CONTRACTOR SHALL CAREFULLY MAINTAIN ALL BENCHMARKS, MONUMENTS, AND OTHER REFERENCE POINTS. IF DISTURBED, CONTRACTOR SHALL ENGAGE LICENSED LAND SURVEY FOR REPLACEMENT OF REFERENCE POINTS.
9. WHERE THESE SPECIFICATIONS CONFLICT WITH BUTLER COUNTY STANDARDS, THE STANDARDS OF THE JURISDICTION HAVING AUTHORITY SHALL PREVAIL.

B. MATERIALS

1. CONTRACTOR TO PROVIDE BORROW SOIL MATERIALS WHEN SUFFICIENT SATISFACTORY SOIL MATERIALS ARE NOT AVAILABLE FROM EXCAVATIONS.
2. SATISFACTORY (OR SUITABLE) SOILS: SOIL CLASSIFICATION GROUPS GW, GP, GM, SW, SP, AND SM ACCORDING TO ASTM D2487, OR A COMBINATION OF THESE GROUPS; FREE OF ROCK OR GRAVEL LARGER THAN 3 INCHES IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION AND OTHER DELETERIOUS MATERIAL.
3. UNSATISFACTORY (OR UNSUITABLE) SOILS: SOIL CLASSIFICATION GROUPS GC, SC, CL, ML, OL CH, MH, OH, AND PT ACCORDING TO ASTM D 2487, OR A COMBINATION OF THESE GROUPS. UNSATISFACTORY SOILS ALSO INCLUDES SATISFACTORY SOILS NOT MAINTAINED WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT AT TIME OF COMPACTION.

C. EXECUTION

1. CONTRACTOR SHALL LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP UTILITIES INDICATED TO BE REMOVED OR ABANDONED IN PLACE. DO NOT INTERRUPT UTILITIES SERVING FACILITIES OCCUPIED BY OWNER UNLESS PERMISSION IS GRANTED. NOTIFY OWNER AT LEAST TWO DAYS IN ADVANCE OF PROPOSED UTILITY INTERRUPTIONS.
2. REMOVE OBSTRUCTIONS, TREES, SHRUBS, AND OTHER VEGETATION AS REQUIRED FOR NEW CONSTRUCTION. STRIP TOPSOIL TO DEPTH AS REQUIRED IN THE FIELD TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL OR OTHER WASTE MATERIALS. STOCKPILE TOPSOIL AWAY FROM EXCAVATIONS WITHOUT INTERMIXING WITH SUBSOIL AND GRADE STOCKPILES TO DRAIN SURFACE WATER.
3. REMOVE EXISTING ABOVE AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND NECESSARY TO FACILITATE NEW CONSTRUCTION.
4. PROTECT SUBGRADES AND FOUNDATION SOILS FROM FREEZING TEMPERATURES, FROST, AND PONDING WATER.
5. EXCAVATE TO INDICATED ELEVATIONS AND DIMENSIONS FOR ALL STRUCTURES, WALKS, PAVEMENTS, AND UTILITY TRENCHES.
6. CONTRACTOR SHALL FURNISH AND OPERATE ALL DEWATERING MEASURES REQUIRED TO FACILITATE NEW CONSTRUCTION AND IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
7. PROOF ROLL SUBGRADE BELOW BUILDING PAVEMENTS WITH A PNEUMATIC-TIRED DUMP TRUCK TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING. DO NOT PROOF ROLL WET OR SATURATED SUBGRADES. RECONSTRUCT SUBGRADES DAMAGED BY FREEZING TEMPERATURES, FROST, RAIN, ACCUMULATED WATER, OR CONSTRUCTION ACTIVITIES AS DIRECTED BY ENGINEER OR OWNER REPRESENTATIVE, WITHOUT ADDITIONAL COMPENSATION.
7. BACKFILL ALL UTILITY TRENCHES BENEATH PAVEMENT (AND WITHIN 5') WITH GRANULAR MATERIAL
8. SOIL FILL: USE SATISFACTORY SOIL MATERIAL UNDER ALL WALKS, PAVEMENTS, STEPS, RAMPS, BUILDING SLABS, FOOTINGS, AND FOUNDATIONS.
9. UNIFORMLY MOISTEN OR AERATE SUBGRADE AND EACH SUBSEQUENT FILL OR BACKFILL SOIL LAYER BEFORE COMPACTION TO WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT. DO NOT PLACE BACKFILL OR FILL SOIL MATERIAL ON SURFACES THAT ARE MUDDY, FROZEN, OR CONTAIN FROST OR ICE. REMOVE AND REPLACE, OR SCARIFY AND AIR DRY, OTHERWISE SATISFACTORY SOIL MATERIAL THAT EXCEEDS OPTIMUM MOISTURE CONTENT BY 2 PERCENT AND IS TOO WET TO COMPACT TO SPECIFIED DENSITY.
10. COMPACTION OF SOIL BACKFILLS AND FILLS ARE TO BE IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS. WHERE NO GEOTECHNICAL REPORT EXISTS, COMPACT ALL FILL MATERIAL BELOW STRUCTURES, PAVEMENTS, WALKS, UTILITY TRENCHES AND STEPS (AND WITHIN 5 FEET OF SAID AREAS) TO 98 PERCENT OF THE MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D-698 (STANDARD PROCTOR DENSITY). COMPACT ALL FILL MATERIALS BELOW TURF OR UNPAVED AREAS TO 85 PERCENT OF THE MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D-698 (STANDARD PROCTOR DENSITY). ALL FILL MATERIALS TO BE COMPACTED IN MAXIMUM 8-INCH LIFTS.
11. SITE ROUGH GRADING: SLOPE GRADES TO DIRECT WATER AWAY FROM BUILDINGS AND TO PREVENT PONDING. FINISH SUBGRADES TO REQUIRED ELEVATIONS WITHIN THE FOLLOWING TOLERANCES:
    i. TURF OR UNPAVED AREAS: PLUS OR MINUS 1 INCH
    ii. WALKS: PLUS OR MINUS 1/2 INCH.
    iii. PAVEMENTS: PLUS OR MINUS 1/2 INCH
    iv. INSIDE BUILDING LINES: FINISH SUBGRADE TO A TOLERANCE OF ½ INCH WHEN TESTED WITH A 10-FOOT STRAIGHTEDGE.
12. QUALITY CONTROL: QUALIFIED GEOTECHNICAL ENGINEER TO BE ENGAGED AS TESTING AGENCY AS DIRECTED BY OWNER.
13. REPAIR AND REESTABLISH GRADES TO SPECIFIED TOLERANCES WHERE COMPLETED OR PARTIALLY COMPLETED SURFACES BECOME ERODED, RUTTED, SETTLED, OR WHERE THEY LOSE COMPACTION DUE TO SUBSEQUENT CONSTRUCTION OPERATIONS OR WEATHER

STORM SEWER:

A. GENERAL

1. STORM SEWER INCLUDES ALL PIPES, FITTINGS, MANHOLES, CLEANOUTS, TRANSITION COUPLINGS, CATCH BASINS, INLETS, END SECTIONS, AND OUTLETS.
2. THE CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING OF ANY CHANGES, ERRORS, OR OMISSIONS FOUND ON THE PLANS OR IN THE FIELD, BEFORE WORK IS STARTED OR RESUMED.
3. CONTRACTOR SHALL LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP UTILITIES INDICATED TO BE REMOVED OR ABANDONED IN PLACE. DO NOT INTERRUPT UTILITIES SERVING FACILITIES OCCUPIED BY OWNER UNLESS PERMISSION IS GRANTED. NOTIFY OWNER AT LEAST TWO DAYS IN ADVANCE OF PROPOSED UTILITY INTERRUPTIONS.

B. PRODUCTS

1. PE PIPE AND FITTINGS: PE DRAINAGE PIPE AND FITTINGS NP 3 TO NPS 10, AASHTO M 252M, TYPE S, WITH SMOOTH WATERWAY FOR COUPLING JOINTS. PE DRAINAGE PIPE AND FITTINGS NPS 12 TO NPS 60, AASHTO M 294M, TYPE S, WITH SMOOTH WATERWAY FOR COUPLING JOINTS.
2. PVC PIPE AND FITTINGS: PIPE: ASTM F 949, PVC, OR ASTM D-3034, F-1336, F-679, CORRUGATED PIPE WITH BELL AND SPIGOT ENDS FOR GASKETED JOINTS. FITTINGS: ASTM 949, PVC MOLDED OR FABRICATED, SOCKET TYPE. GASKETS: ASTM F 477, ELASTOMERIC SEALS.
3. CONCRETE PIPE AND FITTINGS: REINFORCED CONCRETE SEWER PIPE AND FITTINGS MEETING ASTM C 76 WITH BELL AND SPIGOT ENDS AND GASKETED JOINTS WITH ASTM C 443 RUBBER GASKETS. PIPE TO BE CLASS III UNLESS OTHERWISE INDICATED ON PLANS.
4. COMPLY WITH ASTM C 1173, ELASTOMERIC SLEEVE-TYPE REDUCING OR TRANSITION COUPLING, FOR JOINTING UNDERGROUND NON-PRESSURE PIPING. INCLUDE ENDS OF SAME SIZES AS PIPING TO BE JOINED, AND CORROSION-RESISTANT METAL TENSION BAND AND TIGHTENING MECHANISM ON EACH END.
5. CLEANOUTS: CAST IRON CLEANOUTS: ASME A112.36.2M ROUND, GRAY-IRON HOUSING WITH CLAMPING DEVICE AND ROUND, SECURED, SCORIATED, GRAY-IRON COVER. HEAVY DUTY TOP LOADING IS REQUIRED. PLASTIC CLEANOUTS: PVC BODY WITH PVC THREADED PLUG.
6. MANHOLES AND CATCH BASINS: STANDARD REINFORCED PRECAST CONCRETE MANHOLES MEETING ASTM C 478. MINIMUM 48-INCH DIAMETER UNLESS OTHERWISE INDICATED. BASE SECTION TO BE MINIMUM 6-INCH THICKNESS AND 4-INCH THICKNESS FOR WALLS AND BASE RISER SECTION. REINFORCED CONCRETE GRADE RINGS, 6-9 INCH TOTAL THICKNESS, TO MATCH DIAMETER OF MANHOLE FRAME AND COVER. MANHOLE FRAMES AND COVERS AS INDICATED ON DRAWINGS. PIPE CONNECTORS SHOULD BE PROVIDED TO MEET ASTM C293, RESILIENT, OF SIZE REQUIRED, FOR EACH PIPE CONNECTING TO THE BASE SECTION.
7. CONCRETE: CAST-IN-PLACE CONCRETE ACCORDING TO ACI 318 AND ACI 350/350R AND IN ACCORDANCE WITH THE FOLLOWING:
    i. CEMENT: ASTM C 150, TYPE III
    ii. FINE AGGREGATE: ASTM C 33, SAND
    iii. COARSE AGGREGATE: ASTM C 33, CRUSHED GRAVEL
    iv. WATER: POTABLE
8. PORTLAND CEMENT DESIGN MIX: 4,000 PSI MINIMUM WITH 0.45 MAXIMUM WATER/CEMENTIOUS MATERIALS RATIO. REINFORCING FABRIC TO MEET ASTM A 185/A 185M, STEEL, WELDED WIRE FABRIC, PLAIN. REINFORCING BARS TO MEET ASTM A 615/A 615M, GRADE 60 DEFORMED STEEL.
9. MANHOLE CHANNELS TO BE FORMED WITH AN INVERT SLOPE OF 2 PERCENT THROUGH THE MANHOLE AND BENCHES AT 4 PERCENT, SLOPED TO DRAIN INTO CHANNEL.
10. INLETS: PROVIDE INLETS WITH HEAVY DUTY CASTINGS AS SHOWN ON DRAWINGS.
11. OUTLETS: CONCRETE END SECTION SHOULD BE PROVIDED AT ALL PIPE ENDS AND AS INDICATED ON DRAWINGS. RIP RAP APRONS TO BE INSTALLED AT ALL END SECTIONS TO DIMENSIONS INDICATED. AVERAGE RIP-RAP SIZE TO BE 6-INCHES UNLESS OTHERWISE INDICATED ON DRAWINGS.

STORM SEWER (CONT.):

C. EXECUTION

1. INSTALL PIPING BEGINNING AT LOW POINT, TRUE TO GRADES AND ALIGNMENT INDICATED WITH UNBROKEN CONTINUITY OF INVERT. PLACE BELL ENDS OF PIPING FACING UPSTREAM. INSTALL GASKETS, SEALS, SLEEVES, AND OTHER COUPLINGS ACCORDING TO MANUFACTURERS WRITTEN INSTRUCTIONS.
2. WHEN INSTALLING PIPE UNDER STREETS OR OTHER OBSTRUCTIONS THAT CANNOT BE DISTURBED, USE PIPE-JACKING PROCESS OF MICRO-TUNNELING.
3. INSTALL PIPING PITCHED DOWN IN DIRECTION OF FLOW. INSTALL PE CORRUGATED SEWER PIPING IN ACCORDANCE WITH ASTM D 2231. INSTALL PVC PIPING ACCORDING TO ASTM D 2321 AND ASTM F 1668. INSTALL REINFORCED CONCRETE SEWER PIPING IN ACCORDANCE WITH ASTM C 1479 AND ACPA'S "CONCRETE PIPE INSTALLATION MANUAL."
4. PIPE JOINT CONSTRUCTION: JOIN CORRUGATED PE PIPE ACCORDING TO ASTM D 3212 FOR PUSH ON JOINTS. JOIN PVC CORRUGATED SEWER PIPING IN ACCORDANCE WITH ASTM D 2321 FOR ELASTOMERIC-SEAL JOINTS. JOIN REINFORCED CONCRETE PIPE ACCORDING TO ACPA'S "CONCRETE PIPE INSTALLATION MANUAL" FOR RUBBER-GASKETED JOINTS. JON DISSIMILAR PIPE MATERIALS WITH NON-PRESSURE TYPE FLEXIBLE COUPLINGS.
5. CONTRACTOR TO INSPECT INTERIOR OF PIPING AND MANHOLES FOR DEFECTS. DEFECTS REQUIRING CORRECTION INCLUDE THE FOLLOWING:
    i. ALIGNMENT: LESS THAN FULL DIAMETER OF INSIDE OF PIPE IS VISIBLE BETWEEN STRUCTURES.
    ii. DEFLECTION: FLEXIBLE PIPING WITH DEFLECTION THAT PREVENTS PASSAGE OF BALL OR CYLINDER OF SIZE NOT LESS THAN 92.5 PERCENT OF PIPING DIAMETER.
    iii. DAMAGE: CRUSHED, BROKEN, CRACKED, OR OTHERWISE DAMAGED PIPING.
    iv. INFILTRATION: WATER LEAKAGE INTO PIPING.
    v. EXFILTRATION: WATER LEAKAGE FROM OR AROUND PIPING
    REPLACE DEFECTIVE PIPING USING NEW MATERIALS, AND REPEAT INSPECTION UNTIL DEFECTS ARE WITHIN ALLOWANCES SPECIFIED.
6. TEST NEW PIPING SYSTEMS, AND PARTS OF EXISTING SYSTEMS THAT HAVE BEEN ALTERED, EXTENDED, REPAIRED, FOR LEAKS AND DEFECTS. FOR GRAVITY FLOW STORM DRAINAGE PIPING: TEST ACCORDING TO REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION, UNI-B-6, AND THE FOLLOWING:
    i. EXCEPTION: PIPING WITH SOILTIGHT JOINTS UNLESS REQUIRED BY AUTHORITIES HAVING JURISDICTION.
    ii. OPTION: TEST PLASTIC PIPING ACCORDING TO ASTM F 1417
    iii. OPTION: TEST CONCRETE PIPING ACCORDING TO ASTM C 924
7. SUBMIT TESTING REPORTS AS REQUIRED BY OWNER OR AUTHORITY HAVING JURISDICTION.

ASPHALT PAVING:

A. GENERAL

1. THE CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING OF ANY CHANGES, ERRORS, OR OMISSIONS FOUND ON THE PLANS OR IN THE FIELD, BEFORE WORK IS STARTED OR RESUMED.
2. USE MATERIALS AND GRADATIONS THAT HAVE PERFORMED SATISFACTORILY IN PREVIOUS INSTALLATIONS.

B. PRODUCTS

1. AGGREGATES
    i. COURSE AGGREGATE: ASTM D 692/D92M, SOUND; ANGULAR CRUSHED STONE, CRUSHED GRAVEL, OR CURED, CRUSHED BLAST-FURNANCE SLAG.
    ii. FINE AGGREGATE: ASTM D 1073 OR AASHTO M 29, SHARP-EDGED NATURAL SAND OR SAND PREPARED FROM STONE, GRAVEL, CURED BLAST-FURNANCE SLAG, OR COMBINATIONS THEREOF.
        a. FOR HOT-MIX ASPHALT, LIMIT NATURAL SAND TO A MAXIMUM OF 20 PERCENT BY WEIGHT OF THE TOTAL AGGREGATE MASS.
    iii. MINERAL FILLER: ASTM D 242 OR AASHTO M 17, ROCK OR SLAG DUST, HYDRAULIC CEMENT, OR OTHER INERT MATERIAL
2. ASPHALT MATERIALS
    i. ASPHALT BINDER: AASHTO M 320, PG 64-22 (OR AS OTHERWISE RECOMMENDED BY ODOT STANDARDS)
    ii. ASPHALT CEMENT: PER ODOT STANDARDS
    iii. CUTBACK PRIME COAT: PER ODOT STANDARDS
    iv. EMULSIFIED ASPHALT PRIME COAT: PER ODOT STANDARDS
    v. TACK COAT: PER ODOT STANDARDS
    vi. WATER: POTABLE.
    vii. UNDERSEALING ASPHALT: ASTM D 3141; PUMPING CONSISTENCY.
3. AUXILIARY MATERIALS
    i. RECYCLED MATERIALS FOR HOT-MIX ASPHALT MIXES: RECLAIMED ASPHALT PAVEMENT; RECLAIMED, UNBOUND AGGREGATE BASE MATERIAL; AND RECYCLED ASPHALT SHINGLES FROM SOURCES AND GRADATIONS THAT HAVE PERFORMED SATISFACTORILY IN PREVIOUS INSTALLATIONS, EQUAL TO PERFORMANCE OF REQUIRED HOT-MIX ASPHALT PAVING PRODUCED FROM ALL NEW MATERIALS.
    ii. HERBICIDE: COMMERCIAL CHEMICAL FOR WEED CONTROL, REGISTERED BY THE EPA, AND NOT CLASSIFIED AS "RESTRICTED USE" FOR LOCATIONS AND CONDITIONS OF APPLICATION. PROVIDE IN GRANULAR, LIQUID, OR WETTABLE POWDER FORM.
    iii. SAND: ASTM D 1073 OR AASHTO M 29, GRADE NO. 2 OR NO. 3.
4. MIXES
    i. RECYCLED CONTENT OF HOT-MIX ASPHALT: PER ODOT STANDARDS
    ii. HOT-MIX ASPHALT: DENSE-GRADED, HOT-LAID, HOT-MIX ASPHALT PLANT MIXES
    APPROVED BY ODOT AND COMPLYING WITH THE FOLLOWING REQUIREMENTS:
        a. PROVIDE MIXES WITH A HISTORY OF SATISFACTORY PERFORMANCE IN GEOGRAPHICAL AREA WHERE PROJECT IS LOCATED.
        b. BASE COURSE: 25.0 MM OR 19.0 MM (AS INDICATED ON DRAWINGS)
        c. SURFACE COURSE: 9.5MM

C. EXECUTION

1. EXAMINATION
    i. VERIFY THAT SUBGRADE IS DRY AND IN SUITABLE CONDITION TO BEGIN PAVING.
    ii. PROOF-ROLL SUBGRADE BELOW PAVEMENTS WITH HEAVY PNEUMATIC-TIRED EQUIPMENT TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING. DO NOT PROOF-ROLL WET OR SATURATED SUBGRADES. PROOFROLL TO BE PERFORMED BY QUALIFIED GEOTECHNICAL ENGINEER.
        a. COMPLETELY PROOF-ROLL SUBGRADE IN ONE DIRECTION LIMIT VEHICLE SPEED TO 3 MPH.
        b. PROOF ROLL WITH A LOADED 10-WHEEL, TANDEM-AXLE DUMP TRUCK WEIGHING NOT LESS THAN 15 TONS
        c. EXCAVATE SOFT SPOTS, UNSATISFACTORY SOILS, AND AREAS OF EXCESSIVE PUMPING OR RUTTING, AS DETERMINED BY ENGINEER, AND REPLACE WITH COMPACTED BACKFILL OR FILL AS DIRECTED.
        d. PROCEED WITH PAVING ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
2. SURFACE PREPARATION
    i. GENERAL: IMMEDIATELY BEFORE PLACING ASPHALT MATERIALS, REMOVE LOOSE AND DELETERIOUS MATERIAL FROM SUBSTRATE SURFACES. ENSURE THAT PREPARED SUBGRADE IS READY TO RECEIVE PAVING.
    ii. HERBICIDE TREATMENT: APPLY HERBICIDE ACCORDING TO MANUFACTURER'S RECOMMENDED RATES AND WRITTEN APPLICATION INSTRUCTIONS. APPLY TO DRY, PREPARED SUBGRADE OR SURFACE OF COMPACTED-AGGREGATE BASE BEFORE APPLYING PAVING MATERIALS.
        a. MIX HERBICIDE WITH PRIME COAT IF FORMULATED BY MANUFACTURER FOR THAT PURPOSE2
    iii. CUTBACK PRIME COAT: APPLY UNIFORMLY OVER SURFACE OF COMPACTED UNBOUND-AGGREGATE BASE COURSE AT A RATE OF 0.15 TO 0.50 GAL./SQ. YD. APPLY ENOUGH MATERIAL TO PENETRATE AND SEAL, BUT NOT FLOOD, SURFACE. ALLOW PRIME COAT TO CURE.
        a. IF PRIME COAT IS NOT ENTIRELY ABSORBED WITHIN 24 HOURS AFTER APPLICATION, SPREAD SAND OVER SURFACE TO BLOT EXCESS ASPHALT. USE ENOUGH SAND TO PREVENT PICKUP UNDER TRAFFIC. REMOVE LOOSE SAND BY SWEEPING BEFORE PAVEMENT IS PLACED AND AFTER VOLATILES HAVE EVAPORATED.
        b. PROTECT PRIMED SUBSTRATE FROM DAMAGE UNTIL READY TO RECEIVE PAVING.
    iv. TACK COAT: APPLY UNIFORMLY TO SURFACES OF EXISTING PAVEMENT AT A RATE OF 0.05 TO 0.15 GAL./SQ. YD.
        a. ALLOW TACK COAT TO CURE UNDISTURBED BEFORE APPLYING HOT-MIX ASPHALT PAVING.
        b. AVOID SMEARING OR STAINING ADJOINING SURFACES, APPURTENANCES, AND SURROUNDINGS. REMOVE SPILLAGES AND CLEAN AFFECTED SURFACES.
3. PLACING HOT-MIX ASPHALT
    i. MACHINE PLACE HOT-MIX ASPHALT ON PREPARED SURFACE, SPREAD UNIFORMLY, AND STRIKE OFF. PLACE ASPHALT MIX BY HAND IN AREAS INACCESSIBLE TO EQUIPMENT IN A MANNER THAT PREVENTS SEGREGATION OF MIX. PLACE EACH COURSE TO REQUIRED GRADE, CROSS SECTION, AND THICKNESS WHEN COMPACTED.
        a. PLACE HOT-MIX ASPHALT BASE COURSE IN NUMBER OF LIFTS AND THICKNESSES INDICATED.
        b. PLACE HOT-MIX ASPHALT SURFACE COURSE IN SINGLE LIFT.
        c. SPREAD MIX AT A MINIMUM TEMPERATURE OF 250 DEG F
        d. BEGIN APPLYING MIX ALONG CENTERLINE OF CROWN FOR CROWNED SECTIONS AND ON HIGH SIDE OF ONE-WAY SLOPES UNLESS OTHERWISE INDICATED.
        e. REGULATE PAVER MACHINE SPEED TO OBTAIN SMOOTH, CONTINUOUS SURFACE FREE OF PULLS AND TEARS IN ASPHALT-PAVING MAT.
    ii. PLACE PAVING IN CONSECUTIVE STRIPS NOT LESS THAN 10 FEET WIDE UNLESS INFILL EDGE STRIPS OF A LESSER WIDTH ARE REQUIRED.
        a. AFTER FIRST STRIP HAS BEEN PLACED AND ROLLED, PLACE SUCCEEDING STRIPS AND EXTEND ROLLING TO OVERLAP PREVIOUS STRIPS. OVERLAP MIX PLACEMENT ABOUT 1 TO 1-1/2 INCHES FROM STRIP TO STRIP TO ENSURE PROPER COMPACTION OF MIX ALONG LONGITUDINAL JOINTS.
        b. COMPLETE A SECTION OF ASPHALT BASE COURSE BEFORE PLACING ASPHALT SURFACE COURSE.
    iii. PROMPTLY CORRECT SURFACE IRREGULARITIES IN PAVING COURSE BEHIND PAVER. USE SUITABLE HAND TOOLS TO REMOVE EXCESS MATERIAL FORMING HIGH SPOTS. FILL DEPRESSIONS WITH HOT-MIX ASPHALT TO PREVENT SEGREGATION OF MIX; USE SUITABLE HAND TOOLS TO SMOOTH SURFACE.
4. JOINTS
    i. CONSTRUCT JOINTS TO ENSURE A CONTINUOUS BOND BETWEEN ADJOINING PAVING SECTIONS. CONSTRUCT JOINTS FREE OF DEPRESSIONS, WITH SAME TEXTURE AND SMOOTHNESS AS OTHER SECTIONS OF HOT-MIX ASPHALT COURSE.
        a. CLEAN CONTACT SURFACES AND APPLY TACK COAT TO JOINTS.
        b. OFFSET LONGITUDINAL JOINTS, IN SUCCESSIVE COURSES, A MINIMUM OF 6 INCHES
        c. OFFSET TRANSVERSE JOINTS, IN SUCCESSIVE COURSES, A MINIMUM OF 24 INCHES
        d. CONSTRUCT TRANSVERSE JOINTS AT EACH POINT WHERE PAVER ENDS A DAY'S WORK AND RESUMES WORK AT A SUBSEQUENT TIME. CONSTRUCT THESE JOINTS USING EITHER "BULKHEAD" OR "PAPERED" METHOD ACCORDING TO AI MS-22, FOR BOTH "ENDING A LANE" AND "RESUMPTION OF PAVING OPERATIONS."
        e. COMPACT JOINTS AS SOON AS HOT-MIX ASPHALT WILL BEAR ROLLER WEIGHT WITHOUT EXCESSIVE DISPLACEMENT.
        f. COMPACT ASPHALT AT JOINTS TO A DENSITY WITHIN 2 PERCENT OF SPECIFIED COURSE DENSITY.

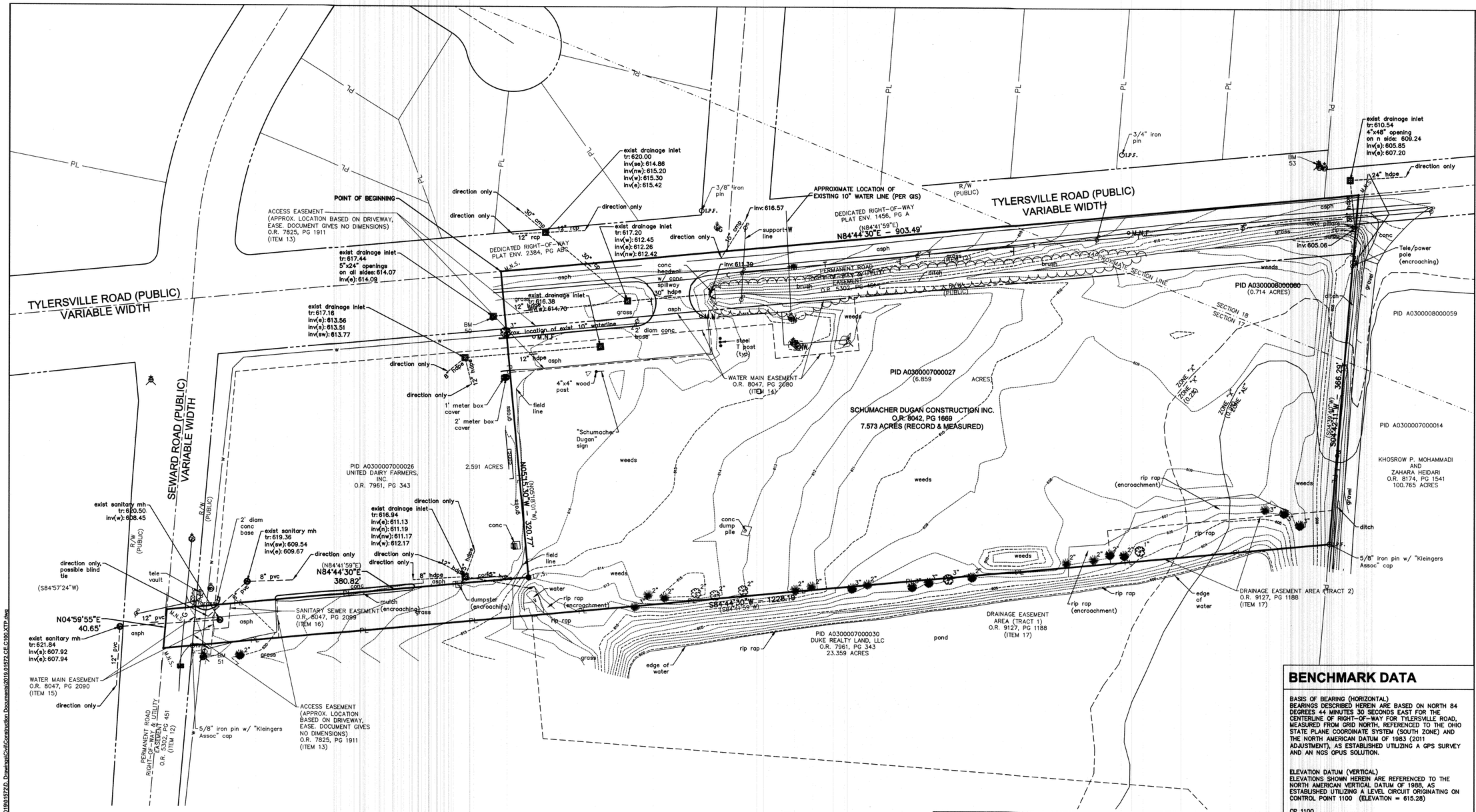
ASPHALT PAVING (CONT.):

5. COMPACTION
    i. GENERAL: BEGIN COMPACTION AS SOON AS PLACED HOT-MIX PAVING WILL BEAR ROLLER WEIGHT WITHOUT EXCESSIVE DISPLACEMENT. COMPACT HOT-MIX PAVING WITH HOT, HAND TAMPERS OR WITH VIBRATORY-PLATE COMPACTORS IN AREAS INACCESSIBLE TO ROLLERS.
        a. COMPLETE COMPACTION BEFORE MIX TEMPERATURE COOLS TO 185 DEG F
    ii. BREAKDOWN ROLLING: COMPLETE BREAKDOWN OR INITIAL ROLLING IMMEDIATELY AFTER ROLLING JOINTS AND OUTSIDE EDGE. EXAMINE SURFACE IMMEDIATELY AFTER BREAKDOWN ROLLING FOR INDICATED CROWN, GRADE, AND SMOOTHNESS. CORRECT LAYDOWN AND ROLLING OPERATIONS TO COMPLY WITH REQUIREMENTS.
    iii. INTERMEDIATE ROLLING: BEGIN INTERMEDIATE ROLLING IMMEDIATELY AFTER BREAKDOWN ROLLING WHILE HOT-MIX ASPHALT IS STILL HOT ENOUGH TO ACHIEVE SPECIFIED DENSITY. CONTINUE ROLLING UNTIL HOT-MIX ASPHALT COURSE HAS BEEN UNIFORMLY COMPACTED TO THE FOLLOWING DENSITY:
        a. AVERAGE DENSITY: 96 PERCENT OF REFERENCE LABORATORY DENSITY ACCORDING TO ASTM D 6927 OR AASHTO T 245, BUT NOT LESS THAN 94 PERCENT OR GREATER THAN 100 PERCENT.
        b. AVERAGE DENSITY: 92 PERCENT OF REFERENCE MAXIMUM THEORETICAL DENSITY ACCORDING TO ASTM D 2041, BUT NOT LESS THAN 90 PERCENT OR GREATER THAN 96 PERCENT.
    iv. FINISH ROLLING: FINISH ROLL PAVED SURFACES TO REMOVE ROLLER MARKS WHILE HOT-MIX ASPHALT IS STILL WARM.
    v. EDGE SHAPING: WHILE SURFACE IS BEING COMPACTED AND FINISHED, TRIM EDGES OF PAVEMENT TO PROPER ALIGNMENT. BEVEL EDGES WHILE ASPHALT IS STILL HOT; COMPACT THOROUGHLY.
    vi. REPAIRS: REMOVE PAVED AREAS THAT ARE DEFECTIVE OR CONTAMINATED WITH FOREIGN MATERIALS AND REPLACE WITH FRESH, HOT-MIX ASPHALT. COMPACT BY ROLLING TO SPECIFIED DENSITY AND SURFACE SMOOTHNESS.
    viii. PROTECTION: AFTER FINAL ROLLING, DO NOT PERMIT VEHICULAR TRAFFIC ON PAVEMENT UNTIL IT HAS COOLED AND HARDENED.
    viiii. ERECT BARRICADES TO PROTECT PAVING FROM TRAFFIC UNTIL MIXTURE HAS COOLED ENOUGH NOT TO BECOME MARKED.
6. INSTALLATION TOLERANCES
    i. PAVEMENT THICKNESS: COMPACT EACH COURSE TO PRODUCE THE THICKNESS INDICATED WITHIN THE FOLLOWING TOLERANCES:
        a. BASE COURSE: PLUS OR MINUS 1/2 INCH
        b. SURFACE COURSE: PLUS 1/4 INCH NO MINUS.
    ii. PAVEMENT SURFACE SMOOTHNESS: COMPACT EACH COURSE TO PRODUCE A SURFACE SMOOTHNESS WITHIN THE FOLLOWING TOLERANCES AS DETERMINED BY USING A 10-FOOT STRAIGHTEDGE APPLIED TRANSVERSELY OR LONGITUDINALLY TO PAVED AREAS:
        a. BASE COURSE: 1/4 INCH
        b. SURFACE COURSE: 1/8 INCH
        c. CROWNED SURFACES: TEST WITH CROWNED TEMPLATE CENTERED AND AT RIGHT ANGLE TO CROWN. MAXIMUM ALLOWABLE VARIANCE FROM TEMPLATE IS 1/4 INCH
7. FIELD QUALITY CONTROL
    i. TESTING AGENCY: CONTRACTOR TO ENGAGE A QUALIFIED TESTING AGENCY TO PERFORM TESTS AND INSPECTIONS.
    ii. THICKNESS: IN-PLACE COMPACTED THICKNESS OF HOT-MIX ASPHALT COURSES WILL BE DETERMINED ACCORDING TO ASTM D 3549.
    iii. SURFACE SMOOTHNESS: FINISHED SURFACE OF EACH HOT-MIX ASPHALT COURSE WILL BE TESTED FOR COMPLIANCE WITH SMOOTHNESS TOLERANCES.
    iv. IN-PLACE DENSITY: TESTING AGENCY WILL TAKE SAMPLES OF UNCOMPACTED PAVING MIXTURES AND COMPACTED PAVEMENT ACCORDING TO ASTM D 979 OR AASHTO T 168.
        a. REFERENCE MAXIMUM THEORETICAL DENSITY WILL BE DETERMINED BY AVERAGING RESULTS FROM FOUR SAMPLES OF HOT-MIX ASPHALT-PAVING MIXTURE DELIVERED DAILY TO SITE, PREPARED ACCORDING TO ASTM D 2041, AND COMPACTED ACCORDING TO JMB-MIX SPECIFICATIONS.
        b. IN-PLACE DENSITY OF COMPACTED PAVEMENT WILL BE DETERMINED BY TESTING CORE SAMPLES ACCORDING TO ASTM D 1188 OR ASTM D 2726.
    v. ONE CORE SAMPLE WILL BE TAKEN FOR EVERY 1000 SQ. YD. OR LESS OF INSTALLED PAVEMENT, WITH NO FEWER THAN THREE CORES TAKEN.
    vi. FIELD DENSITY OF IN-PLACE COMPACTED PAVEMENT MAY ALSO BE DETERMINED BY NUCLEAR METHOD ACCORDING TO ASTM D 2950 AND CORRELATED WITH ASTM D 1188 OR ASTM D 2726.
    vii. REPLACE AND COMPACT HOT-MIX ASPHALT WHERE CORE TESTS WERE TAKEN.
    viii. REMOVE AND REPLACE OR INSTALL ADDITIONAL HOT-MIX ASPHALT WHERE TEST RESULTS OR MEASUREMENTS INDICATE THAT IT DOES NOT COMPLY WITH SPECIFIED REQUIREMENTS.

CONCRETE PAVING:

A. GENERAL

1. CONCRETE PAVING SECTION INCLUDES DRIVEWAYS, ROADWAYS, PARKING LOTS, CURBS AND GUTTERS, WALKS, AND CONCRETE APRONS.
2. ACTION SUBMITTALS
    i. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
    ii. OTHER ACTION SUBMITTALS
        a. DESIGN MIXTURES: FOR EACH CONCRETE PAVING MIXTURE. INCLUDE ALTERNATE DESIGN MIXTURES WHEN CHARACTERISTICS OF MATERIALS PROJECT CONDITIONS, WEATHER, TEST RESULTS, OR OTHER CIRCUMSTANCES WARRANT ADJUSTMENTS.
        b. MATERIAL TEST REPORTS: FROM A QUALIFIED TESTING AGENCY INDICATING AND INTERPRETING TEST RESULTS FOR COMPLIANCE OF THE FOLLOWING WITH REQUIREMENTS INDICATED, BASED ON COMPREHENSIVE TESTING OF CURRENT MATERIALS.
3. QUALITY ASSURANCE
    i. READY-MIX-CONCRETE MANUFACTURER QUALIFICATIONS: A FIRM EXPERIENCED IN MANUFACTURING READY-MIXED CONCRETE PRODUCTS AND THAT COMPLIES WITH ASTM C 94/C 94M REQUIREMENTS FOR PRODUCTION FACILITIES AND EQUIPMENT.
    ii. ACI PUBLICATIONS: COMPLY WITH ACI 301 (ACI 301M) UNLESS OTHERWISE INDICATED.
    iii. HANDICAP STANDARDS: PROVIDE RAMPS INDICATED FOR H



0' 50' 100'

SCALE: 1"=50'

UTILITY CONTACTS

UTILITY	COMPANY	CONTACT	PHONE NO.
CABLE TELEVISION	-----	-----	(XXX) XXX-XXXX
ELECTRIC	DUKE ENERGY	TROY DITTMER	(513) 458-3844
INTERNET	SPECTRUM	KENT RIEGER	(513) 386-5499
GAS	DUKE ENERGY	BEN JOHNSON	(513) 287-1594
SANITARY SEWER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300
STORM SEWER	BUTLER COUNTY	JAMES FOX	(513) 867-4200
TELEPHONE	CINCINNATI BELL	BRECK COWAN	(513) 565-7043
WATER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-362-2764
- OHIO UNDERGROUND -

EXISTING LEGEND

	Drainage Inlet Square		Power Pole
	Electric Transformer		Rock
	Fire Hydrant		Sanitary Manhole
G	Gas Marker		Sign
	Gas Service Valve		Sprinkler Head
	Gas Valve		Storm Manhole
	Guy Wire		Telephone Manhole
O.I.P.F.	Iron Pin & Cap Found		Telephone Pedestal
O.I.P.F.	Iron Pin Found		Tree
●I.P.S.	Iron Pin Set	W	Water Marker
	Light Pole		Water Service Valve
• M.N.S.	Mag Nail Set		Water Valve
	Pine Tree		Zone "AE" (Special Flood Hazard Areas)
	Post		Zone "X" (within 0.2% Chance Annual Floodplain)
	Power & Telephone Pole		

LEGAL DESCRIPTION

SITUATED IN SECTION 17 AND 18, TOWN 2, RANGE 2, BEING PART OF LOT 86 OF FAIRFIELD TOWNSHIP, BUTLER COUNTY, OHIO, AND BEING PART OF AN ORIGINAL 59.237 ACRE (SURVEY) TRACT CONVEYED TO MILLER FARM ENTERPRISES LLC IN O.R. 7118, PG. 1237, THE BOUNDARY OF WHICH BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE CENTERLINE OF TYLERSVILLE ROAD, SAID POINT BEING S84°41'59"E A DISTANCE OF 201.32 FEET FROM THE SOUTHEAST CORNER OF MILLERS RUN SECTION ONE AS RECORDED IN P.E. 2384, POS. A-C;

THENCE ALONG THE CENTERLINE OF TYLERSVILLE ROAD, N84°41'59"E A DISTANCE OF 903.49 FEET;

THENCE S04°39'40"W, PASSING A FOUND ⅝" IRON PIN AT 60.92 FEET, A TOTAL DISTANCE OF 366.29 FEET TO A SET ⅝" IRON PIN;

THENCE THROUGH SAID ORIGINAL 59.237 ACRE TRACT, S84°41'59"W, PASSING A SET ⅝" IRON PIN AT 1197.70 FEET, A TOTAL DISTANCE OF 1228.19 FEET TO A POINT IN THE CENTERLINE OF SEWARD ROAD;

THENCE ALONG THE CENTERLINE OF SAID SEWARD ROAD, N04°57'24"E A DISTANCE OF 40.65 FEET;

THENCE ALONG THE LINES OF A 2.591 ACRE TRACT CONVEYED TO ROBERT D. LINDNER SR. TRUSTEE IN O.R. 7825, PG. 1909, N84°41'59"E, PASSING A FOUND ⅝" IRON PIN AT 30.49 FEET, A TOTAL DISTANCE OF 380.82 FEET TO A FOUND ⅝" IRON PIN;

THENCE CONTINUING, N05°18'01"W, PASSING A FOUND ⅝" IRON PIN AT 260.77 FEET, A TOTAL DISTANCE OF 320.77 FEET TO POINT OF BEGINNING;

CONTAINING 7.573 ACRES, MORE OR LESS (6.336 ACRES NET AND 1.237 ACRES IN RIGHT-OF-WAY) OF WHICH 6.859 ACRES LIE WITHIN SECTION 17 AND 0.714 ACRES LIES WITHIN SECTION 18, BEING SUBJECT TO EASEMENTS, RESTRICTIONS AND RIGHT-OF-WAY OF RECORD.

