

**LOCATION MAP** 

1"=1 Mile

## PROJECT CONTROL

Plan elevation and horizontal location shall be based on a local coordinate system and datum established by the control monuments and benchmarks listed below. Elevations shown were derived from GPS observation using VRS on CORS network which is based on NAVD 88 Datum.

### Control #1

A 3" capped iron pin found at the northwest property corner.

Northing: 627342.08 Easting: 1838012.91

#### Control #2

A 3" capped iron pin found at the southwest property corner.

Northing: 627095.40 Easting: 1837998.07

A mag nail set near the center of the cul-de-sac.

#### Northing: 627300.88 Easting: 1838205.98

Elevation: 704.84

The north rim of a manhole found north of the cul-de-sac.

# Control #5

The north rim of a manhole found near the southeast corner of the property.

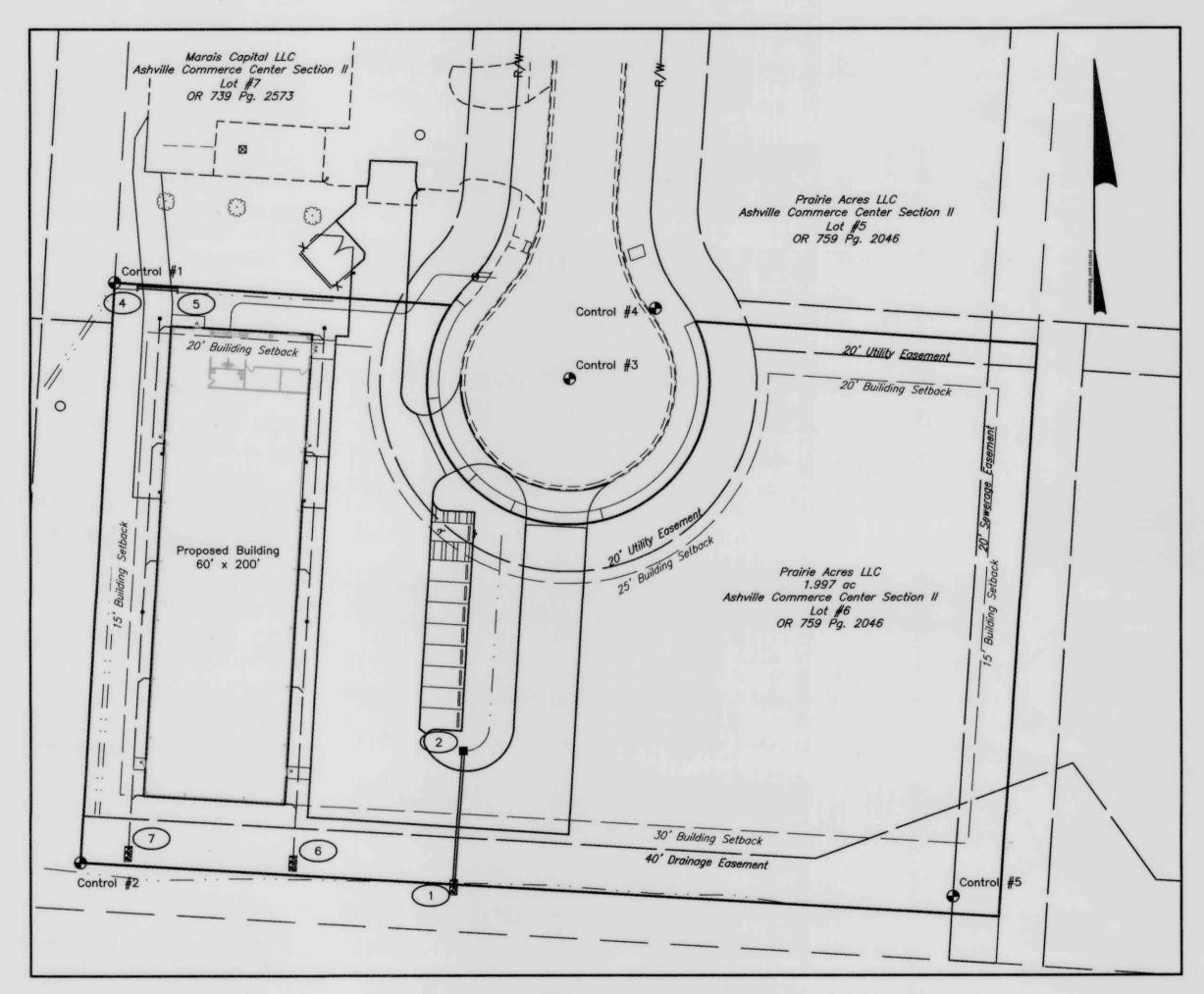
Elevation: 705.73



CALL AT LEAST 48 HOURS BUT NO MORE THAN 10 WORKING DAYS (EXCLUDING WEEKENDS AND LEGAL HOLIDAYS) NON-MEMBERS MUST BE CALLED DIRECTLY

# VILLAGE OF ASHVILLE, PICKAWAY COUNTY, OHIO PRODUCTION PLUS

SOUTH BUSINESS PLACE PLOT, GRADE AND UTILITY PLAN



INDEX MAP

1" = 40'

# OWNER

Production Plus Jeremy Davitz 101 Business Place Ashville, Ohio 43103 740-983-5178

# STANDARD DRAWINGS

The City of Columbus Standard Drawings listed on this plan shall be considered part of this plan.

2300 (07/01/2021)

1441 (07/01/2021) 2202 (07/01/2020)

AA-S133A (08/08/14) AA-S139 (12/06/2013) AA-S149 (10/15/2014) AA-S150 (07/09/2012)

Pavement and Utility Repair Cut Standards Driveway, Non-Residential Standard Catch Basin Light Duty Grate Type | Bedding

Trench Installation

Typical Sanitary Service Connection AA-S160 (03/25/2021) AA-S161 (12/06/13) Typical Cleanout AA-S168 (07/09/12) Precast Pipe Culvert Headwalls

# SHEET INDEX

Location Map, Index Map, and Estimated Quantities

General Notes and Details

General Notes and Details Sheet 3

Existing Site and Demolition Plan

Site Plan Sheet 5

Grading Plan

Utility Plan

Storm Water Pollution Prevention Plan

The plan quantities shown below are the engineer's estimate only. The Contractor shall be responsible for calculating quantities based on the plan for bidding and construction

**ESTIMATE OF QUANTITIES** 

quai	ntities	basea	purposes.		
Item	Quan.	Unit	Description		
201	Lump	Sum	Clearing and Grubbing		
202	Lump	Sum	Structures and Obstructions Removed		
202	41	S.Y.	Concrete Removed		
202	25	S.F.	Sidewalk Removed		
202	8	L.F.	6" Sanitary Service Removed		
252	12	L.F.	Full Depth Sawcut		
203	1,032	C.Y.	Excavation		
203	756	C.Y.	Embankment		
204	3,806	S.Y.	Subgrade Compaction		
204	2	Hours	Proof Rolling		
207	1	Each	Catch Basin Inlet Protection		
207	485	L.F.	Sediment Control Fence		
207	1	Each	Concrete Washout		
207	30	C.Y.	Stabilized Construction Entrance		
304	43	C.Y.	4" Aggregate Base		
304	31	C.Y.	6" Aggregate Base		
304	375	C.Y.	8" Aggregate Base		
448	78	C.Y.	1.5" Asphalt Concrete Surface Course		
448	8	C.Y.	1.5" Asphalt Concrete Intermediate Cour		
448	116	C.Y.	2.5" Asphalt Concrete Intermediate Cour		
452	260	S.Y.	8" Plain Portland Cement Concrete		
608	1,084	S.F.	Concrete Walk		
SPEC	9	Each	Parking Blocks		
J. L.	-	Lucii	T driving blocks		
601	1	C.Y.	Rock Channel Protection, Type C		
604	5	Each			
604	1		Catch Basin (AA-S133A)		
801	130	L.F.	3/4" Water Service and Fittings, Comple		
901	450	L.F.	6" Storm Sewer with Type 1 Bedding		
901	72	L.F.	12" Storm Sewer with Type 1 Bedding		
915	4	Each	Roof Drain Cleanout		
915	3	Each	Sanitary Cleanout		
915	3	Each	6"x6" Sanitary Wye		
918	156	L.F.	6" PVC, SDR-35, Sanitary Service Pipe With Type 1 Bed		
010	100		C , 10, Out ou, California Tipo Har Tipo I		
614	Lump	Sum	Maintenance of Traffic		
623	Lump	Sum	Construction Layout Stakes		
624	Lump	Sum	Mobilization		
630	1	Each	ADA Signage		
644	Lump	Sum	Pavement Markings		
651	370	C.Y.	Topsoil Stripped and Stockpiled (2.4")		
651	356	C.Y.	Placing Stockpiled Topsoil (7")		
659	1,842	S.Y.	Seeding and Mulching		
SPEC	5	Each	Bollard		
SEEC	1	Lucii	Donard		

# APPROVED BY:

Approval of these plans does not constitute assurance to operate as intended. The reviewer does not accept responsibility for the integrity of the plans.

Charles K. Wise Mayor, Village of Ashville

Christopher M. Tebbe, P.E. No. 68106

8/31/2022 Village Engineer, Village of Ashville

Franklin Christman Village Administrator, Village of Ashville

Service Department Supervisor, Village of Ashville

# PREPARED BY: Harral and Stevenson



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Scale: AS NOTED

ANY MODIFICATION TO THE SPECIFICATIONS OR CHANGES TO WORK AS SHOWN ON THESE DRAWINGS MUST HAVE PRIOR WRITTEN APPROVAL BY THE VILLAGE ENGINEER.

GEN 3
THE CONTRACTOR OR SUBCONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY, IT IS ALSO THE SOLE RESPONSIBILITY OF THE CONTRACTOR OR SUBCONTRACTOR TO INITIATE, MAINTAIN, AND SUPERVISE ALL SAFETY REQUIREMENTS. PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR OR SUBCONTRACTOR SHALL ALSO ABIDE BY ALL ORDINANCES OF THE VILLAGE OF ASHVILLE,

PRIOR TO BIDDING THE CONTRACTOR SHALL, BY PERSONAL EXAMINATION, SATISFY THEMSELVES AS TO THE LOCATION OF THE PROPOSED WORK AND TO ACQUAINT THEMSELVES THOROUGHLY WITH THE EXISTING CONDITIONS AND THE DIFFICULTIES THAT ARE LIKELY TO BE ENCOUNTERED IN THE PERFORMANCE OF THE PROPOSED WORK. THIS IS ESPECIALLY TRUE WITH REGARD TO ANY REMOVAL ITEMS.

ALL WORK SHALL BE COMPLETELY ACCEPTABLE TO THE VILLAGE OF ASHVILLE OFFICIALS. NO WORK SHALL BE COMMENCED UNTIL ARRANGEMENTS HAVE BEEN MADE WITH THE VILLAGE OF ASHVILLE ENGINEER FOR INSPECTION. NECESSARY LINE AND GRADE STAKING WILL BE PROVIDED BY THE DEVELOPER. CUT SHEETS SHALL BE SUBMITTED AND APPROVED BY THE VILLAGE PRIOR TO THE BEGINNING OF CONSTRUCTION.

PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS NECESSARY TO COORDINATE AND PROVIDE FULL-TIME INSPECTION SERVICE BY THE VILLAGE FOR THE PROPOSED WORK. COST OF INSPECTION SHALL BE PAID FOR BY THE

<u>GEN 7</u>
THE CONTRACTOR SHALL PROVIDE WRITTEN NOTIFICATION TO THE VILLAGE OF ASHVILLE ENGINEERING DEPARTMENT AT LEAST SEVEN (7) DAYS PRIOR TO ANY CONSTRUCTION.

<u>GEN 8</u>
THE CONTRACTOR OR DEVELOPER SHALL SECURE AND PAY FOR ALL NECESSARY PERMITS AND GOVERNMENT FEES, LICENSES. AND INSPECTIONS FOR THE PROPER EXECUTION AND COMPLETION OF THE IMPROVEMENTS SHOWN ON THE PLANS PRIOR TO CONSTRUCTION. ALL PERTINENT STANDARD CONSTRUCTION DRAWINGS ARE AVAILABLE UPON REQUEST OF THE OFFICE OF THE VILLAGE ENGINEER.

GEN 9
THE CONTRACTOR SHALL NOTIFY ALL OF THE AFFECTED PROPERTY OWNERS AT LEAST TWO (2) WEEKS PRIOR TO THE SCHEDULED COMMENCEMENT OF WORK ON THE JOB SITE. THIS LETTER SHALL STATE THE DATE CONSTRUCTION IS TO BEGIN AND THAT RESIDENT SHOULD. REMOVE ANY ITEMS, EXAMPLE: SHRUBS, SPOT LIGHTS, FENCES, STONES OR BRICKS, ETC., WHICH MAY FALL WITHIN THE WORK LIMITS. THE LETTER SHOULD ALSO CONTAIN THE NAME AND A TWENTY-FOUR (24) HOUR PHONE NUMBER OF A CONTACT, FROM THE CONTRACTOR'S FIRM, WHO COULD BE CONTACTED IN CASE OF EMERGENCY. THIS LETTER, FOR CONVENIENCE PURPOSES, SHALL CONTAIN A PHONE NUMBER FOR ALL LOCAL LAW ENFORCEMENT AGENCIES AND FIRE SAFETY FORCES.

EXISTING UTILITIES SHOWN ARE FROM BEST AVAILABLE RECORDS AND FIELD INVESTIGATION, AND ARE NOT NECESSARILY COMPLETE OR EXACT. THE CONTRACTOR IS RESPONSIBLE FOR THE INVESTIGATION, LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES WHETHER SHOWN ON THESE PLANS OR NOT. THE CONTRACTOR SHALL EXPOSE ALL UTILITIES OR STRUCTURES PRIOR TO CONSTRUCTION TO VERIFY THE VERTICAL AND HORIZONTAL EFFECT OF THE PROPOSED CONSTRUCTION, AND SHALL MAKE ADJUSTMENTS IN ELEVATIONS AS DIRECTED BY THE VILLAGE ENGINEER TO PROVIDE SUFFICIENT CLEARANCE BETWEEN THE PROPOSED AND EXISTING UTILITIES. THE CONTRACTOR SHALL CONTACT THE OHIO UTILITIES PROTECTION SERVICE (OUPS) AT 1-800-362-2764 THREE (3) WORKING DAYS PRIOR TO WORK IN THE VICINITY OF THEIR UNDERGROUND LINES AND ACCORDING TO 153.64, OHIO REVISED CODE (ORC) SHALL NOTIFY ALL UTILITY COMPANIES AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO WORK IN THE VICINITY OF THEIR UNDERGROUND LINES.

GEN 11
THE FOLLOWING UTILITIES AND OWNERS ARE LOCATED WITHIN THE WORK LIMITS OF THIS PROJECT AND DO SUBSCRIBE TO A REGISTERED UNDERGROUND UTILITY SERVICES:

FRONTIER COMMUNICATIONS 500 LANCASTER PIKE CIRCLEVILLE, OHIO 43113 (740) 474-7197 SOUTH CENTRAL POWER COMPANY

AMERICAN ELECTRIC POWER 1320 SUGAR GROVE ROAD LANCASTER, OHIO 43130 (740) 689-4700

COLUMBUS, OH 43232

COLUMBIA GAS TRANSMISSION

1440 MCNAUGHTON ROAD

(614) 653-4422 TIME WARNER COMMUNICATIONS 1315 GRANVILLE PIKE LANCASTER, OHIO 43130

2780 COONPATH ROAD, NE

LANCASTER, OHIO 43130

140 WEST WHEELING STREET LANCASTER, OHIO 43130 (740) 687-6696 (740) 635-9685

COLUMBIA GAS OF OHIO 843 PLATT AVENUE CHILLICOTHE, OHIO 45601 (614) 772-9224

\*VILLAGE OF ASHVILLE SERVICE DEPARTMENT 160 CHERRY STREET, ASHVILLE, OHIO 43103 (740) 983-4053 (WATERLINE SANITARY SEWER & STORM SEWER ONLY) 200 EAST STATION STREET, ASHVILLE OHIO 43103 (740) 983-6367

\* THE VILLAGE OF ASHVILLE DOES NOT SUBSCRIBE OR IS A MEMBER OF OUPS

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIES ON AS BEING EXACT OR COMPLETE. THE VILLAGE OF ASHVILLE AND/OR ENGINEER ASSUMES NO RESPONSIBILITY AS TO THE ACCURACY OR DEPTHS OF THE UNDERGROUND FACILITIES AS SHOWN ON THE PLANS. THE CONTRACTOR MUST CALL APPROPRIATE UTILITY COMPANY AT LEAST SEVEN (7) DAYS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY FOR THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

GEN 13
THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE RELOCATION OF ANY UTILITIES AS REQUIRED BY THE PLAN WITH THE OWNER OF THE AFFECTED UTILITY.

WHERE POTENTIAL GRADE CONFLICTS MIGHT OCCUR WITH EXISTING UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO UNCOVER SUCH UTILITIES SUFFICIENTLY IN ADVANCE OF LAYING PIPE OR DUCT IN ORDER THAT THE ENGINEER MAY DETERMINE THE EXACT ELEVATION AND MAKE ANY NECESSARY ADJUSTMENTS. COST OF THE ABOVE SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS ITEMS IN THE CONTRACT.

ALL MATERIALS INCLUDING PIPING, APPURTENANCES, MANHOLES, GRAVEL, ETC. TO BE UTILIZED FOR DEDICATED PUBLIC UTILITIES OR ROADWAYS MUST BE APPROVED BY THE VILLAGE OF ASHVILLE ENGINEER.

GEN 16
ALL FIELD TILES BROKEN DURING EXCAVATION SHALL BE REPLACED BY THE CONTRACTOR TO ORIGINAL CONDITION OR CONNECTED TO THE CURB SUB DRAIN OR TO THE STORM SEWER SYSTEMS AS DIRECTED BY THE ENGINEER.

TWENTY-FOUR (24) HOUR ADVANCE NOTIFICATION IS REQUIRED FOR ALL WORK REQUIRING INSPECTION, TESTING, OR APPROVAL BY THE VILLAGE ENGINEER OR BUILDING

THE CONTRACTOR SHALL REPAIR OR REPLACE ANY AND ALL EXISTING WORK DAMAGED DURING OR DUE TO THE EXECUTION OF THIS CONTRACT TO EQUAL OR BETTER CONDITION PRIOR TO THE DAMAGE. AT THEIR OWN EXPENSE. ALL SAID WORK TO BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE DEVELOPER'S ENGINEER AND VILLAGE OF ASHVILLE ENGINEER. ANY DAMAGE TO OTHER UTILITIES CAUSED BY THE CONTRACTOR SHALL BE REPAIRED BY THE APPROPRIATE UTILITY COMPANY AT THE CONTRACTOR'S EXPENSE.

CARE SHALL BE EXERCISED WHEN WORKING THE AREA AROUND EXISTING TREES AND SHRUBS, ANY TREES OR SHRUBS NOT MARKED FOR REMOVAL THAT ARE DAMAGED BY THE CONTRACTOR WILL HAVE TO BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF

ANY PROPERTY CORNER PINS OR PERMANENT SURVEY MARKERS DISTURBED DURING CONSTRUCTION SHALL BE RESET BY A REGISTERED SURVEYOR AT THE CONTRACTOR'S

EXISTING STRUCTURES TO BE REMOVED OR DEMOLISHED REQUIRE A "DEMOLITION PERMIT" ISSUED BY THE VILLAGE OF ASHVILLE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING MAIL SERVICE IN THE CONSTRUCTION AREA.

THE CONTRACTOR SHALL NOT ORDER MATERIAL OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

ALL ITEMS OF WORK CALLED FOR ON THE PLANS FOR WHICH NO SPECIFIC METHOD OF PAYMENT IS PROVIDED SHALL BE PERFORMED BY THE CONTRACTOR AND THE COST OF IT SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS RELATED ITEMS.

ALL EXCAVATION ON THIS PROJECT IS UNCLASSIFIED. THE CONTRACTOR SHALL MAKE ALL

EXCAVATION OF WHATEVER NATURE NECESSARY FOR CONSTRUCTION OF WATER LINES AND SEWERS AND THEIR APPURTENANT STRUCTURES INCLUDED IN THIS PROJECT.

APPROVALS OF CONSTRUCTION PLANS IS CONTINGENT ON ALL EASEMENTS REQUIRED FOR THE CONSTRUCTION OF THE WORK BEING SECURED AND SHOWN ON THE FINAL PLAT FOR RECORDING. NO WORK THAT REQUIRES AN EASEMENT WILL BE ALLOWED TO PROCEED UNTIL THIS HAS BEEN DONE.

TWENTY-FOUR (24) HOUR ADVANCE NOTIFICATION IS REQUIRED FOR ALL WORK REQUIRING INSPECTION, TESTING, OR APPROVAL BY THE VILLAGE ENGINEER OR BUILDING

THE CONTRACTOR IS RESPONSIBLE TO NOTIFY THE VILLAGE ENGINEER AND REQUEST A FINAL PUNCH-OUT INSPECTION OF THE SITE ONCE ALL OF THE ITEMS ON THE APPROVED DEVELOPMENT PLANS HAS BEEN COMPLETED.

THE CONTRACTOR SHALL SUFFICIENTLY EXPOSE EACH UTILITY OR STRUCTURE INDICATED ON THE PLANS IN ADVANCE OF EXCAVATING TO DETERMINE IF A GRADE CONFLICT OCCURS. LOCATIONS SHOWN ARE APPROXIMATE ONLY. OTHER UTILITIES NOT MARKED MAY ALSO REQUIRE EXPOSING.