BEARING REFERENCE: BEARINGS ARE BASED ON MILLERS RUN SECTION ONE AS RECORDED IN P.E. 2384, POS. A-C.

THE ABOVE DESCRIPTION IS BASED ON A FIELD SURVEY MADE BY KLEINGERS & ASSOCIATES, INC., ENGINEERS AND SURVEYORS, UNDER THE DIRECTION OF RANDY C. WOLFE, OHIO PROFESSIONAL SURVEYOR NO. 8033. SAID SURVEY IS RECORDED IN VOLUME 51, PAGE 192 OF THE BUTLER COUNTY ENGINEERS RECORD OF LAND SURVEYS.

7.573 ACRES.

BENCHMARK DATA

BASIS OF BEARING (HORIZONTAL)
BEARINGS DESCRIBED HEREIN ARE BASED ON NORTH 84 DEGREES 44 MINUTES 30 SECONDS EAST FOR THE CENTERLINE OF RIGHT-OF-WAY FOR TYLERSVILLE ROAD, MEASURED FROM GRID NORTH, REFERENCED TO THE OHIO STATE PLANE COORDINATE SYSTEM (SOUTH ZONE) AND THE NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT), AS ESTABLISHED UTILIZING A GPS SURVEY AND AN NGS OPUS SOLUTION.

ELEVATION DATUM (VERTICAL)
ELEVATIONS SHOWN HEREIN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, AS ESTABLISHED UTILIZING A LEVEL CIRCUIT ORIGINATING ON CONTROL POINT 1100 (ELEVATION = 615.28)

CP 1100
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED 161.65 FEET NORTHEAST OF A BRICK DUMPSTER STRUCTURE, 147.65 FEET SOUTHEAST OF THE SOUTHEAST CORNER OF A CAR WASH AND 182.85 FEET SOUTH OF LAMP POLE.
ELEV: 615.28

CP 1101
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED IN A GRASS AREA 28.36 FEET SOUTH OF TYLERSVILLE ROAD, 21.48 FEET NORTH OF AN ASPHALT DRIVE, EAST OF THE EXIT DRIVE AND 3.00 FEET EAST OF A CATCH BASIN.
ELEV: 616.63

CP 1102
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED ON THE WEST SIDE OF SEWARD ROAD, 34.75 FEET WEST OF THE EDGE OF PAVEMENT, 119.09 FEET SOUTHWEST OF A POWER POLE AND 130.53 FEET SOUTHWEST OF A FIRE HYDRANT ON THE SOUTH SIDE OF A DRIVE ON THE EAST SIDE OF SEWARD ROAD.
ELEV: 621.66

BM 50
CHISLED SQUARE ON THE SOUTHWEST CORNER OF A SQUARE CATCH BASIN LOCATED 25 FEET SOUTH OF TYLERSVILLE ROAD, 40.56 FEET EAST OF THE CURB FOR THE EXIT ONLY LANE FROM THE NORTHEAST CORNER OF THE ADJOINING UDF PROPERTY.
ELEV: 617.48

BM 51
CHISLED "X" ON THE NORTH BOLT OF A FIRE HYDRANT LOCATED ON THE EAST SIDE OF STEWARD ROAD, 144.80 FEET SOUTHWEST OF THE SOUTHWEST CORNER OF THE UDF BUILDING.
ELEV: 623.28

BM 53
CHISLED "X" ON THE NORTHEAST BOLT OF A FIRE HYDRANT LOCATED ON THE NORTH SIDE OF TYLERSVILLE ROAD.
ELEV: 613.15

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

STERLING

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

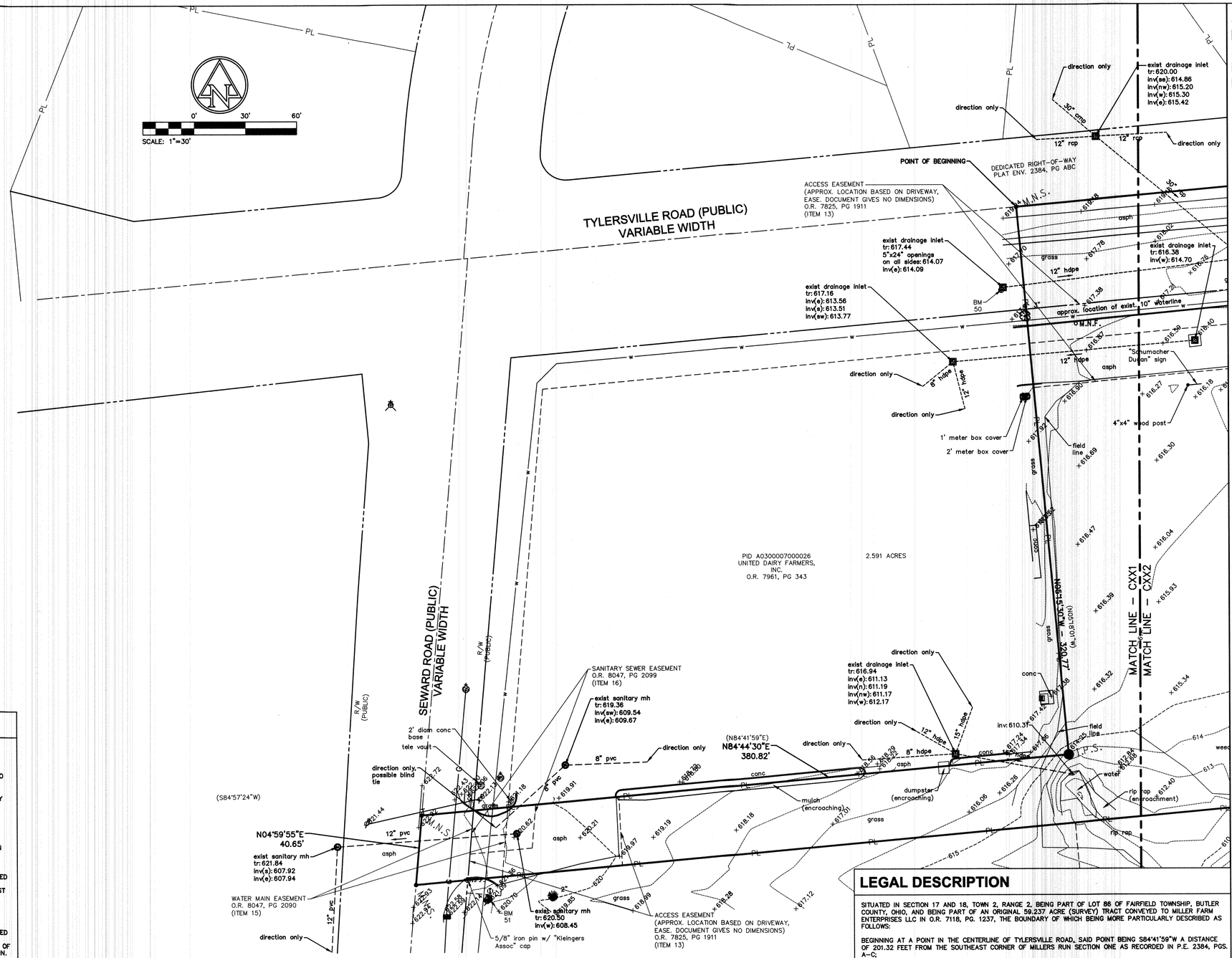
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

Project Number 2019.01572

OVERALL EXISTING TOPOGRAPHY

C100

PLOT DATE: 1/21/2020 2:55 PM
PLOT SCALE: 12.5849
EDIT DATE: 1/3/2020
EDITED BY: NHORGAN
DRAWING FILE: P:\2019\01572\D. Drawings\Civil\Construction Documents\2019.01572.CE.C100.XTP.dwg



BENCHMARK DATA

BASIS OF BEARING (HORIZONTAL)
BEARINGS DESCRIBED HEREIN ARE BASED ON NORTH 84 DEGREES 44 MINUTES 30 SECONDS EAST FOR THE CENTERLINE OF RIGHT-OF-WAY FOR TYLERSVILLE ROAD, MEASURED FROM GRID NORTH, REFERENCED TO THE OHIO STATE PLANE COORDINATE SYSTEM (SOUTH ZONE) AND THE NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT), AS ESTABLISHED UTILIZING A GPS SURVEY AND AN NGS OPUS SOLUTION.

ELEVATION DATUM (VERTICAL)
ELEVATIONS SHOWN HEREIN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, AS ESTABLISHED UTILIZING A LEVEL CIRCUIT ORIGINATING ON CONTROL POINT 1100 (ELEVATION = 615.28)

CP 1100
¾" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED 161.65 FEET NORTHEAST OF A BRICK DUMPSTER STRUCTURE, 147.65 FEET SOUTHEAST OF THE SOUTHEAST CORNER OF A CAR WASH AND 182.85 FEET SOUTH OF LAMP POLE.
ELEV: 615.28

CP 1101
¾" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED IN A GRASS AREA 26.36 FEET SOUTH OF TYLERSVILLE ROAD, 21.48 FEET NORTH OF AN ASPHALT DRIVE, EAST OF THE EXIT DRIVE AND 3.00 FEET EAST OF A CATCH BASIN.
ELEV: 616.63

CP 1102
¾" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED ON THE WEST SIDE OF SEWARD ROAD, 34.75 FEET WEST OF THE EDGE OF PAVEMENT, 119.09 FEET SOUTWEST OF A POWER POLE AND 130.53 FEET SOUTHWEST OF A FIRE HYDRANT ON THE SOUTH SIDE OF A DRIVE ON THE EAST SIDE OF SEWARD ROAD.
ELEV: 621.66

BM 51
CHISLED SQUARE ON THE SOUTHWEST CORNER OF A SQUARE CATCH BASIN LOCATED 25 FEET SOUTH OF TYLERSVILLE ROAD, 40.56 FEET EAST OF THE CURB FOR THE EXIT ONLY LANE FROM THE NORTHEAST CORNER OF THE ADJOINING UDF PROPERTY.
ELEV: 617.48

BM 53
CHISLED "X" ON THE NORTH BOLT OF A FIRE HYDRANT LOCATED ON THE EAST SIDE OF STEWARD ROAD, 144.80 FEET SOUTHWEST OF THE SOUTHWEST CORNER OF THE UDF BUILDING.
ELEV: 623.28

BM 53
CHISLED "X" ON THE NORTHEAST BOLT OF A FIRE HYDRANT LOCATED ON THE NORTH SIDE OF TYLERSVILLE ROAD.
ELEV: 613.15

UTILITY CONTACTS

UTILITY	COMPANY	CONTACT	PHONE NO.
CABLE TELEVISION	-----	-----	(XXX) XXX-XXXX
ELECTRIC	DUKE ENERGY	TROY DITTMER	(513) 458-3844
INTERNET	SPECTRUM	KENT RIEGER	(513) 386-5499
GAS	DUKE ENERGY	BEN JOHNSON	(513) 287-1594
SANITARY SEWER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300
STORM SEWER	BUTLER COUNTY	JAMES FOX	(513) 867-4200
TELEPHONE	CINCINNATI BELL	BRECK COWAN	(513) 565-7043
WATER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-362-2764
- OHIO UNDERGROUND -

EXISTING LEGEND

	Drainage Inlet Square		Power Pole
	Electric Transformer		Rock
	Fire Hydrant		Sanitary Manhole
	Gas Marker		Sign
	Gas Service Valve		Sprinkler Head
	Gas Valve		Storm Manhole
	Guy Wire		Telephone Manhole
I.P.F.	Iron Pin & Cap Found		Telephone Pedestal
I.P.F.	Iron Pin Found		Tree
I.P.S.	Iron Pin Set		Water Marker
	Light Pole		Water Service Valve
M.N.S.	Mag Nail Set		Water Valve
	Pine Tree		Zone "AE" (Special Flood Hazard Areas)
	Post		Zone "X" (within 0.2% Chance Annual Floodplain)
	Power & Telephone Pole		

LEGAL DESCRIPTION

SITUATED IN SECTION 17 AND 18, TOWN 2, RANGE 2, BEING PART OF LOT 86 OF FAIRFIELD TOWNSHIP, BUTLER COUNTY, OHIO, AND BEING PART OF AN ORIGINAL 59.237 ACRE (SURVEY) TRACT CONVEYED TO MILLER FARM ENTERPRISES LLC IN O.R. 7118, PG. 1237, THE BOUNDARY OF WHICH BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE CENTERLINE OF TYLERSVILLE ROAD, SAID POINT BEING S84°41'59"W A DISTANCE OF 201.32 FEET FROM THE SOUTHEAST CORNER OF MILLERS RUN SECTION ONE AS RECORDED IN P.E. 2384, PGS. A-C;

THENCE ALONG THE CENTERLINE OF TYLERSVILLE ROAD, N84°41'59"E A DISTANCE OF 903.49 FEET;

THENCE S04°39'40"W, PASSING A FOUND ⅝" IRON PIN AT 60.92 FEET, A TOTAL DISTANCE OF 366.29 FEET TO A SET ⅝" IRON PIN;

THENCE THROUGH SAID ORIGINAL 59.237 ACRE TRACT, S84°41'59"W, PASSING A SET ⅝" IRON PIN AT 1197.70 FEET, A TOTAL DISTANCE OF 1228.19 FEET TO A POINT IN THE CENTERLINE OF SEWARD ROAD;

THENCE ALONG THE CENTERLINE OF SAID SEWARD ROAD, N04°57'24"E A DISTANCE OF 40.65 FEET;

THENCE ALONG THE LINES OF A 2.591 ACRE TRACT CONVEYED TO ROBERT D. LINDNER SR. TRUSTEE IN O.R. 7825, PG. 1909, N84°41'59"E, PASSING A FOUND ⅝" IRON PIN AT 30.49 FEET, A TOTAL DISTANCE OF 380.82 FEET TO A FOUND ⅝" IRON PIN;

THENCE CONTINUING, N05°18'01"W, PASSING A FOUND ⅝" IRON PIN AT 260.77 FEET, A TOTAL DISTANCE OF 320.77 FEET TO POINT OF BEGINNING;

CONTAINING 7.573 ACRES, MORE OR LESS (6.336 ACRES NET AND 1.237 ACRES IN RIGHT-OF-WAY) OF WHICH 6.859 ACRES LIE WITHIN SECTION 17 AND 0.714 ACRES LIES WITHIN SECTION 18, BEING SUBJECT TO EASEMENTS, RESTRICTIONS AND RIGHT-OF-WAY OF RECORD.

BEARING REFERENCE: BEARINGS ARE BASED ON MILLERS RUN SECTION ONE AS RECORDED IN P.E. 2384, PGS. A-C.

THE ABOVE DESCRIPTION IS BASED ON A FIELD SURVEY MADE BY KLEINGERS & ASSOCIATES, INC., ENGINEERS AND SURVEYORS, UNDER THE DIRECTION OF RANDY C. WOLFE, OHIO PROFESSIONAL SURVEYOR NO. 8033. SAID SURVEY IS RECORDED IN VOLUME 51, PAGE 192 OF THE BUTLER COUNTY ENGINEERS RECORD OF LAND SURVEYS.

7.573 ACRES.

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

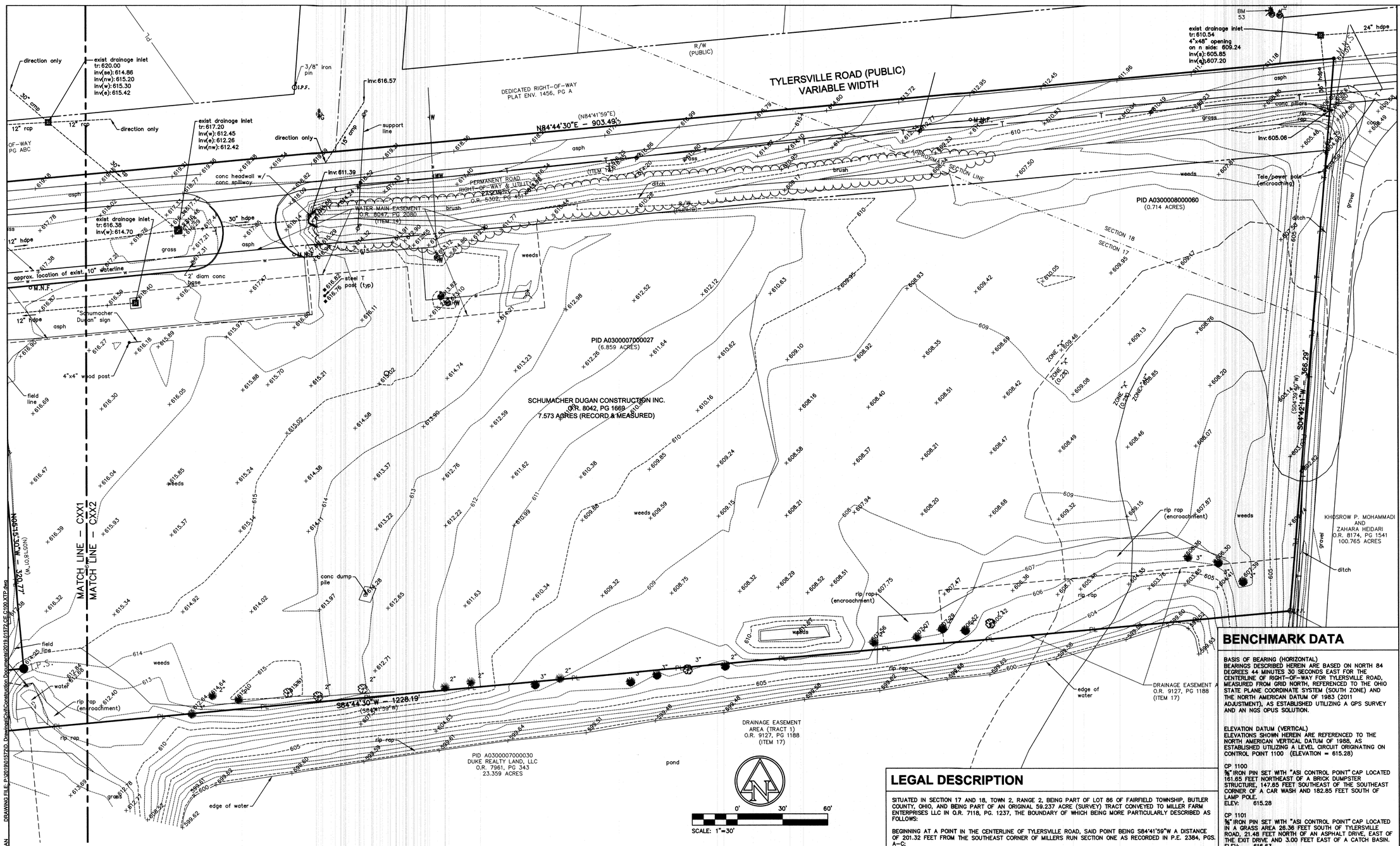
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

Project Number 2019.01572

EXISTING TOPOGRAPHY PLAN

C101

PLOT DATE: 12/1/2020 2:55 PM
PLOT SCALE: 1.2646
EDIT DATE: 1/3/2020
EDITED BY: NHORGAN
DRAWING FILE: P:\2019\01572\D. Drawings\Civil\Construction Documents\2019.01572.CE.C100.XTP.dwg



GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-362-2764
– OHIO UNDERGROUND –

UTILITY CONTACTS

UTILITY	COMPANY	CONTACT	PHONE NO.
CABLE TELEVISION	-------	-------	(XXX) XXX-XXXX
ELECTRIC	DUKE ENERGY	TROY DITTMER	(513) 458-3844
INTERNET	SPECTRUM	KENT RIEGER	(513) 386-5499
GAS	DUKE ENERGY	BEN JOHNSON	(513) 287-1594
SANITARY SEWER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300
STORM SEWER	BUTLER COUNTY	JAMES FOX	(513) 867-4200
TELEPHONE	CINCINNATI BELL	BRECK COWAN	(513) 565-7043
WATER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300

EXISTING LEGEND

	Drainage Inlet Square		Power Pole
	Electric Transformer		Rock
	Fire Hydrant		Sanitary Manhole
	Gas Marker		Sign
	Gas Service Valve		Sprinkler Head
	Gas Valve		Storm Manhole
	Guy Wire		Telephone Manhole
O.I.P.F.	Iron Pin & Cap Found		Telephone Pedestal
O.I.P.F.	Iron Pin Found		Tree
●I.P.S.	Iron Pin Set		Water Marker
	Light Pole		Water Service Valve
● M.N.S.	Mag Nail Set		Water Valve
	Pine Tree		Zone "AE" (Special Flood Hazard Areas)
	Post		Zone "X" (within 0.2% Chance Annual Floodplain)
	Power & Telephone Pole		

LEGAL DESCRIPTION

SITUATED IN SECTION 17 AND 18, TOWN 2, RANGE 2, BEING PART OF LOT 86 OF FAIRFIELD TOWNSHIP, BUTLER COUNTY, OHIO, AND BEING PART OF AN ORIGINAL 59.237 ACRE (SURVEY) TRACT CONVEYED TO MILLER FARM ENTERPRISES LLC IN O.R. 7118, PG. 1237, THE BOUNDARY OF WHICH BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE CENTERLINE OF TYLERSVILLE ROAD, SAID POINT BEING S84°41'59"W A DISTANCE OF 201.32 FEET FROM THE SOUTHEAST CORNER OF MILLERS RUN SECTION ONE AS RECORDED IN P.E. 2384, PGS. A–C;

THENCE ALONG THE CENTERLINE OF TYLERSVILLE ROAD, N84°41'59"E A DISTANCE OF 903.49 FEET;

THENCE S04°39'40"W, PASSING A FOUND ⅝" IRON PIN AT 60.92 FEET, A TOTAL DISTANCE OF 366.29 FEET TO A SET ⅝" IRON PIN;

THENCE THROUGH SAID ORIGINAL 59.237 ACRE TRACT, S84°41'59"W, PASSING A SET ⅝" IRON PIN AT 1197.70 FEET, A TOTAL DISTANCE OF 1228.19 FEET TO A POINT IN THE CENTERLINE OF SEWARD ROAD;

THENCE ALONG THE CENTERLINE OF SAID SEWARD ROAD, N04°57'24"E A DISTANCE OF 40.65 FEET;

THENCE ALONG THE LINES OF A 2.591 ACRE TRACT CONVEYED TO ROBERT D. LINDNER SR. TRUSTEE IN O.R. 7825, PG. 1909, N84°41'59"E, PASSING A FOUND ⅝" IRON PIN AT 30.49 FEET, A TOTAL DISTANCE OF 380.82 FEET TO A FOUND ⅝" IRON PIN;

THENCE CONTINUING, N05°18'01"W, PASSING A FOUND ⅝" IRON PIN AT 260.77 FEET, A TOTAL DISTANCE OF 320.77 FEET TO POINT OF BEGINNING;

CONTAINING 7.573 ACRES, MORE OR LESS (6.336 ACRES NET AND 1.237 ACRES IN RIGHT–OF–WAY) OF WHICH 6.859 ACRES LIE WITHIN SECTION 17 AND 0.714 ACRES LIES WITHIN SECTION 18, BEING SUBJECT TO EASEMENTS, RESTRICTIONS AND RIGHT–OF–WAY OF RECORD.

BEARING REFERENCE: BEARINGS ARE BASED ON MILLERS RUN SECTION ONE AS RECORDED IN P.E. 2384, PGS. A–C.

THE ABOVE DESCRIPTION IS BASED ON A FIELD SURVEY MADE BY KLEINGERS & ASSOCIATES, INC., ENGINEERS AND SURVEYORS, UNDER THE DIRECTION OF RANDY C. WOLFE, OHIO PROFESSIONAL SURVEYOR NO. 8033. SAID SURVEY IS RECORDED IN VOLUME 51, PAGE 192 OF THE BUTLER COUNTY ENGINEERS RECORD OF LAND SURVEYS.

7.573 ACRES.

BENCHMARK DATA

BASIS OF BEARING (HORIZONTAL)
BEARINGS DESCRIBED HEREIN ARE BASED ON NORTH 84 DEGREES 44 MINUTES 30 SECONDS EAST FOR THE CENTERLINE OF RIGHT–OF–WAY FOR TYLERSVILLE ROAD, MEASURED FROM GRID NORTH, REFERENCED TO THE OHIO STATE PLANE COORDINATE SYSTEM (SOUTH ZONE) AND THE NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT), AS ESTABLISHED UTILIZING A GPS SURVEY AND AN NGS OPUS SOLUTION.

ELEVATION DATUM (VERTICAL)
ELEVATIONS SHOWN HEREIN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, AS ESTABLISHED UTILIZING A LEVEL CIRCUIT ORIGINATING ON CONTROL POINT 1100 (ELEVATION = 615.28)

CP 1100
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED 161.65 FEET NORTHEAST OF A BRICK DUMPSTER STRUCTURE, 147.85 FEET SOUTHEAST OF THE SOUTHEAST CORNER OF A CAR WASH AND 182.85 FEET SOUTH OF LAMP POLE.
ELEV: 615.28

CP 1101
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED IN A GRASS AREA 26.36 FEET SOUTH OF TYLERSVILLE ROAD, 21.48 FEET NORTH OF AN ASPHALT DRIVE, EAST OF THE EXIT DRIVE AND 3.00 FEET EAST OF A CATCH BASIN.
ELEV: 616.63

CP 1102
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED ON THE WEST SIDE OF SEWARD ROAD, 34.75 FEET WEST OF THE EDGE OF PAVEMENT, 119.09 FEET SOUTWEST OF A POWER POLE AND 130.53 FEET SOUTHWEST OF A FIRE HYDRANT ON THE SOUTH SIDE OF A DRIVE ON THE EAST SIDE OF SEWARD ROAD.
ELEV: 621.66

BM 50
CHISLED SQUARE ON THE SOUTHWEST CORNER OF A SQUARE CATCH BASIN LOCATED 25 FEET SOUTH OF TYLERSVILLE ROAD, 40.56 FEET EAST OF THE CURB FOR THE EXIT ONLY LANE FROM THE NORTHEAST CORNER OF THE ADJOINING UDF PROPERTY.
ELEV: 617.48

BM 51
CHISLED "X" ON THE NORTH BOLT OF A FIRE HYDRANT LOCATED ON THE EAST SIDE OF STEWARD ROAD, 144.80 FEET SOUTHWEST OF THE SOUTHWEST CORNER OF THE UDF BUILDING.
ELEV: 623.28

BM 53
CHISLED "X" ON THE NORTHEAST BOLT OF A FIRE HYDRANT LOCATED ON THE NORTH SIDE OF TYLERSVILLE ROAD.
ELEV: 613.15

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

STERLING

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

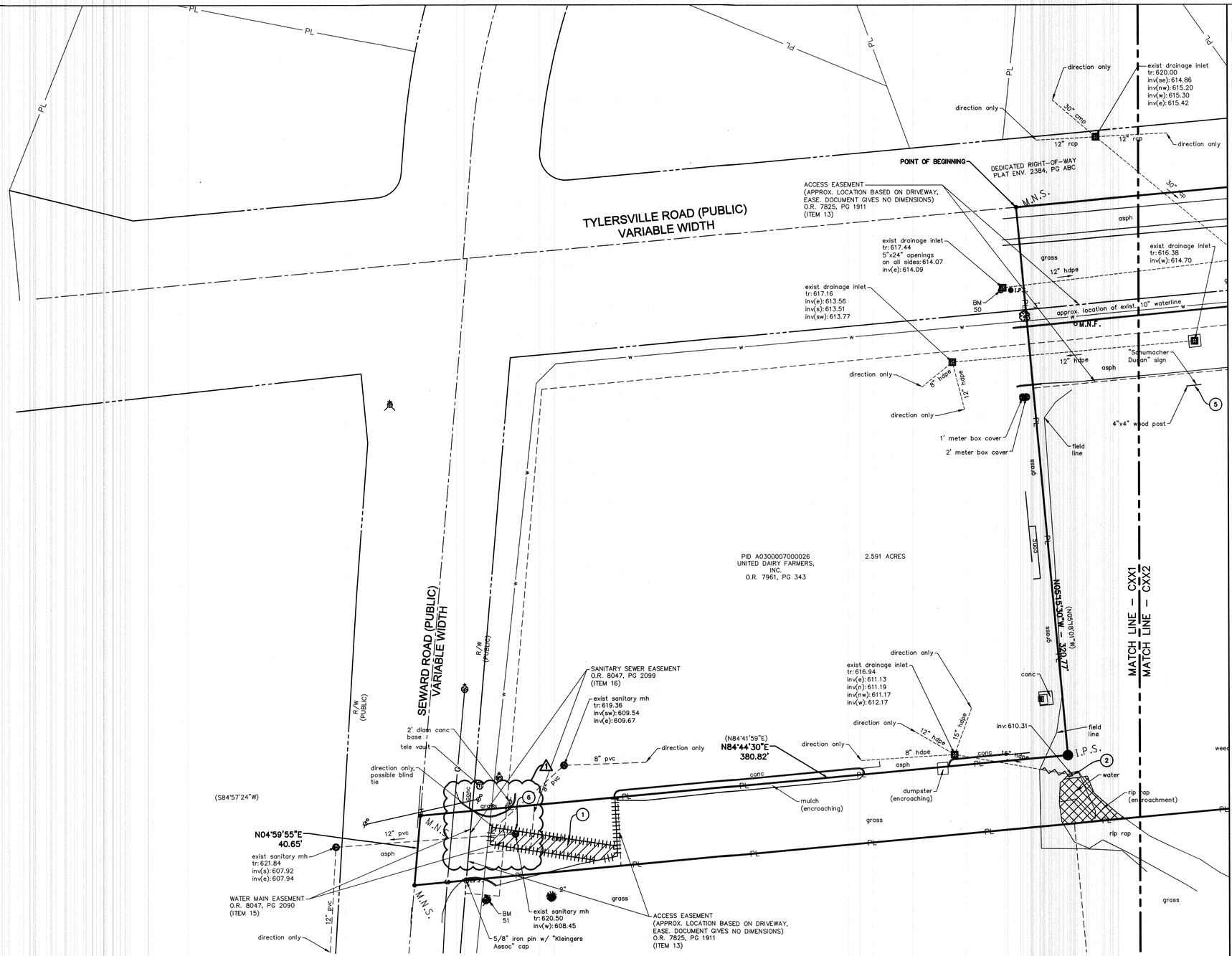
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

Project Number 2019.01572

EXISTING TOPOGRAPHY PLAN

C102

PLOT DATE: 1/21/2020 2:55 PM
PLOT SCALE: 1:2.5409
EDIT DATE: 1/3/2020
EDITED BY: HHORGAN
DRAWING FILE: P:\2019\01572\D. Drawings\Civil\Construction Documents\2019.01572_CE-C100.XTP.dwg



DEMOLITION LEGEND

- EXISTING UTILITY TO BE REMOVED
- PAVEMENT TO BE SAWCUT
- EXISTING CURB TO BE REMOVED
- EXISTING FENCE TO BE REMOVED
- EXISTING ASPHALT TO BE REMOVED
- EXISTING RIPRAP TO BE REMOVED
- EXISTING BRUSH TO BE REMOVED

KEYNOTES

1. EXISTING ASPHALT PAVEMENT AND BASE MATERIAL TO BE REMOVED (SAWCUT FOR CLEAN EDGE).
2. REMOVE EXISTING PIPE AND END SECTION AND RECONNECT TO PROPOSED STRUCTURE.
3. EXISTING TREE TO BE REMOVED AND REPLACED.
4. EXISTING CONCRETE CURB TO BE REMOVED.
5. EXISTING SIGN TO BE REMOVED.
6. PROTECT EXISTING UTILITY THROUGHOUT DURATION OF CONSTRUCTION.
7. EXISTING CONCRETE MATERIAL TO BE REMOVED.
8. ADJUST EXISTING WATER VALVE TO GRADE.
9. ADJUST EXISTING HYDRANT TO GRADE.

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-362-2764
– OHIO UNDERGROUND –

EXISTING LEGEND

	Drainage Inlet Square		Power Pole
	Electric Transformer		Rock
	Fire Hydrant		Sanitary Manhole
G	Gas Marker		Sign
	Gas Service Valve		Sprinkler Head
	Gas Valve		Storm Manhole
	Guy Wire		Telephone Manhole
I.P.F.	Iron Pin & Cap Found		Telephone Pedestal
I.P.F.	Iron Pin Found		Tree
I.P.S.	Iron Pin Set	W	Water Marker
	Light Pole		Water Service Valve
M.N.S.	Mag Nail Set		Water Valve
	Pine Tree		Zone "AE" (Special Flood Hazard Areas)
	Post		Zone "X" (within 0.2% Chance Annual Floodplain)
	Power & Telephone Pole		

0' 30' 60'
SCALE: 1"=30'

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

STATE OF OHIO — SHAWN L. GOODWIN — E-74764 — PROFESSIONAL ENGINEER

01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

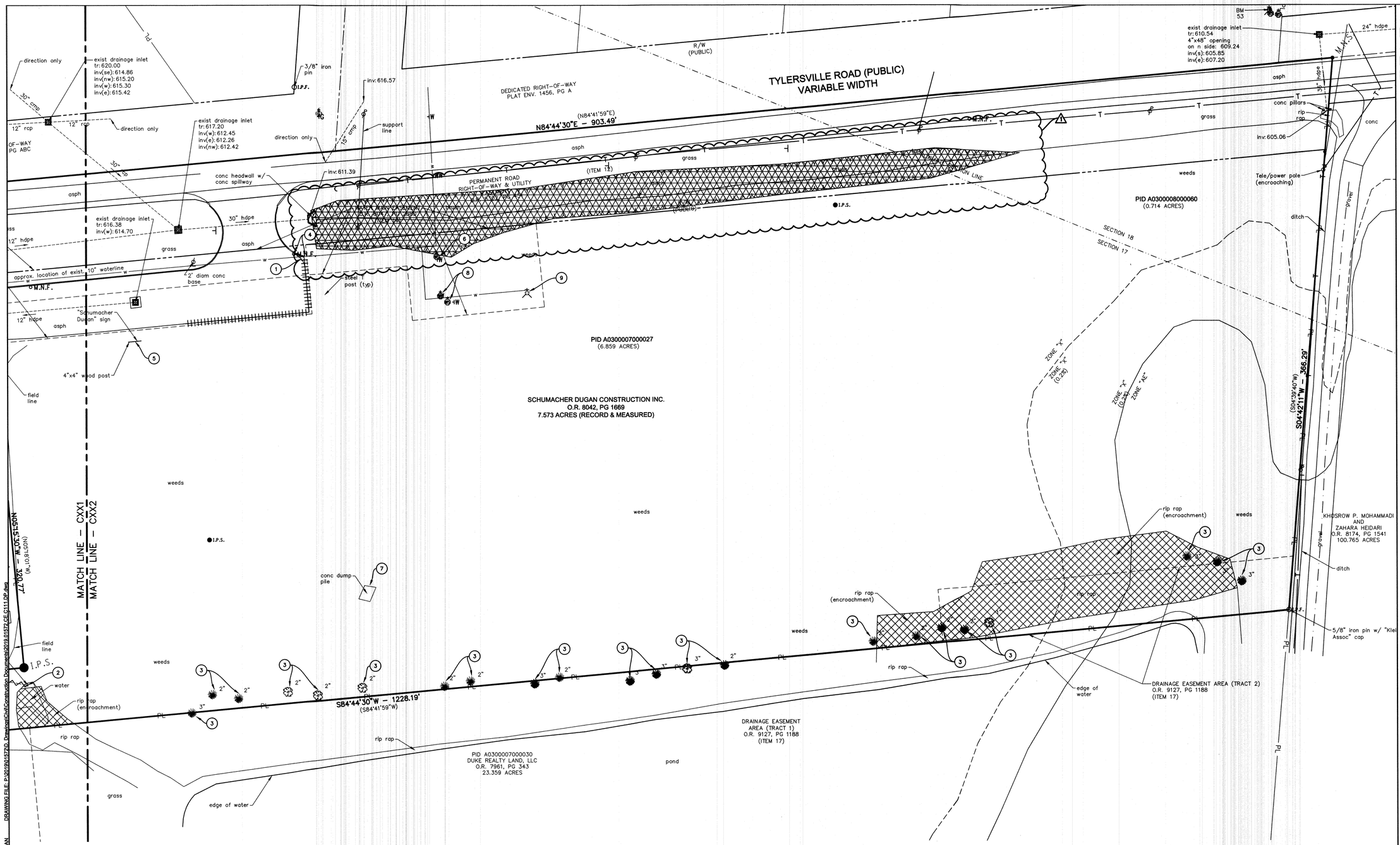
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

Project Number 2019.01572

DEMOLITION PLAN

C111

PLOT DATE: 1/21/2020 2:55 PM
PLOT SCALE: 1.0000
EDIT DATE: 1/6/2020
EDITED BY: NHORGAN
DRAWING FILE: P:\2019\01572\20. Drawings\Civil\Construction Documents\2019.01572-CE-C111.DP.dwg



DEMOLITION LEGEND

- EXISTING UTILITY TO BE REMOVED
- PAVEMENT TO BE SAWCUT
- EXISTING CURB TO BE REMOVED
- EXISTING FENCE TO BE REMOVED
- EXISTING ASPHALT TO BE REMOVED
- EXISTING RIPRAP TO BE REMOVED
- EXISTING BRUSH TO BE REMOVED

KEYNOTES

1. EXISTING ASPHALT PAVEMENT AND BASE MATERIAL TO BE REMOVED (SAWCUT FOR CLEAN EDGE).
2. REMOVE EXISTING PIPE AND END SECTION AND RECONNECT TO PROPOSED STRUCTURE.
3. EXISTING TREE TO BE REMOVED AND REPLACED.
4. EXISTING CONCRETE CURB TO BE REMOVED.
5. EXISTING SIGN TO BE REMOVED.
6. PROTECT EXISTING UTILITY THROUGHOUT DURATION OF CONSTRUCTION.
7. EXISTING CONCRETE MATERIAL TO BE REMOVED.
8. ADJUST EXISTING WATER VALVE TO GRADE.
9. ADJUST EXISTING HYDRANT TO GRADE.