THE DEVELOPER IS RESPONSIBLE FOR HAVING "AS-BUILT" CONSTRUCTION DRAWINGS SENT TO THE VILLAGE ENGINEER AFTER THE PROJECT HAS BEEN COMPLETED. THE PLANS MUST INCLUDE TOP-OF-CASTING AND FLOW-LINE ELEVATIONS FOR ALL SANITARY AND STORM STRUCTURES AND IDENTIFY ALL FIELD MODIFICATIONS TO THE APPROVED PLAN SET. THE "AS BUILT" DRAWINGS MUST ALSO INCLUDE STATE PLANE COORDINATES FOR ALL NEWLY CONSTRUCTED PUBLIC UTILITY STRUCTURES.

ACCESS TO ALL ADJOINING PROPERTIES SHALL BE MAINTAINED AT ALL TIMES, UNLESS

ALL SITE CLEARING SHALL BE PERFORMED BY THE OWNER AT HIS EXPENSE PRIOR TO CONSTRUCTION OF THIS PROJECT SUBJECT TO COMPLIANCE WITH THE VILLAGE OF ASHVILLE ZONING CODE.

ALL TREES, EITHER STANDING OR FALLEN, AND STUMPS WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING

UNLESS DIRECTED OTHERWISE.

AT ALL UTILITY CROSSINGS. THE BACKFILL SHALL CONSIST OF COMPACTED GRANULAR MATERIAL IN ACCORDANCE WITH C.M.S.C. ITEM 912 BETWEEN THE DEEPER AND SHALLOWER PIPE. WHERE PROPOSED UTILITIES OR SERVICES CROSS PROPOSED OR EXISTING PAVEMENT AREAS, BACKFILL SHALL BE COMPACTED GRANULAR MATERIAL IN ACCORDANCE WITH C.M.S.C. ITEM 912 EXTENDING AT LEAST THREE (3) FEET BEYOND THE BACK OF CURB OR EDGE OF PAVEMENT. THE COST IS TO BE INCLUDED IN THE PRICE BID FOR RELATED PIPE, C.M.S.C. ITEM 912 MAY BE SUBSTITUTED

IN THE EVENT THAT IT BECOMES NECESSARY, THE VILLAGE OF ASHVILLE SHALL PERFORM WORK OF AN IMMEDIATE NATURE REQUIRED OF THE CONTRACTOR BY THIS CONTRACT BECAUSE OF THE FAILURE OR REFUSAL OF THE CONTRACTOR TO PERFORM-SUCH WORK. THE CONTRACTOR SHALL REIMBURSE THE VILLAGE OF ASHVILLE AT THE RATE OF 2.5 TIMES THE ACTUAL COST OF LABOR, MATERIALS AND EQUIPMENT NECESSARY TO PERFORM SUCH WORK. THE VILLAGE OF ASHVILLE SHALL BE REQUIRED TO NOTIFY OR ATTEMPT TO NOTIFY THE DESIGNATED REPRESENTATIVE OF THE CONTRACTOR OF THE NECESSITY TO PERFORM SUCH WORK. IN THE EVENT OF AN EMERGENCY, NO NOTIFICATION IS REQUIRED. IF THE CONTRACTOR REFUSES OR FAILS WITHIN A REASONABLE TIME TO PERFORM OR CAUSE THE PERFORMANCE OF SUCH WORK, THE VILLAGE OF ASHVILLE SHALL BE REIMBURSED BY THE CONTRACTOR IN THE AMOUNT PROVIDED HEREIN. REASONABLE TIME FOR ALL STREETS INVOLVED ON THIS CONTRACT IS ONE (1) HOUR FROM THE TIME OF NOTIFICATION BY THE VILLAGE OF ASHVILLE.

PRIOR TO THE CONSTRUCTION OF THE STREETS, SOIL TESTS SHALL BE MADE ON ALL SANITARY SEWER AND DESIGNATED STORM SEWER TRENCHES WHICH CROSS THE PROPOSED PAVEMENTS OR WHICH LIE SUCH .THAT THE PROPOSED PAVEMENTS ARE LOCATED WITHIN ANY PART OF THE INFLUENCE LINE OF SAID TRENCH. WHERE SAID RESULTS INDICATED THAT THE TRENCH BACKFILL DOES NOT MEET THE COMPACTION REQUIREMENTS OF 912.03 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, ALL BACKFILL MATERIAL SHALL BE REMOVED, REPLACED AND RE-TESTED UNTIL COMPACTION MEETS REQUIREMENTS OF

ALL SIDEWALKS, CURB RAMPS, AND CURBS AND GUTTERS SHALL MEET FEDERAL A.D.A. (AMERICANS WITH DISABILITIES ACT) REQUIREMENTS, LATEST EDITION.

ANY EXISTING PAVEMENT REMOVED FOR SANITARY SEWER, STORM SEWER OR WATERLINE PLACEMENT SHALL BE BACKFILLED AND COMPACTED TO A MAXIMUM DENSITY OF 100X OR WITH. CONTROLLED DENSITY FILL (CDF), REFERENCE CITY OF COLUMBUS ITEM 912 OR 636. IF CDF IS USED ALL DUCTILE OR COST IRON PIPE IN CONTACT WITH CDF SHALL BE POLY-WRAPPED IN ACCORDANCE WITH C-7484 OR AWWA C-105.

ANY TUNNELING OR BORING OF ANY PIPELINES SHALL BE IN ACCORDANCE WITH PLANS APPROVED BY THE VILLAGE ENGINEER.

DURING THE CONSTRUCTION OF THE IMPROVEMENTS SHOWN ON THESE PLANS, SEDIMENTATION AND EROSION CONTROL SHALL BE CONTROLLED IN ACCORDANCE WITH APPLICABLE STATE AND FEDERAL REGULATIONS. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH EPA STANDARDS WHERE NEEDED FOR THE DURATION OF THE PROJECT. ALL COSTS ASSOCIATED WITH SEDIMENTATION AND EROSION CONTROL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR

THE CONTRACTOR SHALL, PRIOR TO BIDDING, CAREFULLY STUDY THE GEOTECHNICAL REPORT. AS PROVIDED AS A PART OF THE BID DOCUMENTS, AND MAKE SITE VISITS TO SATISFY HIMSELF OF THE SITE CONDITIONS, THE CONTRACTOR SHALL, AS A PART OF HIS BID, SUBMIT A DETAILED DEWATERING PLAN THAT SHALL INCLUDE THE NUMBER AND SPACING OF WELL POINTS, THE SIZE OF PUMPS TO BE USED. THE POINTS OF DISCHARGE OF SAID DEWATERING OPERATIONS, AND ANY OTHER INFORMATION PERTINENT TO THE DEWATERING OF THE PROJECT. NO EXTRA PAYMENT SHALL BE MADE FOR DEWATERING. ALL COSTS FOR DEWATERING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ASSOCIATED ITEMS. BY SUBMITTING A BID THE CONTRACTOR IS STATING THAT HE CLEARLY UNDERSTANDS THE SCOPE OF THE DEWATERING FOR THE PROJECT AND HAS INCLUDED

THE CITY OF COLUMBUS STANDARD DRAWINGS SHALL GOVERN ALL PROJECTS UNLESS OTHERWISE NOTED.

THIS WORK IN HIS UNIT PRICE BID FOR ASSOCIATED ITEMS.

THE CONTRACTOR SHALL CLEAN UP- ALL DEBRIS AND MATERIALS RESULTING FROM HIS OPERATIONS AND RESTORE ALL SURFACES, STRUCTURES, DITCHES, AND PROPERTY TO ITS ORIGINAL CONDITION TO THE SATISFACTION OF THE ENGINEER.

THE CONTRACTOR SHALL CONFINE HIS ACTIVITIES TO THE PROJECT SITE UNDER DEVELOPMENT OR THE EXISTING RIGHT-OF-WAYS, CONSTRUCTION, AND PERMANENT EASEMENTS AND SHALL NOT TRESPASS UPON OTHER PRIVATE PROPERTY WITHOUT THE WRITTEN CONSENT OF THE OWNER.

THE CONTRACTOR SHALL DISPOSE OF ALL SURPLUS EXCAVATION OFF-SITE OR MOUND FOR FUTURE SECTIONS MOUNDED MATERIAL SHALL BE DRESSED-UP, STABILIZED AND SEEDED ACCORDING TO SPECIFICATIONS. MOUNDS SHALL NOT EXCEED TO THE HEIGHT AND SHALL NOT INTERFERE WITH SITE DRAINAGE.

THE INFORMATION SHOWN CONCERNING EXISTING UTILITIES IS NOT REPRESENTED, WARRANTED. OR GUARANTEED TO BE COMPLETE OR ACCURATE, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PHYSICALLY LOCATE AND VERIFY, IN THE FIELD, ALL UTILITY LOCATIONS AND ELEVATIONS, WHETHER SHOWN ON THE PLAN OR NOT, PRIOR TO THE BEGINNING OF CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL SUPPORT, PROTECT, AND RESTORE ALL EXISTING UTILITIES AND THEIR ASSOCIATED ITEMS.

COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 IS REQUIRED OF ALL CONTRACTORS ON THIS PROJECT.

WHERE MANHOLES ARE LOCATED WITHIN STREET GRADING LIMITS, THE TOPS SHALL BE BUILT TO ELEVATIONS SHOWN OR ORDERED. ELSEWHERE MANHOLES SHALL BE BUILT OR SUBSEQUENT ADJUSTED TO MEET SURFACE GRADES ESTABLISHED FOR THE DEVELOPMENT THE COST OF THE ADJUSTMENT IS TO BE INCLUDED IN THE PRICE BID FOR THE

THE CONTRACTOR SHALL CLEAN UP ALL DEBRIS AND MATERIAL RESULTING FROM HIS

OPERATION AND RESTORE ALL OTHER SURFACES, STRUCTURES, DITCHES, ON PUBLIC AND ADJACENT PROPERTY TO THERE ORIGINAL CONDITIONS TO THE SATISFACTION OF THE ENGINEER AND THE DEVELOPER'S PROPERTY TO THEIR SATISFACTION. ALL COSTS FOR THIS WORK SHALL BE INCLUDED WITH THE PRICE BID FOR THE VARIOUS ITEMS.

ROADWAY NOTES

ALL PAVEMENT SUB-GRADE SHALL BE CONSTRUCTED IN ACCORDANCE WITH ITEM 203 OF THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS, THE SOILS REPORT AND AS DIRECTED BY THE REGISTERED SOILS ENGINEER PRESENT ON THE SITE. SECTION 203.12 SHALL BE MODIFIED SUCH THAT ALL COMPACTION SHALL BE TO ONE HUNDRED (100) PERCENT OF THE MAXIMUM DRY UNIT WEIGHT OBTAINED IN THE LABORATORY BY THE "STANDARD PROCTOR" COMPACTION TEST (ASTM D698). MOISTURE CONTENT OF THE NEW FILL SHALL BE IN RANGE OF + TWO (2) PERCENT OF THE OPTIMUM MOISTURE CONTENT DETERMINED BY ASTM D698.