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-362-2764
– OHIO UNDERGROUND –

EXISTING LEGEND

	Drainage Inlet Square		Power Pole
	Electric Transformer		Rock
	Fire Hydrant		Sanitary Manhole
	Gas Marker		Sign
	Gas Service Valve		Sprinkler Head
	Gas Valve		Storm Manhole
	Guy Wire		Telephone Manhole
O I.P.F.	Iron Pin & Cap Found		Telephone Pedestal
O I.P.F.	Iron Pin Found		Tree
● I.P.S.	Iron Pin Set		Water Marker
	Light Pole		Water Service Valve
● M.N.S.	Mag Nail Set		Water Valve
	Pine Tree		Zone "AE" (Special Flood Hazard Areas)
	Post		Zone "X" (within 0.2% Chance Annual Floodplain)
	Power & Telephone Pole		

0' 30' 60'
SCALE: 1"=30'

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

STERLING

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

STATE OF OHIO · SHAWN L GOODWIN · E-67667 · REGISTERED PROFESSIONAL ENGINEER

01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

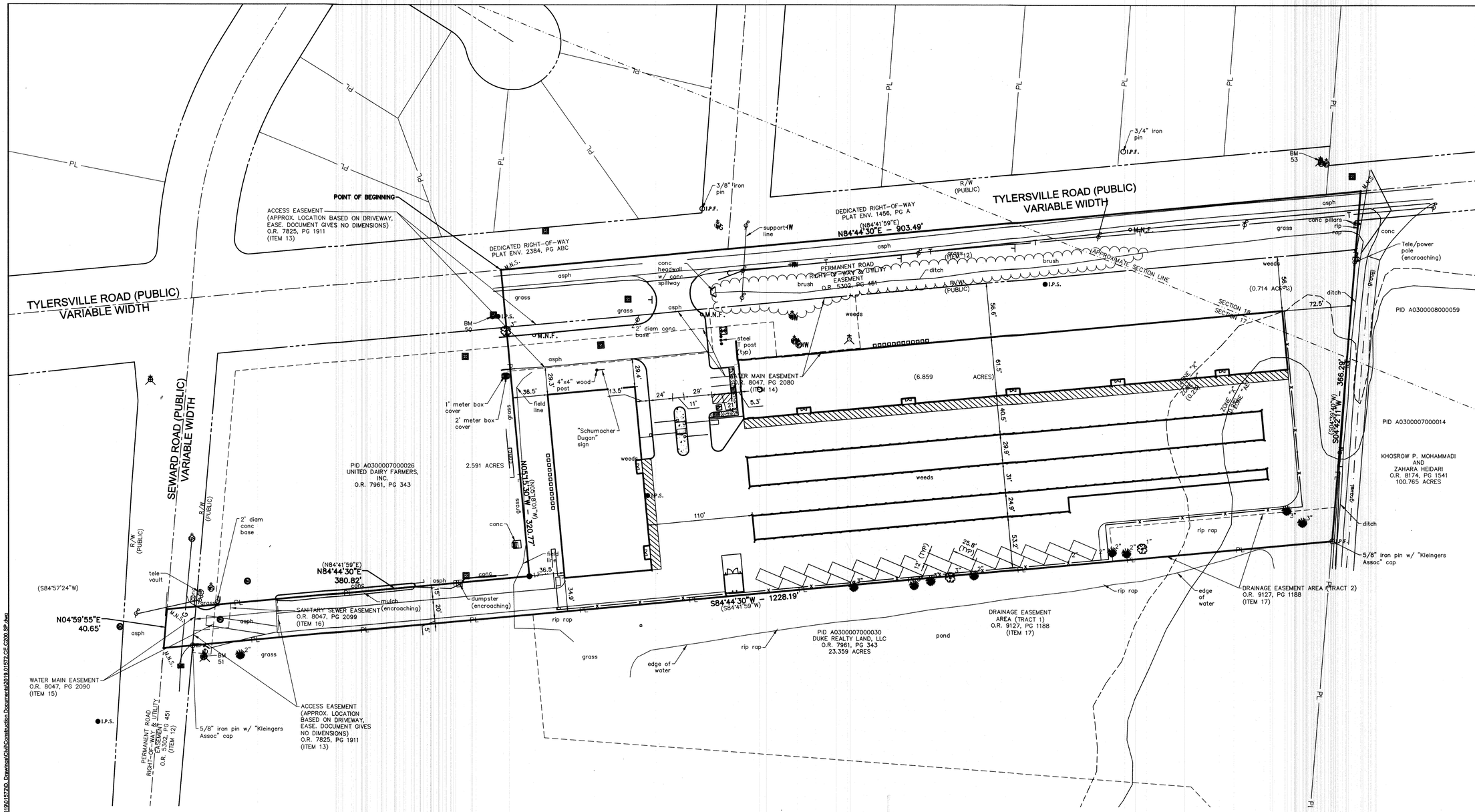
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

Project Number 2019.01572

DEMOLITION PLAN

C112

PLOT DATE: 1/21/2020 2:55 PM
PLOT SCALE: 1.2499
EDIT DATE: 1/6/2020
EDITED BY: NHORGAN
DRAWING FILE: P:\2019\01572\D. Drawings\Civil\Construction Documents\2019.01572_CE-C111_DP.dwg



SITE DATA TABLE

SITE ZONING:	M-1
PROJECT AREA:	6.859± ACRES
BUILDING AREA (CLIMATE CONTROLLED):	52,143 SF
BUILDING AREA (NON-CLIMATE CONTROLLED):	26,818 SF
SITE IMPERVIOUS AREA:	4.18± ACRES
STANDARD PARKING (9'x20'):	3
ADA PARKING PROVIDED: (INCLUDES 1 VAN ACCESSIBLE)	1
TOTAL PROPOSED PARKING:	4

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-362-2764
– OHIO UNDERGROUND –

EXISTING LEGEND

	Drainage Inlet Square		Power Pole
	Electric Transformer		Rock
	Fire Hydrant		Sanitary Manhole
G	Gas Marker		Sign
	Gas Service Valve		Sprinkler Head
	Gas Valve		Storm Manhole
	Guy Wire		Telephone Manhole
I.P.F.	Iron Pin & Cap Found		Telephone Pedestal
I.P.F.	Iron Pin Found		Tree
I.P.S.	Iron Pin Set	W	Water Marker
	Light Pole		Water Service Valve
M.N.S.	Mag Nail Set		Water Valve
	Pine Tree		Zone "AE" (Special Flood Hazard Areas)
	Post		Zone "X" (within 0.2% Chance Annual Floodplain)
	Power & Telephone Pole		

0' 50' 100'
SCALE: 1"=50'

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

STERLING

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

STATE OF OHIO
SHAWN L. GOODWIN
E-68108
PROFESSIONAL ENGINEER

01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

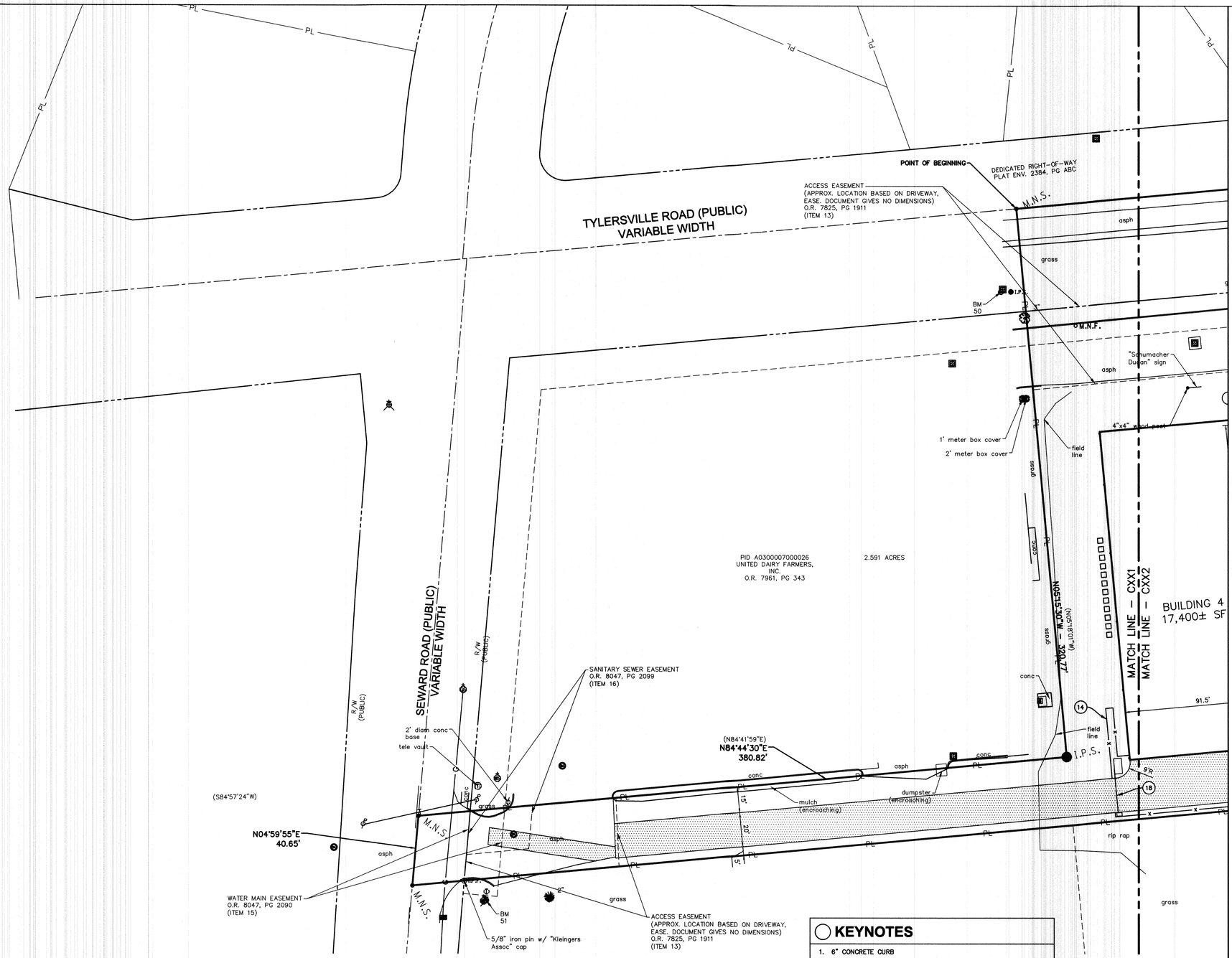
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

Project Number 2019.01572

OVERALL SITE PLAN

C200

PLOT DATE: 12/1/2020 2:56 PM
PLOT SCALE: 1:2.5949
EDIT DATE: 1/6/2020
EDITED BY: NHORGAN
DRAWING FILE: P:\2019\01572\D. Drawings\Civil\Construction Documents\2019.01572-CE-C200-SP.dwg



SITE LEGEND

- HEAVY DUTY ASPHALT PAVEMENT
- CONCRETE PAVEMENT

SITE DATA TABLE

SITE ZONING:	M-1
PROJECT AREA:	6.859± ACRES
BUILDING AREA (CLIMATE CONTROLLED):	52,143 SF
BUILDING AREA (NON-CLIMATE CONTROLLED):	26,818 SF
SITE IMPERVIOUS AREA:	4.18± ACRES
STANDARD PARKING (9'x20'):	3
ADA PARKING PROVIDED: (INCLUDES 1 VAN ACCESSIBLE)	1
TOTAL PROPOSED PARKING:	4

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-362-2764
- OHIO UNDERGROUND -

EXISTING LEGEND

	Drainage Inlet Square		Power Pole
	Electric Transformer		Rock
	Fire Hydrant		Sanitary Manhole
G	Gas Marker		Sign
	Gas Service Valve		Sprinkler Head
	Gas Valve		Storm Manhole
	Guy Wire		Telephone Manhole
I.P.F.	Iron Pin & Cap Found		Telephone Pedestal
I.P.F.	Iron Pin Found		Tree
I.P.S.	Iron Pin Set	W	Water Marker
	Light Pole		Water Service Valve
M.N.S.	Mag Nail Set		Water Valve
	Pine Tree		Zone "AE" (Special Flood Hazard Areas)
	Post		Zone "X" (within 0.2% Chance Annual Floodplain)
	Power & Telephone Pole		

KEYNOTES

1. 6" CONCRETE CURB
2. CONCRETE SIDEWALK
3. COMBINED CONCRETE CURB & WALK
4. ADA ACCESSIBLE RAMP, TYPE "H"
5. ADA ACCESSIBLE RAMP, TYPE "K"
6. ADA PARKING SPACE (4" BLUE PAINT STRIPE)
7. ADA PARKING SYMBOL
8. ADA ACCESSIBLE PARKING SIGN
9. PARKING SPACE (4" WHITE PAINT STRIPE)
10. TRANSFORMER PAD PER UTILITY COMPANY STANDARDS
11. DUMPSTER PAD
12. RETAINING WALL (REFER TO STRUCTURAL DRAWINGS FOR DETAILS)
13. CONCRETE BOLLARD
14. PERIMETER FENCE (REFER TO ARCHITECTURAL PLANS)
15. DUMPSTER ENCLOSURE (REFER TO ARCHITECTURAL PLANS)
16. CURB TAPER
17. CONCRETE WHEEL STOP
18. GATE AND/OR CONTROL ARM (REFER TO ARCHITECTURAL PLANS)

0' 30' 60'

SCALE: 1"=30'

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

STERLING

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

STATE OF OHIO — SHAWN L GOODWIN — REGISTERED PROFESSIONAL ENGINEER

01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

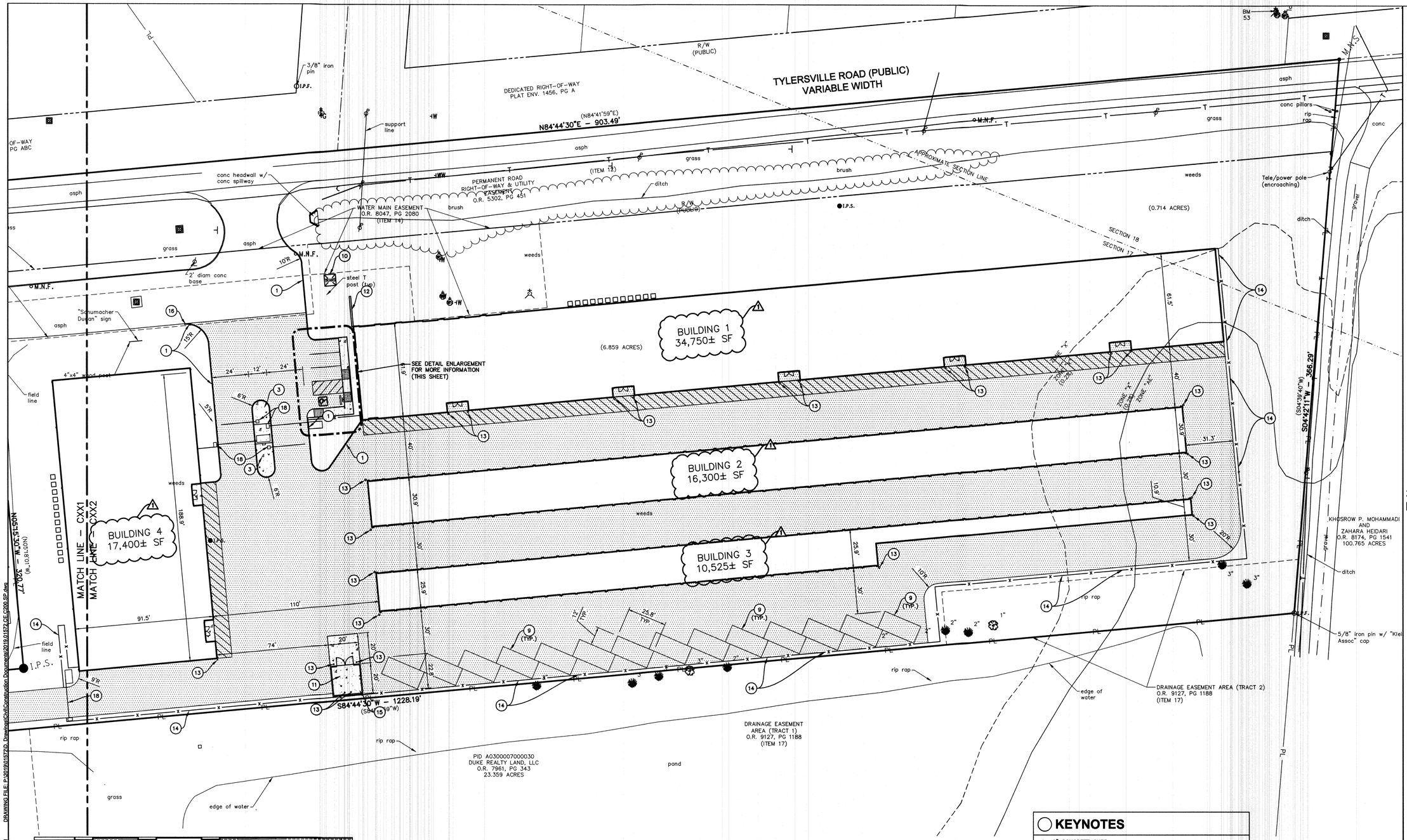
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

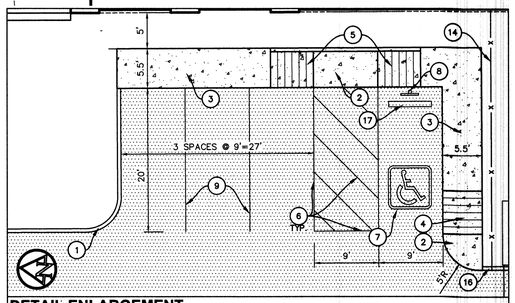
Project Number 2019.01572

SITE PLAN

C201

PLOT DATE: 1/21/2020 2:56 PM
PLOT SCALE: 1:2.5949
EDIT DATE: 1/6/2020
EDITED BY: NHORGAN
DRAWING FILE: P:\2019\01572\00_Drawings\Civil\Construction Documents\2019.01572-CE-C200.SP.dwg





DETAIL ENLARGEMENT
SCALE: 1" = 10'

SITE LEGEND

HEAVY DUTY ASPHALT PAVEMENT

CONCRETE PAVEMENT

SITE DATA TABLE

SITE ZONING:	M-1
PROJECT AREA:	6.859± ACRES
BUILDING AREA (CLIMATE CONTROLLED):	52,143 SF
BUILDING AREA (NON-CLIMATE CONTROLLED):	26,818 SF
SITE IMPERVIOUS AREA:	4.18± ACRES
STANDARD PARKING (9'x20'):	3
ADA PARKING PROVIDED: (INCLUDES 1 VAN ACCESSIBLE)	1
TOTAL PROPOSED PARKING:	4

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-362-2764
OHIO UNDERGROUND

EXISTING LEGEND

	Drainage Inlet Square		Power Pole
	Electric Transformer		Rock
	Fire Hydrant		Sanitary Manhole
+G	Gas Marker		Sign
	Gas Service Valve		Sprinkler Head
	Gas Valve		Storm Manhole
<	Guy Wire		Telephone Manhole
I.P.F.	Iron Pin & Cap Found		Telephone Pedestal
I.P.S.	Iron Pin Found		Tree
I.P.S.	Iron Pin Set	+W	Water Marker
	Light Pole		Water Service Valve
M.N.S.	Mag Nail Set		Water Valve
	Pine Tree		Zone "AE" (Special Flood Hazard Areas)
	Post		Zone "X" (within 0.2% Chance Annual Floodplain)
	Power & Telephone Pole		

KEYNOTES

1. 6" CONCRETE CURB
2. CONCRETE SIDEWALK
3. COMBINED CONCRETE CURB & WALK
4. ADA ACCESSIBLE RAMP, TYPE "H"
5. ADA ACCESSIBLE RAMP, TYPE "K"
6. ADA PARKING SPACE (4" BLUE PAINT STRIPE)
7. ADA PARKING SYMBOL
8. ADA ACCESSIBLE PARKING SIGN
9. PARKING SPACE (4" WHITE PAINT STRIPE)
10. TRANSFORMER PAD PER UTILITY COMPANY STANDARDS
11. DUMPSTER PAD
12. RETAINING WALL (REFER TO STRUCTURAL DRAWINGS FOR DETAILS)
13. CONCRETE BOLLARD
14. PERIMETER FENCE (REFER TO ARCHITECTURAL PLANS)
15. DUMPSTER ENCLOSURE (REFER TO ARCHITECTURAL PLANS)
16. CURB TAPER
17. CONCRETE WHEEL STOP
18. GATE AND/OR CONTROL ARM (REFER TO ARCHITECTURAL PLANS)

0' 30' 60'
SCALE: 1"=30'

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

STERLING

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

STATE OF OHIO
SHAWN L. GOODWIN
E-70040
REGISTERED PROFESSIONAL ENGINEER

01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

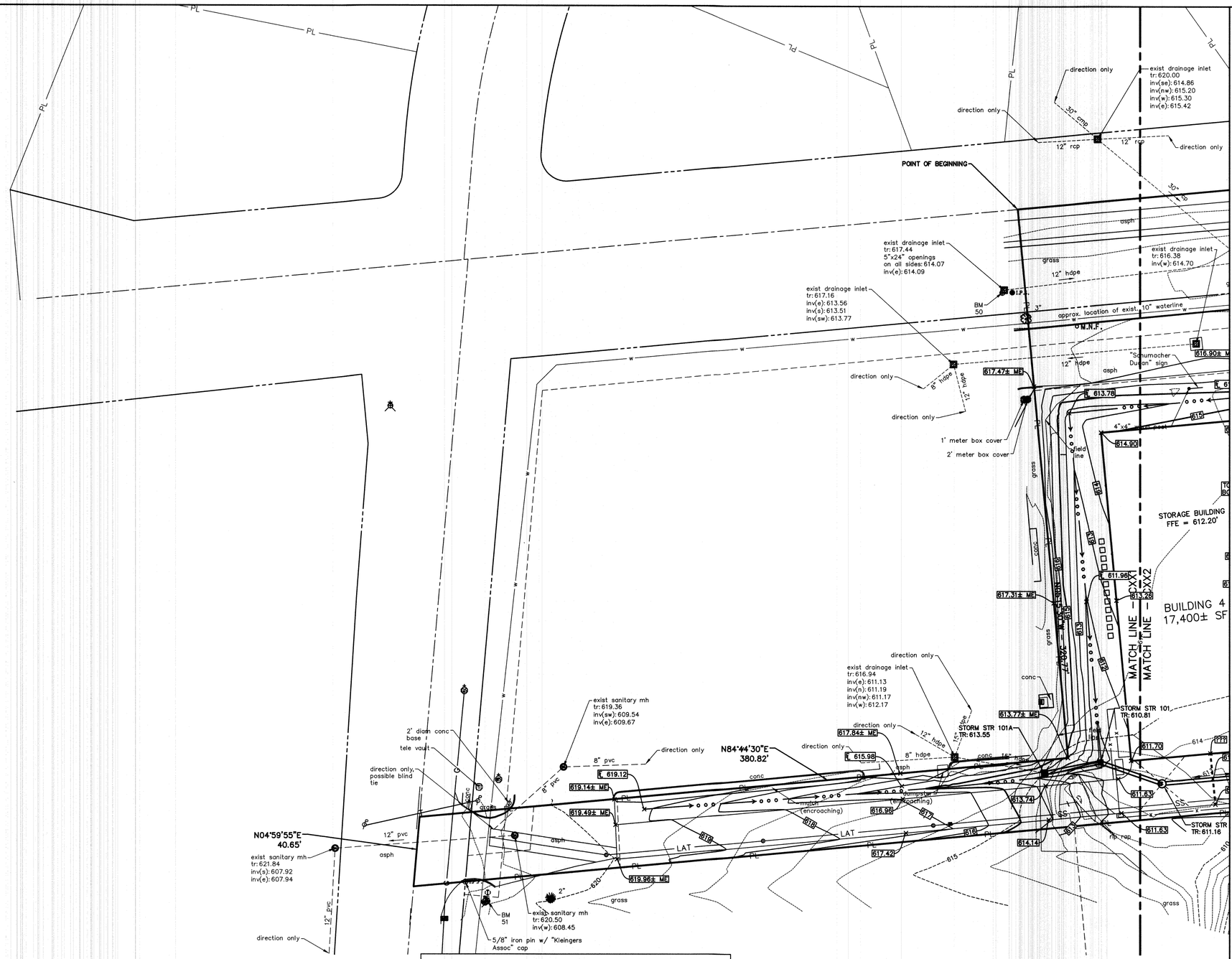
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

Project Number 2019.01572

SITE PLAN

C202

PLOT DATE: 1/21/2020 2:56 PM
PLOT SCALE: 12.5849
EDIT DATE: 1/6/2020
EDITED BY: MHORGAN
DRAWING FILE: P:\2019\01572\0_Drawings\Civil\Construction Documents\2019.01572_CE_C200_SP.dwg



BENCHMARK DATA

BASIS OF BEARING (HORIZONTAL)
BEARINGS DESCRIBED HEREIN ARE BASED ON NORTH 84 DEGREES 44 MINUTES 30 SECONDS EAST FOR THE CENTERLINE OF RIGHT-OF-WAY FOR TYLERSVILLE ROAD, MEASURED FROM GRID NORTH, REFERENCED TO THE OHIO STATE PLANE COORDINATE SYSTEM (SOUTH ZONE) AND THE NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT), AS ESTABLISHED UTILIZING A GPS SURVEY AND AN NGS OPUS SOLUTION.

ELEVATION DATUM (VERTICAL)
ELEVATIONS SHOWN HEREIN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, AS ESTABLISHED UTILIZING A LEVEL CIRCUIT ORIGINATING ON CONTROL POINT 1100 (ELEVATION = 615.28)

CP 1100
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED 161.65 FEET NORTHEAST OF A BRICK DUMPSTER STRUCTURE, 147.65 FEET SOUTHEAST OF THE SOUTHEAST CORNER OF A CAR WASH AND 182.85 FEET SOUTH OF LAMP POLE.
ELEV: 615.28

CP 1101
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED IN A GRASS AREA 28.36 FEET SOUTH OF TYLERSVILLE ROAD, 21.48 FEET NORTH OF AN ASPHALT DRIVE, EAST OF THE EXIT DRIVE AND 3.00 FEET EAST OF A CATCH BASIN.
ELEV: 616.63

CP 1102
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED ON THE WEST SIDE OF SEWARD ROAD, 34.75 FEET WEST OF THE EDGE OF PAVEMENT, 119.09 FEET SOUTWEST OF A POWER POLE AND 130.53 FEET SOUTHWEST OF A FIRE HYDRANT ON THE SOUTH SIDE OF A DRIVE ON THE EAST SIDE OF SEWARD ROAD.
ELEV: 621.66

BM 50
CHISLED SQUARE ON THE SOUTHWEST CORNER OF A SQUARE CATCH BASIN LOCATED 25 FEET SOUTH OF TYLERSVILLE ROAD, 40.56 FEET EAST OF THE CURB FOR THE EXIT ONLY LANE FROM THE NORTHEAST CORNER OF THE ADJOINING UDF PROPERTY.
ELEV: 617.48

BM 51
CHISLED "X" ON THE NORTH BOLT OF A FIRE HYDRANT LOCATED ON THE EAST SIDE OF STEWARD ROAD, 144.80 FEET SOUTHWEST OF THE SOUTHWEST CORNER OF THE UDF BUILDING.
ELEV: 623.28

BM 53
CHISLED "X" ON THE NORTHEAST BOLT OF A FIRE HYDRANT LOCATED ON THE NORTH SIDE OF TYLERSVILLE ROAD.
ELEV: 613.15

UTILITY CONTACTS

UTILITY	COMPANY	CONTACT	PHONE NO.
CABLE TELEVISION	------	------	(XXX) XXX-XXXX
ELECTRIC	DUKE ENERGY	TROY DITTMER	(513) 458-3844
INTERNET	SPECTRUM	KENT RIEGER	(513) 386-5499
GAS	DUKE ENERGY	BEN JOHNSON	(513) 287-1594
SANITARY SEWER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300
STORM SEWER	BUTLER COUNTY	JAMES FOX	(513) 867-4200
TELEPHONE	CINCINNATI BELL	BRECK COWAN	(513) 565-7043
WATER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

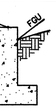
THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-362-2764
- OHIO UNDERGROUND -

GRADING LEGEND

ME	MATCH EXISTING
FL	FLOWLINE
BC	BOTTOM OF CURB
TC	TOP OF CURB
HP	HIGH POINT
LP	LOW POINT
000	CONTOURS
	SWALE
TC 000.50 BC 000.00	CURB ELEVATIONS
000.00	SPOT ELEVATIONS
	FLOW ARROW
	STORM SEWER LINE
	PAVEMENT UNDERDRAIN
	STRUCTURES
	RIDGE LINE

GRADING WALL DETAIL
NOT TO SCALE



TW: TOP OF WALL
FGU: FINISH GRADE AT UPPER SIDE OF WALL
FGL: FINISH GRADE AT LOWER SIDE OF WALL

EXISTING LEGEND

	Drainage Inlet Square		Power Pole
	Electric Transformer		Rock
	Fire Hydrant		Sanitary Manhole
+G	Gas Marker		Sign
	Gas Service Valve		Sprinkler Head
	Gas Valve		Storm Manhole
	Guy Wire		Telephone Manhole
I.P.F.	Iron Pin & Cap Found		Telephone Pedestal
I.P.F.	Iron Pin Found		Tree
I.P.S.	Iron Pin Set	+W	Water Marker
	Light Pole		Water Service Valve
M.N.S.	Mag Nail Set		Water Valve
	Pine Tree		Zone "AE" (Special Flood Hazard Areas)
	Post		Zone "X" (within 0.2% Chance Annual Floodplain)
	Power & Telephone Pole		

0' 30' 60'
SCALE: 1"=30'

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

STERLING

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

STATE OF OHIO
SHAWN L GOODWIN
E-26400
PROFESSIONAL ENGINEER

01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

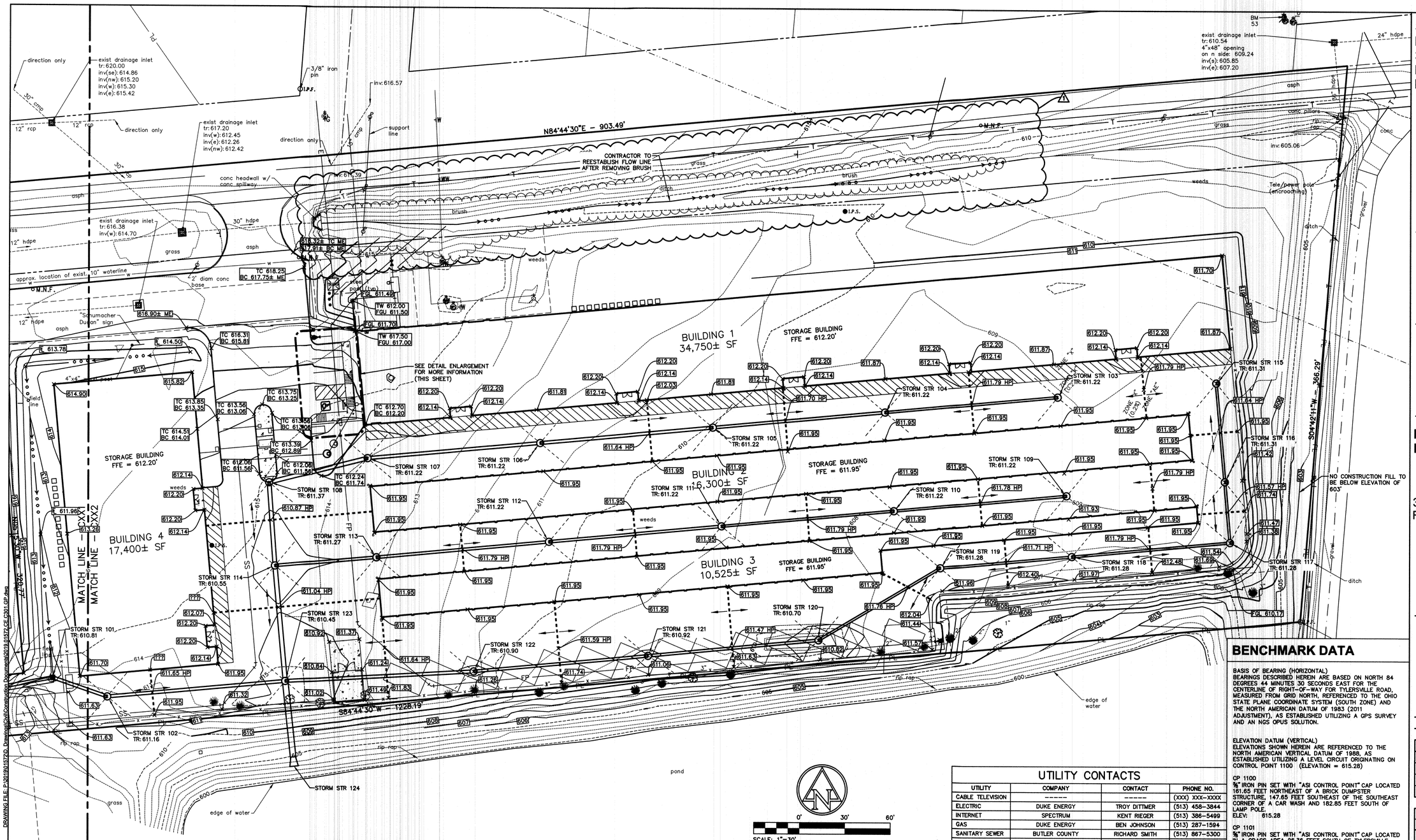
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

Project Number 2019.01572

GRADING PLAN

C301

PLOT DATE: 1/21/2020 2:56 PM
PLOT SCALE: 1.2499
EDIT DATE: 1/6/2020
EDITED BY: MHORGAN
DRAWING FILE: P:\2019\01572\D_Drawings\Civil\Construction Documents\2019.01572.CE.C301.GP.dwg



GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-362-2764

GRADING LEGEND

ME	MATCH EXISTING
FL	FLOWLINE
BC	BOTTOM OF CURB
TC	TOP OF CURB
HP	HIGH POINT
LP	LOW POINT
000	CONTOURS
	SWALE
TC 000.50 BC 000.00	CURB ELEVATIONS
000.00	SPOT ELEVATIONS
	FLOW ARROW
	STORM SEWER LINE
	PAVEMENT UNDERDRAIN
	STRUCTURES
	RIDGE LINE

GRADING WALL DETAIL
NOT TO SCALE

TW: TOP OF WALL
FGU: FINISH GRADE AT UPPER SIDE OF WALL
FGL: FINISH GRADE AT LOWER SIDE OF WALL

UTILITY CONTACTS

UTILITY	COMPANY	CONTACT	PHONE NO.
CABLE TELEVISION	-------	-------	(XXX) XXX-XXXX
ELECTRIC	DUKE ENERGY	TROY DITTMER	(513) 458-3844
INTERNET	SPECTRUM	KENT RIEGER	(513) 386-5499
GAS	DUKE ENERGY	BEN JOHNSON	(513) 287-1594
SANITARY SEWER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300
STORM SEWER	BUTLER COUNTY	JAMES FOX	(513) 867-4200
TELEPHONE	CINCINNATI BELL	BRECK COWAN	(513) 565-7043
WATER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300

EXISTING LEGEND

	Drainage Inlet Square		Power Pole
	Electric Transformer		Rock
	Fire Hydrant		Sanitary Manhole
	Gas Marker		Sign
	Gas Service Valve		Sprinkler Head
	Gas Valve		Storm Manhole
	Guy Wire		Telephone Manhole
I.P.F.	Iron Pin & Cap Found		Telephone Pedestal
I.P.F.	Iron Pin Found		Tree
I.P.S.	Iron Pin Set		Water Marker
	Light Pole		Water Service Valve
M.N.S.	Mag Nail Set		Water Valve
	Pine Tree		Zone "AE" (Special Flood Hazard Areas)
	Post		Zone "X" (within 0.2% Chance Annual

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

STERLING

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

BENCHMARK DATA

BASIS OF BEARING (HORIZONTAL)
BEARINGS DESCRIBED HEREIN ARE BASED ON NORTH 84 DEGREES 44 MINUTES 30 SECONDS EAST FOR THE CENTERLINE OF RIGHT-OF-WAY FOR TYLERSVILLE ROAD, MEASURED FROM GRID NORTH, REFERENCED TO THE OHIO STATE PLANE COORDINATE SYSTEM (SOUTH ZONE) AND THE NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT). AS ESTABLISHED UTILIZING A GPS SURVEY AND AN NGS OPUS SOLUTION.

ELEVATION DATUM (VERTICAL)
ELEVATIONS SHOWN HEREIN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, AS ESTABLISHED UTILIZING A LEVEL CIRCUIT ORIGINATING ON CONTROL POINT 1100 (ELEVATION = 615.28)

CP 1100
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED 161.65 FEET NORTHEAST OF A BRICK DUMPSTER STRUCTURE, 147.65 FEET SOUTHEAST OF THE SOUTHEAST CORNER OF A CAR WASH AND 182.85 FEET SOUTH OF LAMP POLE.
ELEV: 615.28

CP 1101
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED IN A GRASS AREA 26.36 FEET SOUTH OF TYLERSVILLE ROAD, 21.48 FEET NORTH OF AN ASPHALT DRIVE, EAST OF THE EXIT DRIVE AND 3.00 FEET EAST OF A CATCH BASIN.
ELEV: 616.63

CP 1102
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED ON THE WEST SIDE OF SEWARD ROAD, 34.75 FEET WEST OF THE EDGE OF PAVEMENT, 119.09 FEET SOUTHWEST OF A POWER POLE AND 130.53 FEET SOUTHWEST OF A FIRE HYDRANT ON THE SOUTH SIDE OF A DRIVE ON THE EAST SIDE OF SEWARD ROAD.
ELEV: 621.66

BM 50
CHISLED SQUARE ON THE SOUTHWEST CORNER OF A SQUARE CATCH BASIN LOCATED 25 FEET SOUTH OF TYLERSVILLE ROAD, 40.56 FEET EAST OF THE CURB FOR THE EXIT ONLY LANE FROM THE NORTHEAST CORNER OF THE ADJOINING UDF PROPERTY.
ELEV: 617.48

BM 51
CHISLED "X" ON THE NORTH BOLT OF A FIRE HYDRANT LOCATED ON THE EAST SIDE OF STEWARD ROAD, 144.80 FEET SOUTHWEST OF THE SOUTHWEST CORNER OF THE UDF BUILDING.
ELEV: 623.28

BM 53
CHISLED "X" ON THE NORTHEAST BOLT OF A FIRE HYDRANT LOCATED ON THE NORTH SIDE OF TYLERSVILLE ROAD.

STATE OF OHIO
SHAWN L GOODWIN
E-68102
PROFESSIONAL ENGINEER
01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE: 1/6/2020
PROJECT PHASE: PRELIMINARY DOCUMENTS

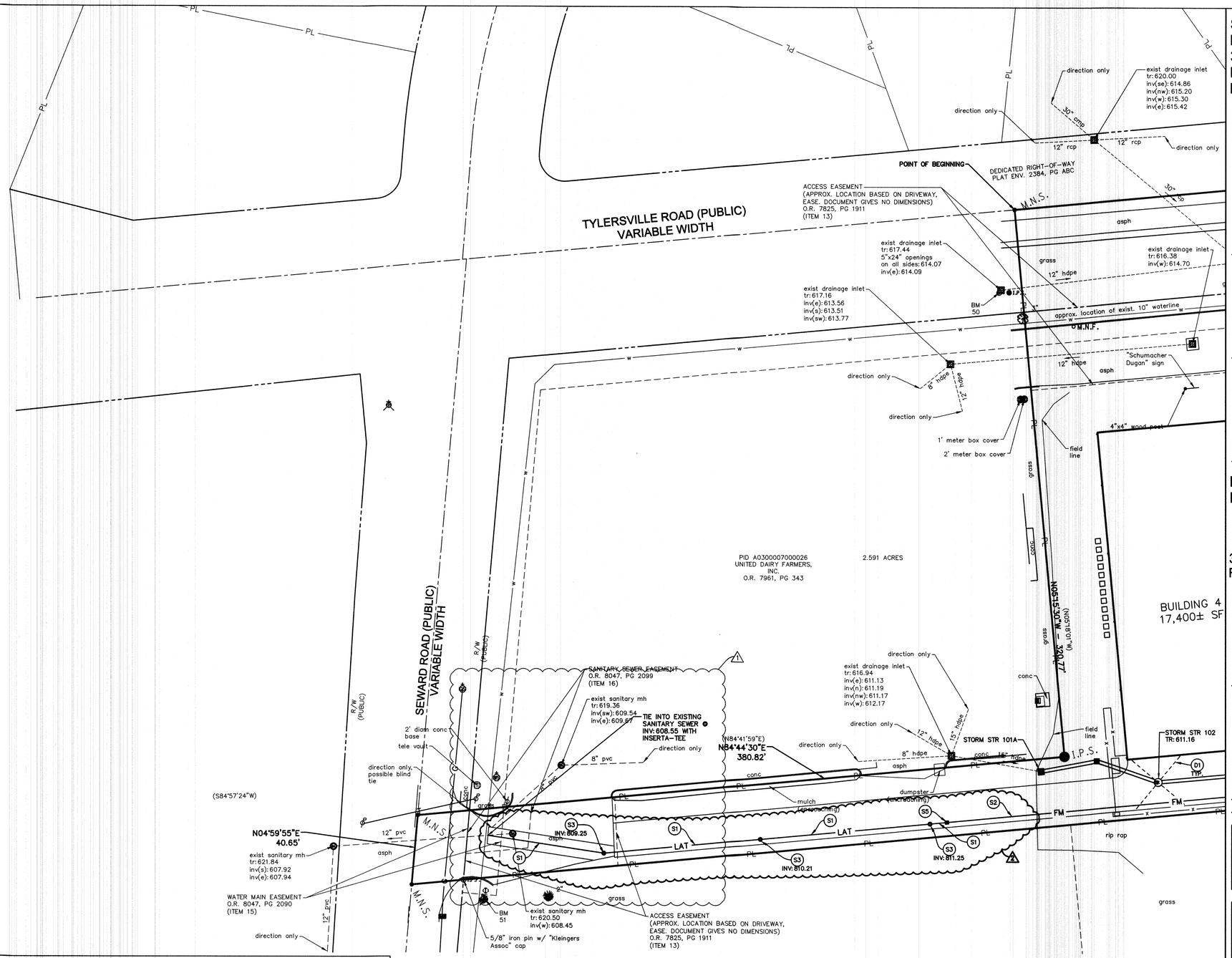
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

Project Number 2019.01572

GRADING PLAN

C302

PLOT DATE: 1/7/2020 2:58 PM EDITED BY: MHORGAN
PLOT SCALE: 1:2.9849 EDIT DATE: 1/6/2020 DRAWING FILE: P:\2019\01572\0. Drawings\Civil\Construction Documents\2019.01572_GE C301.GP.dwg



KEYNOTES

SANITARY SEWER

S1. 8" PVC SANITARY LATERAL @ 1.04% MIN. SLOPE

S2. 1.25" SDR21 PVC SANITARY FORCE MAIN (2)

S3. SANITARY CLEAN OUT

S4. SANITARY HORIZONTAL BEND W/ CONCRETE THRUST BLOCK

S5. TRANSITION COUPLING (2)

WATERLINE

W1. 2" PVC C900 WATER LINE

W2. 8" PVC C900 FIRE PROTECTION LINE

W3. FIRE HYDRANT W/ ASSEMBLY

W4. FIRE DEPARTMENT CONNECTION

W5. WATER BEND W/ CONCRETE THRUST BLOCK

W6. GATE VALVE

W7. POST INDICATOR VALVE

W8. WATER TEE

W9. TAPPING SLEEVE AND VALVE

W10. 6" PVC C900 FIRE PROTECTION LINE

W11. 8"x6" REDUCER (2)

DRAINAGE/STORM SEWER

D1. PAVEMENT UNDER DRAIN

GAS

G1. GAS METER

G2. GAS SERVICE LINE

ELECTRIC \ TELECOMMUNICATIONS

E1. ELECTRIC TRANSFORMER

E2. ELECTRIC SERVICE LINE

MISCELLANEOUS

M1. POTENTIAL UTILITY CONFLICT (ALL WATER / SANITARY / STORM CROSSINGS TO HAVE A MINIMUM OF 18" VERTICAL CLEARANCE. CONTACT ENGINEER IF CONFLICTS EXIST. RELOCATE EXISTING UTILITIES AS REQUIRED.

M2. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH AND SIZE OF EXISTING UTILITIES TO ENSURE CONFLICTS DO NOT EXIST WITH PROPOSED UTILITIES.

M3. CONTRACTOR TO COORDINATE UTILITY CONNECTION WITH UTILITY PROVIDER.