PRIOR TO CONSTRUCTION OF THE STREETS. SOIL TESTS SHALL BE MADE ON ALL SANITARY SEWER AND DESIGNATED STORM SEWER TRENCHES WHICH CROSS PROPOSED PAVEMENTS OR WHICH LIE SUCH THAT THE PROPOSED PAVEMENTS ARE LOCATED WITHIN ANY PART OF THE INFLUENCE LINE OF SAID TRENCH. WHERE SAID RESULTS INDICATE THAT THE TRENCH BACKFILL DOES NOT MEET THE COMPACTION REQUIREMENTS OF 912.03 (MINIMUM OF 100 % OF MAXIMUM LABORATORY DENSITY) OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, ALL BACKFILL MATERIAL SHALL BE REMOVED, REPLACED, AND RE-TESTED UNTIL COMPACTION MEETS SAID REQUIREMENTS OF 912.03.

ALL PAVEMENT JOINTS. PARTICULARLY WHERE A PROPOSED PAVEMENT ABUTS AN EXISTING PAVEMENT, AND ALL PAVEMENT JOINTS ABUTTING UTILITY STRUCTURES SUCH AS MANHOLES. CATCH BASINS, VALVE BOXES, ETC. SHALL BE SEALED IN ACCORDANCE WITH ITEM 413 TYPE (1) OF THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS.

THE CONTRACTOR SHALL CONTACT THE COLUMBIA GAS OF OHIO, INC. OPERATIONS SUPERVISOR AT 614818-21090NE (1) WEEK PRIOR TO ROADWAY CONSTRUCTION FOR THE DELIVERY OF PVC GAS SLEEVES OR COLUMBUS SOUTHERN POWER COMPANY ENGINEERING

LIAISON COORDINATOR AT 614-464-7379 FOR ELECTRIC CONDUIT SLEEVES.

AT THE OPTION OF THE DEVELOPER OR THE VILLAGE, THE PLACEMENT OF THE FINAL WEARING COURSE OF ITEM 404 ASPHALT CONCRETE MAY BE DELAYED UNTIL SUCH TIME THAT THE MAJORITY OF THE RESIDENTIAL HOUSING CONSTRUCTION IN THE AREA IS COMPLETE OR WEATHER PERMITS.

WEARING COURSE OF ASPHALT CONCRETE IS TO MEET CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATION ITEM 404 AND ADDITIONAL MIX DESIGN REQUIREMENTS OF THE VILLAGE OF ASHVILLE.

PAVEMENT CUTS FOR UTILITY LINE INSTALLATIONS ARE SUBJECT TO THE BACKFILL REQUIREMENTS OF ITEM 912 IN LIEU OF COMPACTED GRANULAR MATERIAL, FLOWABLE CONTROLLED DENSITY FILL, ITEM 636 TYPE11 MAY BE USED. PAVEMENT SHALL BE CONSTRUCTED TO MATCH THE EXISTING SECTION OR NINE INCHES OF ITEM 404 ASPHALT CONCRETE, WHICHEVER IS GREATER. AS AN OPTION, THE CONCRETE BASE EXTENDING ONE (1) FOOT BEYOND EITHER EDGE OF THE EXCAVATION, WITH TWO (2) INCHES OF ITEM 404 ASPHALT WEARING COURSE PLACED ON TOP.

STEEL PLATES SHALL BE POSITIONED AND SECURED IN PLACE WITH STEEL SPIKES AND COLD PATCH ASPHALT MIX OVER ALL TRENCHES THAT ARE LEFT OPEN ON A TEMPORARY BASIS AND SUBJECT TO TRAFFIC.

VILLAGE STREETS ARE TO BE KEPT CLEAN AND FREE FROM MUD, STONE, DIRT, ETC. A TEMPORARY CONSTRUCTION ENTRANCE COMPRISED OF A 20' X 50' MAT OF NUMBER 2 STONE IS TO BE MAINTAINED AT ALL SITE ENTRANCES.

CONCRETE CURBS ARE TO BE BRANDED DURING PLACEMENT UTILIZING THE STANDARD BRAND SET PROVIDED BUY THE VILLAGE OF ASHVILLE ENGINEER. BRAND CURBS ARE AS FOLLOWS: ON TOP OF CURB FOR SANITARY LATERAL LOCATIONS

"W" - ON FACE OF CURB FOR WATER SERVICE BOX LOCATIONS. "WV" - ON FACE OF CURB FOR HYDRANT WATCH VALVE LOCATIONS. "WM" - ON FACE OF CURB FOR WATER MAIN VALVE LOCATIONS. BRANDS THAT ARE MISSED MUST BE MECHANICALLY GROUNDED INTO CURB AFTER THE CONCRETE IS SET.

THE COMBINATION CURB AND GUTTER SHALL BE PLACED CONTINUOUSLY. DRIVEWAY KNOCK DOWNS SHALL BE SAW-CUT AT THE TIME EACH INDIVIDUAL RESIDENT IS CONSTRUCTED.

MONUMENT BOXES SHALL BE INSTALLED AT INTERSECTIONS DESIGNATED ON THE PLAN. 8371. MONUMENTS ARE TO BE SET IN A CONCRETE FILLED TWENTY-FOUR (24) INCH

ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND

BOXES SHALL BE NEENAH R-1968, TYPE 36-8 OR EAST JORDAN IRON WORKS NUMBER DIAMETER CORED HOLE, FLUSH WITH THE TOP OF THE PAVEMENT PER VILLAGE STANDARD.

REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE "OHIO MANUAL OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION AND MAINTENANCE OPERATIONS" COPIES OF WHICH ARE AVAILABLE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, BUREAU OF TRAFFIC, 25 SOUTH FRONT STREET, COLUMBUS, OHIO 43215.

LANE RESTRICTIONS OR CLOSURES REQUIRED DURING CONSTRUCTION MUST BE APPROVED BY THE VILLAGE OF ASHVILLE ENGINEER AND SERVICE DEPARTMENTS A MINIMUM OF TWO (2) WEEKS PRIOR TO ANY WORK BEING PERFORMED. OTHERWISE, TRAFFIC LANES SHALL BE FULLY OPEN TO TRAFFIC AT ALL TIMES AND INGRESS AND EGRESS SHALL BE MAINTAINED TO PUBLIC AND PRIVATE PROPERTY.

THE CONTRACTOR/DEVELOPER IS RESPONSIBLE FOR THE PROVISION AND SCHEDULING OF PERSONNEL FOR CONCRETE, ASPHALT, AND SOILS TESTING PROCEDURES AS REQUIRED BY THE VILLAGE ENGINEER. TESTING IS TO BE PERFORMED BY REGISTERED TESTING PROCEDURES AS REQUIRED BY THE VILLAGE ENGINEER. TESTING IS TO BE PERFORMED BY A REGISTERED TESTING AGENCY THAT IS APPROVED BY THE VILLAGE ENGINEER.

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR THE PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE PROVIDED WHETHER INSIDE OR OUTSIDE OF THE WORK LIMITS BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF TRAFFIC CONTROL SERVICES FOR CONSTRUCTION AND MAINTENANCE OPERATIONS (CURRENT EDITION). COPIES OF WHICH ARE AVAILABLE

FROM THE OHIO DEPARTMENT OF TRANSPORTATION, OFFICE OF TRAFFIC ENGINEERING.

THE TRACKING OF SPILLAGE OF MUD, DIRT OR DEBRIS UPON VILLAGE STREETS IS PROHIBITED AND ANY SUCH OCCURRENCE SHALL BE CLEANED UP IMMEDIATELY BY THE

CONTRACTOR.

NO NON-RUBBER TIRE VEHICLE SHALL BE MOVED ON VILLAGE STREETS. EXCEPTIONS MAY BE GRANTED BY AN AUTHORIZED VILLAGE OFFICIAL WHERE SHORT DISTANCES AND SPECIAL CIRCUMSTANCES ARE INVOLVED. GRANTING OF EXCEPTIONS MUST BE IN WRITING AND ANY RESULTING DAMAGE MUST BE REPAIRED TO THE SATISFACTION OF THE VILLAGE.

STEADY BURNING TYPE "C" LIGHTS SHALL BE REQUIRED ON ALL BARRICADES, DRUMS AND SIMILAR TRAFFIC DEVICES IN USE AT NIGHT. CONES ARE NOT PERMITTED TO BE USED FOR

ALL TRAFFIC LANES SHALL BE FULLY OPEN TO TRAFFIC FROM 7:00 A.M. TO 9:00 A.M. AND 4:00 P.M. TO 6:00 P.M., UNLESS OTHERWISE APPROVED BY THE VILLAGE. ONE LANE MAY BE CLOSED TO TRAFFIC DURING WORKING HOURS, DURING SANITARY SEWER BORING

THE PAVEMENT SHALL BE REPLACED BY FIRST REMOVING THE TEMPORARY PAVEMENT DOWN TO THE CLEAN GRANULAR MATERIAL AND REMOVING THE EXISTING PAVEMENT FOR AT LEAST 12 INCHES BEYOND THE TRENCH LIMITS ON EACH SIDE. THE PAVEMENT TO BE REMOVED SHALL BE NEATLY SAWED, NOT MORE THAN 24 HOURS PRIOR TO THE PLACING OF PERMANENT PAVEMENT MATERIALS. THE PERMANENT PAVEMENT MATERIALS AND WORKMANSHIP SHALL BE AT LEAST EQUIVALENT TO THE EXISTING PERMANENT PAVEMENT REPLACED, AS DETERMINED BY THE ENGINEER. AFTER REMOVAL OF THE TEMPORARY PAVEMENT AND SAWING OF THE EXISTING PAVEMENT EDGES, ITEM 407 TACK COAT SHALL BE APPLIED TO THE EXPOSED EXISTING PAVEMENT EDGES, AND TO THE BASE MATERIAL, PRIOR TO THE PLACING OF THE PERMANENT PAVEMENT.

ALL TRENCHES IN THE ROADWAY SHALL BE BACKFILLED OR SECURELY PLATED DURING NON-WORKING HOURS.

IN THE EVENT EXCAVATION FOR THE STREET IS FROM ZERO (0) INCHES TO TWELVE (12) INCHES BELOW WHAT IS CALLED FOR ON THE PLANS THE CONTRACTOR SHALL REPLACE. THIS EXCESS EXCAVATED MATERIAL AS DIRECTED BY THE GEOTECHNICAL ENGINEER. ITEM 310 OR 304 AS DIRECTED AND AT NO EXTRA COST TO THE OWNER.

WHERE NECESSARY TO DISTURB EXISTING PAVEMENT OR DRIVES. THE PAVEMENT SHALL BE SAW CUT IN NEAT, STRAIGHT LINES. THE DEPTH OF SAW CUT SHALL BE AT LEAST TWO (2)

**SANITARY SEWER NOTES** 

REPORTED IN A SUITABLE LOG.

ALL SEWERS, APPURTENANCES, AND METHODS OF CONSTRUCTION AND WORKMANSHIP FOR SEWERS AND APPURTENANCES SHOWN ON THESE PLANS SHALL CONFORM TO THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATION DIVISION 900 AND APPLICABLE REFERENCES THEREIN. CURRENT ON THE DATE OF THE CONTRACT, UNLESS THE REQUIREMENTS OF SUCH RULES AND REGULATIONS ARE UPGRADED OR MODIFIED BY THE FOLLOWING NOTES OR BY THE CONSTRUCTION DETAILS SE FORTH HEREIN.