UTILITY LEGEND

- ETC — ELECTRIC / TELECOMMUNICATIONS LINE
- W — WATER LINE
- FP — FIRE PROTECTION LINE
- RD — ROOF DRAIN LINE
- G — GAS LINE
- FM — SANITARY FORCE MAIN
- LAT — SANITARY LATERAL LINE
- STORM SEWER LINE
- PAVEMENT UNDERDRAIN
- GM — GAS METER
- ELECTRICAL TRANSFORMER
- VALVE
- FIRE HYDRANT W/ ASSEMBLY

EXISTING LEGEND

- Drainage Inlet Square
- Electric Transformer
- Fire Hydrant
- Gas Marker
- Gas Service Valve
- Gas Valve
- Guy Wire
- I.P.F. Iron Pin & Cap Found
- I.P.F. Iron Pin Found
- I.P.S. Iron Pin Set
- Light Pole
- M.N.S. Mag Nail Set
- Pine Tree
- Post
- Power & Telephone Pole
- Power Pole
- Rock
- Sanitary Manhole
- Sign
- Sprinkler Head
- Storm Manhole
- Telephone Manhole
- Telephone Pedestal
- Tree
- Water Marker
- Water Service Valve
- Water Valve
- Zone "AE" (Special Flood Hazard Areas)
- Zone "X" (within 0.2% Chance Annual Floodplain)

UTILITY CONTACTS

UTILITY	COMPANY	CONTACT	PHONE NO.
CABLE TELEVISION	------	------	(XXX) XXX-XXXX
ELECTRIC	DUKE ENERGY	TROY DITTMER	(513) 458-3844
INTERNET	SPECTRUM	KENT RIEGER	(513) 386-5499
GAS	DUKE ENERGY	BEN JOHNSON	(513) 287-1594
SANITARY SEWER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300
STORM SEWER	BUTLER COUNTY	JAMES FOX	(513) 867-4200
TELEPHONE	CINCINNATI BELL	BRECK COWAN	(513) 565-7043
WATER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-362-2764
– OHIO UNDERGROUND –

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

STERLING

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

STATE OF OHIO — SHAWN L. GOODWIN — E-82 — REGISTERED PROFESSIONAL ENGINEER

01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

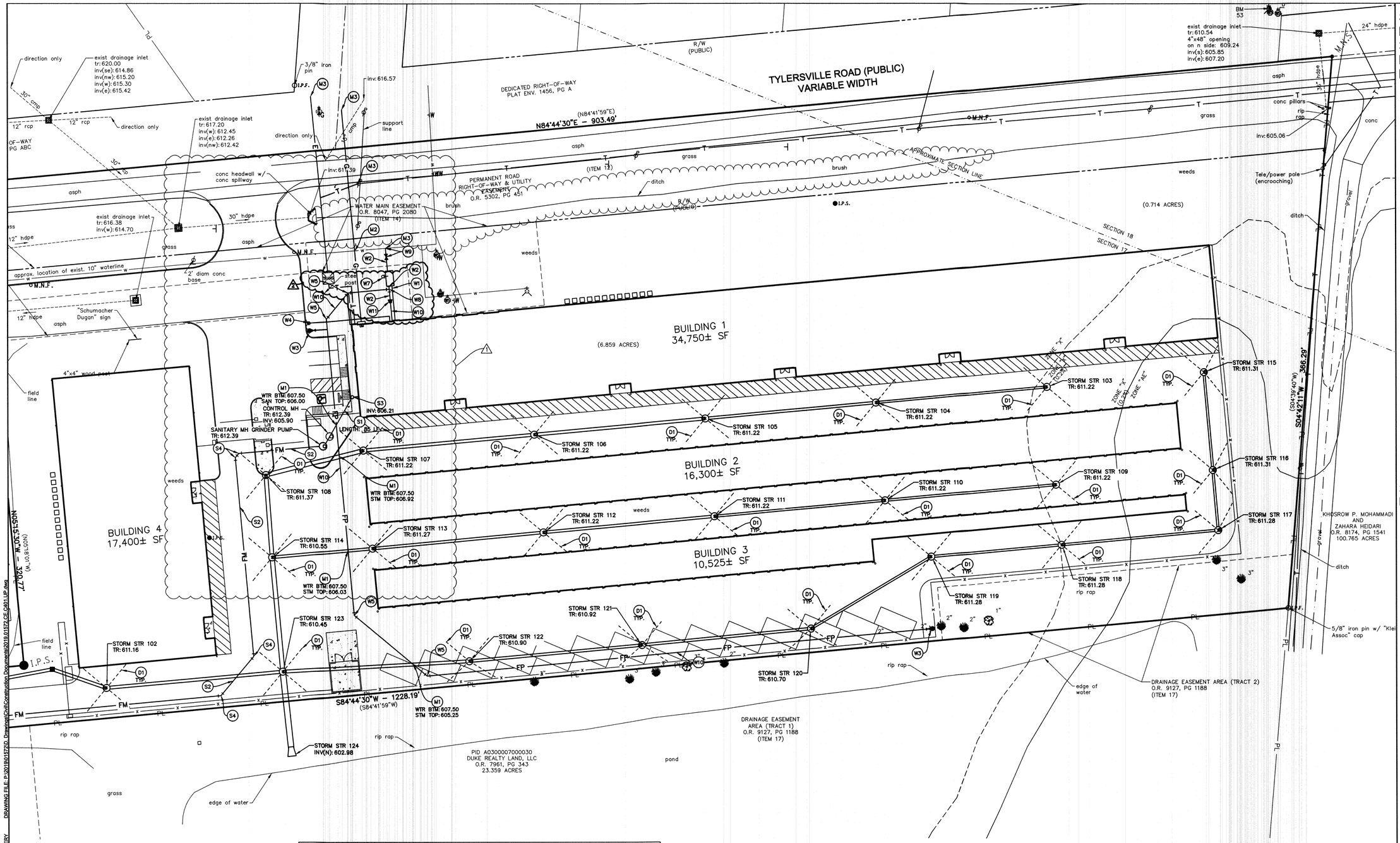
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

Project Number 2019.01572

UTILITY PLAN

C401

PLOT DATE: 1/21/2020 2:56 PM
PLOT SCALE: 1.0000
EDIT DATE: 1/17/2020
EDITED BY: PDOTTERY
DRAWING FILE: P:\2019\01572\03. Drawings\Civil\Construction Documents\2019.01572 CE C401 UP.dwg



KEYNOTES

SANITARY SEWER

S1. 6" PVC SANITARY LATERAL @ 1.04% MIN. SLOPE
S2. 1.25" SDR21 PVC SANITARY FORCE MAIN (2)
S3. SANITARY CLEAN OUT
S4. SANITARY HORIZONTAL BEND W/ CONCRETE THRUST BLOCK
S5. TRANSITION COUPLING (2)

WATERLINE

W1. 2" PVC C900 WATER LINE
W2. 8" PVC C900 FIRE PROTECTION LINE
W3. FIRE HYDRANT W/ ASSEMBLY
W4. FIRE DEPARTMENT CONNECTION
W5. WATER BEND W/ CONCRETE THRUST BLOCK
W6. GATE VALVE
W7. POST INDICATOR VALVE
W8. WATER TEE
W9. TAPPING SLEEVE AND VALVE
W10. 6" PVC C900 FIRE PROTECTION LINE
W11. 8"x6" REDUCER (2)

DRAINAGE/STORM SEWER

D1. PAVEMENT UNDER DRAIN

GAS

G1. GAS METER
G2. GAS SERVICE LINE

ELECTRIC \ TELECOMMUNICATIONS

E1. ELECTRIC TRANSFORMER
E2. ELECTRIC SERVICE LINE

MISCELLANEOUS

M1. POTENTIAL UTILITY CONFLICT (ALL WATER / SANITARY / STORM CROSSINGS TO HAVE A MINIMUM OF 18" VERTICAL CLEARANCE. CONTACT ENGINEER IF CONFLICTS EXIST. RELOCATE EXISTING UTILITIES AS REQUIRED.
M2. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH AND SIZE OF EXISTING UTILITIES TO ENSURE CONFLICTS DO NOT EXIST WITH PROPOSED UTILITIES.
M3. CONTRACTOR TO COORDINATE UTILITY CONNECTION WITH UTILITY PROVIDER.

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-362-2764
- OHIO UNDERGROUND -

UTILITY LEGEND

ETC	ELECTRIC / TELECOMMUNICATIONS LINE
W	WATER LINE
FP	FIRE PROTECTION LINE
RD	ROOF DRAIN LINE
G	GAS LINE
FM	SANITARY FORCE MAIN
LAT	SANITARY LATERAL LINE
	STORM SEWER LINE
	PAVEMENT UNDERDRAIN
GM	GAS METER
ELEC	ELECTRICAL TRANSFORMER
	VALVE
	FIRE HYDRANT W/ ASSEMBLY

EXISTING LEGEND

Drainage Inlet Square	Power Pole
Electric Transformer	Rock
Fire Hydrant	Sanitary Manhole
Gas Marker	Sign
Gas Service Valve	Sprinkler Head
Gas Valve	Storm Manhole
Guy Wire	Telephone Manhole
I.P.F. Iron Pin & Cap Found	Telephone Pedestal
I.P.F. Iron Pin Found	Tree
I.P.S. Iron Pin Set	Water Marker
Light Pole	Water Service Valve
M.N.S. Mag Nail Set	Water Valve
Pine Tree	Zone "AE" (Special Flood Hazard Areas)
Post	Zone "X" (within 0.2% Chance Annual Floodplain)
Power & Telephone Pole	

UTILITY CONTACTS

UTILITY	COMPANY	CONTACT	PHONE NO.
CABLE TELEVISION	------	------	(XXX) XXX-XXXX
ELECTRIC	DUKE ENERGY	TROY DITTMER	(513) 458-3844
INTERNET	SPECTRUM	KENT RIEGER	(513) 386-5499
GAS	DUKE ENERGY	BEN JOHNSON	(513) 287-1594
SANITARY SEWER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300
STORM SEWER	BUTLER COUNTY	JAMES FOX	(513) 867-4200
TELEPHONE	CINCINNATI BELL	BRECK COWAN	(513) 565-7043
WATER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

STERLING

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

STATE OF OHIO — SHAWN L. GOODWIN — PROFESSIONAL ENGINEER — E-67762 — STERLING — ENGINEER

01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

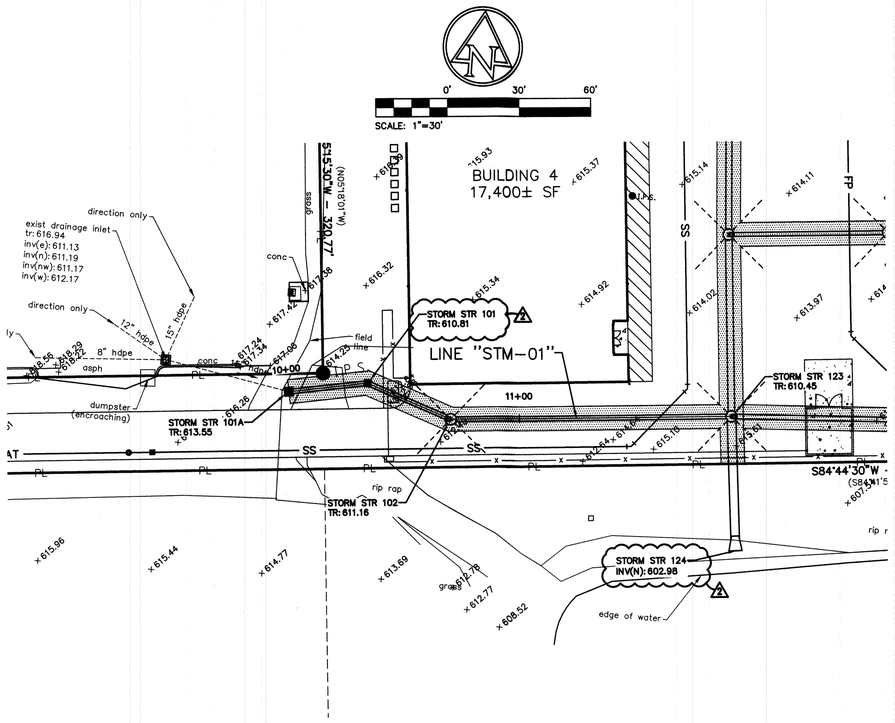
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

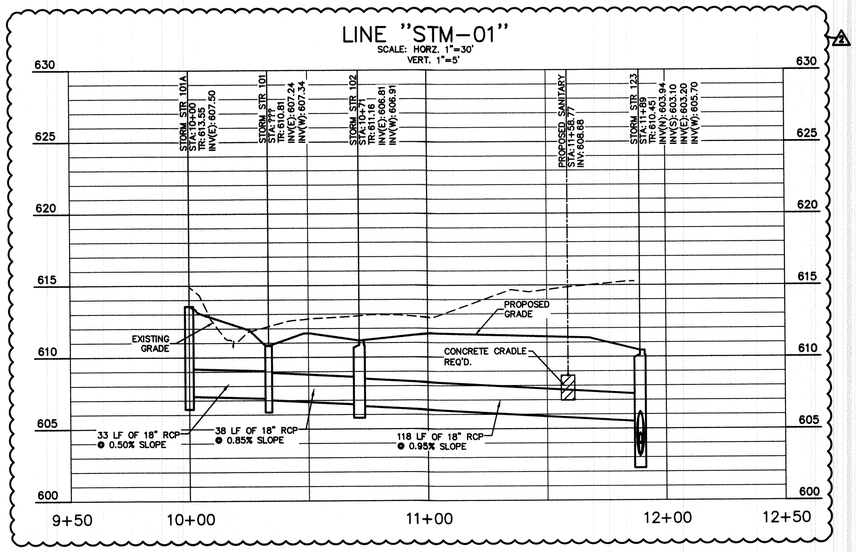
Project Number 2019.01572

UTILITY PLAN

C402

DRAWING FILE: P:\2019\01572\D. Drawings\Civil\Construction Documents\2019.01572_CE-CA01 UP.dwg
EDITED BY: PDOTTERY
EDIT DATE: 1/17/2020
PLOT DATE: 12/1/2020 2:56 PM
PLOT SCALE: 12.3949'





BENCHMARK DATA

BASIS OF BEARING (HORIZONTAL)
BEARINGS DESCRIBED HEREIN ARE BASED ON NORTH 84 DEGREES 44 MINUTES 30 SECONDS EAST FOR THE CENTERLINE OF RIGHT-OF-WAY FOR TYLERSVILLE ROAD, MEASURED FROM GRID NORTH, REFERENCED TO THE OHIO STATE PLANE COORDINATE SYSTEM (SOUTH ZONE) AND THE NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT), AS ESTABLISHED UTILIZING A GPS SURVEY AND AN NGS OPUS SOLUTION.

ELEVATION DATUM (VERTICAL)
ELEVATIONS SHOWN HEREIN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, AS ESTABLISHED UTILIZING A LEVEL CIRCUIT ORIGINATING ON CONTROL POINT 1100 (ELEVATION = 615.28)

CP 1100
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED 161.65 FEET NORTHEAST OF A BRICK DUMPSTER STRUCTURE, 147.65 FEET SOUTHEAST OF THE SOUTHEAST CORNER OF A CAR WASH AND 182.85 FEET SOUTH OF LAMP POLE.
ELEV: 615.28

CP 1101
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED IN A GRASS AREA 26.36 FEET SOUTH OF TYLERSVILLE ROAD, 21.48 FEET NORTH OF AN ASPHALT DRIVE, EAST OF THE EXIT DRIVE AND 3.00 FEET EAST OF A CATCH BASIN.
ELEV: 616.63

CP 1102
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED ON THE WEST SIDE OF SEWARD ROAD, 34.75 FEET WEST OF THE EDGE OF PAVEMENT, 119.09 FEET SOUTWEST OF A POWER POLE AND 130.53 FEET SOUTHWEST OF A FIRE HYDRANT ON THE SOUTH SIDE OF A DRIVE ON THE EAST SIDE OF SEWARD ROAD.
ELEV: 621.66

BM 50
CHISLED SQUARE ON THE SOUTHWEST CORNER OF A SQUARE CATCH BASIN LOCATED 25 FEET SOUTH OF TYLERSVILLE ROAD, 40.56 FEET EAST OF THE CURB FOR THE EXIT ONLY LANE FROM THE NORTHEAST CORNER OF THE ADJOINING UDF PROPERTY.
ELEV: 617.46

BM 51
CHISLED "X" ON THE NORTH BOLT OF A FIRE HYDRANT LOCATED ON THE EAST SIDE OF STEWARD ROAD, 144.80 FEET SOUTHWEST OF THE SOUTHWEST CORNER OF THE UDF BUILDING.
ELEV: 623.28

BM 53
CHISLED "X" ON THE NORTHEAST BOLT OF A FIRE HYDRANT LOCATED ON THE NORTH SIDE OF TYLERSVILLE ROAD.
ELEV: 613.15

UTILITY CONTACTS

UTILITY	COMPANY	CONTACT	PHONE NO.
CABLE TELEVISION	------	------	(XXX) XXX-XXXX
ELECTRIC	DUKE ENERGY	TROY DITTMER	(513) 458-3844
INTERNET	SPECTRUM	KENT RIEGER	(513) 386-5499
GAS	DUKE ENERGY	BEN JOHNSON	(513) 287-1594
SANITARY SEWER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300
STORM SEWER	BUTLER COUNTY	JAMES FOX	(513) 867-4200
TELEPHONE	CINCINNATI BELL	BRECK COWAN	(513) 565-7043
WATER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300

STORM SEWER NOTES:
1. ALL CASTINGS SHALL BE LABELED "DUMP NO WASTE – DRAINS TO WATERWAY"
2. MANNINGS COEFFICIENT n = 0.012
3. THE GRANULAR BACKFILL AREAS SHOWN IN PLAN VIEW ARE AN ESTIMATE PROVIDED BY THE ENGINEER. EXACT LIMITS OF GRANULAR BACKFILL ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR BASED ON TRENCH WIDTH AND AS DIRECTED BY THE AUTHORITY HAVING JURISDICTION.

GRANULAR BACKFILL REQUIRED

GENERAL NOTES:
1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!
THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.
CALL TOLL FREE
"811" OR 1-800-362-2764
– OHIO UNDERGROUND –

EXISTING LEGEND

	Drainage Inlet Square		Power Pole
	Electric Transformer		Rock
	Fire Hydrant		Sanitary Manhole
+G	Gas Marker		Sign
	Gas Service Valve		Sprinkler Head
	Gas Valve		Storm Manhole
	Guy Wire		Telephone Manhole
	Iron Pin & Cap Found		Telephone Pedestal
	Iron Pin Found		Tree
	Iron Pin Set	+W	Water Marker
	Light Pole		Water Service Valve
M.N.S.	Mag Nail Set		Water Valve
	Pine Tree		Zone "AE" (Special Flood Hazard Areas)
	Post		
	Power & Telephone Pole		Zone "X" (within 0.2% Chance Annual Floodplain)

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

STERLING

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

STATE OF OHIO
SHAWN L. GOODWIN
E-67006
REGISTERED PROFESSIONAL ENGINEER

01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

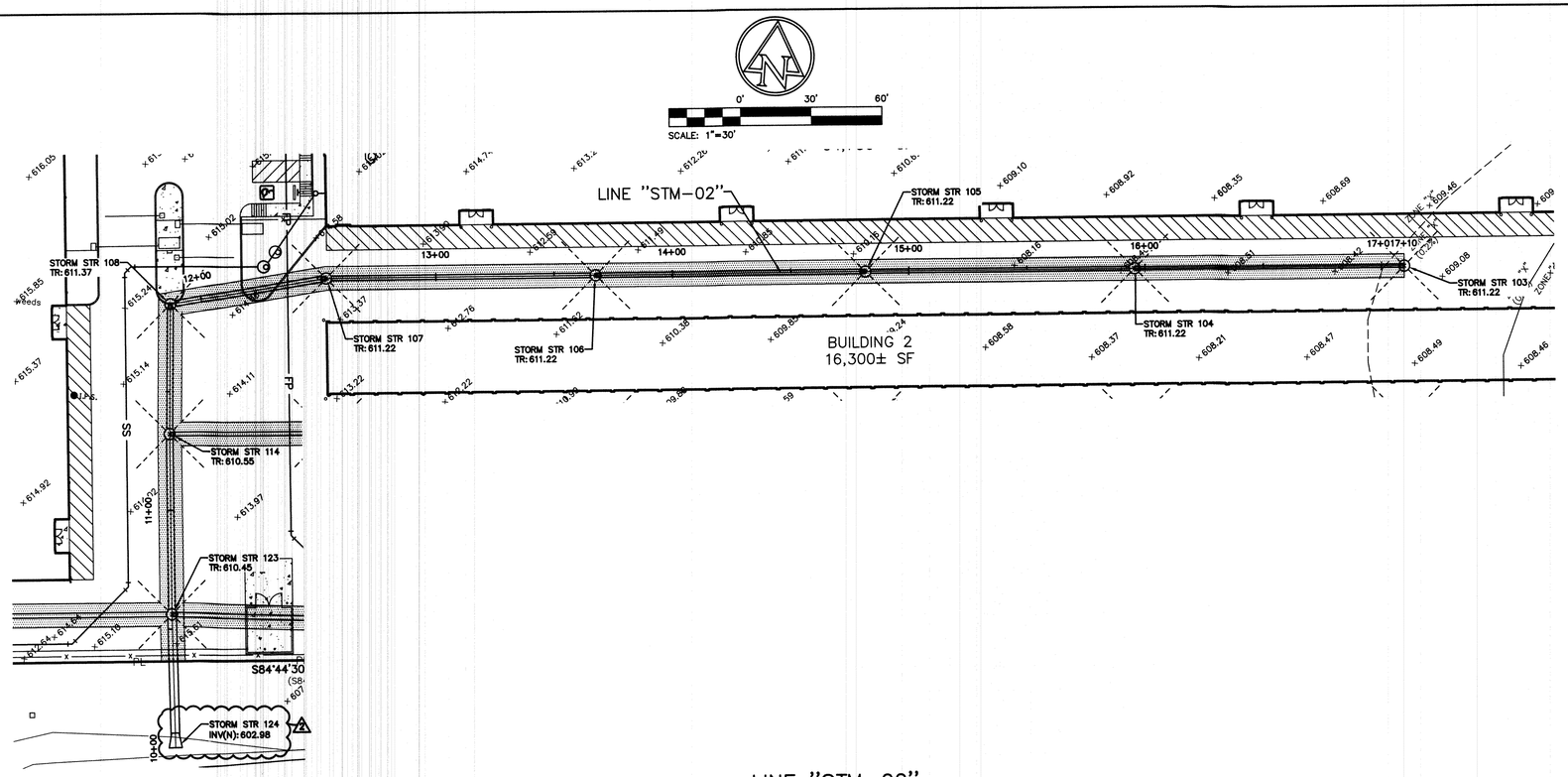
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

Project Number 2019.01572

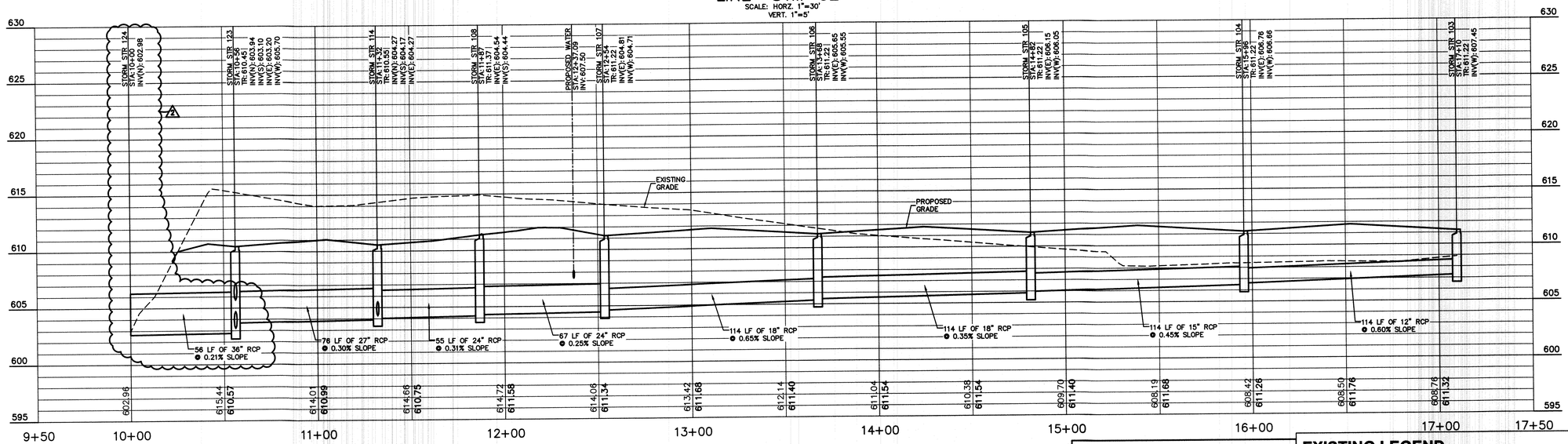
STORM SEWER PLAN & PROFILE

C410

PLOT DATE: 1/21/2020 2:56 PM
PLOT SCALE: 1:2.5849
EDIT DATE: 1/21/2020
EDITED BY: PDOTTERY
DRAWING FILE: P:\2019\01572\D. Drawings\Civil\Construction Documents\2019.01572.CE.C410.STMPP.dwg



LINE "STM-02"
SCALE: HORZ. 1"=30'
VERT. 1"=5'



UTILITY CONTACTS

UTILITY	COMPANY	CONTACT	PHONE NO.
CABLE TELEVISION	------	------	(XXX) XXX-XXXX
ELECTRIC	DUKE ENERGY	TROY DITTMER	(513) 458-3844
INTERNET	SPECTRUM	KENT RIEGER	(513) 386-5499
GAS	DUKE ENERGY	BEN JOHNSON	(513) 287-1594
SANITARY SEWER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300
STORM SEWER	BUTLER COUNTY	JAMES FOX	(513) 867-4200
TELEPHONE	CINCINNATI BELL	BRECK COWAN	(513) 565-7043
WATER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300

STORM SEWER NOTES:
1. ALL CASTINGS SHALL BE LABELED "DUMP NO WASTE – DRAINS TO WATERWAY"
2. MANNINGS COEFFICIENT n = 0.012
3. THE GRANULAR BACKFILL AREAS SHOWN IN PLAN VIEW ARE AN ESTIMATE PROVIDED BY THE ENGINEER. EXACT LIMITS OF GRANULAR BACKFILL ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR BASED ON TRENCH WIDTH AND AS DIRECTED BY THE AUTHORITY HAVING JURISDICTION.

GRANULAR BACKFILL REQUIRED

GENERAL NOTES:
1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-362-2764
– OHIO UNDERGROUND –

EXISTING LEGEND

	Drainage Inlet Square		Power Pole
	Electric Transformer		Rock
	Fire Hydrant		Sanitary Manhole
+G	Gas Marker		Sign
	Gas Service Valve		Sprinkler Head
	Gas Valve		Storm Manhole
	Guy Wire		Telephone Manhole
	Iron Pin & Cap Found		Telephone Pedestal
	Iron Pin Found		Tree
	Iron Pin Set	+W	Water Marker
	Light Pole		Water Service Valve
M.N.S.	Mag Nail Set		Water Valve
	Pine Tree		Zone "AE" (Special Flood Hazard Areas)
	Post		Zone "X" (within 0.2% Chance Annual Floodplain)
	Power & Telephone Pole		

BENCHMARK DATA

BASIS OF BEARING (HORIZONTAL)
BEARINGS DESCRIBED HEREIN ARE BASED ON NORTH 84 DEGREES 44 MINUTES 30 SECONDS EAST FOR THE CENTERLINE OF RIGHT-OF-WAY FOR TYLERSVILLE ROAD, MEASURED FROM GRID NORTH, REFERENCED TO THE OHIO STATE PLANE COORDINATE SYSTEM (SOUTH ZONE) AND THE NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT), AS ESTABLISHED UTILIZING A GPS SURVEY AND AN NGS OPUS SOLUTION.

ELEVATION DATUM (VERTICAL)
ELEVATIONS SHOWN HEREIN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, AS ESTABLISHED UTILIZING A LEVEL CIRCUIT ORIGINATING ON CONTROL POINT 1100 (ELEVATION = 615.28)

CP 1100
¾" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED 161.65 FEET NORTHEAST OF A BRICK DUMPSTER STRUCTURE, 147.65 FEET SOUTHEAST OF THE SOUTHEAST CORNER OF A CAR WASH AND 182.85 FEET SOUTH OF LAMP POLE.
ELEV: 615.28

CP 1101
¾" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED IN A GRASS AREA 26.36 FEET SOUTH OF TYLERSVILLE ROAD, 21.48 FEET NORTH OF AN ASPHALT DRIVE, EAST OF THE EXIT DRIVE AND 3.00 FEET EAST OF A CATCH BASIN.
ELEV: 616.63

CP 1102
¾" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED ON THE WEST SIDE OF SEWARD ROAD, 34.75 FEET WEST OF THE EDGE OF PAVEMENT, 119.09 FEET SOUTWEST OF A POWER POLE AND 130.53 FEET SOUTHWEST OF A FIRE HYDRANT ON THE SOUTH SIDE OF A DRIVE ON THE EAST SIDE OF SEWARD ROAD.
ELEV: 621.66

BM 50
CHISLED SQUARE ON THE SOUTHWEST CORNER OF A SQUARE CATCH BASIN LOCATED 25 FEET SOUTH OF TYLERSVILLE ROAD, 40.56 FEET EAST OF THE CURB FOR THE EXIT ONLY LANE FROM THE NORTHEAST CORNER OF THE ADJOINING UDF PROPERTY.
ELEV: 617.48

BM 51
CHISLED "X" ON THE NORTH BOLT OF A FIRE HYDRANT LOCATED ON THE EAST SIDE OF STEWARD ROAD, 144.80 FEET SOUTHWEST OF THE SOUTHWEST CORNER OF THE UDF BUILDING.
ELEV: 623.28

BM 53
CHISLED "X" ON THE NORTHEAST BOLT OF A FIRE HYDRANT LOCATED ON THE NORTH SIDE OF TYLERSVILLE ROAD.
ELEV: 613.15

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

STERLING

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

STATE OF OHIO
SHAWN L GOODWIN
E-27442
REGISTERED PROFESSIONAL ENGINEER

01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

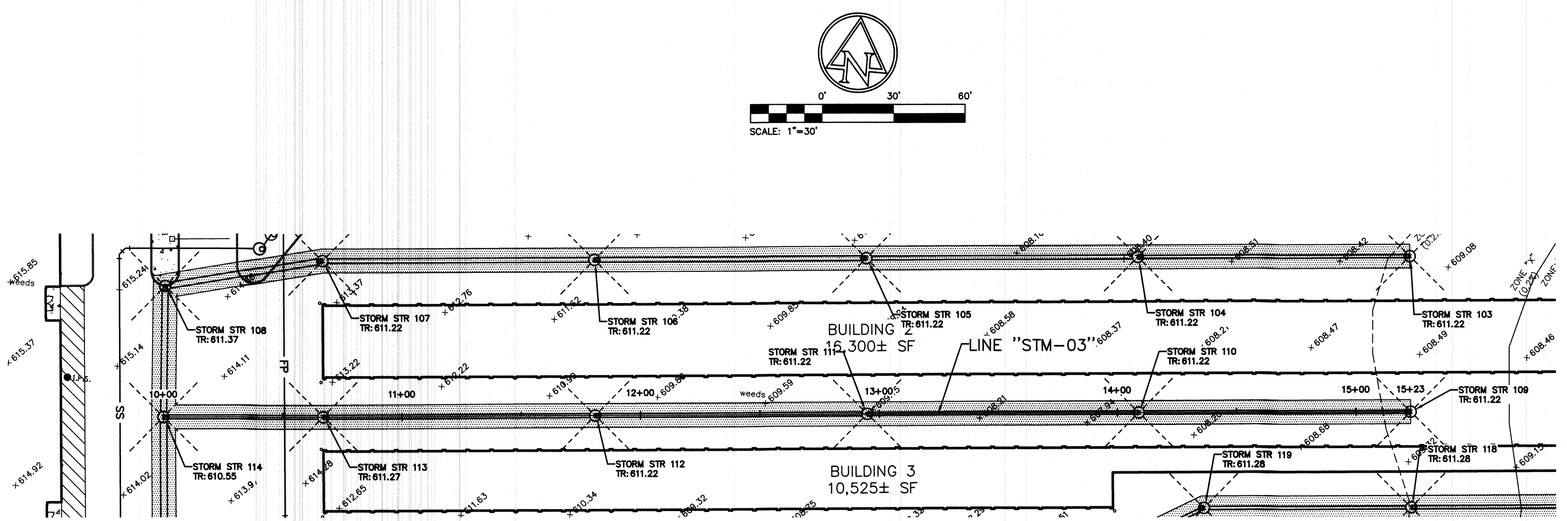
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

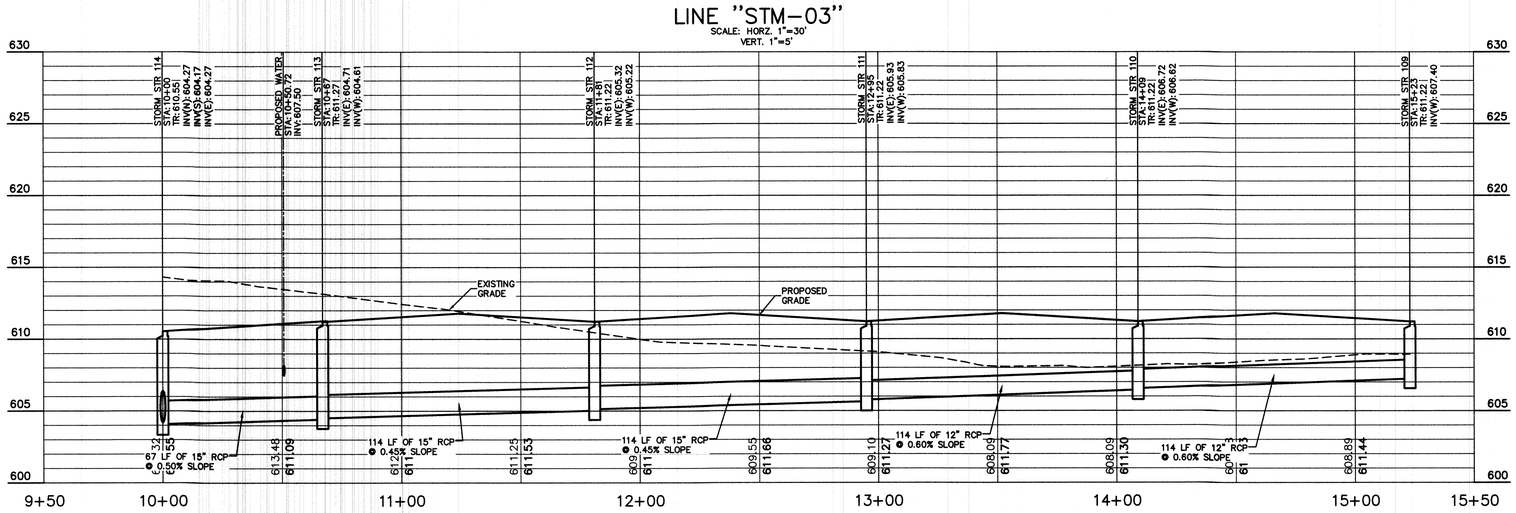
Project Number 2019.01572

STORM SEWER PLAN & PROFILE

C411

PLOT DATE: 1/21/2020 2:56 PM
PLOT SCALE: 1"=30'
EDIT DATE: 1/21/2020
EDITED BY: PPOTTERY
DRAWING FILE: P:\2019\01572\D. Drawings\Civil\Construction Documents\2019.01572.CE.C410.STMPP.dwg





UTILITY CONTACTS

UTILITY	COMPANY	CONTACT	PHONE NO.
CABLE TELEVISION	-----	-----	(XXX) XXX-XXXX
ELECTRIC	DUKE ENERGY	TROY DITTMER	(513) 458-3844
INTERNET	SPECTRUM	KENT RIEGER	(513) 386-5499
GAS	DUKE ENERGY	BEN JOHNSON	(513) 287-1594
SANITARY SEWER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300
STORM SEWER	BUTLER COUNTY	JAMES FOX	(513) 867-4200
TELEPHONE	CINCINNATI BELL	BRECK COWAN	(513) 565-7043
WATER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300

STORM SEWER NOTES:
1. ALL CASTINGS SHALL BE LABELED "DUMP NO WASTE – DRAINS TO WATERWAY"
2. MANNINGS COEFFICIENT n = 0.012
3. THE GRANULAR BACKFILL AREAS SHOWN IN PLAN VIEW ARE AN ESTIMATE PROVIDED BY THE ENGINEER. EXACT LIMITS OF GRANULAR BACKFILL ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR BASED ON TRENCH WIDTH AND AS DIRECTED BY THE AUTHORITY HAVING JURISDICTION.

GRANULAR BACKFILL REQUIRED

GENERAL NOTES:
1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (Including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-362-2764
– OHIO UNDERGROUND –

EXISTING LEGEND

	Drainage Inlet Square		Power Pole
	Electric Transformer		Rock
	Fire Hydrant		Sanitary Manhole
+G	Gas Marker		Sign
	Gas Service Valve		Sprinkler Head
	Gas Valve		Storm Manhole
	Guy Wire		Telephone Manhole
	Iron Pin & Cap Found		Telephone Pedestal
	Iron Pin Found		Tree
	Iron Pin Set	+W	Water Marker
	Light Pole		Water Service Valve
M.N.S.	Mag Nail Set		Water Valve
	Pine Tree		Zone "AE" (Special Flood Hazard Areas)
	Post		Zone "X" (within 0.2% Chance Annual Floodplain)
	Power & Telephone Pole		

BENCHMARK DATA

BASIS OF BEARING (HORIZONTAL)
BEARINGS DESCRIBED HEREIN ARE BASED ON NORTH 84 DEGREES 44 MINUTES 30 SECONDS EAST FOR THE CENTERLINE OF RIGHT-OF-WAY FOR TYLERSVILLE ROAD, MEASURED FROM GRID NORTH, REFERENCED TO THE OHIO STATE PLANE COORDINATE SYSTEM (SOUTH ZONE) AND THE NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT), AS ESTABLISHED UTILIZING A GPS SURVEY AND AN NGS OPUS SOLUTION.

ELEVATION DATUM (VERTICAL)
ELEVATIONS SHOWN HEREIN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, AS ESTABLISHED UTILIZING A LEVEL CIRCUIT ORIGINATING ON CONTROL POINT 1100 (ELEVATION = 615.28)

CP 1100
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED 161.65 FEET NORTHEAST OF A BRICK DUMPSTER STRUCTURE, 147.65 FEET SOUTHEAST OF THE SOUTHEAST CORNER OF A CAR WASH AND 182.85 FEET SOUTH OF LAMP POLE.
ELEV: 615.28

CP 1101
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED IN A GRASS AREA 26.36 FEET SOUTH OF TYLERSVILLE ROAD, 21.48 FEET NORTH OF AN ASPHALT DRIVE, EAST OF THE EXIT DRIVE AND 3.00 FEET EAST OF A CATCH BASIN.
ELEV: 616.63

CP 1102
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED ON THE WEST SIDE OF SEWARD ROAD, 34.75 FEET WEST OF THE EDGE OF PAVEMENT, 119.09 FEET SOUTWEST OF A POWER POLE AND 130.53 FEET SOUTHWEST OF A FIRE HYDRANT ON THE SOUTH SIDE OF A DRIVE ON THE EAST SIDE OF SEWARD ROAD.
ELEV: 621.66

BM 50
CHISLED SQUARE ON THE SOUTHWEST CORNER OF A SQUARE CATCH BASIN LOCATED 25 FEET SOUTH OF TYLERSVILLE ROAD, 40.56 FEET EAST OF THE CURB FOR THE EXIT ONLY LANE FROM THE NORTHEAST CORNER OF THE ADJOINING UDF PROPERTY.
ELEV: 617.46

BM 51
CHISLED "X" ON THE NORTH BOLT OF A FIRE HYDRANT LOCATED ON THE EAST SIDE OF STEWARD ROAD, 144.80 FEET SOUTHWEST OF THE SOUTHWEST CORNER OF THE UDF BUILDING.
ELEV: 623.28

BM 53
CHISLED "X" ON THE NORTHEAST BOLT OF A FIRE HYDRANT LOCATED ON THE NORTH SIDE OF TYLERSVILLE ROAD.
ELEV: 613.15

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

STERLING

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

STATE OF OHIO
SHAWN L GOODWIN
E-68402
REGISTERED PROFESSIONAL ENGINEER

01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

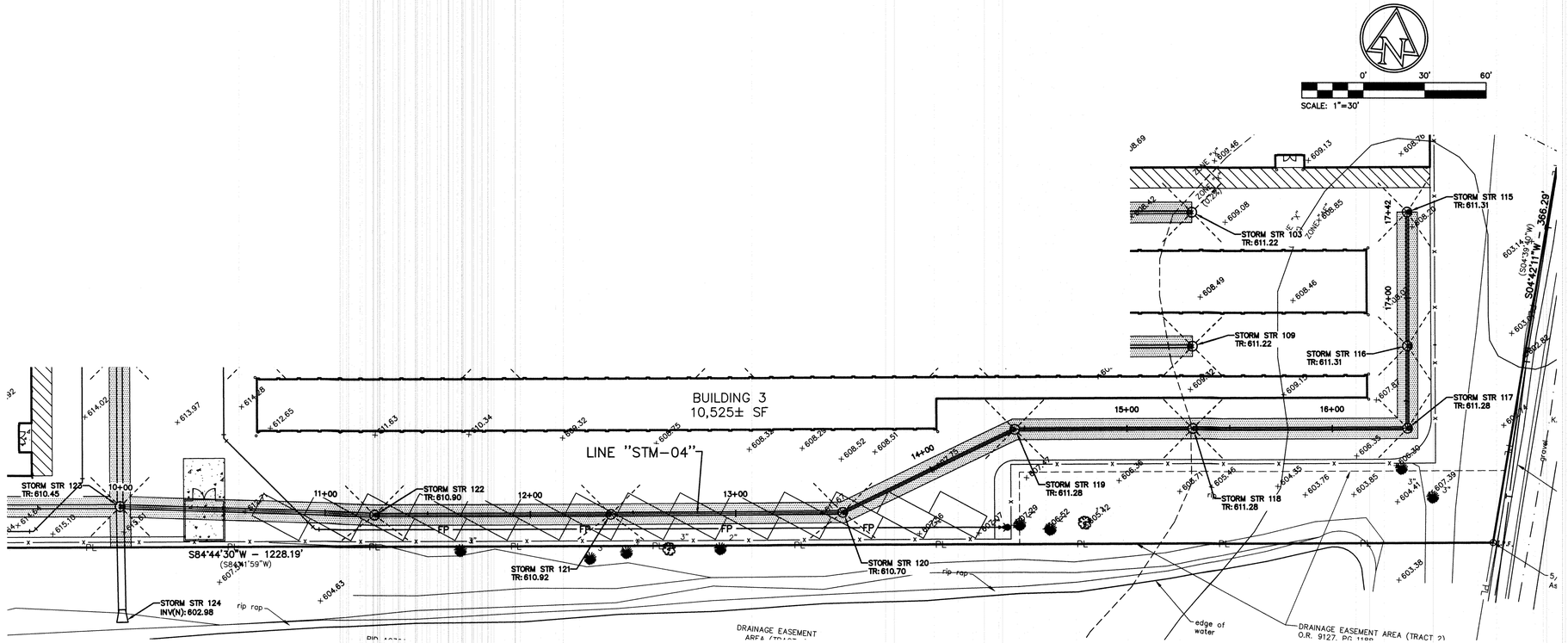
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

Project Number 2019.01572

STORM SEWER PLAN & PROFILE

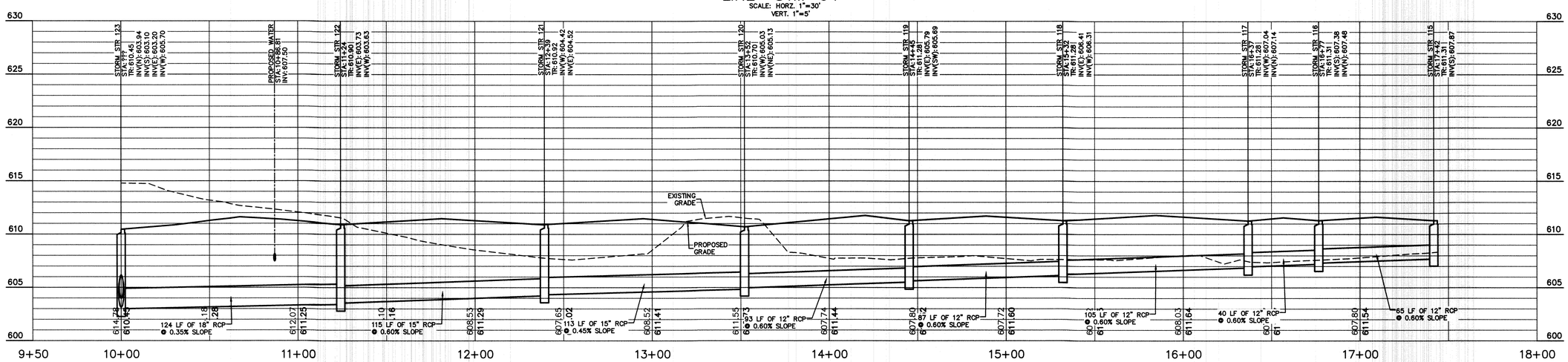
C412

PLOT DATE: 1/21/2020 2:56 PM
PLOT SCALE: 1:2.9849
EDIT DATE: 1/21/2020
EDITED BY: PDOTTERY
DRAWING FILE: P:\2019\01572\D. Drawings\Civil\Construction Documents\2019.01572-CE-C410-STMP2.dwg



LINE "STM-04"

SCALE: HORZ. 1"=30'
VERT. 1"=5'



BENCHMARK DATA

BASIS OF BEARING (HORIZONTAL)
BEARINGS DESCRIBED HEREIN ARE BASED ON NORTH 84 DEGREES 44 MINUTES 30 SECONDS EAST FOR THE CENTERLINE OF RIGHT-OF-WAY FOR TYLERSVILLE ROAD, MEASURED FROM GRID NORTH, REFERENCED TO THE OHIO STATE PLANE COORDINATE SYSTEM (SOUTH ZONE) AND THE NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT), AS ESTABLISHED UTILIZING A GPS SURVEY AND AN NGS OPUS SOLUTION.