SANITARY SEWER LEAKAGE TESTING: LEAKAGE TESTING: LEAKAGE TEST SHALL BE CONDUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF ITEM 901.20 AND SHALL INCLUDE MAIN SEWER, MANHOLES AND SERVICE CONNECTIONS DURING THE CONSTRUCTION

THE CONTRACTOR'S SPECIFIC ATTENTION IS DIRECTED TO THE REQUIREMENTS OF EITHER THE INFILTRATION OR EXFILTRATION AS SPECIFIED BY THE VILLAGE OF ASHVILLE. LEAKAGE THROUGH THE JOINTS OF THE SEWER SHALL NOT EXCEED THE FOLLOWING ALLOWABLE LIMITS: ONE HUNDRED (100) GALLONS PER INCH OF TRIBUTARY SEWER DIAMETER PER TWENTY FOUR (24) HOURS PER MILE OF LENGTH OR THE COMPUTED EQUIVALENT FOR SHORTER LENGTHS AND SHORTER PERIODS OF TIME. ALL SANITARY SEWERS AND SERVICES SHALL BE TESTED. ALL SANITARY SEWERS SHALL BE SUBJECT TO AND PASS THE INFILTRATION OR EXFILTRATION TEST PRIOR TO ACCEPTANCE. AN AIR TEST IS

OF THE SEWER AND MANHOLES GROUND WATER LEVELS SHALL BE OBSERVED AND

CLEAN WATER CONNECTIONS INCLUDING ROOF DRAINS, FOUNDATION DRAINS, SUMPS, ETC. ARE PROHIBITED FROM BEING CONNECTED TO THE SANITARY SEWER.

ACCORDING TO THE CURRENT REGULATIONS OF THE VILLAGE'S ENGINEERING DEPARTMENT.

ACCEPTABLE TO THE VILLAGE OF ASHVILLE. THIS AIR TEST SHALL BE PERFORMED

MATERIAL: UNLESS OTHERWISE INDICATED ON THE PLANS, SEWERS AND SERVICES ARE TO BE SUPPLIED WITH MATERIAL CONFORMING TO ITEM 901 CMSC. (1) POLYVINYL CHLORIDE (PVC) PLASTIC PIPE: ITEM 720.08 PIPE SHALL CONFORM TO ASTM D-3034 SDR 35 FOR SIZES 6", 8", 10", 12" AND 15". FITTINGS SHALL ALSO CONFORM TO ASTM F-1336. (2) POLYVINYL CHLORIDE (PVC) LARGE DIAMETER PLASTIC PIPE: ITEM 720.08. THE PIPES AND FITTINGS SHALL CONFORM TO ASTM F-679 FOR SIZES 18" THROUGH 36".

PIPES FOR ALL 6" SERVICES SHALL BE PVC SEWER PIPE CONFORMING TO REQUIREMENTS OF ASTM D-3034, SDR 35. THESE SERVICES ARE ALL SUBJECT TO LEAK TESTING. SERVICES EXTENSIONS SHALL BE INSTALLED AT A MINIMUM GRADE OF 1/4" PER FOOT AND SHALL BE CONSTRUCTED AT THE TIME OF CONSTRUCTING THE MAIN SEWER, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

THE MINIMUM REQUIREMENT FOR SEWER PIPE ON THIS PROJECT SHALL BE SDR35, ASTM D3034 POLYVINYL CHLORIDE (PVC) SEWER PIPE WITH ASTM C1784 CELL CLASSIFICATION OF 12454 B OR 12454 C, UNLESS OTHERWISE SHOWN ON THE PLANS.

ALL PVC PIPE SHALL BE DEFLECTION TESTED THIRTY (30) DAYS OR MORE AFTER THE

TRENCH HAS BEEN BACKFILLED TO FINISHED GRADE. THE TESTING SHALL BE DONE IN ACCORDANCE WITH ITEM 901.21 CMSC. A RIGID MANDREL PROVIDED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER SHALL BE USED FOR THE TESTING. NO MECHANICAL PULLING DEVICES SHALL BE USED. PIPE DEFLECTION SHALL NOT EXCEED FIVE (5) PERCENT. AN ACCURATE LOG OF THE SEWER INSTALLATION SEGMENTS AND DATES SHALL BE KEPT BY THE CONTRACTOR.

6'-0" LONG CLAY DAMS ARE TO BE INSTALLED ALONG MAIN LINE SEWERS IN ACCORDANCE

WITH ITEM 901.11 CMCS AT HALF THE DISTANCE BETWEEN EACH PAIR OF MANHOLES. BUT NO CLOSER THAN TEN (10) FEET FROM A LATERAL SERVICE, COST TO BE INCLUDED WITH CARIOUS SEWER ITEMS.

6'-0" LONG CLAY DAMS ARE TO BE INSTALLED ON ALL SANITARY LATERAL SEWERS BUT NO CLOSER THAN FIVE (5) FEET FROM THE END OF THE SERVICE. DAMS ARE TO BE

PUBLIC SANITARY MANHOLE COVERS ARE TO BE EAST JORDAN IRON WORKS NO. 1660-A2

OR EQUIVALENT AND EMBOSSED "VILLAGE OF ASHVILLE SANITARY SEWER".

INSTALLED BY SITE UTILITY CONTRACTOR WITH THE COST TO BE INCLUDED WITH VARIOUS

ALL SANITARY MANHOLES AND LATERAL SERVICES ARE TO BE MARKED WITH A

4"X4"X10'-0" PRESSURE TREATED WOOD POST WITH 4'-0" PROJECTING ABOVE THE FINISHED GRADE AND WITH THE TOP 1'-0" PAINTED GREEN ON FOUR (4) SIDES. ADDITIONALLY A 2"X2" HARDWOOD WYE POLE IS TO BE WIRED TO THE BASE OF EACH 4"X4" POLE AND EXTENDED DOWN TO THE END OF EACH LATERAL SERVICE. COST TO BE INCLUDED IN THE VARIOUS ITEMS.

WHERE THE COVER TO FINISHED GRADE OVER A SANITARY WYE IS IN EXCESS OF TWELVE (12) FEET, A LENGTH OF RISER PIPE AND A FORTY-FIVE (45) DEGREE BEND SHALL BE INSTALLED ALONG WITH A MINIMUM OF ONE WHOLE LENGTH OF SIX (6) INCH PIPE SUCH THAT THE END OF THE SERVICE WILL BE TEN (10) FEET BELOW GRADE. ALL SANITARY LINES AND SERVICES ARE TO BE DESIGNED AND INSTALLED SO AS TO PROVIDE BASEMENT

WHERE THE SANITARY SEWER CROSSES UNDER A PROPOSED STORM SEWER OR WATERLINE THE TRENCH SHALL BE BACKFILLED TO THE BOTTOM OF THE PROPOSED STORM SEWER OR WATERLINE WITH COMPACTED GRANULAR MATERIAL AS PER ITEM 912. FOR A LENGTH OF TWENTY (20) LINEAR FEET CENTERED ON THE STORM SEWER OR WATERLINE. THE COST OF THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR THE VARIOUS SEWER ITEMS.

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY MANHOLE CONSTRUCTION AND TOP-OF-CASTING ELEVATION. MANHOLES SHALL BE BUILT OR ADJUSTED SO THE TOPS

ALL PIPES SHALL BE INSTALLED WITH STONE OR GRAVEL BEDDING AS SHOWN IN THE

ADJUSTMENTS SHALL BE ACCOMPLISHED WITH PRE-CAST CONCRETE ADJUSTMENT RINGS.

CONFORM TO THE ELEVATIONS SHOWN ON THESE PLANS. ALL MANHOLE CASTING

SANITARY TRENCH DETAILS SHALL BE IN ACCORDANCE WITH THE CITY OF COLUMBUS STANDARD DRAWINGS AA-S149 UNLESS OTHERWISE INDICATED BY VILLAGE OF ASHVILLE STANDARD DRAWINGS. ALL PIPES SHALL BE INSTALLED WITH STONE OR GRAVEL TYPE

TEMPORARY BULKHEADS SHALL BE PLACES WHERE INDICATED ON THE PLANS AND SHALL

SANITARY LATERALS INSTALLED IN A COMMON TRENCH ARE TO BE INSTALLED WITH A MINIMUM 2'-0" CENTER TO CENTER SEPARATION OF PIPES IN A 4'-0" MINIMUM TRENCH WITH A 1'-0" MINIMUM BEDDING AROUND PIPES. PIPE ENDS ARE TO BE FLARED TO A

REMAIN IN PLACE UNTIL REMOVAL IS DIRECTED BY THE VILLAGE ENGINEER.

A PERMANENT FLEXIBLE WATER JOINT SEALANT BETWEEN THE TOPS OF SANITARY MANHOLES AND MANHOLE CASTINGS SHALL BE INSTALLED. SEALANT TO BE "CONSEAL" AS MANUFACTURED BY CONCRETE SEALANTS, INC. NEW CARLISLE, OHIO OR APPROVED EQUAL.

MINIMUM 10'-0" CENTER TO CENTER SEPARATION OF PIPES AT 5'-0" FROM THE

PROPERTY LINE RIGHT-OF-WAY.

EACH MANHOLE SHALL BE PROVIDED WITH A "CHIMNEY SEAL" CONSISTING OF A TRIPLE PLEATED RUBBER SLEEVE HAVING A MINIMUM THICKNESS OF 3/16 INCH, A MINIMUM UNEXPANDED VERTICAL HEIGHT OF EIGHT (8) INCHES, CAPABLE OF EXPANDING NOT LESS THAN TWO (2) INCHES VERTICALLY WHEN INSTALLED, EQUIPPED WITH SIXTEEN (16) GAUGE BY 1-3/4 INCH WIDE A.S.T.M. STAINLESS STEEL TYPE 304 EXPANSION BANDS, THE ENTIRE UNIT AS MANUFACTURED BY CRETEX SPECIALTY PRODUCTS OR APPROVED EQUAL.

NO FLOW MAY BE DIVERTED INTO THE NEW OR EXISTING SEWER UNTIL THEY HAVE BEEN INSPECTED, TESTED, AND APPROVED FOR USE. WRITTEN APPROVAL FOR SUCH USE SHALL BE OBTAINED FROM THE VILLAGE OF ASHVILLE.

SANITARY AND STORM SEWER NOTES

ROOF DRAINS. FOUNDATION DRAINS AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED ON THIS PROJECT.

ALL SANITARY SEWERS CONSTRUCTED UNDER THIS PLAN SHALL MEET THE REQUIREMENTS OF THE VILLAGE OF ASHVILLE, UNLESS OTHERWISE NOTED.

STM/SAS 3

THE CONSTRUCTION OF NEW SANITARY SEWERS OR WATERLINES SHALL NOT BEGIN UNTIL THE VILLAGE RECEIVES AN APPROVED AND CURRENT OHIO ENVIRONMENTAL PROTECTION AGENCY PERMIT TO INSTALL (PTI), OR A LETTER OF ACCEPTANCE.