ELEVATION DATUM (VERTICAL)
ELEVATIONS SHOWN HEREIN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, AS ESTABLISHED UTILIZING A LEVEL CIRCUIT ORIGINATING ON CONTROL POINT 1100 (ELEVATION = 615.28)

CP 1100
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED 161.65 FEET NORTHEAST OF A BRICK DUMPSTER STRUCTURE, 147.65 FEET SOUTHEAST OF THE SOUTHEAST CORNER OF A CAR WASH AND 182.85 FEET SOUTH OF LAMP POLE.
ELEV: 615.28

CP 1101
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED IN A GRASS AREA 26.36 FEET SOUTH OF TYLERSVILLE ROAD, 21.48 FEET NORTH OF AN ASPHALT DRIVE, EAST OF THE EXIT DRIVE AND 3.00 FEET EAST OF A CATCH BASIN.
ELEV: 616.63

CP 1102
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED ON THE WEST SIDE OF SEWARD ROAD, 34.75 FEET WEST OF THE EDGE OF PAVEMENT, 119.09 FEET SOUTWEST OF A POWER POLE AND 130.53 FEET SOUTHWEST OF A FIRE HYDRANT ON THE SOUTH SIDE OF A DRIVE ON THE EAST SIDE OF SEWARD ROAD.
ELEV: 621.66

BM 50
CHISLED SQUARE ON THE SOUTHWEST CORNER OF A SQUARE CATCH BASIN LOCATED 25 FEET SOUTH OF TYLERSVILLE ROAD, 40.56 FEET EAST OF THE CURB FOR THE EXIT ONLY LANE FROM THE NORTHEAST CORNER OF THE ADJOINING UDF PROPERTY.
ELEV: 617.48

BM 51
CHISLED "X" ON THE NORTH BOLT OF A FIRE HYDRANT LOCATED ON THE EAST SIDE OF STEWARD ROAD, 144.80 FEET SOUTHWEST OF THE SOUTHWEST CORNER OF THE UDF BUILDING.
ELEV: 623.28

BM 53
CHISLED "X" ON THE NORTHEAST BOLT OF A FIRE HYDRANT LOCATED ON THE NORTH SIDE OF TYLERSVILLE ROAD.
ELEV: 613.15

UTILITY CONTACTS

UTILITY	COMPANY	CONTACT	PHONE NO.
CABLE TELEVISION	------	------	(XXX) XXX-XXXX
ELECTRIC	DUKE ENERGY	TROY DITTMER	(513) 458-3844
INTERNET	SPECTRUM	KENT RIEGER	(513) 386-5499
GAS	DUKE ENERGY	BEN JOHNSON	(513) 287-1594
SANITARY SEWER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300
STORM SEWER	BUTLER COUNTY	JAMES FOX	(513) 867-4200
TELEPHONE	CINCINNATI BELL	BRECK COWAN	(513) 565-7043
WATER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300

STORM SEWER NOTES:
1. ALL CASTINGS SHALL BE LABELED "DUMP NO WASTE – DRAINS TO WATERWAY"
2. MANNINGS COEFFICIENT n = 0.012
3. THE GRANULAR BACKFILL AREAS SHOWN IN PLAN VIEW ARE AN ESTIMATE PROVIDED BY THE ENGINEER. EXACT LIMITS OF GRANULAR BACKFILL ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR BASED ON TRENCH WIDTH AND AS DIRECTED BY THE AUTHORITY HAVING JURISDICTION.

GRANULAR BACKFILL REQUIRED

GENERAL NOTES:
1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!
THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.
CALL TOLL FREE
"811" OR 1-800-362-2764
– OHIO UNDERGROUND –

EXISTING LEGEND

	Drainage Inlet Square		Power Pole
	Electric Transformer		Rock
	Fire Hydrant		Sanitary Manhole
G	Gas Marker		Sign
	Gas Service Valve		Sprinkler Head
	Gas Valve		Storm Manhole
	Guy Wire		Telephone Manhole
I.P.F.	Iron Pin & Cap Found		Telephone Pedestal
I.P.F.	Iron Pin Found		Tree
I.P.S.	Iron Pin Set	W	Water Marker
	Light Pole		Water Service Valve
M.N.S.	Mag Nail Set		Water Valve
	Pine Tree		Zone "AE" (Special Flood Hazard Areas)
	Post		Zone "X" (within 0.2% Chance Annual Floodplain)
	Power & Telephone Pole		

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

STATE OF OHIO
SHAWN L GOODWIN
E-68102
REGISTERED PROFESSIONAL ENGINEER
01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

Project Number 2019.01572

STORM SEWER PLAN & PROFILE

C413

PLOT DATE: 1/21/2020 2:56 PM
PLOT SCALE: 1:2.9849
EDIT DATE: 1/21/2020
EDITED BY: PDOTTERY
DRAWING FILE: P:\2019\01572\0_Drawings\Civil\Construction Documents\2019.01572.CE.C410.STMPP.dwg

STORM STRUCTURE DATA TABLE
NOTE: ALL CASTINGS SHALL BE LABELED "DUMP NO WASTE–DRAINS TO WATERWAY"

STR. NO.	STRUCTURE / CASTING TYPE	T.O.R.	INCOMING PIPE DATA (DIRECTION) [FROM STR]	OUTGOING PIPE DATA (DIRECTION) [TO STR]	OUTGOING PIPE L.F.	OUTGOING PIPE SIZE	OUTGOING GRADE (%)	CONNECT TO STRUCT	REMARKS
101	TYPE "A" INLET / R-4342	610.81	18" RCP 607.34 (W) [101A]	18" RCP 607.24 (SW) [102]	38'	18"	0.85%	102	
101A	TYPE "F" INLET / R-4215-C	613.55		18" RCP 607.50 (E) [101]	33'	18"	0.50%	101	
102	TYPE "C" MANHOLE / R-3472	611.16	18" RCP 606.91 (W) [101]	18" RCP 606.81 (SW) [123]	118'	18"	0.95%	123	
103	TYPE "C" MANHOLE / R-3472	611.22		12" RCP 607.45 (W) [104]	114'	12"	0.60%	104	
104	TYPE "C" MANHOLE / R-3472	611.22	12" RCP 606.76 (E) [103]	15" RCP 606.66 (W) [105]	114'	15"	0.45%	105	
105	TYPE "C" MANHOLE / R-3472	611.22	15" RCP 606.15 (E) [104]	18" RCP 606.05 (W) [106]	114'	18"	0.35%	106	
106	TYPE "C" MANHOLE / R-3472	611.22	18" RCP 605.65 (E) [105]	18" RCP 605.55 (W) [107]	114'	18"	0.65%	107	
107	TYPE "C" MANHOLE / R-3472	611.22	18" RCP 604.81 (E) [106]	24" RCP 604.71 (W) [108]	67'	24"	0.25%	108	
108	TYPE "C" MANHOLE / R-3472	611.37	24" RCP 604.54 (E) [107]	24" RCP 604.44 (S) [114]	55'	24"	0.31%	114	
109	TYPE "C" MANHOLE / R-3472	611.22		12" RCP 607.40 (W) [110]	114'	12"	0.60%	110	
110	TYPE "C" MANHOLE / R-3472	611.22	12" RCP 606.72 (E) [109]	12" RCP 606.62 (W) [111]	114'	12"	0.60%	111	
111	TYPE "C" MANHOLE / R-3472	611.22	12" RCP 605.93 (E) [110]	15" RCP 605.83 (W) [112]	114'	15"	0.45%	112	
112	TYPE "C" MANHOLE / R-3472	611.22	15" RCP 605.32 (E) [111]	15" RCP 605.22 (W) [113]	114'	15"	0.45%	113	
113	TYPE "C" MANHOLE / R-3472	611.27	15" RCP 604.71 (E) [112]	15" RCP 604.61 (W) [114]	67'	15"	0.50%	114	
114	TYPE "C" MANHOLE / R-3472	610.55	24" RCP 604.27 (N) [108] 15" RCP 604.27 (E) [113]	27" RCP 604.17 (S) [123]	76'	27"	0.30%	123	
115	TYPE "C" MANHOLE / R-3472	611.31		12" RCP 607.87 (S) [116]	65'	12"	0.60%	116	
116	TYPE "C" MANHOLE / R-3472	611.31	12" RCP 607.48 (N) [115]	12" RCP 607.38 (S) [117]	40'	12"	0.60%	117	
117	TYPE "C" MANHOLE / R-3472	611.28	12" RCP 607.14 (N) [116]	12" RCP 607.04 (W) [118]	105'	12"	0.60%	118	
118	TYPE "C" MANHOLE / R-3472	611.28	12" RCP 606.41 (E) [117]	12" RCP 606.31 (W) [119]	87'	12"	0.60%	119	
119	TYPE "C" MANHOLE / R-3472	611.28	12" RCP 605.79 (E) [118]	12" RCP 605.69 (SW) [120]	93'	12"	0.60%	120	
120	TYPE "C" MANHOLE / R-3472	610.70	12" RCP 605.13 (NE) [119]	15" RCP 605.03 (W) [121]	113'	15"	0.45%	121	
121	TYPE "C" MANHOLE / R-3472	610.92	15" RCP 604.52 (E) [120]	15" RCP 604.42 (W) [122]	115'	15"	0.60%	122	
122	TYPE "C" MANHOLE / R-3472	610.90	15" RCP 603.73 (E) [121]	18" RCP 603.63 (W) [123]	124'	18"	0.35%	123	
123	TYPE "C" MANHOLE / R-3472	610.45	27" RCP 603.94 (N) [114] 18" RCP 603.20 (E) [122] 18" RCP 605.70 (W) [102]	36" RCP 603.10 (S) [124]	56'	36"	0.21%	124	
124	30" CONCRETE END SECTION	606.39	36" RCP 602.98 (N) [123]						

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

STERLING

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

STATE OF OHIO
SHAWN L. GOODWIN
E-74264
REGISTERED PROFESSIONAL ENGINEER

01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

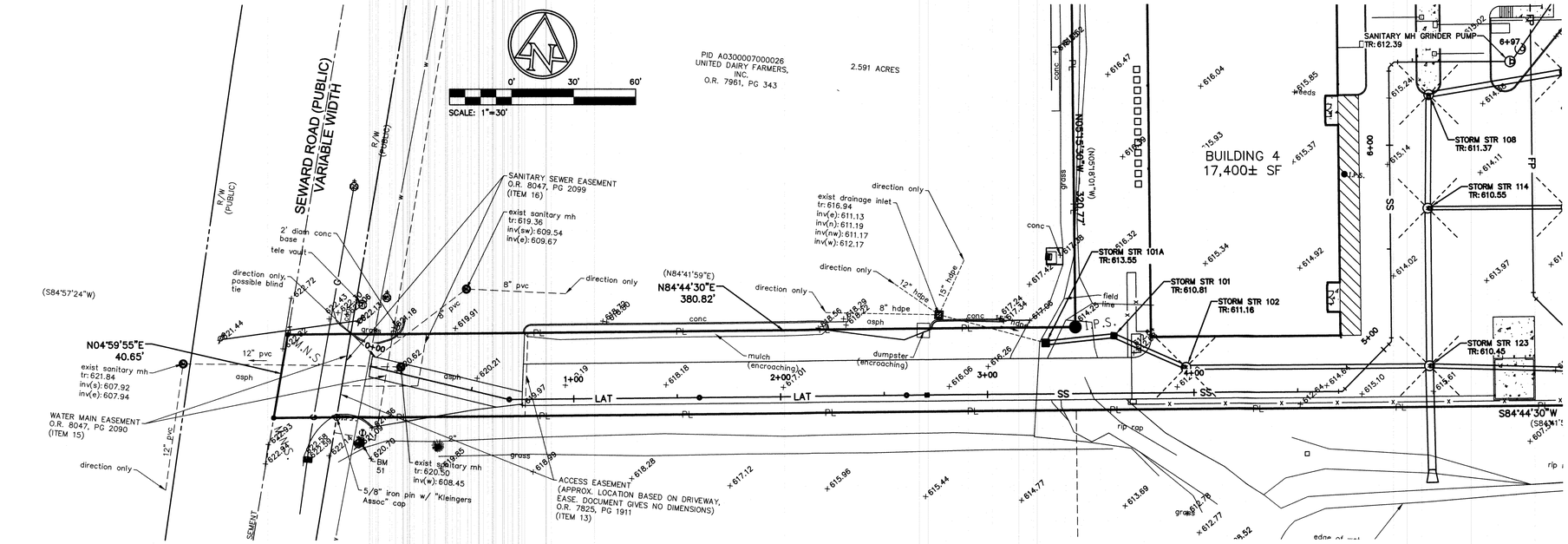
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

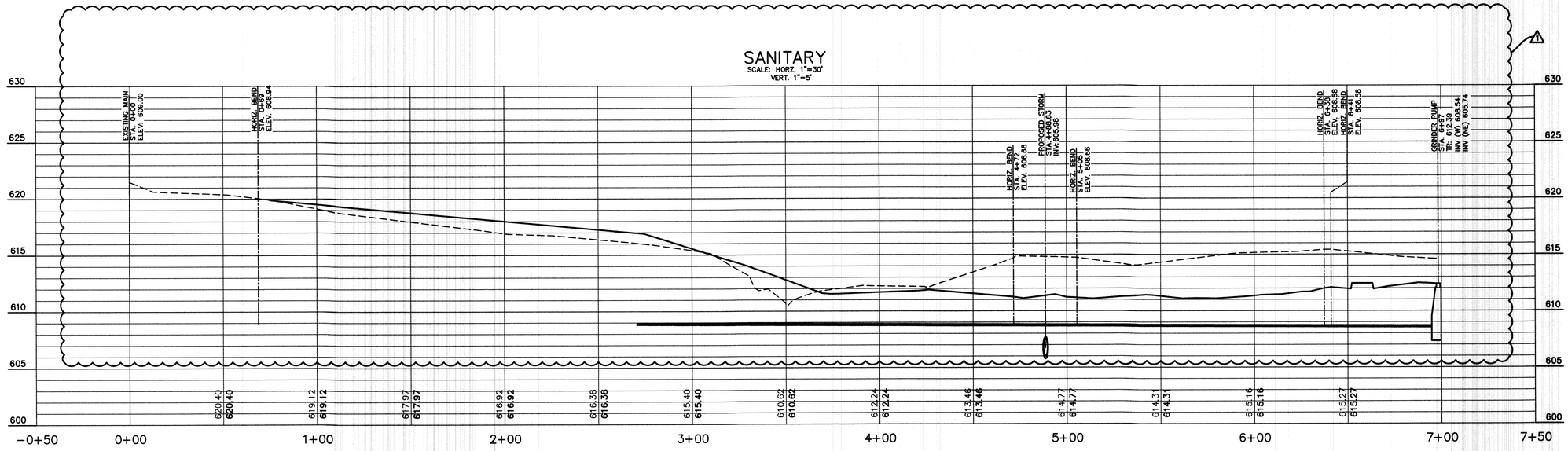
Project Number 2019.01572

STORM SEWER STRUCTURE DATA TABLE

C420

PLOT DATE: 1/21/2020 2:57 PM
PLOT SCALE: 1:1.000
EDIT DATE: 1/21/2020
EDITED BY: PDOTTERY
DRAWING FILE: P:\2019\01572\D. Drawings\Civil\Construction Documents\2019.01572_CE.C420_SDT.dwg





BENCHMARK DATA

BASIS OF BEARING (HORIZONTAL)
BEARINGS DESCRIBED HEREIN ARE BASED ON NORTH 84 DEGREES 44 MINUTES 30 SECONDS EAST FOR THE CENTERLINE OF RIGHT-OF-WAY FOR TYLERSVILLE ROAD, MEASURED FROM GRID NORTH, REFERENCED TO THE OHIO STATE PLANE COORDINATE SYSTEM (SOUTH ZONE) AND THE NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT), AS ESTABLISHED UTILIZING A GPS SURVEY AND AN NGS OPUS SOLUTION.

ELEVATION DATUM (VERTICAL)
ELEVATIONS SHOWN HEREIN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, AS ESTABLISHED UTILIZING A LEVEL CIRCUIT ORIGINATING ON CONTROL POINT 1100 (ELEVATION = 615.28)

CP 1100
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED 161.65 FEET NORTHEAST OF A BRICK DUMPSTER STRUCTURE, 147.85 FEET SOUTHEAST OF THE SOUTHEAST CORNER OF A CAR WASH AND 182.85 FEET SOUTH OF LAMP POLE.
ELEV: 615.28

CP 1101
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED IN A GRASS AREA 26.36 FEET SOUTH OF TYLERSVILLE ROAD, 21.48 FEET NORTH OF AN ASPHALT DRIVE, EAST OF THE EXIT DRIVE AND 3.00 FEET EAST OF A CATCH BASIN.
ELEV: 616.63

CP 1102
⅝" IRON PIN SET WITH "ASI CONTROL POINT" CAP LOCATED ON THE WEST SIDE OF SEWARD ROAD, 34.75 FEET WEST OF THE EDGE OF PAVEMENT, 119.09 FEET SOUTHWEST OF A POWER POLE AND 130.53 FEET SOUTHWEST OF A FIRE HYDRANT ON THE SOUTH SIDE OF A DRIVE ON THE EAST SIDE OF SEWARD ROAD.
ELEV: 621.66

BM 50
CHISLED SQUARE ON THE SOUTHWEST CORNER OF A SQUARE CATCH BASIN LOCATED 25 FEET SOUTH OF TYLERSVILLE ROAD, 40.56 FEET EAST OF THE CURB FOR THE EXIT ONLY LANE FROM THE NORTHEAST CORNER OF THE ADJOINING UDF PROPERTY.
ELEV: 617.48

BM 51
CHISLED "X" ON THE NORTH BOLT OF A FIRE HYDRANT LOCATED ON THE EAST SIDE OF STEWARD ROAD, 144.80 FEET SOUTHWEST OF THE SOUTHWEST CORNER OF THE UDF BUILDING.
ELEV: 623.28

BM 53
CHISLED "X" ON THE NORTHEAST BOLT OF A FIRE HYDRANT LOCATED ON THE NORTH SIDE OF TYLERSVILLE ROAD.
ELEV: 613.15

GRANULAR BACKFILL REQUIRED

UTILITY CONTACTS

UTILITY	COMPANY	CONTACT	PHONE NO.
CABLE TELEVISION	-----	-----	(XXX) XXX-XXXX
ELECTRIC	DUKE ENERGY	TROY DITTMER	(513) 458-3844
INTERNET	SPECTRUM	KENT RIEGER	(513) 386-5499
GAS	DUKE ENERGY	BEN JOHNSON	(513) 287-1594
SANITARY SEWER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300
STORM SEWER	BUTLER COUNTY	JAMES FOX	(513) 867-4200
TELEPHONE	CINCINNATI BELL	BRECK COWAN	(513) 565-7043
WATER	BUTLER COUNTY	RICHARD SMITH	(513) 867-5300

EXISTING LEGEND

D	Drainage Inlet Square		Power Pole
E	Electric Transformer		Rock
	Fire Hydrant	S	Sanitary Manhole
-G	Gas Marker		Sign
G	Gas Service Valve		Sprinkler Head
G	Gas Valve	S	Storm Manhole
	Guy Wire	T	Telephone Manhole
I.P.F.	Iron Pin & Cap Found		Telephone Pedestal
I.P.F.	Iron Pin Found		Tree
I.P.S.	Iron Pin Set	-W	Water Marker
	Light Pole	W	Water Service Valve
M.N.S.	Mag Nail Set	W	Water Valve
	Pine Tree		Zone "AE" (Special Flood Hazard Areas)
	Post		Zone "X" (within 0.2% Chance Annual Floodplain)
	Power & Telephone Pole		

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-362-2764
– OHIO UNDERGROUND –

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

STERLING

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

STATE OF OHIO
SHAWN L. GOODWIN
PE-STERLING
PROFESSIONAL ENGINEER

01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

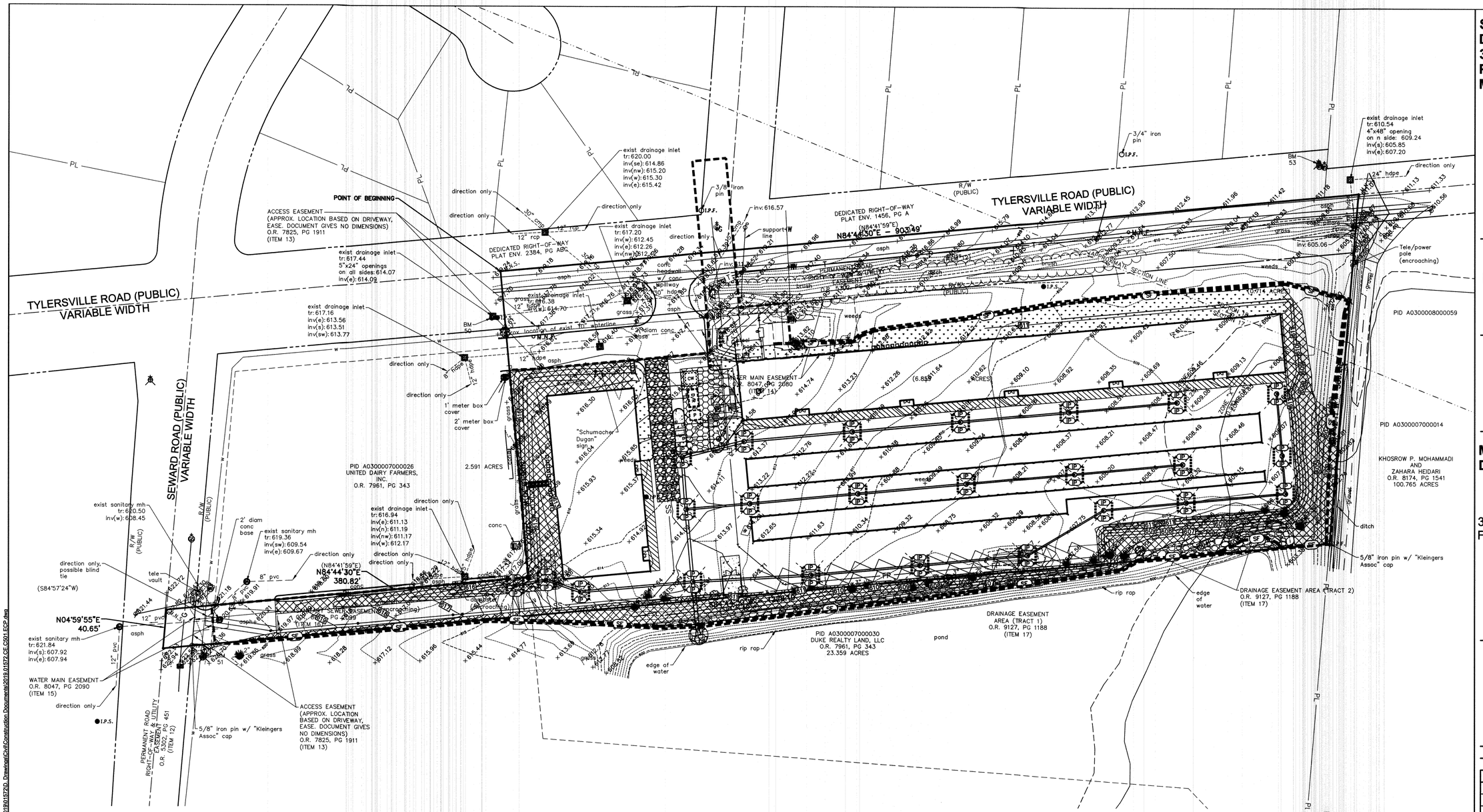
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

Project Number 2019.01572

SANITARY SEWER PLAN & PROFILE

C430

PLOT DATE: 1/21/2020 2:57 PM
PLOT SCALE: 1:2.3849 EDIT DATE: 1/9/2020 EDITED BY: HNORGAN DRAWING FILE: P:\2019\01572\D. Drawings\Civil\Construction Documents\2019.01572 GE C430 SANPP.dwg



GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-362-2764
– OHIO UNDERGROUND –

EROSION CONTROL LEGEND

- SF — SILT FENCE
- CONSTRUCTION LIMITS
- IP IP — INLET PROTECTION
- AREA SUBJECT TO TEMPORARY SEEDING DURING CONSTRUCTION AND PERMANENT SEEDING AFTER CONSTRUCTION IS COMPLETE (REFER TO LANDSCAPE PLANS)
- EROSION CONTROL BLANKET WITH SEEDING
- GRAVEL CONSTRUCTION ENTRANCE
- STAGING AREA
- CW — CONCRETE WASHOUT
- D/R — DUMPSTER / RECYCLING AREA
- P — PORT-O-LET
- N.O.I. — N.O.I. SIGN POSTING
- OUTLET PROTECTION
- RIPRAP
- ROCK CHECK DAM

EXISTING LEGEND

	Drainage Inlet Square		Power Pole
	Electric Transformer		Rock
	Fire Hydrant		Sanitary Manhole
+G	Gas Marker		Sign
	Gas Service Valve		Sprinkler Head
	Gas Valve		Storm Manhole
	Guy Wire		Telephone Manhole
	I.P.F. Iron Pin & Cap Found		Telephone Pedestal
	I.P.F. Iron Pin Found		Tree
	I.P.S. Iron Pin Set	+W	Water Marker
	Light Pole		Water Service Valve
	M.N.S. Mag Nail Set		Water Valve
	Pine Tree		Zone "AE" (Special Flood Hazard Areas)
	Post		Zone "X" (within 0.2% Chance Annual Floodplain)
	Power & Telephone Pole		

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

SHAWN L GOODWIN — STATE OF OHIO — PROFESSIONAL ENGINEER

01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

Project Number 2019.01572

OVERALL EROSION CONTROL PLAN

C500

PLOT DATE: 1/21/2020 2:57 PM
PLOT SCALE: 1:2.5849
EDIT DATE: 1/6/2020
EDITED BY: NHORGAN
DRAWING FILE: P:\2019\01572\D. Drawings\Civil\Construction Documents\2019.01572.GE.GS01.ECP.dwg

SITE NAME

The area scheduled for construction is known as "Mini Storage Depot" (hereinafter referred to as the "Project").

PROJECT LOCATION

The property is located at the Southeast intersection of Tylersville and Seward Road in the City of Fairfield, Butler County, Ohio, at a latitude of 39°21'44" N and a longitude of 84°29'20" W.

OWNER'S INFORMATION

Name: The Sterling Group
Address: 3900 Edison Lakes Pkwy., Suite 201
Mishawaka, IN 46545
Representative: Clint Patterson
Title: Real Estate Development
Telephone: (574) 247-3215

OPERATOR'S INFORMATION

Name: The Sterling Group
Address: 3900 Edison Lakes Pkwy., Suite 201
Mishawaka, IN 46545
Representative: Clint Patterson
Title: Real Estate Development
Telephone: (574) 247-3215

NOTICE OF INTENT

All parties defined as owners or operators must submit a Notice of Intent (NOI) at least 48 hours prior to commencement of on-site construction activities. Submittal of late NOI's is not prohibited; however, authorization under the construction general permit is only for discharges that occur after permit coverage is granted. Unpermitted discharges may be subject to enforcement actions by the EPA. For the purposes of this permit, an operator is defined as any party meeting either of the following requirements:

a) The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications.
b) The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with a stormwater pollution prevention plan for the site or other permit conditions.

A2 11" x 17" PLAT

Refer to the Site Plan.

A3 PROJECT NARRATIVE

The project is the development of a vacant lot at the aforementioned location to a self storage facility. The facility includes four buildings, including two buildings that are climate-controlled. Included in the project is associated paving, parking, drainage, and utility works.

A4 VICINITY MAP

Refer to Title Sheet.

A5 LEGAL DESCRIPTION OF THE PROJECT SITE

Refer to C100 – Existing Topography.

A6 LOCATION OF ALL LOTS AND PROPOSED SITE IMPROVEMENTS

The site will not be subdivided; therefore, there are no individual lots on the property. The proposed site improvements are shown on the included plans.

A7 HYDROLOGIC UNIT CODE (HUC)

050902050101

A8 STATE AND FEDERAL WATER QUALITY PERMITS

Not applicable. Water quality of stormwater from the property has been designed for in the existing detention basin to which the drainage system connects.

A9 SPECIFIC POINT WHERE STORMWATER DISCHARGE WILL LEAVE THE SITE

Stormwater drainage from the site will be conveyed by a proposed storm sewer to existing dry detention facilities on the south side of the site.

A10 LOCATION AND NAME OF ALL WETLANDS, LAKES, AND WATERCOURSES ON AND ADJACENT TO THE SITE

No wetlands, lakes or watercourses have been identified on the site that may be impacted by stormwater discharges as a result of the proposed construction activities.

A11 IDENTIFICATION OF ALL RECEIVING WATERS

East fork Mill Creek is the ultimate receiving water for the project area.

A12 IDENTIFICATION OF ALL POTENTIAL DISCHARGES TO GROUND WATER

There are no locations on site where surface water may be discharged into ground water.

A13 100-YEAR FLOODPLAINS, FLOODWAYS, AND FLOODWAY FRINGES

The southeast corner of the site is located within the floodplain Zone "AE", (areas determined to be inside the 1 percent annual chance floodplain) as indicated on the Butler County, Ohio Flood Insurance Rate Map Number 39017C0326F, dated 10/19/2018.

A14 PRE-CONSTRUCTION AND POST-CONSTRUCTION ESTIMATE OF PEAK DISCHARGE

Pre-construction 10-year discharge: 13.61 cfs
Post-construction 10-year discharge: 23.43 cfs

A15 ADJACENT LAND USE

North: Residential
East: Light Industrial
South: Industrial
West: Light Industrial

A16 LOCATIONS AND APPROXIMATE BOUNDARIES OF ALL DISTURBED AREAS

Approximate boundaries of disturbed areas are as identified on the Erosion Control Plan.

A17 IDENTIFICATION OF EXISTING VEGETATIVE COVER

Approximate areas of existing vegetative cover are as shown on the Existing Topography Plan.

A18 SOILS MAP INCLUDING SOIL DESCRIPTION AND LIMITATIONS

The Natural Resources Conservation Service (NRCS) Web Soil Survey of Butler County, Ohio, indicates Xenia silt loam, Fincastle silt loam, Russell-Miamian silt loam, and Raub silt loam are located on the site.

The on-site soil will be treated as recommended by the geotechnical engineer if the conditions are unsuitable for the proposed construction. Remedial treatments may include, but are not limited to, removal of unsuitable soil and backfilling with engineered material, installation of a geofabric within or under the pavement system, or treatment of the subgrade with lime.

A19 LOCATIONS, SIZE, AND DIMENSIONS FOR PROPOSED STORMWATER SYSTEMS

Locations of stormwater systems: Refer to the Utility Plan or Storm Sewer Plan and Profiles
Size of storm sewer: Refer to the Utility Plan or Storm Sewer Plan and Profiles
Details of storm inlets and manholes: Refer to Site Details

A20 PLANS FOR ANY OFF-SITE CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT

Not applicable. No offsite constructions activities are foreseen.

A21 LOCATIONS OF PROPOSED SOIL STOCKPILES AND/OR BORROW/DISPOSAL

Excess soil shall be immediately stockpiled, surrounded with silt fence and seeded and/or removed from the construction site in accordance with all applicable laws. If topsoil stockpiles are anticipated for this project, they are shown on the Erosion Control Plan.

A22 EXISTING SITE TOPOGRAPHY

Refer to the Existing Topography Plan.

A23 PROPOSED FINAL SITE TOPOGRAPHY

Refer to the Grading Plan.

B1 DESCRIPTION OF POTENTIAL POLLUTANT SOURCES ASSOCIATED WITH CONSTRUCTION ACTIVITIES

The following potential pollutant sources may be associated with construction activities on site:

1. Material storage areas (more specifically described below)
2. Construction waste material
3. Fuel storage areas and fueling stations
4. Exposed soils
5. Leaking vehicles and equipment
6. Sanitary waste from temporary toilet facilities
7. Litter
8. Windblown dust
9. Soil tracking off site from construction equipment

The following construction materials may be staged or stored on site at various points during development of the site:

1. Structural fill
2. Pavement Base Stone
3. HDPE, PVC, RCP or Ductile Iron pipe
4. Precast concrete, HDPE or PVC drainage and sanitary structures
5. Rock rip-rap

B2 SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION RELATIVE TO LAND-DISTURBING ACTIVITIES

The following potential pollutant sources may be associated with construction activities on site:

1. Material storage areas (more specifically described below)
2. Construction waste material
3. Fuel storage areas and fueling stations
4. Exposed soils
5. Leaking vehicles and equipment
6. Sanitary waste from temporary toilet facilities
7. Litter
8. Windblown dust
9. Soil tracking off site from construction equipment

The following construction materials may be staged or stored on site at various points during development of the site:

1. Structural fill
2. Pavement Base Stone
3. HDPE, PVC, RCP or Ductile Iron pipe
4. Precast concrete, HDPE or PVC drainage and sanitary structures
5. Rock riprap

B3 STABLE CONSTRUCTION ENTRANCE LOCATIONS AND SPECIFICATIONS

Construction entrances will be in place prior to any site construction or demolition. Entrances are shown on the Erosion Control Plan, refer to the Erosion Control Details for details.

B4 SEDIMENT CONTROL MEASURES FOR SHEET FLOW AREAS

Sheet flow areas will be protected by seed and mulch or hydroseeding. Erosion control blankets will be installed on sloped areas where the slope exceeds 6:1 (horizontal to vertical). Silt Fencing will be utilized to prevent sedimentation from leaving the site. Refer to the Erosion Control Plan for locations and the Erosion Control Details for details.

B5 SEDIMENT CONTROL MEASURES FOR CONCENTRATED FLOW AREAS

Proposed swales will be stabilized with erosion control blankets, and rock donuts will be installed to slow runoff to inlets. Straw bales and silt fences will not be allowed as concentrated flow protection measures. Refer to the Erosion Control Plan for locations and the Erosion Control Details for details.

B6 STORM SEWER INLET PROTECTION MEASURE LOCATIONS AND SPECIFICATIONS

The contractor shall install appropriate inlet protection measures at each inlet. Refer to the Erosion Control Plan for locations and the Erosion Control Details for details. Straw bales will not be allowed as inlet protection measures.

B7 RUNOFF CONTROL MEASURES

Rock check dams, silt fencing, riprap outlet projection, and erosion control blankets will be utilized.

B8 STORMWATER OUTLET PROTECTION SPECIFICATIONS

Stormwater outlets will be protected by riprap aprons to prevent scour erosion. Refer to the Erosion Control Plan for locations and the Erosion Control Details for details.

B9 GRADE STABILIZATION STRUCTURE LOCATIONS AND SPECIFICATIONS

Rip rap aprons at outlets will be utilized to prevent grade destabilization. Refer to the Erosion Control Plan for locations and the Erosion Control Details for details.

B10 LOCATION, DIMENSIONS, SPECIFICATIONS, AND CONSTRUCTION DETAILS OF EACH STORMWATER QUALITY MEASURE

The proposed storm sewer outfalls into the existing detention pond on the south end of the site.
Refer to the Erosion Control Plan for locations of each stormwater quality measure and the Erosion Control Details.

B11 TEMPORARY SURFACE STABILIZATION METHODS APPROPRIATE FOR EACH SEASON

Surface stabilization is required on any bare or thinly vegetated area that is scheduled or likely to remain inactive for a period of 15 days or more.
Refer to the Temporary Seeding Detail within Erosion Control Details for specifics on soil amendments, seed mixtures and mulching.

B12 PERMANENT SURFACE STABILIZATION SPECIFICATIONS

A. Loosen lawn area to a minimum depth of 6 inches. Mix soil amendments and fertilizers with topsoil at rates specified. Organic soil amendments such as peat, compost or manure shall be applied at 2" depth evenly over soil and incorporated into the top 6" of topsoil. Provide fertilizer with percentage of nitrogen required to provide not less than 1 pound of actual nitrogen per 1,000 sq. ft. of lawn area and not less than 4 percent phosphoric acid and 2 percent potassium. At least 50 percent of nitrogen to be organic form. Delay mixing of fertilizer if planting will not follow placing of planting soil within a few days.
B. Fertilizer for lawns: provide a fast release fertilizer with a composition of 1 lb per 1,000 sq. ft. of actual nitrogen, 4 percent phosphorous, and 2 percent potassium by weight.
C. Slow-release fertilizer for trees and shrubs: granular fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorous and potassium made up of a composition by weight of 5 percent
D. Grade lawn and grass areas to a smooth, even surface with loose, uniformly fine texture. Limit fine grading to areas that can be planted within immediate future. Remove trash, debris, stones larger than 1 inch diameter, and other objects that may interfere with planting or maintenance operations. Sow seed using a spreader or seeding machine. Do not seed when wind velocity exceeds 5 miles per hour.
E. Distribute seed evenly over entire area by sowing equal quantity in 2 directions at right angles to each other.
F. Rake seed lightly into top 1/8 inch of soil, roll lightly, and water with a fine spray.
G. Install erosion control blankets as indicated on the plan.
H. Protect seeded areas against erosion by spreading clean, seed-free straw mulch after completion of seeding operations. Spread uniformly to form a continuous blanket not less than 1-1/2 inches loose measurements over seeded areas.
I. Water newly planted lawn areas and keep moist until new grass is established. Immediately repair any lawn areas disturbed by construction activities including tree and shrub installation.
J. Refer to the Permanent Seeding Details within the Erosion Control Detail Sheet, for timing of permanent seeding, grass seed specifications and mulching specifications.

B13 MATERIAL HANDLING AND SPILL PREVENTION PLAN

Solid Waste Disposal
No solid material, including building materials, is permitted to be discharged to surface waters or buried on site. All solid waste materials, including disposable materials incidental to the construction activity, must be collected in containers or closed dumpsters. The collection containers must be emptied periodically and the collected material hauled to a landfill permitted by the State and/or appropriate local municipality to accept the waste for disposal.

A foreman or supervisor should be designated in writing to oversee, enforce, and instruct construction workers on proper solid waste procedures.

Hazardous Waste
Whenever possible, minimize the use of hazardous materials and generation of hazardous wastes. All hazardous waste materials will be disposed in the manner specified by federal, state, or local regulations or by the manufacturer.

Use containment berms in fueling and maintenance areas and where potential for spills is high.

A foreman or supervisor should be designated in writing to oversee, enforce and instruct construction workers on proper hazardous waste procedures. The location of any hazardous waste storage areas should be indicated on the stormwater pollution prevention plan by the operator following on-site location of the facility.

Dust Control/Off-Site Vehicle Tracking
During construction, water trucks should be used, as needed, by each contractor or subcontractor to reduce dust. After construction, the site should be stabilized to reduce dust.

Construction traffic should enter and exit the site at a Construction Entrance with a rock pad or equivalent device. The purpose of the rock pad is to minimize the amount of soil and mud that is tracked onto existing streets. If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts.

Sanitary/Septic
Contractors and subcontractors must comply with all state and local sanitary sewer, portable toilet, or septic system regulations. Sanitary facilities shall be provided at the site by each contractor or subcontractor throughout construction activities. The sanitary facilities should be utilized by all construction personnel and be serviced regularly. All expenses associated with providing sanitary facilities are the responsibility of the contractors and subcontractors. The location of any sanitary facilities should be indicated on the stormwater pollution prevention plan by the operator following on-site location of said facilities.

Water Source
Water used to establish and maintain grass, to control dust, and for other construction purposes must originate from a public water supply or private well approved by the State or local health department.

Equipment Fueling and Storage Areas
Equipment fueling, maintenance, and cleaning should only be completed in protected areas (i.e., bermed area). Leaking equipment and maintenance fluids will be collected and not allowed to discharge onto soil where they may be washed away during a rain event.

Equipment wash down (except for wheel washes) should take place within an area surrounded by a berm. The use of detergents is prohibited.

Hazardous Material Storage
Chemicals, paints, solvents, fertilizers, and other toxic or hazardous materials should be stored in their original containers (if original container is not reasonable, store the products in clearly labeled, waterproof containers). Except during application, the containers should be kept in trucks or in bermed areas within covered storage facilities. Runoff containing such materials shall be collected, removed from the site, and disposed of in accordance with the federal, state, and local regulations.

As may be required by federal, state or local regulations, the Contractor should have a Hazardous Materials Management Plan and/or Hazardous Materials Spill and Prevention Program in place. A foreman or supervisor should be designated in writing to oversee, enforce, and instruct construction workers on proper hazardous materials storage and handling procedures. The location of any hazardous material storage areas should be indicated on the stormwater pollution prevention plan by the operator following on-site location of the storage areas.

Material Handling and Spill Prevention
Discharge of hazardous substances or oil into stormwater is subject to reporting requirements. In the event of a spill of a hazardous substance, the operator is required to notify the National Response Center (1-800-424-8802) to properly report the spill. In addition, the operator shall submit a written description of the release (including the type and amount of material released, the date of the release, the circumstances of the release, and the steps to be taken to prevent future spills) to the local governing authority. The SWPPP must be revised within 14 calendar days after the release to reflect the release, stating the information above along with modifications to minimize the possibility of future occurrences. Each contractor and subcontractor is responsible for complying with these reporting requirements.