THERE SHALL BE NO SANITARY SEWER INSTALLED IN REAR OR SIDE LOT EASEMENTS

WITHOUT PRIOR WRITTEN APPROVAL FROM THE VILLAGE OF ASHVILLE WASTEWATER

SUPERINTENDENT.

THE MINIMUM REQUIREMENTS FOR SANITARY SEWER PIPE SHALL BE PVC SEWER PIPE ASTM D-3034, SDR 35 AND ASTM F-679.

THE MINIMUM REQUIREMENT FOR STORM SEWER PIPE SHALL BE: 8" THROUGH 36" HIGH DENSITY POLYFTHYLENE N-12 OR FOLIAL HIGH DENSITY POLYFTHYLENE PIPE WITH SMOOTH

STM/SAS 6

FOR BEDDING OF SANITARY PIPE.

WHEN THEY DEEM NECESSARY. ALL TRENCH BACKFILL SHALL BE COMPACTED BACKFILL AS PER CMSC ITEM 911. THE COST OF OIL COMPACTED BACKFILL SHALL BE INCLUDED IN THE PRICE BID FOR FURNISHING AND INSTALLING PIPE. THE CONTRACTOR IS HEREBY NOTIFIED THAT THE CMSC

INTERIOR WAIL. STORM DRAINS LARGER THAN 36" SHALL MEET THE REQUIREMENTS OF

FOR ASHVILLE REQUIRES THE USE OF NUMBER 57 CRUSHED LIMESTONE ROUND GRAVEL

AASHTO M-294-S. REINFORCED CONCRETE RCP MAY BE SPECIFIED BY THE ENGINEER

FOR FURNISHING AND INSTALLING PIPE.

IN ADDITION TO THE REQUIREMENTS OF CMSC ITEM 901.08 AS IT REFERS TO COMPACTED BACKFILL, THERE MAY BE AREAS ON THE PLANS WITH THE LIMITS INDICATED ON THE PROFILE VIEW OF THE SEWER AS "COMPACTED GRANULAR BACKFILL". THESE AREAS WILL BE COMPACTED TO MEET THE REQUIREMENTS OF CMSC ITEM 912.03. PAYMENT FOR THE COMPACTION OF BACKFILL WITHIN THESE AREAS SHALL BE INCLUDED IN THE PRICE BID

ALL BEDDING OF SANITARY SEWER PIPE SHALL CONFORM TO THE TYPICAL TRENCH DETAIL.

THE CONTRACTOR'S SPECIFIC ATTENTION IS DIRECTED TO THE REQUIREMENTS OF THE LEAKAGE TEST. ALL SANITARY SEWERS SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH 901.20 OF THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS. THIS IS AN EXFIITRATION WATER TEST. AN AIR TEST IS PERMITTED AS DIRECTED BY THE VILLAGE OF ASHVILLE. AN INFILTRATION TEST MAY BE REQUIRED IN AREAS OF HIGH

PIPE FOR ALL SIX (6) INCH HOUSE SERVICES SHALL BE PVC SEWER PIPE, ASTM D-3034, SDR 35. ALL SERVICE EXTENSIONS SHALL BE LAID AT A 'MINIMUM GRADE OF TWO (2) PERCENT AND SHALL BE CONSTRUCTED AT THE TIME OF CONSTRUCTION OF THE MAIN SEWER, UNLESS OTHERWISE DIRECTED BY THE VILLAGE ENGINEER.

CONNECTIONS BETWEEN EXISTING AND PROPOSED SERVICE LINES SHALL BE COMPLETED USING A FOUR (4) INCH OR SIX (6) INCH FERNCO, INC. DONUT OR BOOT.

A WYE POLE MADE OF 4" BY 4" LUMBER SHALL BE FURNISHED AND PLACED AT ALL WYE BRANCHES AND AT THE END OF EXTENDED SERVICE. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE SEWER ITEMS.

ALL SANITARY SEWER LINES INSTALLED USING PVC PIPE WILL BE. SUBJECT TO DEFLECTION TESTING BY PULLING AN APPROVED MANDREL EQUAL IN DIAMETER TO 95% OF THE PIPE DIAMETER THROUGH THE PIPE NO LESS THAN (30) DAYS AFTER THE PIPE IS BACKFILLED.

THE WYE LOCATIONS SHOWN ON THE PLANS ORE APPROXIMATE AND SHALL BE FIELD LOCATED DURING CONSTRUCTION TO SERVE THE INDIVIDUAL STRUCTURES.

MANHOLE COVERS FOR SANITARY SEWERS SHALL CONFORM TO VILLAGE OF ASHVILLE

STANDARD DRAWINGS.

MANHOLE TOPS SHALL BE BUILT OR SUBSEQUENTLY ADJUSTED TO MEET SURFACE GRADES ESTABLISHED FOR THE DEVELOPMENT. COST OF THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR THE VARIOUS SEWER ITEMS.

ALL SANITARY SEWER LINES SHALL END WITH MANHOLES.

ALL NEW SANITARY SEWER AND STORM DRAIN MANHOLES INSTALLED IN THE VILLAGE OF ASHVILLE SANITARY SEWER AND STORM DRAIN SYSTEMS SHALL BE AS FOLLOWS:

. PRE-CAST CONCRETE . FOUR (4) FOOT DIAMETER, MINIMUM INSTALLED WITH FORMED CHANNELS

ALL NEW SANITARY SEWER MANHOLES AND EXISTING SANITARY MANHOLES ADJUSTED TO

VILLAGE OF ' ASHVILLE SPECIFICATIONS.

ARE TO THE CENTER OF THE MANHOLE BASE.

ALL NEW MANHOLES AND EXISTING MANHOLES ADJUSTED TO GRADE SHALL HAVE CONCRETE

GRADE SHALL BE CONSTRUCTED WITH CHIMNEY SEALS AND DISH IN ACCORDANCE WITH

SANITARY SEWER--MANHOLE CONNECTIONS: THE SANITARY SEWER PIPE TO MANHOLE CONNECTIONS SHALL BE OF A FLEXIBLE WATERTIGHT JOINT OF APPROVED MANUFACTURE. THE JOINT MAY BE OF THE FOLLOWING DESIGN (A) RUBBER SLEEVE WITH STAINLESS

MANHOLE LOCATIONS: THE STATION AND OFFSET OF THE MANHOLES SHOWN ON THE PLANS

STEEL BANDING, (B) RUBBER GASKET COMPRESSION, OR (C) RUBBER GASKET EXPANSION.

THE MAXIMUM TRENCH WIDTH SHALL NOT BE GREATER THAN THE OUTSIDE DIAMETER OF

THE PIPE PLUS TWO (2) FEET.

THE CONTRACTOR SHALL MAKE PROVISIONS TO MAINTAIN FLOWS IN THE EXISTING SEWER AT ALL TIMES - DURING CONSTRUCTION METHODS FOR MAINTAINING

YEAR WARRANTY PERIOD.

ALL SANITARY SEWERS SHALL BE RECORDED IN DVD FORMAT AFTER CONSTRUCTION PRIOR TO ACCEPTANCE OF THE SEWERS BY THE VILLAGE OF ASHVILLE. THE DVD SHALL REMAIN. THE PROPERTY OF THE VILLAGE OF ASHVILLE. THE DVD SHALL CLEARLY IDENTIFY THE LOCATION OF THE CAMERA WITHIN THE SEWER, DATE AND TIME OF THE DVD AND BE OF SUFFICIENT QUALITY TO DETERMINE THE CONDITIONS OF THE SANITARY SEWERS. AN ADDITIONAL DVD SHALL BE PERFORMED JUST PRIOR TO THE EXPIRATION OF THE ONE (1)

SECOND (10 FPS).

TESTING OF LATERAL CONNECTIONS SHALL BE ADHERED TO.

THE CONTRACTOR SHALL MAKE PROVISIONS TO MAINTAIN FLOWS IN THE EXISTING SEWER AT ALL TIMES - DURING CONSTRUCTION METHODS FOR MAINTAINING FLOWS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION. AT NO TIME WILL SANITARY SEWAGE BE ALLOWED TO DISCHARGE TO ANY RIVER OR STREAM NOR SPILL OUT ON THE GROUND. APPROVAL OF PLANS BY THE ENGINEER TO MAINTAIN FLOWS SHALL NOT RELIEVE THE CONTRACTOR OF ANY RESPONSIBILITY TO ADEQUATELY PROVIDE FOR ALL FLOWS. THE CONTRACTOR SHALL BE AWARE THAT THE EXISTING SEWERS MAY BE OPERATING UNDER PRESSURE (HEAD) DURING TIMES OF RAINFALL: THEREFORE THE CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING ON THESE SEWERS. PAYMENT FOR

THIS WORK SHALL BE INCLUDED IN THE ITEM BID FOR FURNISHING AND INSTALLING PIPE.

THE MAXIMUM VELOCITY IN ANY NEW SANITARY SEWER SHALL NOT EXCEED TEN FEET PER

THE CONTRACTOR SHALL SUBMIT TO THE DESIGN ENGINEER AND THE VILLAGE ENGINEER FOR HIS OR HER REVIEW, FIVE COPIES OF SHOP DRAWINGS FOR ALL MATERIALS, STRUCTURES, GRADATION CERTIFICATIONS AND EQUIPMENT BEFORE ANY OF THE SAID MATERIALS. STRUCTURES OR EQUIPMENT IS ORDERED. THE OWNER NOR VILLAGE BARE ANY RESPONSIBILITY TO ACCEPT ANY OF THE ABOVE MENTIONED ITEMS WITHOUT A COMPLETED REVIEW OF SAID SHOP DRAWINGS. SHOP DRAWINGS SHALL BE APPROVED BY THE DESIGN ENGINEER PRIOR TO SUBMITTAL TO THE VILLAGE ENGINEER. THESE DOCUMENTS SHALL BE BOUND AND INDEXED WITH NUMBERED SHEETS FOR EACH ITEM OR PAGES NUMBERED

THE MINIMUM CLEARANCE BETWEEN SANITARY AND WATER MAINS SHALL BE TEN (10) FEET HORIZONTAL OR ONE(1) FOOT SIX (6) INCHES VERTICAL OUTSIDE OF PIPE TO OUTSIDE OF

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FLEXIBLE STORM SEWERS ARE SUBJECT TO MANDREL TESTING AND/OR VIDEO INSPECTION AS DIRECTED BY THE VILLAGE ENGINEER, TESTING SHALL BE PERFORMED NO SOONER THAN THIRTY (30) DAYS AFTER THE PIPE TRENCH HAS BEEN BACKFILLED AND ALL ROADWAY AND SITE FILLS OVER THE STORM LINES HAVE BEEN CONSTRUCTED. MAXIMUM DEFLECTION SHALL NOT EXCEED 7.5% OF THE BASE INSIDE DIAMETER. COST OF TESTING SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

ALL STORM MANHOLES SHALL BE MARKED WITH A 4" X 4" X 10' - 0" PRESSURE TREATED WOODEN POST PROJECTING 4' - 0" ABOVE THE FINISHED GRADE AND WITH THE TOP 1'-0" PAINTED GREEN ON FOUR SIDES.