Concrete Washout
All concrete trucks waste material shall be completely contained and disposed in accordance with all local, state, and federal regulations. A pit or container is required when cleaning concrete chutes.

Spill Response Plan
Minor – Small spills that typically involve oil, gasoline, paint, hydraulic fluid, etc., can be controlled by the first responder at the discovery of the spill.
- Contain spill to prevent material from entering storm or ground water. Do not flush with water or bury.
- Use absorbent material to clean-up spill material and any subsequently contaminated soil and dispose of properly.

Semi-Significant Spills – Approximately ten gallons or less of pollutant with no contamination of ground or surface waters. Minor spills can be generally controlled by the first responder with help from other site personnel. This response may require other operations to stop to make sure the spill is quickly and safely addressed. At the discovery of the spill:
- Contain spill to prevent material from entering storm or ground water. Do not flush with water or bury.
- Use absorbent material to clean-up spills and dispose of properly. Spills on impervious surfaces should be disposed of as soon as possible to prevent migration deeper into the soil and groundwater. Dispose of contaminated soils or absorbents properly.
- Contact 911 if the spill could be a safety issue.
- Contact supervisors and designated site inspectors immediately.
- Contaminated solids are to be removed to an approved landfill.

Major or Hazardous Spills – More than ten gallons, there is the potential for death, injury or illness to humans or animals, or has the potential for surface or groundwater pollution.
- Control or contain the spill without risking bodily harm. Temporarily plug storm drains if possible to prevent migration of the spill into the stormwater system.
- Immediately contact the local Fire Department at 911 to report any hazardous material spill.
- Contact supervisors and designated site inspectors immediately. Governing authorities responsible for storm water facilities should be contacted as well. The contractor is responsible for having these contact numbers available at the job site. A written report should be submitted to the owner as soon as possible.
- As soon as possible but within 2 hours of discovery, contact the local agency responsible for spill management. The following information should be noted for future reports to the agency:
  - Name, address and phone number of person making the spill report
  - The location of the spill
  - The time of the spill
  - Identification of the spilled substance
  - Approximate quantity of the substance that has been spilled or may be further spilled
  - The duration and source of the spill
  - Name and location of the damaged waters
  - Name of spill response organization
  - What measures were taken in the spill response
  - Other information that may be significant

Additional regulations or requirements may be present. A spill response professional should be consulted to make sure all appropriate and required steps have been taken. Contaminated solids should only be removed from the site after approval is given by the appropriate agency.

B14 MONITORING AND MAINTENANCE GUIDELINES FOR EACH PROPOSED STORMWATER QUALITY MEASURE

Inspection Schedule/Reporting
All impacted areas, as well as all erosion and sediment control devices, will be inspected every seven (7) calendar days and within 24 hours after a rainfall of 0.5 inch or greater. Where sites have been final or temporarily stabilized or on sites where runoff is unlikely due to winter conditions (e.g., site is covered with snow, ice, or frozen ground exists), such inspections shall be conducted at least once every month.

Inspections shall be conducted and a written report prepared, by a designated and qualified person familiar with the USEPA NPDES Storm Water General Permit, this SWPPP, and the Project.

Inspection reports shall be completed including scope of the inspection, name(s) and qualifications of personnel making the inspection, the date of the inspection, observations relating to the implementation of the SWPPP, and any actions taken as a result of incidents of noncompliance noted during the inspection. The inspection report should state whether the site was in compliance or identify any incidents of noncompliance. The contractor shall keep a copy of the inspection reports on site and permanently for a period of two years following construction. The on-site reports may be requested by inspections conducted by the local governing authority.

Construction Entrance
Locations where vehicles exit the site shall be inspected for evidence of off-site sediment tracking. Each contractor and subcontractor shall be responsible for maintaining the Construction Entrance and other controls as described in this SWPPP.

Material Storage Inspections
Inspectors must evaluate areas used for storage of materials that are exposed to precipitation. The purpose is to ensure that materials are protected and/or impounded so that pollutants cannot discharge from storage areas. Off-site material storage areas used solely by the subject project are considered to be part of the project and must be included in the erosion control plans and the site inspection reports.

Soil Stabilization Inspections
Seeded areas will be inspected to confirm that a healthy stand of vegetation is maintained. The site has achieved final stabilization once all areas are covered with pavement or have a stand of vegetation with at least 70% of the background vegetation density. The density of 70% or greater must be maintained to be considered as stabilized. The operator or their representative will water, fertilize, and reseed disturbed areas as needed to achieve this goal.

Erosion and Sediment Control Inspections
All controls should be inspected at least once every seven (7) calendar days and following any storm event of 0.5 inch or greater. The following is a list of inspection/maintenance practices that will be used for specific controls:

1. Geotextiles/Erosion Control Mats: Missing or loose matting must be replaced or re-anchored.
2. Inlet Protection: If silt fence inlet protection is to be used, sediment should be removed when it reaches approximately one-half the height of the fence. If a sump is used, sediment should be removed when the volume of the basin is reduced by 50%.
3. Diversion Swales: Clean debris or other obstructions as needed. Damage from storms or normal construction activities (i.e., tire ruts) shall be repaired immediately.
4. Mulching: Inspect for thin or bare spots caused by natural decomposition or weather-related events. Mulch in high traffic areas should be replaced on a regular basis to maintain uniform protection.
5. Sediment Trap: Accumulated silt shall be removed and the basin shall be re-graded to its original dimensions at such point that the capacity of the impoundment has been reduced to one-half of its original storage capacity. The removed sediment shall be stockpiled or redistributed in areas that are protected from erosion.
6. Sediment Basin: Inspect frequently to check for damage and to ensure obstructions are not diminishing the effectiveness of the structures. Sediment shall be removed and the basin shall be re-graded to its original dimensions at such point that the capacity of the impoundment has been reduced to 20% of its original storage capacity. The removed sediment shall be stockpiled or redistributed in areas that are protected from erosion.
7. Silt Fence: Removal of built-up sediment will occur when the sediment reaches one-third the height of the fence.
8. Stabilized Construction Entrance: Periodic re-grading and top dressing with additional stone.
9. Straw Bales: Replace straw bales that show signs of deterioration.
10. Vegetation: Protect newly seeded areas from excessive runoff and traffic until vegetation is established. Establish a watering and fertilizing schedule.
11. Good Housekeeping: Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges through screening of outfalls and daily pickup of litter.

In the event that sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize adverse impacts. An example of this may be the situation where sediment has washed into the street and could be carried into the storm sewers by the next rainfall and/or pose a safety hazard to users of public streets. Modifications/Revisions to SWPPP.

Based on inspection results, any necessary modification to this SWPPP shall be implemented within seven calendar days of the inspection. A modification is necessary if a control measure or operational procedure does not provide adequate pollutant control. All revisions shall be recorded on a Record of Revisions within seven calendar days of the inspection.

It is the responsibility of the operator to maintain effective pollutant discharge controls. Physical site conditions or contractor/subcontractor practices could make it necessary to install more controls than were originally planned. For example, localized concentrations of surface runoff or unusually steep areas could require additional silt barrier or other structural controls. Assessing the need for and installing additional controls will be a continuing contractor/subcontractor responsibility until final stabilization is achieved. Contractors and subcontractors implementing this SWPPP must remain alert to the need to periodically refine and update this SWPPP in order to accomplish the intended goals.

Notice of Termination
Compliance of the site with the General Construction Permit remains the responsibility of all operators that have submitted an NOI until such time as they have submitted a Notice of Termination (NOT). The permittee's authorization to discharge under the General Construction Permit terminates at midnight of the day the NOT is signed.

All permittees must submit an NOT within thirty (30) days after one or more of the following conditions have been met:

1. Final stabilization has been achieved on all portions of the site for which the permittee was responsible.
2. Another operator/permittee has assumed control over all areas of the site that have not been finally stabilized.
3. In residential construction operations, temporary stabilization has been completed and the residence has been transferred to the homeowner.

B15 EROSION AND SEDIMENT CONTROL SPECIFICATIONS FOR INDIVIDUAL BUILDING LOTS

Since the entire site is under a single ownership, there are not any individual building lots.

C1 DESCRIPTION OF POLLUTANTS AND THEIR SOURCES ASSOCIATED WITH THE PROPOSED LAND USE

The proposed land use is a self storage facility. The pollutants and sources of each pollutant normally expected from this type of land use are listed below:

Pollutant Source: Passenger vehicles, delivery vehicles.
Type of Pollutant: Oil, gasoline, diesel fuel, any hydrocarbon associated with vehicular fuels and lubricants, grease, antifreeze, windshield cleaner solution, brake fluid, brake dust, rubber, glass, metal and plastic fragments, grit, road de-icing materials.

Pollutant Source: Building
Type of Pollutant: Cleaning solutions or solvents, leaks from HVAC equipment, grit from roof drainage, aggregate or rubber fragments from roofing system.

Pollutant Source: Trash dumpster
Type of Pollutant: Cleaning solutions or solvents, litter (paper, plastic, general refuse associated with distribution operations), uneaten food products, bacteria.

Pollutant Source: Parking lot
Type of Pollutant: Any pollutant associated with vehicular sources, grit from asphalt wearing surface, bituminous compounds from periodic maintenance (sealing, resurfacing and patching), pavement de-icing materials, paint fragments from parking stall stripes, concrete fragments, wind-blown litter from off-site sources, elevated water temperatures from contact with impervious surfaces.

Pollutant Source: Lawn and landscape areas
Type of Pollutant: Fertilizers, soil, organic material (leaves, mulch, grass clippings)

C2 SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION

The existing stormwater detention ponds will remain in place as permanent features after construction is completed. The purpose of the these measures is to restrict stormwater discharges and provide a sediment removal function.

C3 DESCRIPTION OF PROPOSED POST-CONSTRUCTION STORMWATER QUALITY MEASURES

Vegetated Swale
Vegetated swales are designed to reduce pollutants and sediment loads in storm water runoff. Storm water runoff is directed into the swale which conveys the runoff from the site. While moving through the swale, runoff velocity is greatly descreased allowing biofiltration (uptake of nutrients by plants), infiltration (percolation of water through the swale's porous soil substrate), and sedimentation (settling out of later suspended particles.)

Permanent Vegetation
Topsoil will be placed in lawn areas and seeded with grass, and graded not to exceed 3:1 slopes. Proposed landscape trees and shrubs will also be added. These Bio areas will act as a natural filter strip to help improve storm water quality. The vegetated areas will slow the velocities of storm water runoff, reduce sediment runoff, and reduce problems associated with mud or dust from bare soils.

Wet Detention Pond
A wet detention pond detains storm water runoff long enough for contaminated sediments to settle and remain in the pond and allow the water in the pond to be displaced by the next rain event. The sedimentation process removes particulates, organic matter, and metals from the water while nutrients are removed through biological uptake. By capturing and retaining runoff, wet ponds control both storm water quality and quantity.

Good Housekeeping Measures
Good Housekeeping measures such as regular street sweeping, installation of trash receptacles, and reduction in fertilizer overspray can be incorporated by the owner and/or occupant.

C4 LOCATION, DIMENSIONS, SPECIFICATIONS, AND CONSTRUCTION DETAILS OF EACH STORMWATER QUALITY MEASURE

The stormwater quality is controlled by an existing detention pond.

C5 DESCRIPTION OF MAINTENANCE GUIDELINES FOR POST-CONSTRUCTION STORMWATER QUALITY MEASURES

Maintenance requirements for the stormwater quality measures which will remain in place after construction is complete, are described below. Refer to the BMP Operations and Maintenance Manual for more detailed maintenance requirements.

Vegetated Swale
Vegetated swales require little maintenance if properly designed. Mow as needed during the growing season; inspect for erosion problems twice during the first year, annually thereafter; and remove sediment, trash and debris annually or more frequently if needed.

Detention Ponds (Wet or Dry)
Inspect periodically as needed or at least every six months. Sediment shall be disposed of off site in accordance with all applicable laws. Areas that show sign of erosion shall be stabilized with erosion control blanket and/or seed as necessary.

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

STERLING

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

STATE OF OHIO
SHAWN L. GOODWIN
PROFESSIONAL ENGINEER

01/07/2020

CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

REVISION SCHEDULE

NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

Project Number 2019.01572

STORM WATER POLLUTION PREVENTION PLAN

C510

PLOT DATE: 1/21/2020 2:57 PM
PLOT SCALE: 1:12.5849
EDIT DATE: 1/11/2019
EDITED BY: CPOTTER
DRAWING FILE: P:\2019\01572\0_Directives\Civil\Construction Documents\2019.01572_CE-C510_SWPPP.dwg

SPECIFICATIONS
CONTRIBUTING DRAINAGE AREA
- TWO ACRES MAXIMUM..

RIPRAP CHECK DAM
- DAM HEIGHT – TWO FEET MAXIMUM; CENTER OF THE DAM TO BE AT LEAST NINE INCHES LOWER THAN THE POINTS OF CONTACT BETWEEN THE UPPERMOST POINTS OF THE RIPRAP DAM AND CHANNEL BANKS.
- SIDE SLOPE – RATIO OF 2:1 OR FLATTER.
- SPACING – TOE OF THE UPSTREAM DAM AT SAME ELEVATION AS OVERFLOW WEIR OF THE DOWNSTREAM DAM.

OVERFLOW AREAS
- STABILIZED TO REDUCE SCOUR/EROSION ALONG SIDES AND BELOW THE DAM.

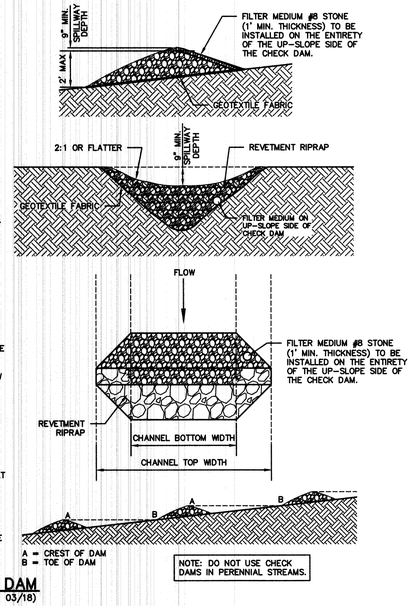
FILTER MEDIUM
- PLACED ON UP–SLOPE SIDE OF DAM.
- HEIGHT – TO BASE OF OVERFLOW WEIR NOTCH.

MATERIALS
- GEOTEXTILE FABRIC (8 OUNCE OR HEAVIER; NON–WOVEN).
- INDIANA DEPARTMENT OF TRANSPORTATION REVETMENT RIPRAP FOR DAM.
- INDOT CA NO. 5 AGGREGATE FOR USE AS FILTER MEDIUM (AGGREGATE MUST BE WELL–GRADED).

NOTE: INDOT CA NO. 8 AGGREGATE IS ACCEPTABLE IF NO. 5 IS NOT AVAILABLE. THE USE OF NO. 8 AGGREGATE MAY RESULT IN MORE FREQUENT OVERTOPPING OF THE STRUCTURE AND WILL INCREASE THE FREQUENCY OF STRUCTURE MAINTENANCE.

INSTALLATION
1. LAY OUT THE LOCATION OF THE CHECK DAM.
2. EXCAVATE A CUTOFF TRENCH INTO THE CHANNEL BOTTOM AND DITCH BANKS, EXTENDING IT A MINIMUM OF 18 INCHES BEYOND THE TOP OF THE DITCH BANK.
3. INSTALL AND ANCHOR FILTER FABRIC IN THE CHANNEL AND CUTOFF TRENCH.
4. PLACE RIPRAP IN THE CUTOFF TRENCH AND CHANNEL TO THE LINES AND DIMENSIONS SHOWN IN THE CONSTRUCTION PLANS. THE CENTER OF EACH DAM MUST BE AT LEAST NINE INCHES LOWER THAN THE UPPERMOST POINTS OF CONTACT BETWEEN THE RIPRAP DAM AND CHANNEL BANKS.
5. EXTEND THE RIPRAP AT LEAST 18 INCHES BEYOND THE TOP OF THE CHANNEL BANKS TO KEEP OVERFLOW FROM ERODING AREAS ADJACENT TO THE CHANNEL BANKS BEFORE IT RE–ENTERS THE CHANNEL.
6. PLACE FILTER MEDIUM (INDOT CA NO. 5 AGGREGATE) ON THE UP–SLOPE SIDE OF THE DAM. PLACE FILTER MEDIUM OVER THE ENTIRE FACE OF THE DAM UP TO THE BASE OF THE OVERFLOW WEIR NOTCH.
7. STABILIZE THE CHANNEL ABOVE THE UPPERMOST DAM.
8. INSTALL AN EROSION–RESISTANT LINING IN THE CHANNEL BELOW THE LOWERMOST DAM. THE LINING SHOULD EXTEND A MINIMUM DISTANCE OF SIX FEET BELOW THE DAM.
9. ADDITIONAL SEDIMENT STORAGE CAN BE PROVIDED BY EXCAVATING A SMALL SEDIMENT TRAP ON THE UPSTREAM SIDE OF THE CHECK DAM.

MAINTENANCE
- INSPECT WITHIN 24 HOURS OF EACH RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
- IF SIGNIFICANT EROSION OCCURS BETWEEN DAMS, INSTALL AN EROSION–RESISTANT LINER IN THAT PORTION OF THE CHANNEL.
- REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES ONE–HALF THE HEIGHT OF THE DAM TO MAINTAIN CHANNEL CAPACITY, ALLOW DRAINAGE THROUGH THE DAM, AND PREVENT LARGE FLOW FROM DISPLACING SEDIMENT.
- ADD RIPRAP AND AGGREGATE AS NEEDED TO MAINTAIN DESIGN HEIGHT AND CROSS SECTION OF THE DAMS.
- WHEN DAMS ARE NO LONGER NEEDED, REMOVE THE RIPRAP AND AGGREGATE AND STABILIZE THE CHANNEL. USING AN EROSION–RESISTANT LINING IF NECESSARY. (RIPRAP AND AGGREGATE FROM THE DAM MAY BE REMOVED OR UTILIZED TO STABILIZE THE CHANNEL.)



ROCK CHECK DAM
NOT TO SCALE (REV. 03/18)

SPECIFICATIONS
DRAINAGE AREA
- LIMITED TO ONE–QUARTER ACRE PER 100 LINEAR FEET OF FENCE.
- FURTHER RESTRICTED BY SLOPE STEEPNESS (SEE TABLE 1).

EFFECTIVE LIFE
- SIX MONTHS (MAXIMUM).

LOCATION
- INSTALLED PARALLEL TO THE SLOPE CONTOUR.
- MINIMUM OF 10 FEET BEYOND THE TOE OF THE SLOPE TO PROVIDE A BROAD, SHALLOW SEDIMENT POOL.
- ACCESSIBLE FOR MAINTENANCE (REMOVAL OF SEDIMENT AND SILT FENCE REPAIR).

SPACING
TABLE 1. SLOPE STEEPNESS RESTRICTIONS

PERCENT SLOPE		MAXIMUM DISTANCE
< 2%	< 50:1	100 FEET
2% – 5%	50:1 TO 20:1	75 FEET
5% – 10%*	20:1 TO 10:1	50 FEET
10% – 20%*	10:1 TO 5:1	25 FEET
> 20%	> 5:1	15 FEET

*CONSIDER OTHER ALTERNATIVES.
NOTE: MULTIPLE ROWS OF SILT FENCE ARE NOT RECOMMENDED ON THE SAME SLOPE.

TRENCH
- DEPTH: EIGHT INCHES MINIMUM.
- WIDTH: FOUR INCHES MINIMUM.
- AFTER INSTALLING THE FENCE, BACKFILL WITH SOIL MATERIAL AND COMPACT (TO BURY AND ANCHOR THE LOWER PORTION OF THE FENCE FABRIC).

NOTE: AN ALTERNATIVE TO TRENCHING IS TO USE MECHANICAL EQUIPMENT TO PLOW IN THE SILT FENCE.

MATERIALS AND SILT FENCE SPECIFICATIONS
- FABRIC – WOVEN OR NON–WOVEN GEOTEXTILE FABRIC, MEETING SPECIFIED MINIMUMS OUTLINED IN TABLE 2.

TABLE 2. GEOTEXTILE FABRIC SPECIFICATIONS FOR SILT FENCE (MINIMUM)

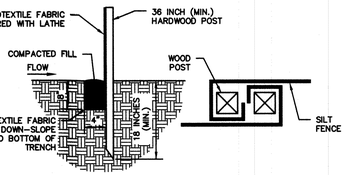
PHYSICAL PROPERTY	WOVEN GEOTEXTILE FABRIC	NON–WOVEN GEOTEXTILE FABRIC
FILTERING EFFICIENCY	85%	85%
TEXTILE STRENGTH AT 20% ELONGATION STANDARD STRENGTH EXTRA STRENGTH	 30 LBS. PER LINEAL INCH 50 LBS. PER LINEAL INCH	 50 LBS. PER LINEAL INCH 70 LBS. PER LINEAL INCH
SLURRY FLOW RATE	0.3 GAL./MIN./SQUARE FOOT	4.5 GAL./MIN./SQUARE FOOT
WATER FLOW RATE	15 GAL./MIN./SQUARE FOOT	220 GAL./MIN./SQUARE FOOT
UV RESISTANCE	70%	85%
POST SPACING	7 FEET	5 FEET

NOTE: SILT FENCES CAN BE PURCHASED COMMERCIALLY.
- HEIGHT – A MINIMUM OF 18 INCHES ABOVE GROUND LEVEL (30 INCHES MAXIMUM).
- REINFORCEMENT – FABRIC SECURELY FASTENED TO POSTS WITH WOOD LATHE.
- SUPPORT POSTS – 2x2 INCH HARDWOOD POSTS. STEEL FENCE POSTS MAY BE SUBSTITUTED FOR HARDWOOD POSTS (STEEL POSTS SHOULD HAVE PROJECTIONS FOR FASTENING FABRIC).
- SPACING – EIGHT FEET MAXIMUM IS FENCE IS SUPPORTED BY WIRE MESH FENCING, SIX FEET MAXIMUM FOR EXTRA–STRENGTH FABRIC WITHOUT WIRE BACKING.

INSTALLATION
1. LAY OUT THE LOCATION OF THE FENCE SO THAT IS IS PARALLEL TO THE CONTOUR OF THE SLOPE AND AT LEAST 10 FEET BEYOND THE TOE OF THE SLOPE TO PROVIDE A SEDIMENT STORAGE AREA. TURN THE ENDS OF THE FENCE UP SLOPE SUCH THAT THE POINT OF CONTACT BETWEEN THE GROUND AND THE BOTTOM OF THE FENCE END TERMINATES AT A HIGHER ELEVATION THAN THE TOP OF THE FENCE AT ITS LOWEST POINT.
2. EXCAVATE AN EIGHT–INCH DEEP BY FOUR–INCH WIDE TRENCH ALONG THE ENTIRE LENGTH OF THE FENCE LINE. INSTALLATION BY PLOWING IS ALSO ACCEPTABLE.
3. INSTALL THE SILT FENCE WITH THE FILTER FABRIC LOCATED ON THE UP–SLOPE SIDE OF THE EXCAVATED TRENCH AND THE SUPPORT POSTS ON THE DOWN–SLOPE SIDE OF THE TRENCH.
4. DRIVE THE SUPPORT POSTS AT LEAST 18 INCHES INTO THE GROUND, TIGHTLY STRETCHING THE FABRIC BETWEEN THE POSTS AS EACH IS DRIVEN INTO THE SOIL. A MINIMUM OF 12 INCHES OF THE FILTER FABRIC SHOULD EXTEND INTO THE TRENCH. (IF IT IS NECESSARY TO JOIN THE ENDS OF TWO FENCES, USE THE JOINT METHOD SHOWN.
5. LAY THE FOUR INCHES OF FILTER FABRIC ON THE BOTTOM OF THE TRENCH AND EXTEND IT TOWARD THE UP–SLOPE SIDE OF THE TRENCH.
6. BACKFILL THE TRENCH WITH SOIL MATERIAL AND COMPACT IT IN PLACE.

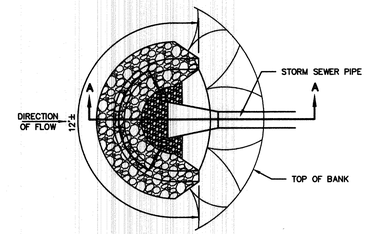
NOTE: IF THE SILT FENCE IS BEING CONSTRUCTED ON–SITE, ATTACH THE FILTER FABRIC TO THE SUPPORT POSTS (REFER TO TABLES 1 AND 2 FOR SPACING AND GEOTEXTILE SPECIFICATIONS) AND ATTACH WOODEN LATHE TO SECURE THE FABRIC TO THE POSTS. ALLOW FOR AT LEAST 12 INCHES OF FABRIC BELOW GROUND LEVEL. COMPLETE THE SILT FENCE INSTALLATION, FOLLOWING STEPS 1 THROUGH 6 ABOVE.

MAINTENANCE
- INSPECT WITHIN 24 HOURS OF A RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
- IF FENCE FABRIC TEARS, STARTS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED PORTION IMMEDIATELY. ALL REPAIRS SHOULD MEET SPECIFICATIONS AS OUTLINED WITHIN THIS MEASURE.
- REMOVE DEPOSITED SEDIMENT WHEN IT IS CAUSING THE FILTER FABRIC TO BULGE OR WHEN IT REACHES ONE–HALF THE HEIGHT OF THE FENCE AT ITS LOWEST POINT. WHEN CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE THE FENCE AND SEDIMENT DEPOSITS, GRADE THE SITE TO BLEND WITH THE SURROUNDING AREA, AND STABILIZE.

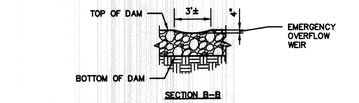


NOTE: SILT FENCE IS NOT RECOMMENDED FOR USE AS A DIVERSION AND SHOULD NOT BE USED ACROSS A STREAM, CHANNEL, DITCH, SWALE, OR ANYWHERE THAT CONCENTRATED FLOW IS ANTICIPATED.

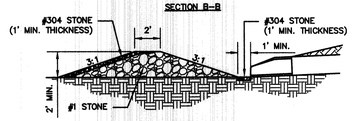
SILT FENCE CONSTRUCTION
NOT TO SCALE (REV. 01/17)



PLAN



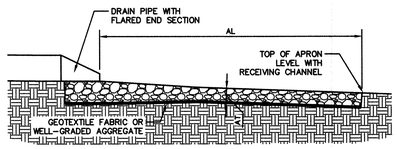
SECTION B–B



SECTION A–A

MAINTENANCE
- INSPECT WITHIN 24 HOURS OF A RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
- WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE AND PROPERLY DISPOSE OF ANY UNSTABLE SEDIMENT AND CONSTRUCTION MATERIAL, AND RE–STABILIZE.

ROCK DONUT DETAIL
NOT TO SCALE (REV. 01/17)



AL = APRON LENGTH (FEET)
AW = APRON WIDTH (FEET)
AT = APRON THICKNESS (FEET)

NOTE: AW IS THE APRON WIDTH AT THE NARROW END OF THE APRON.

SPECIFICATIONS
CAPACITY
- PEAK RUNOFF FROM A 10–YEAR FREQUENCY, 24–HOUR STORM EVENT OR THE DESIGN DISCHARGE OF THE WATER CONVEYANCE STRUCTURE, WHICHEVER IS GREATER.

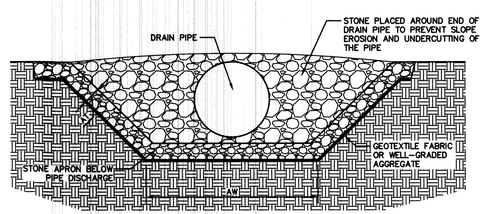
MAXIMUM VELOCITY
- TEN FEET PER SECOND.

APRON
- ALIGNED STRAIGHT WITH CHANNEL FLOW. IF A CURVE IS NECESSARY TO ALIGN THE APRON WITH THE RECEIVING STREAM, LOCATE THE CURVE IN THE UPSTREAM SECTION OF THE APRON.
- THICKNESS
  - ** 1.2 TIMES THE MAXIMUM STONE DIAMETER FOR A d_{50} STONE SIZE OF 15 INCHES OR LARGER.
  - ** 1.5 TIMES THE MAXIMUM STONE DIAMETER FOR A d_{50} STONE SIZE OF 15 INCHES OR LESS.

TABLE 1. SIZING FOR FLOW DISSIPATERS AT CULVERT PIPE OUTLETS

PIPE SIZE	MEDIAN RIPRAP DIAMETER	APRON WIDTH*	APRON LENGTH**
8 IN.	6 IN. MIN.	2 TO 3 FT.	5 TO 7 FT.
12 IN.	6 IN. MIN.	3 TO 4 FT.	6 TO 10 FT.
15 IN.	6 IN. MIN.	4 TO 6 FT.	6 TO 12 FT.
18 IN.	6 IN. MIN.	4 TO 6 FT.	8 TO 16 FT.
21 IN.	6 IN. MIN.	6 TO 8 FT.	8 TO 16 FT.
24 IN.	9 IN. MIN.	6 TO 8 FT.	12 TO 18 FT.
30 IN.	9 IN. MIN.	8 TO 10 FT.	14 TO 20 FT.
36 IN.	9 IN. MIN.	10 TO 12 FT.	16 TO 22 FT.
42 IN.	9 IN. MIN.	12 TO 14 FT.	18 TO 24 FT.
48 IN.	12 IN. MIN.	12 TO 14 FT.	18 TO 26 FT.
54 IN.	12 IN. MIN.	14 TO 16 FT.	22 TO 28 FT.
60 IN.	12 IN. MIN.	15 TO 17 FT.	22 TO 32 FT.
66 IN.	12 IN. MIN.	17 TO 19 FT.	24 TO 36 FT.
72 IN.	12 IN. MIN.	18 TO 20 FT.	26 TO 40 FT.
84 IN.	18 IN. MIN.	21 TO 23 FT.	30 TO 44 FT.

*APRON WIDTH AT THE NARROW END OF APRON (PIPE OR CHANNEL OUTLET).
**SELECT LENGTH TAKING INTO CONSIDERATION THE LOW FLOW (NO PRESSURE HEAD) OR HIGH FLOW (PRESSURE HEAD) CONDITIONS OF THE CULVERT PIPE.



MATERIALS
- RIPRAP
  - ** HARD, ANGULAR, HIGHLY WEATHER RESISTANT.
  - ** SPECIFIC GRAVITY OF AT LEAST 2.5.
  - ** SIZE AND GRADATION THAT WILL WITHSTAND VELOCITIES OF STORM WATER DISCHARGE FLOW DESIGN.
  - ** WELL–GRADED MIXTURE OF STONE WITH 50 PERCENT OF THE STONE PIECES, BY WEIGHT, LARGER THAN THE d_{50} SIZE AND THE DIAMETER OF THE LARGEST STONE EQUAL TO 1.5 TIMES THE d_{50} SIZE.
- GEOTEXTILE FABRIC OR WELL–GRADED AGGREGATE (INDOT CA NO. 9, 11, OR 12).

INSTALLATION
1. DIVERT SURFACE WATER RUNOFF AROUND THE STRUCTURE DURING CONSTRUCTION SO THAT THE SITE CAN BE PROPERLY DEWATERED FOR FOUNDATION PREPARATION.
2. EXCAVATE FOUNDATION AND APRON AREA SUBGRADES BELOW DESIGN ELEVATION TO ALLOW FOR THIS THICKNESS OF FILTER MEDIUM AND RIPRAP.
3. COMPACT ANY FILL USED IN SUBGRADE PREPARATION TO THE DENSITY OF SURROUNDING UNDISTURBED SOIL MATERIAL.
4. SMOOTH SUBGRADE ENOUGH TO PROTECT GEOTEXTILE FABRIC FROM TEARING.
5. PLACE GEOTEXTILE FABRIC OR AGGREGATE BEDDING MATERIAL (FOR STABILIZATION AND FILTRATION) ON THE COMPACTED AND SMOOTHED FOUNDATION.
6. INSTALL RIPRAP TO THE LINES AND ELEVATIONS SHOWN IN THE CONSTRUCTION PLANS. BLEND RIPRAP SMOOTHLY TO SURROUNDING GRADE. IF THE CHANNEL IS WELL DEFINED, EXTEND THE APRON ACROSS THE CHANNEL BOTTOM AND UP THE CHANNEL BANKS TO AN ELEVATION OF SIX INCHES ABOVE THE MAXIMUM TAILWATER DEPTH OR THE TOP OF THE BANK, WHICHEVER IS LESS.
7. IF GEOTEXTILE FABRIC TEARS WHEN PLACING RIPRAP, REPAIR IMMEDIATELY BY LAYING AND STAPLING A PIECE OF FABRIC OVER DAMAGED AREA, OVERLAPPING THE UNDAMAGED AREAS BY AT LEAST 12 INCHES.
8. CONSTRUCT A SMALL PLUNGE POOL WITHIN THE OUTLET APRON. (RIPRAP APRONS MUST BE LEVEL WITH OR SLIGHTLY LOWER THAN THE RECEIVING CHANNEL AND SHOULD NOT PRODUCE AN OVERFALL OR RESTRICT FLOW OF THE WATER CONVEYANCE STRUCTURE.)

MAINTENANCE
- INSPECT WITHIN 24 HOURS OF A RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
- INSPECT FOR STONE DISPLACEMENT; REPLACE STONES ENSURING PLACEMENT AT FINISHED GRADE.
- CHECK FOR EROSION OR SCOURING AROUND SIDES OF THE APRON; REPAIR IMMEDIATELY.
- CHECK FOR PIPING OR UNDERCUTTING; REPAIR IMMEDIATELY.

RIPRAP OUTLET PROTECTION
NOT TO SCALE (REV. 12/17)

SEEDING SPECIFICATIONS
SEEDBED PREPARATION
- GRADE AND APPLY SOIL AMENDMENTS.

SEEDING FREQUENCY
- SEED ROUGH GRADED AREAS DAILY WHILE SOIL IS STILL LOOSE AND MOIST.

DENSITY OF VEGETATIVE COVER
- EIGHTY PERCENT OR GREATER OVER THE SOIL SURFACE.

MATERIALS
- SOIL AMENDMENTS – SELECT MATERIALS AND RATES AS DETERMINED BY A SOIL TEST (CONTACT YOUR COUNTY SOIL AND WATER CONSERVATION DISTRICT OR COOPERATIVE EXTENSION OFFICE FOR ASSISTANCE AND SOIL INFORMATION, INCLUDING AVAILABLE SOIL TESTING SERVICES) OR 400 TO 600 POUNDS OF 12–12–12 ANALYSIS FERTILIZER, OR EQUIVALENT. CONSIDER THE USE OF REDUCED PHOSPHOROUS APPLICATION WHERE SOIL TESTS INDICATE ADEQUATE PHOSPHOROUS LEVELS IN THE SOIL PROFILE.
- SEED – SELECT APPROPRIATE PLANT SPECIES SEED OR SEED MIXTURES ON THE BASIS OF QUICK GERMINATION, GROWTH, AND TIME OF YEAR TO BE SEEDED (SEE TABLE 1).
- MULCH – STRAW, HAY, WOOD FIBER, ETC. (TO PROTECT SEEDBED, RETAIN MOISTURE, AND ENCOURAGE PLANT GROWTH). ANCHORED TO PREVENT REMOVAL BY WIND OR WATER OR COVERED WITH MANUFACTURED EROSION CONTROL BLANKETS.

TABLE 1. SLOPE STEEPNESS RESTRICTIONS

SEED SPECIES*	RATE PER ACRE	PLANTING DEPTH	OPTIMUM DATES**
WHEAT OR RYE	150 LBS.	1 TO 1–1/2 INCHES	SEPT. 15–OCT. 30
SPRING OATS	100 LBS.	1 INCH	MARCH 1–APRIL 15
ANNUAL RYEGRASS	40 LBS.	1/4 INCH	MARCH 1–MAY 1 AUG. 1–SEPT. 1
GERMAN MILLET	40 LBS.	1 TO 2 INCHES	MAY 1–JUNE 1
SUDANGRASS	35 LBS.	1 TO 2 INCHES	MAY 1–JULY 30
BUCKWHEAT	60 LBS.	1 TO 2 INCHES	APRIL 15–JUNE 1
CORN (BROADCAST)	300 LBS.	1 TO 2 INCHES	MAY 11–AUG. 10
SORGHUM	35 LBS.	1 TO 2 INCHES	MAY 1–JULY 15

*PERENNIAL SPECIES MAY BE USED AS A TEMPORARY COVER, ESPECIALLY IF THE AREA TO BE SEEDED WILL REMAIN IDLE FOR MORE THAN ONE YEAR.
**SEEDING DONE OUTSIDE THE OPTIMUM SEEDING DATES INCREASES THE CHANCES OF SEEDING FAILURE. DATES MAY BE EXTENDED OR SHORTENED BASED ON THE LOCATION OF THE PROJECT WITHIN THE STATE.

NOTES:
MULCH ALONE IS AN ACCEPTABLE TEMPORARY COVER AND MAY BE USED IN LIEU OF TEMPORARY SEEDING, PROVIDED THAT IT IS APPROPRIATELY ANCHORED.

A HIGH POTENTIAL FOR FERTILIZER, SEED, AND MULCH TO WASH EXISTS ON STEEP BANKS, CUTS, AND IN CHANNELS AND AREAS OF CONCENTRATED FLOW.

SEEDING APPLICATION
SEEDBED PREPARATION
1. TEST SOIL TO DETERMINE pH AND NUTRIENT LEVELS.
2. APPLY SOIL AMENDMENTS AS RECOMMENDED BY THE SOIL TEST. IF TESTING IS NOT DONE, APPLY 400 TO 600 POUNDS PER ACRE OF 12–12–12 ANALYSIS FERTILIZER, OR EQUIVALENT.
3. WORK THE SOIL AMENDMENTS INTO THE UPPER TWO TO FOUR INCHES OF THE SOIL WITH A DISK OR RAKE OPERATED ACROSS THE SLOPE.

SEEDING
1. SELECT A SEED SPECIES OR AN APPROPRIATE SEED MIXTURE AND APPLICATION RATE FROM TABLE 1.
2. APPLY SEED UNIFORMLY WITH A DRILL OR CULTIPACKER SEEDER OR BY BROADCASTING. PLANT OR COVER SEED TO THE DEPTH SHOWN IN TABLE 1.

   NOTES:
   1. IF DRILLING OR BROADCASTING THE SEED, ENSURE GOOD SEED–TO–SOIL CONTACT BY FIRMING THE SEEDBED WITH A ROLLER OR CULTIPACKER AFTER COMPLETING SEED OPERATIONS.
   2. DAILY SEEDING WHEN THE SOIL IS MOIST IS USUALLY MOST EFFECTIVE.
   3. IF SEEDING IS DONE WITH A HYDROSEEDER, FERTILIZER AND MULCH CAN BE APPLIED WITH THE SEED IN A SLURRY MIXTURE.
3. APPLY MULCH AND ANCHOR IT IN PLACE.

SEEDING MAINTENANCE
- INSPECT WITHIN 24 HOURS OF EACH RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
- CHECK FOR EROSION OR MOVEMENT OF MULCH AND REPAIR IMMEDIATELY.
- MONITOR FOR EROSION DAMAGE AND ADEQUATE COVER (80 PERCENT DENSITY); RESEED, FERTILIZE, AND APPLY MULCH WHERE NECESSARY.
- IF NITROGEN DEFICIENCY IS APPARENT, TOP–DRESS FALL SEEDED WHEAT OR RYE SEEDING WITH 50 POUNDS PER ACRE OF NITROGEN IN FEBRUARY OR MARCH.

MULCH SPECIFICATIONS
MATERIALS

TABLE 1. SLOPE STEEPNESS RESTRICTIONS

MATERIAL*	RATE PER ACRE	COMMENTS
STRAW OR HAY	2 TONS	SHOULD BE DRY, FREE OF UNDESIRABLE SEEDS. SPREAD BY HAND OR MACHINE. MUST BE CRIMPED OR ANCHORED (SEE TABLE 2).
WOOD FIBER OR CELLULOSE	1 TON	APPLY WITH A HYDRAULIC MULCH MACHINE AND USE WITH TACKING AGENT.

*MULCHING IS NOT RECOMMENDED IN CONCENTRATED FLOWS. CONSIDER EROSION CONTROL BLANKETS OR OTHER STABILIZATION METHODS.

COVERAGE
- THE MULCH SHOULD HAVE A UNIFORM DENSITY OF AT LEAST 75 PERCENT OVER THE SOIL SURFACE.

ANCHORING
TABLE 2. MULCH ANCHORING METHODS

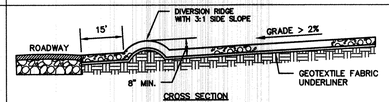
ANCHORING METHOD*	HOW TO APPLY
MULCH ANCHORING TOOL OR FARM DISK (DULL, SERRATED, AND BLADES SET STRAIGHT)	CRIMP OR PUNCH THE STRAW OR HAY TWO TO FOUR INCHES INTO THE SOIL. OPERATE MACHINERY ON THE CONTOUR OF THE SLOPE.
CLEATING WITH DOZER TRACKS	OPERATE DOZER UP AND DOWN SLOPE TO PREVENT FORMATION OF RILLS BY DOZER CLEATS.
WOOD HYDROMULCH FIBERS	APPLY ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
SYNTHETIC TACKIFIERS, BINDERS, OR SOIL STABILIZERS	APPLY ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
NETTING (SYNTHETIC OR BIODEGRADABLE MATERIAL)	INSTALL NETTING IMMEDIATELY AFTER APPLYING MULCH. ANCHOR NETTING WITH STAPLES. EDGES OF NETTING STRIPS SHOULD OVERLAP WITH EACH UP–SLOPE STRIP OVERLAPPING FOUR TO SIX INCHES OVER THE ADJACENT DOWN–SLOPE STRIP. BEST SUITED TO SLOPE APPLICATIONS. IN MOST INSTANCES, INSTALLATION DETAILS ARE SITE SPECIFIC, SO MANUFACTURER'S RECOMMENDATIONS SHOULD BE FOLLOWED.

*ALL FORMS OF MULCH MUST BE ANCHORED TO PREVENT DISPLACEMENT BY WIND AND/OR WATER.

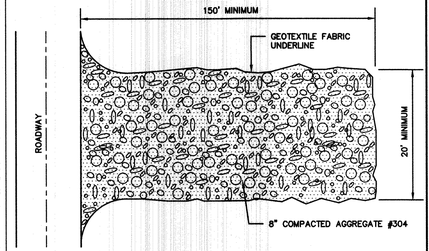
MULCH APPLICATION
1. APPLY MULCH AT THE RECOMMENDED RATE SHOWN IN TABLE 1.
2. SPREAD THE MULCH MATERIAL UNIFORMLY BY HAND, HAYFORK, MULCH BLOWER, OR HYDRAULIC MULCH MACHINE. AFTER SPREADING, NO MORE THAN 25 PERCENT OF THE GROUND SHOULD BE VISIBLE.
3. ANCHOR STRAW OR HAY MULCH IMMEDIATELY AFTER APPLICATION. THE MULCH CAN BE ANCHORED USING ONE OF THE METHODS LISTED BELOW:
   a. CRIMP WITH A MULCH ANCHORING TOOL, A WEIGHTED FARM DISK WITH DULL SERRATED BLADES SET STRAIGHT, OR TRACK CLEATS OF A BULLDOZER,
   b. APPLY HYDRAULIC MULCH WITH SHORT CELLULOSE FIBERS,
   c. APPLY A LIQUID TACKIFIER, OR
   d. COVER WITH NETTING SECURED BY STAPLES.

MULCH MAINTENANCE
- INSPECT WITHIN 24 HOURS OF EACH RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
- CHECK FOR EROSION OR MOVEMENT OF MULCH; REPAIR DAMAGED AREAS, RESEED, APPLY NEW MULCH AND ANCHOR THE MULCH IN PLACE.
- CONTINUE INSPECTIONS UNTIL VEGETATION IS FIRMLY ESTABLISHED.
- IF EROSION IS SEVER OR RECURRING, USE EROSION CONTROL BLANKETS OR OTHER MORE SUBSTANTIAL STABILIZATION METHODS TO PROTECT THE AREA.

TEMPORARY SEEDING WITH MULCH
NOT TO SCALE (REV. 01/17)



CROSS SECTION



SPECIFICATIONS
LOCATION
- AVOID LOCATING ON STEEP SLOPES OR AT CURVES IN PUBLIC ROADS.

DIMENSIONS
- WIDTH: TWENTY (20) FEET MINIMUM OR FULL WIDTH OF ENTRANCE/EXIT ROADWAY, WHICHEVER IS GREATER.
- LENGTH: ONE–HUNDRED FIFTY (150) FEET MINIMUM (LENGTH CAN BE SHORTER FOR SMALLER SITES).
- THICKNESS: EIGHT (8) INCHES MINIMUM.

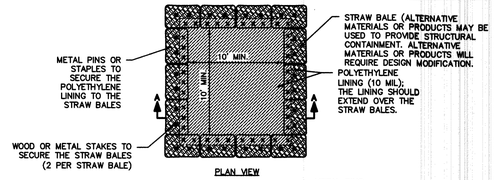
MATERIALS
- ONE (1) TO TWO AND ONE–HALF (2–1/2) INCH DIAMETER WASHED AGGREGATE (INDOT CA NO. 2).
- ONE–HALF (1/2) TO ONE AND ONE–HALF (1–1/2) INCH WASHED AGGREGATE (INDOT CA NO. 53); OPTIONAL, USED PRIMARILY WHERE THE PURPOSE OF THE PAD IS TO KEEP SOIL FROM ADHERING TO VEHICLE TIRES.
- GEOTEXTILE FABRIC UNDERLAYMENT (USED AS A SEPARATE LAYER TO PREVENT INTERMIXING OF AGGREGATE AND THE UNDERLYING SOIL MATERIAL AND TO PROVIDE GREATER BEARING STRENGTH WHEN ENCOUNTERING WET CONDITIONS OR SOILS WITH SEASONAL HIGH WATER TABLE LIMITATIONS).

INSTALLATION
1. REMOVE ALL VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA.
2. GRADE FOUNDATION AND CROWN FOR POSITIVE DRAINAGE. IF THE SLOPE OF THE CONSTRUCTION ENTRANCE IS TOWARD A PUBLIC ROAD AND EXCEEDS TWO (2) PERCENT, CONSTRUCT AN EIGHT (8) INCH HIGH DIVERSION RIDGE WITH A RATIO OF 3–TO–1 SIDE SLOPES ACROSS THE FOUNDATION AREA ABOUT 15 FEET FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE ROAD (SEE CROSS–SECTION VIEW ABOVE).
3. INSTALL A CULVERT PIPE UNDER THE PAD IF NEEDED TO MAINTAIN PROPER PUBLIC ROAD DRAINAGE.
4. IF WET CONDITIONS ARE ANTICIPATED, PLACE GEOTEXTILE FABRIC ON THE GRADED FOUNDATION TO IMPROVE STABILITY.
5. PLACE AGGREGATE (INDOT CA NO. 2) TO THE DIMENSIONS AND GRADE SHOWN IN THE CONSTRUCTION PLANS, LEAVING THE SURFACE SMOOTH AND SLOPED FOR DRAINAGE.
6. WHERE POSSIBLE, DIVERT ALL STORM WATER RUNOFF AND DRAINAGE FROM THE TEMPORARY CONSTRUCTION INGRESS/EGRESS PAD TO A SEDIMENT TRAP OR BASIN.

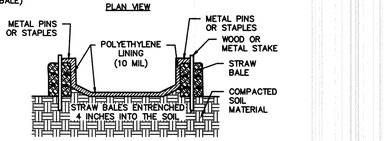
MAINTENANCE
- INSPECT DAILY.
- RESHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.
- TOP–DRESS WITH CLEAN AGGREGATE AS NEEDED.
- IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS.
- FLUSHING SHOULD ONLY BE USED IF THE WATER FROM THE CONSTRUCTION DRIVE CAN BE CONVEYED INTO A SEDIMENT TRAP OR BASIN.

GRAVEL CONSTRUCTION ENTRANCE (SITES LARGER THAN TWO ACRES)
NOT TO SCALE (REV. 01/17)

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
**Mishawaka

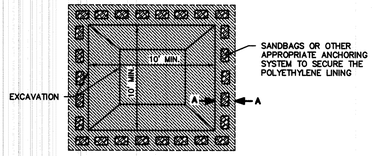


PLAN VIEW

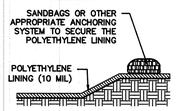


SECTION A–A

ABOVE GRADE SYSTEM



PLAN VIEW



SECTION A–A

BELOW GRADE SYSTEM

MATERIALS
- MINIMUM OF TEN MIL POLYETHYLENE SHEETING THAT IS FREE OF HOLES, TEARS, AND OTHER DEFECTS. THE SHEETING SELECTED SHOULD BE OF AN APPROPRIATE SIZE TO FIT THE WASHOUT SYSTEM WITHOUT SEAMS OR OVERLAP OF THE LINING (DESIGNED AND INSTALLED SYSTEMS).
- SIGNAGE.
- ORANGE SAFETY FENCING OR EQUIVALENT.
- STRAW BALES, SANDBAGS (BAGS SHOULD BE ULTRAVIOLET–STABILIZED GEOTEXTILE FABRIC), SOIL MATERIAL, OR OTHER APPROPRIATE MATERIALS THAT CAN BE USED TO CONSTRUCT A CONTAINMENT SYSTEM (ABOVE GRADE SYSTEMS).
- METAL PINS OR STAPLES AT A MINIMUM OF SIX INCHES IN LENGTH, SANDBAGS, OR ALTERNATIVE FASTENER TO SECURE POLYETHYLENE LINING TO THE CONTAINMENT SYSTEM.
- NON–COLLAPSING AND NON–WATER HOLDING COVER FOR USE DURING RAIN EVENTS (OPTIONAL).

INSTALLATION

PREFABRICATED WASHOUT SYSTEMS/CONTAINERS
- INSTALL AND LOCATE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

DESIGNED AND INSTALLED SYSTEMS
- UTILIZE AND FOLLOW THE DESIGN IN THE STORM WATER POLLUTION PREVENTION PLAN TO INSTALL THE SYSTEM.
- DEPENDENT UPON THE TYPE OF SYSTEM, EITHER EXCAVATE THE PIT OR INSTALL THE CONTAINMENT SYSTEM.
- A BASE SHALL BE CONSTRUCTED AND PREPARED THAT IS FREE OF ROCKS AND OTHER DEBRIS THAT MAY CAUSE TEARS OR PUNCTURES IN THE POLYETHYLENE LINING.
- INSTALL THE POLYETHYLENE LINING. FOR EXCAVATED SYSTEMS, THE LINING SHOULD EXTEND OVER THE ENTIRE EXCAVATION. THE LINING FOR BERMED SYSTEMS SHOULD BE INSTALLED OVER THE POOLING AREA WITH ENOUGH MATERIAL TO EXTEND THE LINING OVER THE BERM OR CONTAINMENT SYSTEM. THE LINING SHOULD BE SECURED WITH PINS, STAPLES, OR OTHER FASTENERS.
- PLACE FLAGS, SAFETY FENCING, OR EQUIVALENT TO PROVIDE A BARRIER TO CONSTRUCTION EQUIPMENT AND OTHER TRAFFIC.
- PLACE A NON–COLLAPSING, NON–WATER HOLDING COVER OVER THE WASHOUT FACILITY PRIOR TO A PREDICTED RAINFALL EVENT TO PREVENT ACCUMULATION OF WATER AND POSSIBLE OVERFLOW OF THE SYSTEM (OPTIONAL).
- INSTALL SIGNAGE THAT IDENTIFIES CONCRETE WASHOUT AREAS.
- POST SIGNS DIRECTING CONTRACTORS AND SUPPLIERS TO DESIGNATED LOCATIONS.
- WHERE NECESSARY, PROVIDE STABLE INGRESS AND EGRESS OR ALTERNATIVE APPROACH PAD FOR CONCRETE WASHOUT SYSTEMS.

MAINTENANCE
- INSPECT DAILY AND AFTER EACH STORM EVENT.
- INSPECT THE INTEGRITY OF THE OVERALL STRUCTURE INCLUDING, WHERE APPLICABLE, THE CONTAINMENT SYSTEM.
- INSPECT THE SYSTEM FOR LEAKS, SPILLS, AND TRACKING OF SOIL BY EQUIPMENT.
- INSPECT THE POLYETHYLENE LINING FOR FAILURE, INCLUDING TEARS AND PUNCTURES.
- ONCE CONCRETE WASTES HARDEN, REMOVE AND DISPOSE OF THE MATERIAL.
- EXCESS CONCRETE SHOULD BE REMOVED WHEN THE WASHOUT SYSTEM REACHES 50 PERCENT OF THE DESIGN CAPACITY. USE OF THE SYSTEM SHOULD BE DISCONTINUED UNTIL APPROPRIATE MEASURES CAN BE INITIATED TO CLEAN THE STRUCTURE. PREFABRICATED SYSTEMS SHOULD ALSO UTILIZE THIS CRITERION, UNLESS THE MANUFACTURER HAS ALTERNATE SPECIFICATIONS.
- UPON REMOVAL OF THE SOLIDS, INSPECT THE STRUCTURE. REPAIR THE STRUCTURE AS NEEDED OR CONSTRUCT A NEW SYSTEM.
- DISPOSE OF ALL CONCRETE IN A LEGAL MANNER. REUSE THE MATERIAL ON SITE, RECYCLE OR HAUL THE MATERIAL TO AN APPROVED CONSTRUCTION/DEMOLITION LANDFILL SITE. RECYCLING OF MATERIAL IS ENCOURAGED. THE WASTE MATERIAL CAN BE USED FOR MULTIPLE APPLICATIONS INCLUDING BUT NOT LIMITED TO ROADBEDS AND BUILDING. THE AVAILABILITY FOR RECYCLING SHOULD BE CHECKED LOCALLY.
- THE PLASTIC LINER SHOULD BE REPLACED AFTER EVERY CLEANING; THE REMOVAL OF MATERIAL WILL USUALLY DAMAGE THE LINING.
- THE CONCRETE WASHOUT SYSTEM SHOULD BE REPAIRED OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE.
- CONCRETE WASHOUT SYSTEMS ARE DESIGNED TO PROMOTE EVAPORATION. HOWEVER, IF THE LIQUIDS DO NO EVAPORATE AND THE SYSTEM IS NEAR CAPACITY IT MAY BE NECESSARY TO VACUUM OR REMOVE THE LIQUIDS AND DISPOSE OF THEM IN AN ACCEPTABLE METHOD. DISPOSAL MAY BE ALLOWED AT THE LOCAL SANITARY SEWER AUTHORITY PROVIDED THEIR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMITS ALLOW FOR ACCEPTANCE OF THIS MATERIAL. ANOTHER OPTION WOULD BE TO UTILIZE A SECONDARY CONTAINMENT SYSTEM OR BASIN FOR FUTURE DEWATERING.
- PREFABRICATED UNITS ARE OFTEN PUMPED AND THE COMPANY SUPPLYING THE UNIT PROVIDES THIS SERVICE.
- INSPECT CONSTRUCTION ACTIVITIES ON A REGULAR BASIS TO ENSURE SUPPLIERS, CONTRACTORS, AND OTHERS ARE UTILIZING DESIGNATED WASHOUT AREAS. IF CONCRETE WASTE IS BEING DISPOSED OF IMPROPERLY, IDENTIFY THE VIOLATORS AND TAKE APPROPRIATE ACTION.
- WHEN CONCRETE WASHOUT SYSTEMS ARE NO LONGER REQUIRED, THE CONCRETE WASHOUT SYSTEMS SHALL BE CLOSED. DISPOSE OF ALL HARDENED CONCRETE AND OTHER MATERIALS USED TO CONSTRUCT THE SYSTEM.
- HOLES, DEPRESSIONS AND OTHER LAND DISTURBANCES ASSOCIATED WITH THE SYSTEM SHOULD BE BACKFILLED, GRADED, AND STABILIZED.

SPECIFICATIONS

SITE MANAGEMENT
- COMPLETE CONSTRUCTION/INSTALLATION OF THE SYSTEM AND HAVE WASHOUT LOCATIONS OPERATIONAL PRIOR TO CONCRETE DELIVERY.
- DO NOT WASH OUT CONCRETE TRUCKS OR EQUIPMENT INTO STORM DRAINS, WETLANDS, STREAMS, RIVERS, CREEKS, DITCHES, OR STREETS.
- NEVER WASH OUT INTO A STORM SEWER DRAINAGE SYSTEM. THESE SYSTEMS ARE TYPICALLY CONNECTED TO A NATURAL CONVEYANCE SYSTEM.
- WHERE NECESSARY, PROVIDE STABLE INGRESS AND EGRESS.
- IT IS RECOMMENDED THAT WASHOUT SYSTEMS BE RESTRICTED TO WASHING CONCRETE FROM MIXER AND PUMP TRUCKS AND NOT USED TO DISPOSE OF EXCESS CONCRETE OR RESIDUAL LOADS DUE TO THE POTENTIAL TO EXCEED THE DESIGN CAPACITY OF THE WASHOUT SYSTEM. SMALL AMOUNTS OF EXCESS OR RESIDUAL CONCRETE (NOT WASHOUT WATER) MAY BE DISPOSED OF IN AREAS THAT WILL NOT RESULT IN FLOW TO AN AREA THAT IS TO BE PROTECTED.
- INSTALL SYSTEMS AT STRATEGIC LOCATIONS THAT ARE CONVENIENT AND IN CLOSE PROXIMITY TO WORK AREAS AND IN SUFFICIENT NUMBER TO ACCOMMODATE THE DEMAND FOR DISPOSAL.
- INSTALL SIGNAGE IDENTIFYING THE LOCATION OF CONCRETE WASHOUT SYSTEMS.

LOCATION
- LOCATE CONCRETE WASHOUT SYSTEMS AT LEAST 50 FEET FROM ANY CREEKS, WETLANDS, DITCHEST, KARST FEATURES, OR STORM DRAINS/MANMADE CONVEYANCE SYSTEMS.
- TO THE EXTENT PRACTICAL, LOCATE CONCRETE WASHOUT SYSTEMS IN RELATIVELY FLAT AREAS THAT HAVE ESTABLISHED VEGETATIVE COVER AND DO NOT RECEIVE RUNOFF FROM ADJACENT LAND AREAS.
- LOCATE IN AREAS THAT PROVIDE EASY ACCESS FOR CONCRETE TRUCKS AND OTHER CONSTRUCTION EQUIPMENT.
- LOCATE AWAY FROM OTHER CONSTRUCTION TRAFFIC TO REDUCE THE POTENTIAL FOR DAMAGE TO THE SYSTEM.

GENERAL DESIGN CONSIDERATIONS
- THE STRUCTURE OR SYSTEM SHALL BE DESIGNED TO CONTAIN THE ANTICIPATED WASHOUT WATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- THE SYSTEM SHALL BE DESIGNED, TO THE EXTENT PRACTICAL, TO ELIMINATE RUNOFF FROM ENTERING THE WASHOUT SYSTEM.
- RUNOFF FROM A RAINSTORM OR SNOWMELT SHOULD NOT CARRY WASTES AWAY FROM THE WASHOUT LOCATION.
- WASHOUT WILL NOT IMPACT FUTURE LAND USES (I.E., OPEN SPACES, LANDSCAPED AREAS, HOME SITES, PARKS).
- WASHOUT SYSTEMS/CONTAINMENTS MEASURES MAY ALSO BE UTILIZED ON SMALLER INDIVIDUAL BUILDING SITES. THE DESIGN AND SIZE OF THE SYSTEM CAN BE ADJUSTED TO ACCOMMODATE THE EXPECTED CAPACITY.

PREFABRICATED WASHOUT SYSTEMS/CONTAINERS
- SELF–CONTAINED STURDY CONTAINMENT SYSTEMS THAT ARE DELIVERED TO A SITE AND LOCATED AT STRATEGIC LOCATIONS FOR CONCRETE DISPOSAL.
- THESE SYSTEMS ARE MANUFACTURED TO RESIST DAMAGE FROM CONSTRUCTION EQUIPMENT AND PROTECT AGAINST LEAKS OR SPILLS.
- MANUFACTURER OR SUPPLIER PROVIDES THE CONTAINERS. THE PROJECT SITE MANAGER MAINTAINS THE SYSTEM OR THE SUPPLIER PROVIDES COMPLETE SERVICE THAT INCLUDES MAINTENANCE AND DISPOSAL.
- UNITS ARE OFTEN AVAILABLE WITH OR WITHOUT RAMPS. UNITS WITH RAMPS LEND THEMSELVES TO ACCOMMODATE PUMP TRUCKS.
- MAINTAIN ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

DESIGNED AND INSTALLED UNITS

THESE UNITS ARE DESIGNED AND INSTALLED ON SITE. THEY TEND TO BE LESS RELIABLE THAN PREFABRICATED SYSTEMS ARE OFTEN PRONE TO FAILURE. CONCRETE WASHOUT SYSTEMS CAN BE CONSTRUCTED ABOVE OR BELOW GRADE. IT IS NOT UNCOMMON TO HAVE A SYSTEM THAT IS PARTLY BELOW GRADE WITH AN ADDITIONAL CONTAINMENT STRUCTURE ABOVE GRADE.
- WASHOUT SYSTEMS SHALL UTILIZE A PIT OR BERMED AREA DESIGNED AND MAINTAINED AT A CAPACITY TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
- THE VOLUME OF THE SYSTEM MUST ALSO BE DESIGNED TO CONTAIN RUNOFF THAT DRAINS TO THE SYSTEM AND RAINFALL THAT ENTERS THE SYSTEM FOR A TWO–YEAR FREQUENCY, 24–HOUR STORM EVENT.

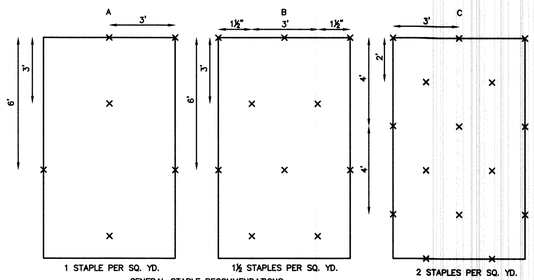
BELOW GRADE SYSTEM
- A WASHOUT SYSTEM INSTALLED BELOW GRADE SHOULD BE A MINIMUM OF TEN FEET WIDE BY TEN FEET LONG, BUT SIZED TO CONTAIN ALL LIQUID AND WASTE THAT IS EXPECTED TO BE GENERATED BETWEEN SCHEDULED CLEANOUT PERIODS. THE SIZE OF THE PIT MAY BE LIMITED BY THE SIZE OF THE POLYETHYLENE AVAILABLE. THE POLYETHYLENE LINING SHOULD BE ADEQUATE SIZE TO EXTEND OVER THE ENTIRE EXCAVATION.
- INCLUDE A MINIMUM 12–INCH FREEBOARD TO REASONABLY ENSURE THAT THE STRUCTURE WILL NOT OVERTOP DURING A RAIN EVENT.
- LINE THE PIT WITH TEN MIL POLYETHYLENE LINING TO CONTROL SEEPAGE.
- THE BOTTOM OF EXCAVATED PIT SHOULD BE ABOVE THE SEASONAL HIGH WATER TABLE.

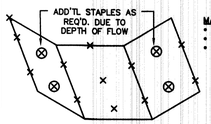
ABOVE GRADE SYSTEM
- A SYSTEM DESIGNED AND BUILT ABOVE GRADE SHOULD BE A MINIMUM OF TEN FEET WIDE BY TEN FEET LONG, BUT SIZED TO CONTAIN ALL LIQUID AND WASTE THAT IS EXPECTED TO BE GENERATED BETWEEN SCHEDULED CLEANOUT PERIODS. THE SIZE OF THE CONTAINMENT SYSTEM MAY BE LIMITED BY THE SIZE OF POLYETHYLENE AVAILABLE. POLYETHYLENE LINING SHOULD BE OF ADEQUATE SIZE TO EXTEND OVER THE BERM OR CONTAINMENT SYSTEM.
- THE SYSTEM DESIGN MAY UTILIZE AN EARTHEN BERM, STRAW BALES, SANDBAGS, OR OTHER ACCEPTABLE
- BARRIERS THAT WILL MAINTAIN ITS SHAPE AND INTEGRITY AND SUPPORT THE POLYETHYLENE LINING.
- INCLUDE A MINIMUM FOUR–INCH FREEBOARD AS PART OF THE DESIGN.

WASHOUT PROCEDURES
- DO NOT LEAVE EXCESS MUD IN THE CHUTES OR HOPPER AFTER THE POUR. EVERY EFFORT SHOULD BE MADE TO EMPTY THE CHUTES AND HOPPER AT THE POUR. THE LESS MATERIAL LEFT IN THE CHUTES AND HOPPER, THE QUICKER AND EASIER THE CLEANOUT. SMALL AMOUNTS OF EXCESS CONCRETE (NOT WASHOUT WATER) MAY BE DISPOSED OF IN AREAS THAT WILL NOT RESULT IN FLOW TO AN AREA THAT IS TO BE PROTECTED.
- AT THE WASHOUT LOCATION, SCRAPE AS MUCH MATERIAL FROM THE CHUTES AS POSSIBLE BEFORE WASHING THEM. USE NON–WATER CLEANING METHODS TO MINIMIZE THE CHANCE FOR WASTE TO FLOW OFF SITE.
- REMOVE AS MUCH MUD AS POSSIBLE WHEN WASHING OUT.
- STOP WASHING OUT IN AN AREA IF YOU OBSERVE WATER RUNNING OFF THE DESIGNATED AREA OR IF THE CONTAINMENT SYSTEM IS LEAKING OR OVERFLOWING AND INEFFECTIVE.
- DO NOT BACK FLUSH EQUIPMENT AT THE PROJECT SITE. BACK FLUSHING SHOULD BE RESTRICTED TO THE PLANT AS IT GENERATES LARGE VOLUMES OF WASTE THAT MORE THAN LIKELY WILL EXCEED THE CAPACITY OF MOST WASHOUT SYSTEMS. IF AN EMERGENCY ARISES, BACK FLUSH SHOULD ONLY BY PERFORMED WITH THE PERMISSION OF AN ON–SITE MANAGER FOR THE PROJECT.
- DO NOT USE ADDITIVES WITH WASH WATER. DO NOT USE SOLVENTS OR ACIDS THAT MAY BE USED AT THE TARGET PLANT.

CONCRETE WASH OUT

NOT TO SCALE (REV. 01/17)





SPECIFICATIONS

EFFECTIVE LIFE
- THE FUNCTIONAL LIFE OF AN EROSION CONTROL BLANKET IS DEPENDENT ON THE MATERIALS USED.

ANCHORING
- STAPLES, PINS OR STAKES USED TO PREVENT MOVEMENT OR DISPLACEMENT OF BLANKET. (FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR SPECIFIC APPLICATIONS.)

MATERIALS
- ORGANIC (STRAW, EXCELSIOR, WOVEN PAPER, COCONUT FIBER, ETC.) OR SYNTHETIC MULCH INCORPORATED WITH A POLYPROPYLENE, NATURAL FIBER OR SIMILAR NETTING MATERIAL. (THE NETTING MAY BE BIODEGRADABLE, PHOTODEGRADABLE OR PERMANENT.)

NOTE: SOME EROSION CONTROL BLANKET NETTINGS MAY POSE A THREAT TO CERTAIN SPECIES OF WILDLIFE IF THEY BECOME ENTANGLED IN THE NETTING MATRIX.
- SIX TO 12–INCH STAPLES, PINS, OR STAKES.

INSTALLATION
1. SELECT THE TYPE AND WEIGHT OF EROSION CONTROL BLANKET TO FIT THE SITE CONDITIONS (E.G., SLOPE, CHANNEL, FLOW VELOCITY) PER THE MANUFACTURER'S RECOMMENDATIONS.
2. PREPARE THE SEEDBED, ADD SOIL AMENDMENTS, AND PERMANENTLY SEED THE AREA IMMEDIATELY FOLLOWING SEEDBED PREPARATION.
3. LAY EROSION CONTROL BLANKETS ON THE SEEDED AREA SO THAT THEY ARE IN CONTINUOUS CONTACT WITH THE SOIL WITH EACH UP–SLOPE OR UP–STREAM BLANKET OVERLAPPING THE DOWN–SLOPE OR DOWN–STREAM BLANKET BY AT LEAST EIGHT INCHES, OR FOLLOW MANUFACTURER'S RECOMMENDATIONS.
4. TUCK THE UPPERMOST EDGE OF THE UPPER BLANKETS INTO A CHECK SLOT (SLIT TRENCH), BACKFILL WITH SOIL AND TAMP DOWN. IN CERTAIN APPLICATIONS, THE MANUFACTURER MAY REQUIRE ADDITIONAL CHECK SLOTS AT SPECIFIC LOCATIONS DOWN SLOPE FROM THE UPPERMOST EDGE OF THE UPPER BLANKETS.
5. ANCHOR THE BLANKETS IN PLACE BY DRIVING STAPLES, PINS, OR STAKES THROUGH THE BLANKET AND INTO THE UNDERLYING SOIL. FOLLOW AN ANCHORING PATTERN APPROPRIATE FOR THE SITE CONDITIONS AND AS RECOMMENDED BY THE MANUFACTURER.

MAINTENANCE
- INSPECT WITHIN 24 HOURS OF EACH RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
- CHECK FOR EROSION OR DISPLACEMENT OF THE BLANKET.
- IF ANY AREA SHOWS EROSION, PULL BACK THAT PORTION OF THE BLANKET COVERING THE ERODED AREA, ADD SOIL AND TAMP, RESEED THE AREA, REPLACE AND STAPLE THE BLANKET.

NOTES

CHANNEL LININGS UTILIZE STAPLE PATTERN "C" WITH ADDITIONAL STAPLES ON SIDE SLOPES AT PROJECTED WATER LINE.

STAPLE PATTERNS APPLY TO ALL NORTH AMERICAN GREEN EROSION CONTROL BLANKETS. STAPLE PATTERNS MAY VARY DEPENDING UPON SOIL TYPE AND AVERAGE RAINFALL.

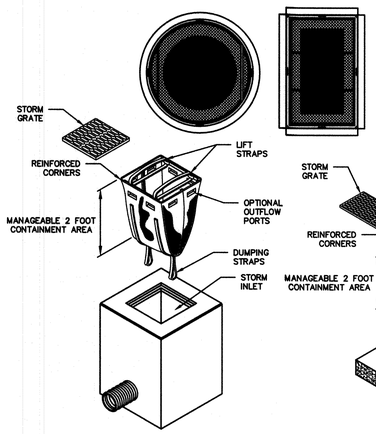
AT SLOPE LENGTHS GREATER THAN 300 FEET OR WHERE DRAINAGE OVER LARGE AREAS IS DIRECTED ONTO THE BLANKETS, STAPLE PATTERN "C" SHOULD BE UTILIZED.

EROSION CONTROL BLANKET

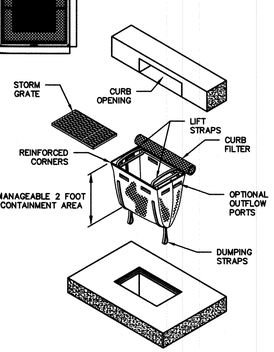
NOT TO SCALE (REV. 01/17)

INSTALLATION
1. REMOVE THE STORM SEWER GRATE AND PLACE THE FRAME INTO THE GRATE OPENING.
2. PLACE GEOTEXTILE FABRIC INTO THE FRAME AND SECURE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
3. REPLACE THE STORM SEWER GRATE.

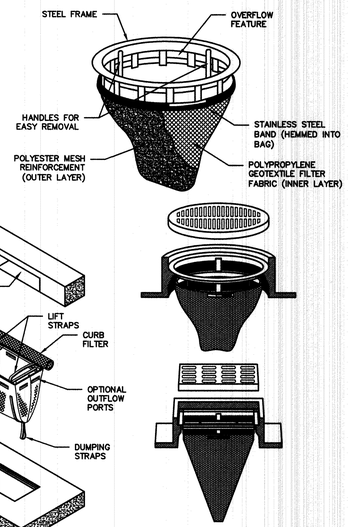
MAINTENANCE
- INSPECT DAILY.
- REMOVE ACCUMULATED SEDIMENT AND DEBRIS AFTER EACH STORM EVENT. DEPOSIT SEDIMENT IN AN AREA WHERE IT WILL NOT RE–ENTER THE PAVED AREA OR STORM DRAINS.
- REPLACE OR CLEAN GEOTEXTILE FABRIC AS NEEDED.
- WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE INLET PROTECTION.



DETAIL OF INLET SEDIMENT CONTROL DEVICE



DETAIL OF INLET SEDIMENT CONTROL DEVICE WITH CURB FILTER



NOTE: CONTRACTOR TO USE FLEXSTORM CATCH–IT INLET PROTECTOR, DANDY BAG OR APPROVED ALTERNATE.

DROP–IN INLET PROTECTION TO BE USED IN PAVED AREAS.

DROP–IN INLET PROTECTION

NOT TO SCALE (REV. 01/17)

SPECIFICATIONS

NOTE: ALTERNATIVE SUPPORT SYSTEMS MAY BE SUBSTITUTED FOR HARDWOOD POSTS AND CROSS BRACES.

CONTRIBUTING DRAINAGE AREA
- ONE ACRE MAXIMUM.

EFFECTIVE LIFE
- SIX MONTHS (MAXIMUM).

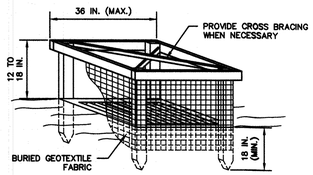
CAPACITY
- RUNOFF FROM A TWO–YEAR FREQUENCY, 24–HOUR STORM EVENT ENTERING A STORM DRAIN WITHOUT BYPASS FLOW.

GEOTEXTILE STRUCTURE
- HEIGHT – 12 TO 18 INCHES, MEASURED FROM THE TOP OF STORM DRAIN INLET.
- POST SPACING – 36–INCH MAXIMUM SPACING BETWEEN POSTS.
- FRAME SUPPORT – BRACING TO STRENGTHEN INTEGRITY OF THE STRUCTURE. (STRUCTURE MUST WITHSTAND 1½–FOOT HEAD OF WATER AND SEDIMENT WITHOUT COLLAPSING OR WITHSTANDING.)

MATERIALS
- SUPPORT POSTS
  - 2 x 2 INCH OR 2 x4 INCH HARDWOOD POSTS.
  - THREE FEET LENGTH, MINIMUM.
- 1 x 2 INCH OR 1 x 3 INCH HARDWOOD CROSS BRACING LUMBER.
- LATHE.
- STAPLES OR NAILS.
- GEOTEXTILE FABRIC.

TABLE 2. GEOTEXTILE FABRIC SPECIFICATIONS FOR SILT FENCE (MINIMUM)

PHYSICAL PROPERTY	WOVEN GEOTEXTILE FABRIC	NON–WOVEN GEOTEXTILE FABRIC
FILTERING EFFICIENCY	85%	85%
UV RESISTANCE (INHIBITORS AND STABILIZERS TO ENSURE SIX MONTH MINIMUM LIFE AT TEMPERATURES 0° TO 120° F)	70%	85%
TEXTILE STRENGTH AT 20% ELONGATION STANDARD STRENGTH EXTRA STRENGTH	30 LBS. PER LINEAL INCH 50 LBS. PER LINEAL INCH	50 LBS. PER LINEAL INCH 70 LBS. PER LINEAL INCH
SLURRY FLOW RATE	0.3 GAL./MIN./SQUARE FOOT	4.5 GAL./MIN./SQUARE FOOT
WATER FLOW RATE	15 GAL./MIN./SQUARE FOOT	220 GAL./MIN./SQUARE FOOT

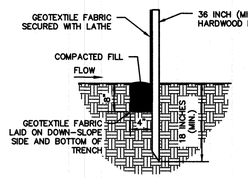


INSTALLATION
1. DIG AN EIGHT–INCH DEEP, FOUR–INCH WIDE TRENCH AROUND THE PERIMETER OF THE INLET.
2. IF USING PRE–ASSEMBLED GEOTEXTILE FABRIC AND POSTS, DRIVE THE POSTS INTO THE SOIL, TIGHTLY STRETCHING THE GEOTEXTILE FABRIC BETWEEN POSTS AS EACH IS DRIVEN. (POSTS MUST BE PLACED ON THE INLET SIDE OF THE ANCHOR TRENCH WITH THE GEOTEXTILE FABRIC ON THE SIDE OF THE TRENCH FARTHEST FROM THE INLET.)

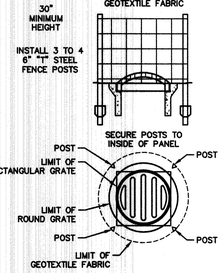
   NOTE: IF ASSEMBLING THE GEOTEXTILE FABRIC AND POSTS ON–SITE, DRIVE THE POSTS INTO THE SOIL AND THEN SECURE THE GEOTEXTILE FABRIC TO THE POSTS BY PLACING A PIECE OF LATHE OVER THE FABRIC AND FASTENING IT TO THE POST (STRETCHING THE FABRIC BETWEEN POSTS AS IT IS FASTENED).
3. USE THE WRAP JOIN METHOD WHEN JOINING POSTS.
4. PLACE THE BOTTOM 12 INCHES OF GEOTEXTILE FABRIC INTO THE EIGHT–INCH DEEP TRENCH, LAYING THE REMAINING FOUR INCHES IN THE BOTTOM OF THE TRENCH AND EXTENDING AWAY FROM THE INLET.
5. BACKFILL THE TRENCH WITH SOIL MATERIAL AND COMPACT IT IN PLACE.
6. BRACE THE POSTS BY NAILING BRACES INTO EACH CORNER POST OR UTILIZE RIGID PANELS TO SUPPORT FABRIC.

   NOTE: IN SITUATIONS WHERE STORM WATER MAY BYPASS THE STRUCTURE, EITHER:
   - SET THE TOP OF THE GEOTEXTILE FABRIC FILTER AT LEAST SIX INCHES LOWER THAN THE GROUND ELEVATION ON THE DOWN–SLOPE SIDE OF THE STORM DRAIN INLET.
   - BUILD A TEMPORARY DIKE, COMPACTED TO SIX INCHES HIGHER THAN THE FABRIC, ON THE DOWN–SLOPE SIDE OF THE STORM DRAIN INLET, AND/OR
   - USE IN CONJUNCTION WITH EXCAVATED DROP INLET PROTECTION.

MAINTENANCE
- INSPECT DAILY.
- INSPECT GEOTEXTILE FABRIC AND MAKE NEEDED REPAIRS IMMEDIATELY.
- REMOVE SEDIMENT FROM POOL AREA TO PROVIDE STORAGE FOR THE NEXT STORM EVENT. AVOID DAMAGING OR UNDERCUTTING FABRIC DURING SEDIMENT REMOVAL.
- WHEN CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE SEDIMENT, PROPERLY DISPOSE OF ALL CONSTRUCTION MATERIAL, GRADE AREA TO THE ELEVATION OF THE STORM DRAIN INLET TOP, THEN STABILIZE IMMEDIATELY.



NOTE: THIS MEASURE IS NOT RECOMMENDED FOR PAVED SURFACES DUE TO INABILITY TO ENTRENCH THE FABRIC AND LACK OF AN ANCHORING SYSTEM.



SILT FENCE INLET PROTECTION

NOT TO SCALE (REV. 01/17)

PLOT DATE: 12/1/2020 2:57 PM
PLOT SCALE: 12.0000
EDIT DATE: 1/3/2020
EDITED BY: ANORGAN
DRAWING FILE: P:\2019\01572\D Drawings\Civil\Construction Documents\2019.01572.CE.CS20.ECD.dwg

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

STERLING

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

STATE OF OHIO — SHAWN L. GOODWIN — PROFESSIONAL ENGINEER — STERLING DEVELOPMENT LLC

01/07/2020

CERTIFIED BY

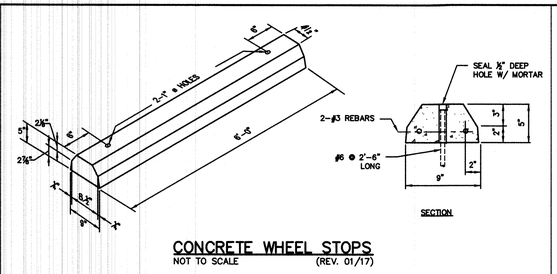
ISSUANCE INDEX
DATE: 1/6/2020
PROJECT PHASE: PRELIMINARY DOCUMENTS

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

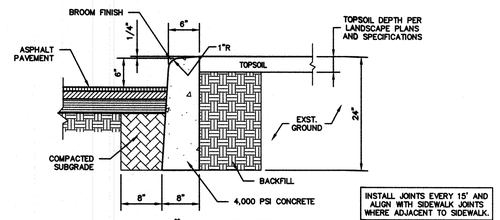
Project Number 2019.01572

EROSION CONTROL DETAILS

C521

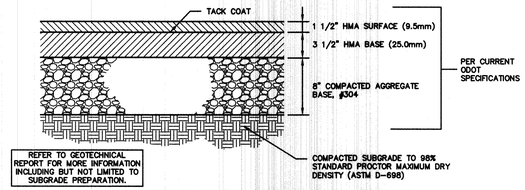


CONCRETE WHEEL STOPS
NOT TO SCALE (REV. 01/17)

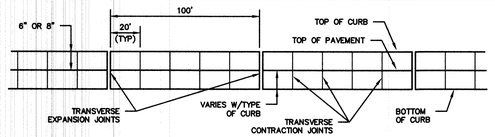


INSTALL JOINTS EVERY 15' AND ALIGN WITH SIDEWALK JOINTS WHERE ADJACENT TO SIDEWALK.

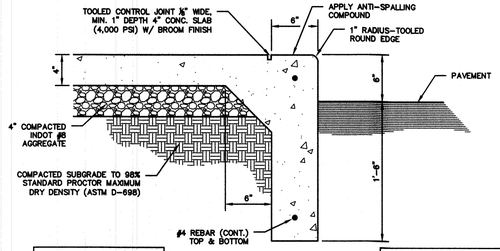
6" CONCRETE CURB
NOT TO SCALE (REV. 01/17)



HEAVY DUTY ASPHALT PAVEMENT
NOT TO SCALE (REV. 06/17)



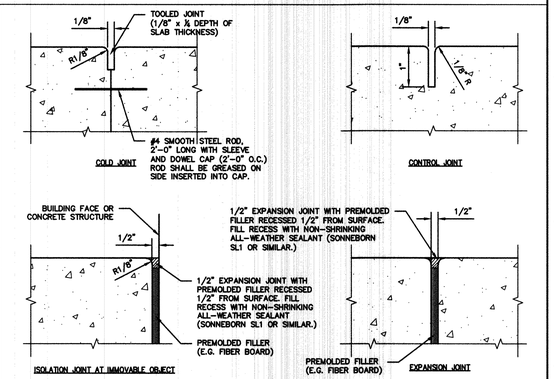
CURB JOINT DETAIL
NOT TO SCALE (REV. 01/17)



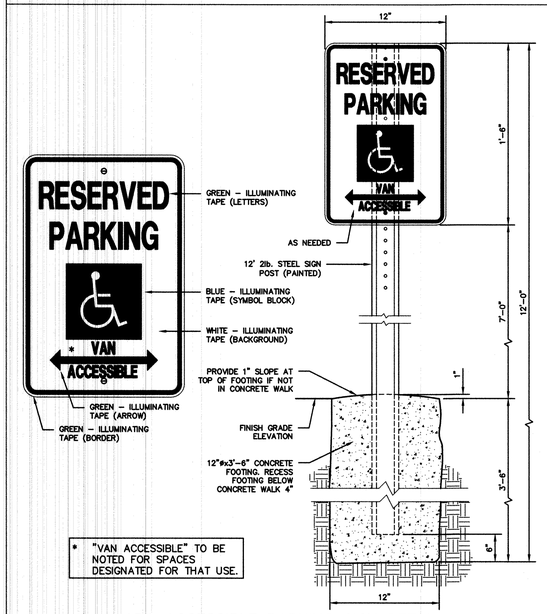
REFER TO TYPICAL CONCRETE JOINT DETAILS ON THIS SHEET FOR JOINTING INFORMATION.

NOTE:
PROVIDE ISOLATION JOINTS AT BUILDINGS OR IMMOVABLE OBJECTS. CONTROL JOINTS AT 5'-0" O.C. OR AS SHOWN ON SITE PLANS. WITH EXPANSION JOINTS AT 30'-0" O.C. MAX.