THE COST OF ANY DEWATERING OPERATIONS REQUIRED FOR THE CONSTRUCTION OF THE STORM SEWER SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS SEWER ITEMS.

THE COST OF ANY ROCK EXCAVATION SHALL BE INCLUDED IN THE PRICE BID FOR THE STORM SEWER. THE BIDDER SHALL DETERMINE IF ANY ROCK EXCAVATION WILL BE REQUIRED AND ADJUST THEIR BIDS ACCORDINGLY.

THE FLOW IN ALL SEWERS, DRAINS, AND WATERCOURSES ENCOUNTERED SHALL BE MAINTAINED BY THE CONTRACTOR AT THEIR OWN EXPENSE AND WHENEVER SUCH WATERCOURSES AND DRAINS ARE DISTURBED OR DESTROYED DURING THE PROSECUTION OF THE WORK, THEY SHALL BE RESTORED BY THE CONTRACTOR AT HIS OWN EXPENSE TO A CONDITION SATISFACTORY TO THE ENGINEER.

ALL MAJOR FLOOD ROUTES AND DETENTION BASINS ARE TO BE SURVEYED BY A REGISTERED SURVEYOR TO VERIFY CONFORMANCE TO THE APPROVED GRADING PLAN. COST OF THIS WORK SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

EROSION CONTROL MEASURES ARE TO BE INSTALLED BY THE CONTRACTOR DURING CONSTRUCTION TO PROTECT CATCH BASINS AND CURB INLETS FROM SILT, MUD, AND

ALL DRAINAGE FLOOD ROUTES, SWALES, AND DITCHES ARE TO BE DESIGNED AND GRADED WITH A MINIMUM FLOW LINE GRADE OF TWO (2) PERCENT, AND A MAXIMUM SIDE SLOPE

ALL CATCH BASINS, MANHOLES, AND CURB INLETS SHALL HAVE CONCRETE CHANNELS POURED IN PLACE TO ASSURE POSITIVE DRAINAGE THROUGH THESE STRUCTURES.

PUBLIC STORM SEWER MANHOLE LIDS ARE TO BE EAST JORDAN IRON WORKS NUMBER

1660 — A2 OR EQUIVALENT AND EMBOSSED "VILLAGE OF ASHVILLE STORM SEWER".

STORM SEWER CURB INLETS ARE TO BE ADJUSTED WITHIN 1/4" OF PLAN ELEVATION USING STEEL SHIMS.

PRE-CAST RINGS ARE TO BE USED FOR ALL FINAL ADJUSTMENTS OF MANHOLE CASTINGS. STORM MANHOLE TOP OF CASTINGS SHOULD BE SET AT  $1-\frac{1}{2}$ " ABOVE FINISHED GRADE.

OPENINGS SHALL BE PROVIDED IN DRAINAGE STRUCTURES TO ACCOMMODATE UNDER DRAIN OUTLETS. UNDER DRAINS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH DETAILS GIVEN IN THE PLANS.

WATER MAIN/LINE NOTES

ALL WATERLINE SERVICE SADDLES SHALL BE DOUBLE BOLT STAINLESS STEEL STYLE 306 AS MANUFACTURED BY ROMAC, OR EQUAL.

LOCATION. SUPPORT. PROTECTION AND RESTORATION OF ALL WATER LINES, SERVICES AND APPURTENANCES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL SUBMIT HIS DETAILS AND METHODS OF SUPPORTING THE WATER LINES ACROSS THE SEWER TRENCH TO THE ENGINEER FOR APPROVAL BY THE WATER DEPARTMENT. SUPPORT METHOD AND DETAIL APPROVAL SHALL BE SECURED PRIOR TO THE COMMENCEMENT OF **EXCAVATION OPERATIONS.** 

WATER MAINS SHALL, WHERE POSSIBLE, BE DEFLECTED AROUND STRUCTURES WITHOUT THE USE OF SPECIAL FITTINGS AND WITHOUT EXCEEDING THE MANUFACTURER'S ALLOWABLE

THE CONTRACTOR SHALL HAND SWAB ALL PIPE AND FITTINGS THAT ARE NOT OTHERWISE DISINFECTED. THE AMOUNT OF CHLORINE TO BE USED DURING HAND SWABBING OPERATIONS SHALL BE DETERMINED BY THE VILLAGE OF ASHVILLE, WATER DEPARTMENT.

ANY TESTING PERFORMED AGAINST EXISTING VALVES SHALL BE DONE AT THE CONTRACTOR'S RISK AND IN STRICT COMPLIANCE WITH THE REQUIREMENTS OF THE ENGINEER. IF SATISFACTORY TEST RESULTS CANNOT BE OBTAINED AGAINST AN EXISTING VALVE, THE NEW LINE SHALL BE DISCONNECTED FROM THE EXISTING LINE, PLUGGED AND RE-TESTED. DAMAGE CAUSED TO EXISTING LINES AND VALVES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.

ALL COST TO PLUG AND BLOCK THE ENDS OF WATER MAINS AT LOCATION SHOWN IN THE PLANS SHALL BE INCLUDED IN THE PRICE BID FOR PIPE.

WATER SERVICE BOXES SHALL BE LOCATED 6" TO 12" FROM THE ROADWAY RIGHT-OF-WAY LINE, UNLESS OTHERWISE AUTHORIZED BY THE VILLAGE ENGINEER.

A DETECTABLE UNDERGROUND UTILITY MARKING TAPE SHALL BE INSTALLED APPROXIMATELY 18" BELOW GRADE. THIS TAPE SHALL CONSIST OF A MINIMUM 5 MIL. OVERALL THICKNESS, WITH A SOLID ALUMINUM FOIL CORE, WITH, A 2 MIL. CLEAR FILM REVERSE PRINT LAMINATED TO AN ALUMINUM FOIL TO 2 MIL. CLEAR FILM, MAKING THE FILM PERMANENTLY PRINTED. COLOR CODE SHALL BE BLUE INDICATING WATER AND ASSOCIATED LINES. THE TAPE SHALL BE MANUFACTURED TO WITHSTAND ALKALINE. ACIDIC AND NEUTRAL SOIL CONDITIONS. ANY DIRECTIONAL BORED PIPE SHALL HAVE A NO. 6 BRAIDED WIRE, INSTALLED WITH THE PIPE. COST SHALL BE INCLUDED WITH THE PRICE OF PIPE. NO SEPARATE PAYMENT WILL BE MADE.

THE CONTRACTOR SHALL SUBMIT TO THE VILLAGE ENGINEER FOR REVIEW. FIVE COPIES OF SHOP DRAWINGS FOR ALL MATERIALS, STRUCTURES, GRADATION CERTIFICATIONS AND EQUIPMENT BEFORE ANY OF THE SAID MATERIALS, STRUCTURES AND EQUIPMENT IS ORDERED. THE OWNER NOR THE VILLAGE OF ASHVILLE BEAR ANY RESPONSIBILITY TO ACCEPT ANY OF THE ABOVE-MENTIONED ITEMS WITHOUT A COMPLETE REVIEW OF SAID SHOP DRAWINGS. THE SHOP DRAWINGS SHALL BE APPROVED BY THE ENGINEER PRIOR TO SUBMISSION TO THE VILLAGE, THESE DOCUMENTS SHALL BE BOUND INTO A FOLDER WITH EITHER AN INDEX WITH # OF SHEETS FOR EACH ITEM OR PAGES IDENTIFIED THROUGHOUT.

ALL WATER PIPES AND FITTINGS, AND METHODS OF CONSTRUCTION AND WORKMANSHIP FOR WATER LINES AND APPURTENANCES SHOWN IN THESE PLANS SHOULD CONFORM TO THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS, DIVISION 800 AND APPLICABLE REFERENCES THEREIN, CURRENT ON THE DATE OF CONTRACT, UNLESS THE REQUIREMENTS OF SUCH RULES AND REGULATIONS ARE UPGRADED OR MODIFIED BY THE FOLLOWING NOTES OR BY THE CONSTRUCTION DETAILS SET FORTH HEREIN.

WORK REQUIRING THE SHUTDOWN OF EXISTING WATER MAINS IS TO BE COORDINATED. WITH THE VILLAGE OF ASHVILLE WATER DEPARTMENT FORTY-EIGHT (48) HOURS PRIOR TO THE SCHEDULED. WORK BEING PERFORMED. ALL EFFECTED CUSTOMERS SHALL BE NOTIFIED BY THE CONTRACTOR AT LEAST TWENTY-FOUR (24) HOURS PRIOR TO THE SHUT DOWN.

WATER MAINS SHALL BE DUCTILE IRON PIPE DESIGNED IN ACCORDANCE WITH THE LATEST REVISIONS OF A.N.S.I./A.W.W.A. C150/A21.50 FOR A MINIMUM 150 PSI (OR PROJECT REQUIREMENTS. WHICHEVER IS GREATER) RATED WORKING PRESSURE PLUS A 100 PSI MINIMUM SURGE ALLOWANCE; A 2 TO 1 FACTOR OR SAFETY ON THE SUM OF WORKING PRESSURE PLUS SURGE PRESSURE.

WATER MAINS SHALL BE DUCTILE IRON PIPE, CLASS 52 (AWWA C151) WITH CEMENT MORTAR LINING AND SEAL COATING (AWWAC104) IN ACCORDANCE WITH VILLAGE SPECIFICATIONS. JOINTS SHALL BE RUBBER GASKET PUSH-ON MECHANICAL (AWWA C111). WATER MAIN FITTINGS SHALL BE OF DUCTILE IRON WITH CEMENT MORTAR LINING AND SEAL COATING WITH MECHANICAL JOINTS AND SHALL CONFORM TO AWWA C153.

DUCTILE IRON PIPE SHALL BE MANUFACTURED IN THE U.S.A. IN ACCORDANCE WITH THE LATEST REVISION OF A.N.S.I. /A.W.W.A. C151/A21.51. EACH PIPE SHALL BE SUBJECT TO A HYDROSTATIC PRESSURE TEST OF AT LEAST 500 PSI AT THE POINT OF MANUFACTURED.

PIPE SHALL HAVE STANDARD ASPHALTIC COATING ON THE EXTERIOR PIPE SHALL ALSO HAVE A CEMENT MORTAR ON THE INTERIOR IN ACCORDANCE WITH A.N.S.I. /A.W.W.A.

C104/A21.4 OF THE LATEST REVISION.

THE CLASS OR NOMINAL THICKNESS, NET WEIGHT WITHOUT LINING, AND CASTING PERIOD SHALL BE CLEARLY MARKED ON EACH LENGTH OF PIPE. ADDITIONALLY, THE MANUFACTURE'S MARK, COUNTRY WHERE CAST, YEAR IN WHICH THE PIPE WAS PRODUCED,

AND LETTERS "DI" OR "DUCTILE" SHALL BE CAST OR STAMPED ON THE PIPE.