COMBINED CONCRETE CURB AND WALK
NOT TO SCALE (REV. 01/17)

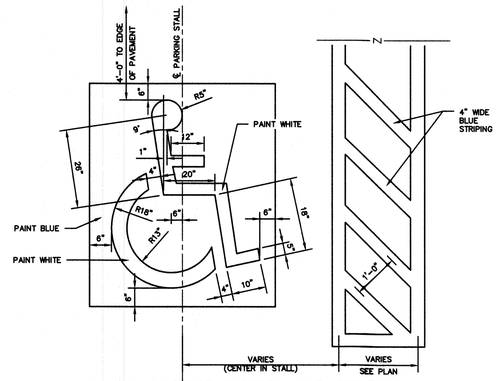


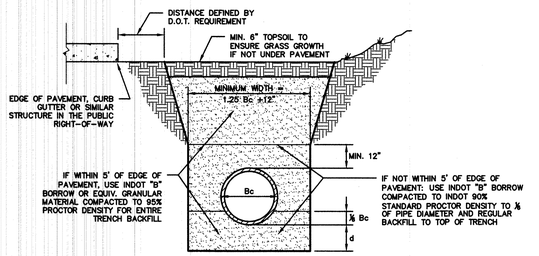
TYPICAL CONCRETE JOINT DETAILS
NOT TO SCALE (REV. 01/17)



* "VAN ACCESSIBLE" TO BE NOTED FOR SPACES DESIGNATED FOR THAT USE.

ADA ACCESSIBLE PARKING SIGN DETAIL
NOT TO SCALE (REV. 01/17)


N
4'-0" TO EDGE OF PAVEMENT
℄ PARKING STALL
8'
8'
8'



LEGEND
Bc= OUTSIDE DIAMETER
D= INSIDE DIAMETER
d= DEPTH OF BEDDING MATERIAL BELOW PIPE

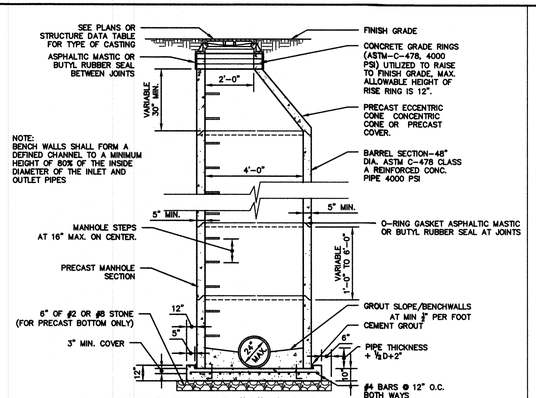
NOTE:
ALL INITIAL BACKFILL SHALL BE INSTALLED IN 6" TO 12" BALANCED LIFTS.

A MINIMUM 9" OF CLEARANCE SHALL BE PROVIDED ON EACH SIDE OF THE INSTALLED PIPE.

DEPTH OF BEDDING MATERIAL BELOW PIPE

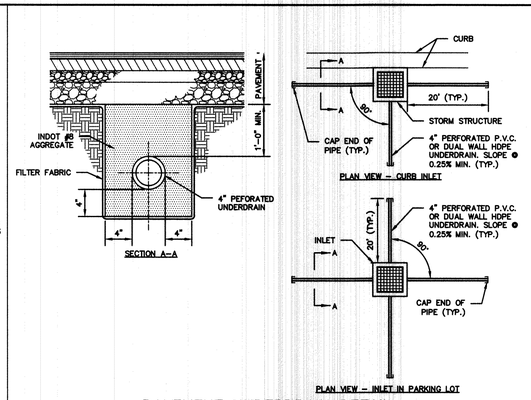
D	d (MIN)
27" & SMALLER	3"
30" TO 60"	4"
66" & LARGER	6"

REINFORCED CONCRETE PIPE (RCP) BEDDING DETAIL
NOT TO SCALE (REV. 12/17)

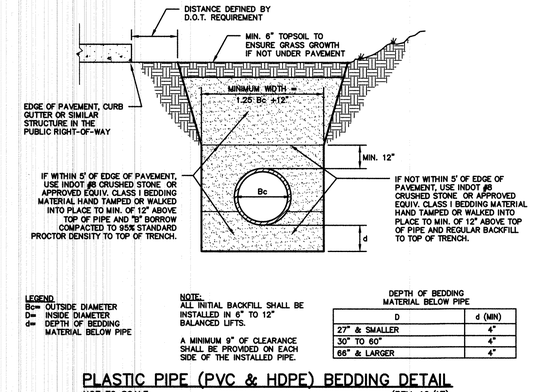


NOTE:
BENCH WALLS SHALL FORM A DEFINED CHANNEL TO A MINIMUM HEIGHT OF 80% OF THE INSIDE DIAMETER OF THE INLET AND OUTLET PIPES

MANHOLE TYPE "C" (STORM SEWER)
NOT TO SCALE (REV. 06/17)



PAVEMENT UNDERDRAIN DETAIL
NOT TO SCALE (REV. 07/18)



LEGEND
Bc= OUTSIDE DIAMETER
D= INSIDE DIAMETER
d= DEPTH OF BEDDING MATERIAL BELOW PIPE

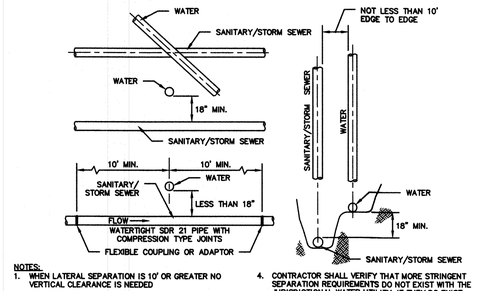
NOTE:
ALL INITIAL BACKFILL SHALL BE INSTALLED IN 6" TO 12" BALANCED LIFTS.

A MINIMUM 9" OF CLEARANCE SHALL BE PROVIDED ON EACH SIDE OF THE INSTALLED PIPE.

DEPTH OF BEDDING MATERIAL BELOW PIPE

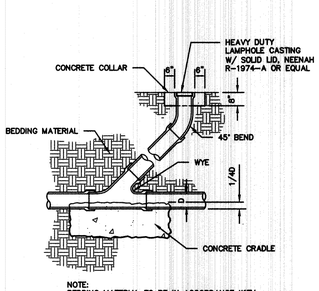
D	d (MIN)
27" & SMALLER	4"
30" TO 60"	4"
66" & LARGER	4"

PLASTIC PIPE (PVC & HDPE) BEDDING DETAIL
NOT TO SCALE (REV. 12/17)



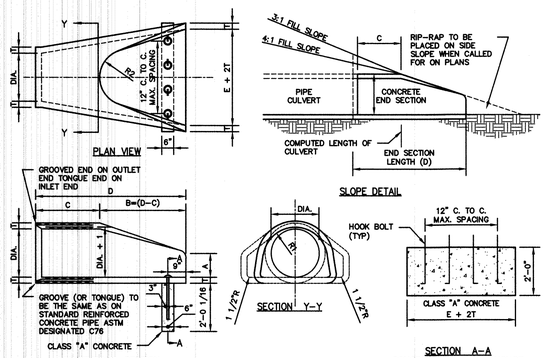
NOTES:
1. WHEN LATERAL SEPARATION IS 10' OR GREATER NO VERTICAL CLEARANCE IS NEEDED
2. ALL CROSSINGS AND SEPARATIONS TO BE 327 IAC, ARTICLES 3 & 8
3. WHEN HORIZONTAL SEPARATION IS LESS THAN 10' OR VERTICAL SEPARATION IS LESS THAN 18", SANITARY PIPE MUST BE WATERTIGHT SDR 21 WITH COMPRESSION TYPE JOINTS.
4. CONTRACTOR SHALL VERIFY THAT MORE STRINGENT SEPARATION REQUIREMENTS DO NOT EXIST WITH THE JURISDICTIONAL WATER UTILITY. IF THEY DO EXIST, CONTRACTOR SHALL FOLLOW THE MORE STRINGENT REQUIREMENTS.

MIN CROSSOVER & SEPARATION REQUIREMENTS FOR WATER & SANITARY/STORM SEWERS
NOT TO SCALE (REV. 01/17)



NOTE:
BEDDING MATERIAL TO BE IN ACCORDANCE WITH PLASTIC PIPE (PVC AND HDPE) BEDDING DETAIL.

CLEANOUT DETAIL
NOT TO SCALE (REV. 01/17)



NOTES:
CONCRETE IN THESE END SECTIONS SHALL BE THE SAME GRADE AND STRENGTH AS SPECIFIED FOR REINFORCED CONCRETE PIPE, A.S.T.M. DESIGNATION C-76

REINFORCEMENT IN THE "C" PORTION SHALL BE THE SAME AS SPECIFIED FOR REINFORCED CONCRETE, A.S.T.M. DESIGNATION C-76 FOR THE SIZE OF CONNECTING PIPE.

REINFORCEMENT IN THE "B" PORTION SHALL HAVE A CROSS SECTIONAL AREA EQUAL TO THAT OF ONE LAYER OF STEEL IN THE "C" PORTION.

THE END OF THE PIPE CULVERT SHALL BE PLACED IN THE CONCRETE END SECTION SO THAT THE FLOW LINES ARE FLUSH. THE JOINT SHALL BE COMPLETELY FILLED WITH MORTAR.

IN 3:1 OR 4:1 FILL SLOPE, CHANGE TO THE SLOPE OF THE END SECTION IN A SMOOTH, PLEASING TRANSITION APPROXIMATELY 10'-0" IN LENGTH.

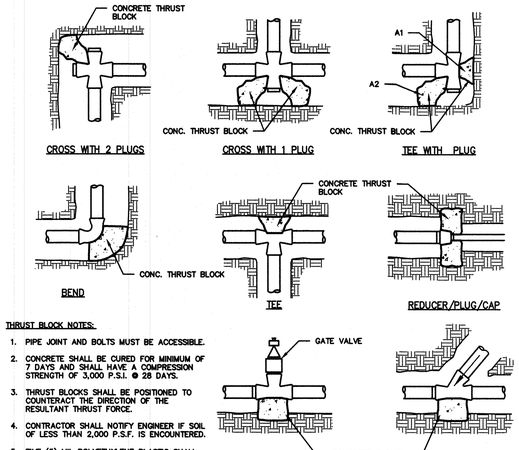
VARIATIONS IN DIMENSIONS - THE THICKNESS OR THE CONCRETE, THE POSITION OF STEEL, AND THE INTERNAL DIAMETER OF THE PIPE SHALL CONFORM WITH THE VARIATIONS IN DIMENSIONS AS PROVIDED IN THE SPECIFICATIONS FOR REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, A.S.T.M. DESIGNATION C-76.

CONCRETE PIPE TOE ANCHORS SHALL BE REQUIRED ON ALL CONCRETE PIPE END SECTIONS.

DIA.	T (MIN.)	A*	C*	D*	E*	R1	R2
12"	2"	5"	4'-3"	6'-2"	2'-0"	10 1/8"	9"
15"	2 1/4"	7"	4'-0"	6'-3"	2'-8"	12 1/2"	11"
18"	2 1/2"	11"	4'-1"	6'-2"	3'-0"	15 1/2"	12"
21"	2 3/4"	11"	3'-6"	6'-3"	3'-6"	18 1/8"	13"
24"	3"	12"	2'-8"	6'-3"	4'-0"	18 3/16"	14"
27"	3 1/4"	13"	2'-5"	6'-3"	4'-6"	18 3/16"	14 1/2"
30"	3 1/2"	14"	1'-10"	6'-3"	5'-0"	18 1/2"	15"
33"	3 3/4"	15"	3'-4"	8'-3"	5'-6"	23 3/4"	17 1/2"
36"	4"	17"	3'-1"	8'-3"	6'-0"	24 3/16"	20"
42"	4 1/2"	21"	2'-11"	8'-2"	7'-0"	27 1/2"	22"
48"	5"	24"	2'-2"	8'-2"	8'-0"	28 1/2"	22"
54"	5 1/2"	27"	2'-9"	8'-2"	9'-0"	33 1/8"	24"
60	6"	30"	3'-3"	8'-3"	10'-0"	36 11/16"	24"
66"	6 1/2"	30"	2'-3"	8'-3"	11'-0"	36 1/8"	24"
72"	7"	36"	1'-5"	8'-3"	9'-0"	*	*
84"	8"	36"	1'-5"	9'-3 1/2"	10'-0"	*	*

* RADIUS COMES FURNISHED BY MANUFACTURER

PRECAST CONCRETE END SECTION DETAIL
NOT TO SCALE (REV. 06/18)



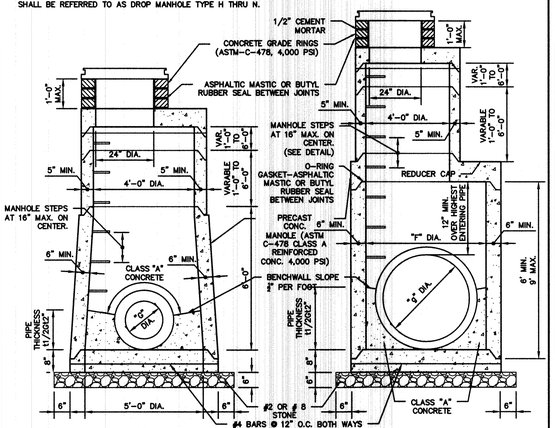
THRUST BLOCK NOTES:
1. PIPE JOINT AND BOLTS MUST BE ACCESSIBLE.
2. CONCRETE SHALL BE CURED FOR MINIMUM OF 7 DAYS AND SHALL HAVE A COMPRESSION STRENGTH OF 3,000 P.S.I. @ 28 DAYS.
3. THRUST BLOCKS SHALL BE POSITIONED TO COUNTERACT THE DIRECTION OF THE RESULTANT THRUST FORCE.
4. CONTRACTOR SHALL NOTIFY ENGINEER IF SOIL OF LESS THAN 2,000 P.S.F. IS ENCOUNTERED.
5. FIVE (5) MIL POLYETHYTLENE PLASTIC SHALL BE USED TO COVER FITTINGS PRIOR TO POURING THE THRUST BLOCK.
6. BELOW BEARING AREAS BASED ON TEST PROCEDURE OF 150 P.S.I. AND AN ALLOWABLE SOIL BEARING STRESS OF 2,000 POUNDS PER SQUARE FOOT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, USE THE FOLLOWING EQUATION: BEARING AREA = (TEST PRESSURE/150) X (2,000/SOIL BEARING STRESS) X (TABLE VALUE). BEARING AREAS IN SQUARE FEET.

FITTING SIZE (IN.)	TEE, WHY, PLUG OR CAP	90 DEGREE BEND PLUGGED CROSS	TEE PLUGGED ON RUN		45 DEGREE BEND	22 1/2 DEGREE BEND	11 1/4 DEGREE BEND
			A1	A2			
4.0	1.0	1.4	1.9	1.4	1.0	–	–
6.0	2.0	3.0	4.3	3.0	1.6	1.0	–
8.0	3.8	5.3	7.6	5.4	2.9	1.5	1.0
10.0	5.9	8.4	11.8	8.4	4.6	2.4	1.2
12.0	8.5	12.0	17.0	12.0	6.6	3.4	1.7
14.0	11.5	16.3	23.0	16.3	8.9	4.6	2.3
16.0	15.0	21.3	30.0	21.3	11.6	6.0	3.0
18.0	19.0	27.0	38.0	27.0	14.6	7.6	3.8
20.0	23.5	33.3	47.0	33.3	18.1	9.4	4.7
24.0	34.0	48.0	68.0	48.0	26.2	13.6	6.8

WATER LINE THRUST BLOCK DETAILS
NOT TO SCALE (REV. 06/17)

MANHOLE				
TYPE	"C"	"F"	MAXIMUM PIPE SIZE RT. ANGLE TO MAINLINE	MAXIMUM PIPE SIZE FOR MAINLINE
H	24"to36"		30"	36"
J	24"to36"	60"	33"	36"
K	36"x48"	72"	36"	48"
L	48"x54"	96"	48"	54"
M	54"x72"	102"	66"	72"
N	72"x84"	108"	72"	84"

NOTES:
DROP PIPE MAY BE USED WITH MANHOLE'S TYPE H THRU N AND SHALL BE REFERRED TO AS DROP MANHOLE TYPE H THRU N.



NOTE: BENCH WALLS SHALL FORM A DEFINED CHANNEL TO A MINIMUM HEIGHT OF 80% OF THE INSIDE DIAMETER OF THE INLET AND OUTLET PIPES

MANHOLES TYPE "H,J,K,L,M & N" DETAIL
NOT TO SCALE (REV. 06/17)

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

STERLING

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

STATE OF OHIO
SHAWN L. GOODWIN
E-67582
REGISTERED PROFESSIONAL ENGINEER

01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

Project Number 2019.01572

SITE DETAILS

C601

PLOT DATE: 1/21/2020 2:57 PM
PLOT SCALE: 1.0000
EDIT DATE: 1/6/2020
EDITED BY: NHORGAN
DRAWING FILE: P:\2019\01572\D. Drawings\Civil\Construction Documents\2019.01572.CE.C600.SD.dwg

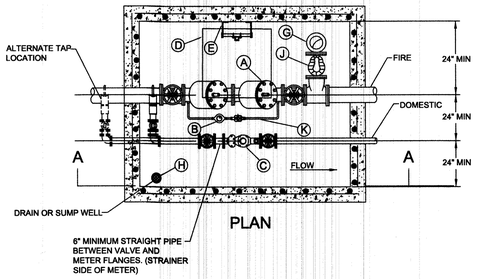
OMNI METER INSTALLATION INSTRUCTIONS

1. WHEN INSTALLING SENSUS OMNI METERS WITH THE STRAINER, A MINIMUM OF 2 1/2 PIPE DIAMETERS OF STRAIGHT RUN OF PIPE OR EQUIVALENT FULL OPEN COMPONENTS IS REQUIRED UPSTREAM AND DOWNSTREAM OF THE METER OR STRAINER FLANGES. FULL OPEN FLOW COMPONENTS MAY CONSIST OF: STRAIGHT PIPE, FULL OPEN GATE VALVES, BYPASS TEES AND CONCENTRIC REDUCERS (1 NOMINAL PIPE SIZE REDUCTION ONLY). FOR ALL OTHER INSTALLATION CONFIGURATIONS, A MINIMUM OF 5 PIPE DIAMETERS OF STRAIGHT RUN IS REQUIRED UPSTREAM.

2. GATE VALVES LOCATED IMMEDIATELY UPSTREAM OR DOWNSTREAM ARE ACCEPTABLE, PROVIDED THEY ARE FULLY OPEN DURING METER SERVICE AND ARE NOT USED TO THROTTLE FLOW RATES THROUGH THE METER.

3. INSTALL NONCONCENTRIC REDUCERS, CHECK VALVES, BACKFLOW PREVENTERS, PRV (PRESSURE REDUCING VALVES), THROTTLING DEVICES, ALTITUDE VALVES NO CLOSER THAN 4 PIPE DIAMETERS DOWNSTREAM OF THE METER. ALWAYS AVOID PLACING ANY OF THESE DEVICES UPSTREAM OF ANY METER SINCE THE PLACEMENT WILL PUT THE METER IN A LOW PRESSURE ZONE THUS POSSIBLY CAUSING INCONSISTENT ACCURACY AND REDUCED LONGEVITY.

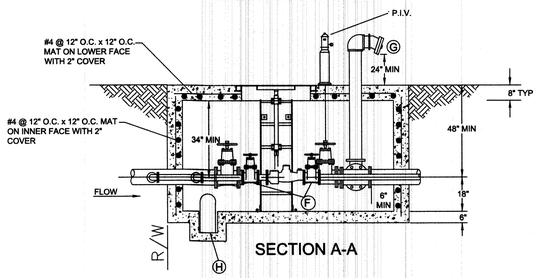
NOTE: OMNI METERS CAN BE INSTALLED VERTICALLY OR ROTATED ON THE BOLT PATTERN IN ANY ORIENTATION.



PLAN

METER SIZE & TYPE	MIN. C
1 1/2" T2 OMNI	13"
1 1/2" C2 OMNI	13"
2" T2 OMNI	17"
2" C2 OMNI	15 1/4"
3" T2 OMNI	19"
3" C2 OMNI	17"
4" T2 OMNI	23"
4" C2 OMNI	20"
6" T2 OMNI	27"
6" C2 OMNI	24"

NOTE: SIDES SHALL BE DOWLED TO TOP AND BOTTOM WITH REINFORCING STEEL



SECTION A-A

A) FIRE SERVICE BACKFLOW PREVENTION DEVICE: WATTS #709-DCDA, AMES #3000 DCDA, OR EQUAL.

B) BY-PASS METER (¾" OR 1" PURCHASED FROM BUTLER CO.). NOTE: BY-PASS LINE REQUIRES A BACKFLOW DEVICE SIMILAR TO THE WATTS #709.

C) DOMESTIC METER FURNISHED BY BUTLER CO. NOTE: 3" AND LARGER METERS SHALL BE INSTALLED WITH FLANGED CLASS 53 DUCTILE IRON PIPE. 2" AND LESS SHALL BE "K" COPPER.

D) LID: BILCO MODEL #J-4AL, OR HALLIDAY MODEL #W1S3636, OR APPROVED EQUAL.

E) ALUMINUM LADDER: OSHA APPROVED HALLIDAY SERIES L-1B WITH SERIES L-1E SAFETY POST, OR APPROVED EQUAL.

F) DOMESTIC INLET AND OUTLET CONNECTIONS SEE CHART ABOVE.

G) 5" LOCKING STORTZ ON 30° ELBOW TURNED DOWN SECURED SIGN INDICATING "FIRE DEPT. CONNECTION" (FDC) WITH ADDRESS IT PROTECTS FIXED TO THE FDC FACING STREET.

H) SUMP PUMP (REQUIRED IF GRAVITY DRAIN IS NOT POSSIBLE). EXTEND DISCHARGE PIPING AWAY FROM TOP OF VAULT.

J) CHECK VALVE WITH AUTOMATIC BALL DRIP.

K) CONTRACTOR/ PLUMBER TO VERIFY LAYING LENGTH OF BACKFLOW DEVICE, VALVES, METERS ETC.

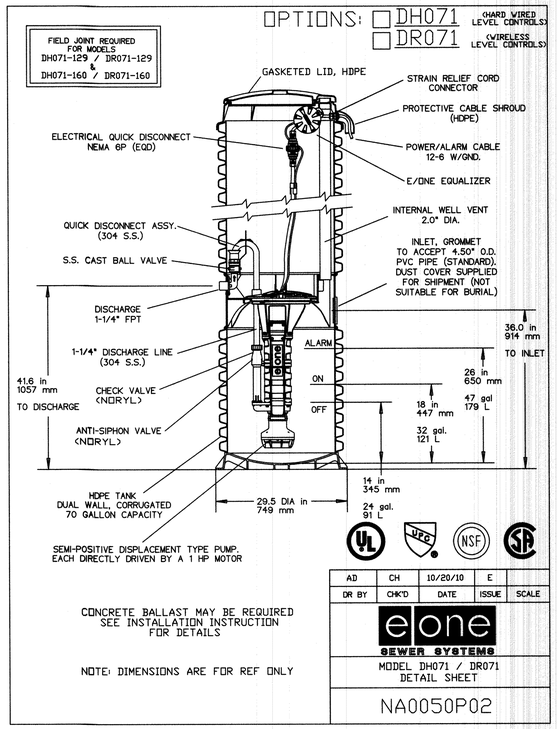
BUTLER COUNTY
WATER AND SEWER
130 HIGH STREET
HAMILTON, OH 45011
TELEPHONE: 513-887-3066
FAX: 513-887-3777

5200

DUAL SERVICE SETTING
W/ BACKFLOW DEVICE

OPTIONS: ☐ DH071 (HARD WIRED LEVEL CONTROLS) ☐ DR071 (WIRELESS LEVEL CONTROLS)

FIELD JOINT REQUIRED FOR MODELS DH071-129 / DR071-129 & DH071-160 / DR071-160



CONCRETE BALLAST MAY BE REQUIRED SEE INSTALLATION INSTRUCTION FOR DETAILS

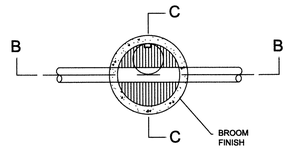
NOTE: DIMENSIONS ARE FOR REF ONLY

AD	CH	10/20/10	E	
DR BY	CHK'D	DATE	ISSUE	SCALE

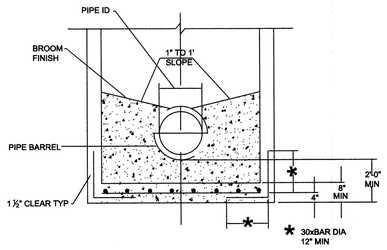
e/one SEWER SYSTEMS

MODEL DH071 / DR071
DETAIL SHEET

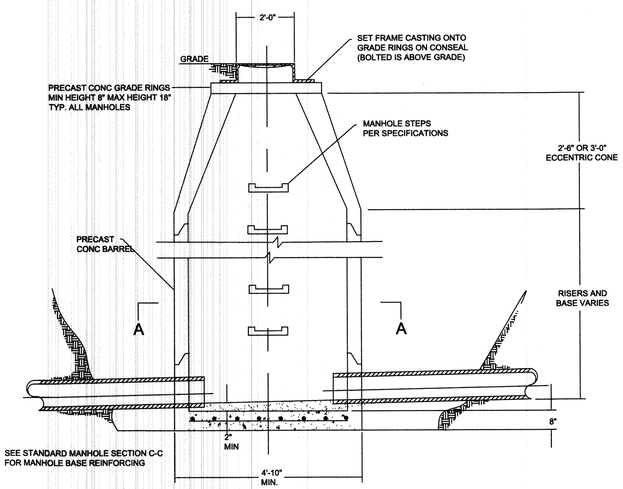
NA0050P02



SECTION A - A



SECTION C - C



SECTION B - B

BUTLER COUNTY
WATER AND SEWER
130 HIGH STREET
HAMILTON, OH 45011
TELEPHONE: 513-887-3066
FAX: 513-887-3777

6110

STANDARD CONTROL MANHOLE

FILE NAME: MANHOLE.DWG
PLOT SCALE: 1:2.3848
EDIT DATE: 1/6/2020
EDITED BY: NHORGAN
DRAWING FILE: P:\2019\01572\0 Drawings\Civil\Construction Documents\2019.01572 CE C600.dwg

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

STERLING

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

STATE OF OHIO
SHAWN L GOODWIN
E-68022
REGISTERED PROFESSIONAL ENGINEER

01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

Project Number 2019.01572

SITE DETAILS

C602

PLANT SCHEDULE

TREES	QTY	BOTANICAL / COMMON NAME	COND.	SIZE	SPACING
BN	3	Betula nigra / River Birch Multi-Trunk	B & B	6` Ht.	As shown
NW	3	Nyssa sylvatica `Wildfire` / Black Gum	B & B	2" Cal.	As shown
PY	1	Prunus x yedoensis / Yoshino Cherry	B & B	2" Cal.	As shown
QR	6	Quercus rubra / Red Oak	B & B	2" Cal.	As shown

SHRUBS	QTY	BOTANICAL / COMMON NAME	COND.	SIZE	SPACING
AA	28	Aronia arbutifolia `Brilliantissima` / Brilliant Red Chokeberry	CONT.	3 GAL.	48" O.C.
JG	14	Juniperus chinensis `Gold Coast` TM / Gold Coast Juniper	CONT.	3 GAL.	48" O.C.
JF	28	Juniperus chinensis `Sea Green` / Sea Green Juniper	CONT.	3 GAL.	48" O.C.
TS	5	Thuja occidentalis `Smaragd` / Emerald Green Arborvitae	CONT.	3 GAL.	48" O.C.
WS	6	Weigela florida `Spilled Wine` / Spilled Wine Weigela	CONT.	1 GAL.	36" O.C.

TURF SCHEDULE

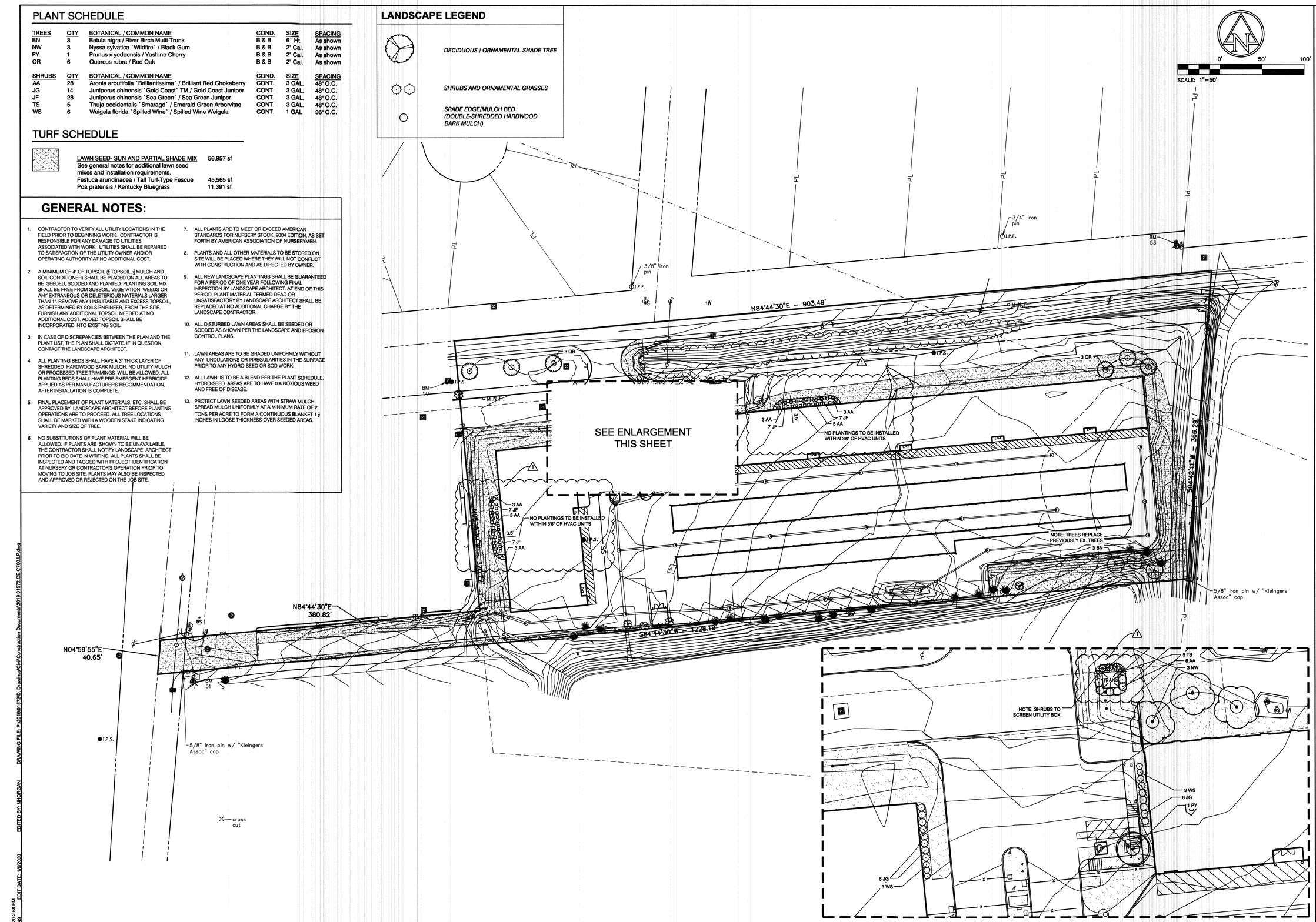
LAWN SEED- SUN AND PARTIAL SHADE MIX See general notes for additional lawn seed mixes and installation requirements.	56,957 sf
Festuca arundinacea / Tall Turf-Type Fescue	45,565 sf
Poa pratensis / Kentucky Bluegrass	11,391 sf

GENERAL NOTES:

1. CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS IN THE FIELD PRIOR TO BEGINNING WORK. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES ASSOCIATED WITH WORK. UTILITIES SHALL BE REPAIRED TO SATISFACTION OF THE UTILITY OWNER AND/OR OPERATING AUTHORITY AT NO ADDITIONAL COST.
2. A MINIMUM OF 4" OF TOPSOIL (6" TOPSOIL, 1/2 MULCH AND SOIL CONDITIONER) SHALL BE PLACED ON ALL AREAS TO BE SEEDED, SODDED AND PLANTED. PLANTING SOIL MIX SHALL BE FREE FROM SUBSOIL, VEGETATION, WEEDS OR ANY EXTRANEOUS OR DELETERIOUS MATERIALS LARGER THAN 1". REMOVE ANY UNSUITABLE AND EXCESS TOPSOIL, AS DETERMINED BY SOILS ENGINEER, FROM THE SITE. FURNISH ANY ADDITIONAL TOPSOIL NEEDED AT NO ADDITIONAL COST. ADDED TOPSOIL SHALL BE INCORPORATED INTO EXISTING SOIL.
3. IN CASE OF DISCREPANCIES BETWEEN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE. IF IN QUESTION, CONTACT THE LANDSCAPE ARCHITECT.
4. ALL PLANTING BEDS SHALL HAVE A 3" THICK LAYER OF SHREDDED HARDWOOD BARK MULCH. NO UTILITY MULCH OR PROCESSED TREE TRIMMINGS WILL BE ALLOWED. ALL PLANTING BEDS SHALL HAVE PRE-EMERGENT HERBICIDE APPLIED AS PER MANUFACTURER'S RECOMMENDATION, AFTER INSTALLATION IS COMPLETE.
5. FINAL PLACEMENT OF PLANT MATERIALS, ETC. SHALL BE APPROVED BY LANDSCAPE ARCHITECT BEFORE PLANTING OPERATIONS ARE TO PROCEED. ALL TREE LOCATIONS SHALL BE MARKED WITH A WOODEN STAKE INDICATING VARIETY AND SIZE OF TREE.
6. NO SUBSTITUTIONS OF PLANT MATERIAL WILL BE ALLOWED. IF PLANTS ARE SHOWN TO BE UNAVAILABLE, THE CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT PRIOR TO BID DATE IN WRITING. ALL PLANTS SHALL BE INSPECTED AND TAGGED WITH PROJECT IDENTIFICATION AT NURSERY OR CONTRACTORS OPERATION PRIOR TO MOVING TO JOB SITE. PLANTS MAY ALSO BE INSPECTED AND APPROVED OR REJECTED ON THE JOB SITE.
7. ALL PLANTS ARE TO MEET OR EXCEED AMERICAN STANDARDS FOR NURSERY STOCK, 2004 EDITION, AS SET FORTH BY AMERICAN ASSOCIATION OF NURSERYMEN.
8. PLANTS AND ALL OTHER MATERIALS TO BE STORED ON SITE WILL BE PLACED WHERE THEY WILL NOT CONFLICT WITH CONSTRUCTION AND AS DIRECTED BY OWNER.
9. ALL NEW LANDSCAPE PLANTINGS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FOLLOWING FINAL INSPECTION BY LANDSCAPE ARCHITECT. AT END OF THIS PERIOD, PLANT MATERIAL TERMED DEAD OR UNSATISFACTORY BY LANDSCAPE ARCHITECT SHALL BE REPLACED AT NO ADDITIONAL CHARGE BY THE LANDSCAPE CONTRACTOR.
10. ALL DISTURBED LAWN AREAS SHALL BE SEEDED OR SODDED AS SHOWN PER THE LANDSCAPE AND EROSION CONTROL PLANS.
11. LAWN AREAS ARE TO BE GRADED UNIFORMLY WITHOUT ANY UNDULATIONS OR IRREGULARITIES IN THE SURFACE PRIOR TO ANY HYDRO-SEED OR SOD WORK.
12. ALL LAWN IS TO BE A BLEND PER THE PLANT SCHEDULE. HYDRO-SEED AREAS ARE TO HAVE 0% NOXIOUS WEED AND FREE OF DISEASE.
13. PROTECT LAWN SEEDED AREAS WITH STRAW MULCH. SPREAD MULCH UNIFORMLY AT A MINIMUM RATE OF 2 TONS PER ACRE TO FORM A CONTINUOUS BLANKET 1 1/2 INCHES IN LOOSE THICKNESS OVER SEEDED AREAS.

LANDSCAPE LEGEND

- DECIDUOUS / ORNAMENTAL SHADE TREE
- SHRUBS AND ORNAMENTAL GRASSES
- SPADE EDGE/MULCH BED (DOUBLE-SHREDDED HARDWOOD BARK MULCH)



01 ENTRY ENLARGEMENT
C700 SCALE: 1" = 20'

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

STERLING

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

STATE OF OHIO
SHAWN L GOODWIN
E-62
REGISTERED
PROFESSIONAL ENGINEER

01/07/2020

CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

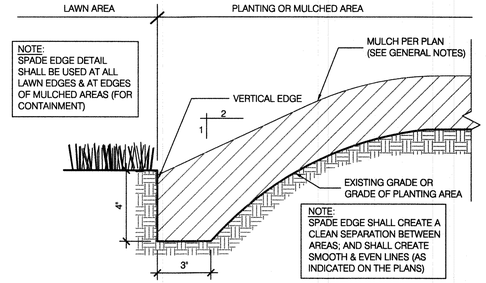
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	12/9/19 01/03/20
2	CITY COMMENTS	01/14/20

Project Number 2019.01572

LANDSCAPE PLAN

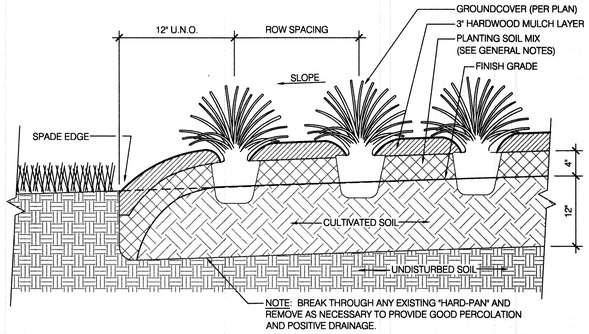
C700

PLOT DATE: 1/21/2020 2:58 PM
PLOT SCALE: 1'-2.3849'
EDIT DATE: 1/6/2020
EDITED BY: HWORGAN
DRAWING FILE: P:\2019\01\572\0. Drawings\Civil\Construction Documents\2019.01572.C6.C700 LP.dwg



04 SPADE EDGE DETAIL

C710 SCALE: NTS

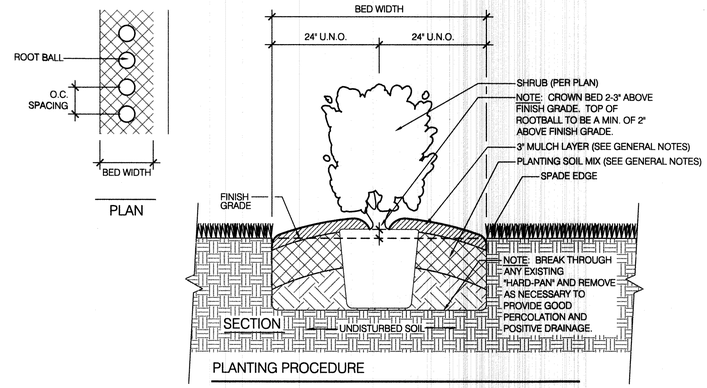


PLANTING PROCEDURE

1. LAYOUT BED AND OUTLINE WITH SPADE EDGE. PLACE SOIL FROM SPADE EDGE WITHIN BED.
2. ROTOTILL BED TO 12" DEPTH. SPREAD 4" MIN. LAYER OF PLANTING SOIL MIX OVER BED. ROTOTILL PLANTING SOIL MIX INTO TOP OF BED.
3. INSTALL PLANTS, MULCH AND WATER THOROUGHLY. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING.

03 PERENNIAL PLANTING DETAIL

C710 SCALE: NTS



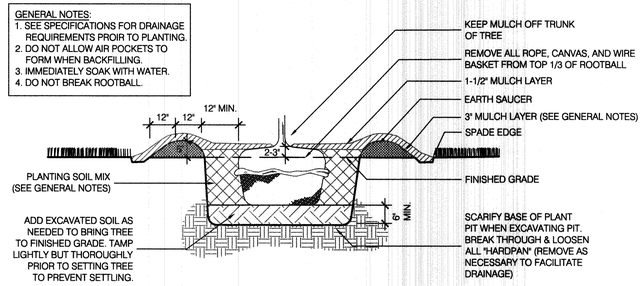
PLANTING PROCEDURE

1. LAYOUT BED AND OUTLINE WITH SPADE EDGE. PLACE SOIL FROM SPADE EDGE WITHIN BED.
2. ROTOTILL BED TO A 12" MIN. DEPTH OR AS REQUIRED FOR SPECIFIED SHRUBS. REMOVE EXISTING SOIL AS REQUIRED. SPREAD 6" MIN. LAYER OF PLANTING SOIL MIX OVER BED. ROTOTILL PLANTING SOIL MIX INTO TOP OF BED.
3. INSTALL PLANTS, MULCH AND WATER THOROUGHLY. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING.

02 SHRUB PLANTING DETAIL

C710 SCALE: NTS

GENERAL NOTES:
1. SEE SPECIFICATIONS FOR DRAINAGE REQUIREMENTS PRIOR TO PLANTING.
2. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING.
3. IMMEDIATELY SOAK WITH WATER.
4. DO NOT BREAK ROOTBALL.



PLANTING PROCEDURE

1. EXCAVATE ROOTBALL PIT
2. ADD EXCAVATED SOIL & TAMP. SET TREE SUCH THAT TOP OF ROOTBALL IS 2-3" HIGHER THAN FINISHED GRADE.
3. BACKFILL WITH SOIL MIX & "WATER IN"
4. COMPLETE BACKFILLING, CONSTRUCT SAUCER, SPADE EDGE & ADD MULCH
5. STAKE & GUY SECURELY (AS REQUIRED)

01 TREE PLANTING DETAIL

C710 SCALE: NTS

STERLING DEVELOPMENT LLC
3900 Edison Lakes Parkway, Suite 201.
Mishawaka, IN

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

MINI STORAGE DEPOT

3939 TYLERSVILLE ROAD
FAIRFIELD, OHIO

STATE OF OHIO — SHAWN L GOODWIN — E-70467 — REGISTERED PROFESSIONAL ENGINEER

01/07/2020
CERTIFIED BY

ISSUANCE INDEX
DATE:
1/6/2020
PROJECT PHASE:
PRELIMINARY DOCUMENTS

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	CITY & OWNER COMMENTS	01/03/20
2	CITY COMMENTS	01/14/20

Project Number 2019.01572

LANDSCAPE DETAILS

C710

PLOT DATE: 1/21/2020 2:58 PM
PLOT SCALE: 12.0000
EDIT DATE: 11/8/2019
EDITED BY: ANDENS
DRAWING FILE: P:\2019\01572\D. Drawings\Civil\Construction Documents\2019.01572-CE-C710-LSD.dwg