PVC PLASTIC PIPE, A.W.W.A. C900 DR 18 FOR SIZES 4" TO 12" AND A.W.W.A. C905 DR

18 FOR SIZES 14" AND ABOVE MAY BE USED ONLY WHEN APPROVED BY THE VILLAGE OF ASHVILLE.

ALL PIPING TWO (2") INCHES OR LESS IN DIAMETER BETWEEN THE WATER MAIN AND THE CONTROL VALVE OR THE METER PIT SHALL BE ADS POTABLE WATER SERVICE TUBING (CTS) CONFORMING IN ALL RESPECTS TO A.S.T.M. D2737, AWWA C901 AND NSF STANDARDS 41 AND 61. FITTINGS SHALL BE HIGH QUALITY COPPER BRASS WITH AAWA APPROVED COMPRESSION TYPE JOINTS. IN GENERAL, THERE WILL BE NO FITTINGS PERMITTED BETWEEN THE WATER MAIN CONNECTION AND THE CONTROL VALVE.

THE VILLAGE WILL ALLOW THE USE OF TYPE K, SOFT TEMPERED, COPPER TUBING CONFORMING IN ALL RESPECTS TO A.S.T.M. 888 ONLY WITH PRIOR WRITTEN APPROVAL.

DEAD END WATER LINES SHALL TERMINATE WITH A FIRE HYDRANT AND A WATCH VALVE OR TWO 3/4 INCH WATER SERVICE FOLLOWED BY SUFFICIENT LENGTH OF WATER LINE TO RESTRAIN THE VALVE AND SHALL BE FOLLOWED BY A MAIN LINE VALVE AND AN ADDITIONAL SECTION OF WATER LINED PLUGGED AND BLOCKED PER THE "STANDARD

WATERLINES SHALL BE INSTALLED WITH A MINIMUM OF FOUR (4) FEET OF COVER MEASURED FOR THE FINISHED GRADE TO THE TOP OF THE WATER MAIN.

ALL MAIN LINE VALVES, HYDRANT WATCH VALVES, CURB BOXES AND DEAD END LINES ARE TO BE MARKED WTIH A 4"X4"8'0" OR 10'-0" PRESSURE TREATED WOOD POST WITH 4'-0" PROJECTING ABOVE THE FINISH GRADE AND THE TOP 1'-0" POINTED BLUE ON ALL FOUR

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE HORIZONTAL AND VERTICAL DEFLECTIONS OR BENDS OF THE WATER LINES IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. DEFLECT WATER LINES TO PROVIDE 1'-6" VERTICAL AND 10'-0" HORIZONTAL CLEARANCE FROM SANITARY AND STORM SEWERS.

WML 23

IF THERE ARE ANY CONFLICTS IN GRADE BETWEEN WATER LINES AND GRAVITY SEWERS, THE WATER LINES SHALL BE LOWERED DURING CONSTRUCTION. CLEARANCES STATED MUST

A PERMIT FOR EACH WATER SERVICE MUST BE OBTAINED FROM THE VILLAGE OF ASHVILLE. PRIOR TO MAKING A CONNECTION TO THE WATER SERVICE INSTALLED AS PART OF THIS PROJECT AND PRIOR TO MAKING ANY ADDITIONAL TAPS INTO THESE WATER LINES.

THE WATER SERVICE TAPS SHALL CONSIST OF ALL PIPE, VALVES FITTINGS AND APPURTENANCES REQUIRED FROM AND INCLUDING THE WATER MAIN CONNECTION TO AND INCLUDING THE CONTROL VALVE AND BOX OR METER PIT.

THE CAPS AND INSIDE OF ALL MAINLINE WATER VALVE BOXES SHALL BE PAINTED BLUE. AND THE CAPS AND INSIDE OF ALL FIRE HYDRANT GATE VALVE BOXES SHALL BE POINTED RED WITH TWO COATS OF RUST INHIBITIVE PAINT. PUBLIC FIRE HYDRANTS ARE TO BE PAINTED WITH TWO COATS OF FEDERAL SAFETY RED, SHERWIN WILLIAMS B54Y37 PER VILLAGE OF ASHVILLE 1507.08(A)(1). PRIVATE FIRE HYDRANTS ARE TO BE PAINTED FEDERAL SAFETY RED AND WHITE CAPS AND BONNETS PER VILLAGE OF ASHVILLE 1507.14(B)(4). HYDRANTS PLACES IN A FACTORY LOOPED SYSTEM SHALL BE PAINTED ALL FEDERAL SAFETY RED. WML 27 TAPPING SLEEVES ARE TO BE FORD METER BOX STYLE FTSS ALL STAINLESS STEEL OR JCM 432 ALL STAINLESS STEEL.

ALL GATE VALVES SHALL BE DUCTILE IRON RESILIENT WEDGE, TWO HUNDRED AND FIFTY (250) POUNDS PER SQUARE INCH (PSI), AS MANUFACTURED BY AMERICAN FLOW CONTROL OR APPROVED EQUIVALENT WHICH MEETS OR EXCEEDS THE REQUIREMENTS OF ANSI /

VALVE BOXES ARE TO BE TYLER 6500 SCREW TYPE FOR MAIN AND WATCH VALVES WITH FORD F-1000 CORPORATION STOPS, AND TYLER 94E CURB BOXES. VALVE BOXES ARE TO BE HEAVY DUTY IF LOCATED IN PAVED AREAS. CONTROL VALVES SHALL BE FORD Z44-333

WATER MAIN CLEANING AND FLUSHING SHALL CONFORM TO ITEM 801.11 CMSC.

F-1000 CORPORATION STOPS. CONTROL VALVES SHALL BE FORD Z44-333 VALVES.

HYDROSTATIC TESTS (AS REQUIRED IN SECTION 5 OF A.W.W.A C600) SHALL CONFORM TO ITEM 801.12 CMSC. 33. CHLORINATING OF COMPLETED PIPE LINE SHALL CONFORM TO ITEM

FOR WATER SERVICE TAPS, WATER MAIN CONNECTION SHALL BE MADE USING FORD

WATER SERVICE BOXES ARE TO BE LOCATED IN PAIRS ALONG PROPERTY LINES. 8"-0" APART AND 2' - 0" OUTSIDE OF THE RIGHT-OF-WAY LINE, WHENEVER PRACTICAL.

ALL WATER LINES SHALL BE TESTED (AWWA 600) AND STERILIZED (AWWA C651) BY THE

CONTRACTOR IN ACCORDANCE WITH THE VILLAGE OF ASHVILLE AND AWWA SPECIFICATIONS.

TESTING SHALL BE DONE UNDER THE SUPERVISION OF THE VILLAGE ENGINEER OR HIS

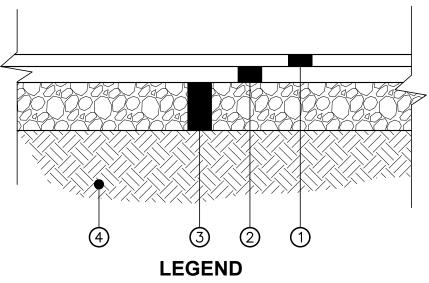
AUTHORIZED REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.

IT IS THE POLICY OF THE VILLAGE OF ASHVILLE THAT THE DESIGN OF THE WATER DISTRIBUTION SYSTEM IMPROVEMENTS BE SUCH THAT THE WORKING PRESSURE SHOULD NOT BE LESS THAN THIRTY-FIVE (35) POUNDS PER SQUARE INCH (PSI) DURING PEAK FLOW CONDITIONS, OR MINIMUM OF TWENTY (20) PSI DURING PEAK FLOW PLUS FIRE FLOW CONDITIONS. INDIVIDUAL BOOSTER PUMPS FOR THE PURPOSE OF RAISING SUPPLY LINE PRESSURE SHALL NOT BE PERMITTED FOR NON-SINGLE FAMILY RESIDENTIAL APPLICATION.

THE METER PIT FOR SINGLE-FAMILY RESIDENTIAL APPLICATION, INCLUDING ALL PIPING, FITTINGS, EQUIPMENT, AND APPURTENANCES ARE SUBJECT TO APPROVAL BY THE VILLAGE OF ASHVILLE PRIOR TO INSTALLATION. METER PITS UNABLE TO BE PROVIDED WITH A GRAVITY FLOOR DRAIN MUST BE INSTALLED IN A DEDICATED METER ROOM. GRAVITY DRAWS SHALL HAVE A BACKFLOW PREVENTION INSTALLED.

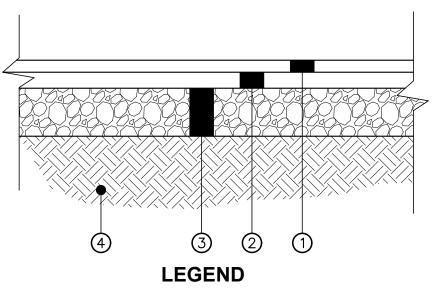
THE PRESSURE REQUIRED TO PERFORM HYDROSTATIC TESTING ON WATER LINES MUST BE 150 PSI FOR DOMESTIC LINES AND 200 PSI FOR FIRE SUPPRESSION LINES (PER NFPA 13). HYDROSTATIC TESTS (AS REQUIRED IN SECTION 5 OF AWWA C 600) SHALL CONFORM TO ITEM 801.12 CMSC.

CHLORINATION OF COMPLETED PIPELINE SHALL CONFORM TO ITEM 801.13 CMSC.GE OF ASHVILLE WATER DEPARTMENT FORTY-EIGHT.



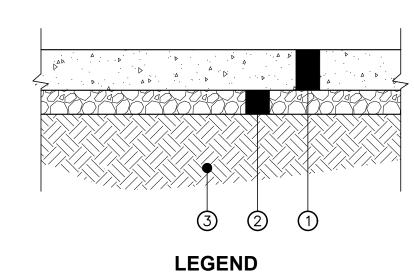
- (1) 1 1/2" of Asphalt Concrete, Item 448 Surface Course, Type I
- 2 1/2" of Asphalt Concrete, Item 448 Intermediate Course, Type 1
- 8" Aggregate Base, Item 304
- Compacted Subgrade, Item 204

### HEAVY DUTY ASPHALT PAVEMENT SECTION Not to Scale



- 1 1/2" of Asphalt Concrete, Item 448 Surface Course, Type I
- 1 1/2" of Asphalt Concrete, Item 448 Intermediate Course, Type 1
- 6" Aggregate Base, Item 304
- Compacted Subgrade, Item 204

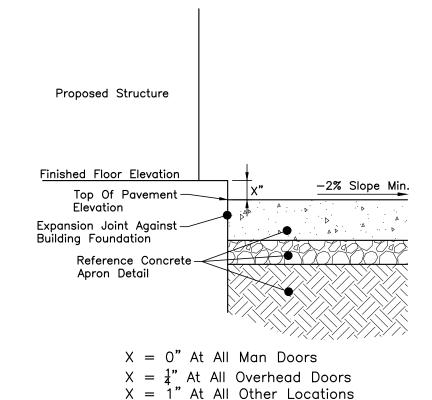
LIGHT DUTY ASPHALT PAVEMENT SECTION Not to Scale



- (1) 8" of Plain Portland Cement Concrete Pavement, Item 452
- (2) 4" of Aggregate Base, Item 304
- 3 Compacted Subgrade, Item 204

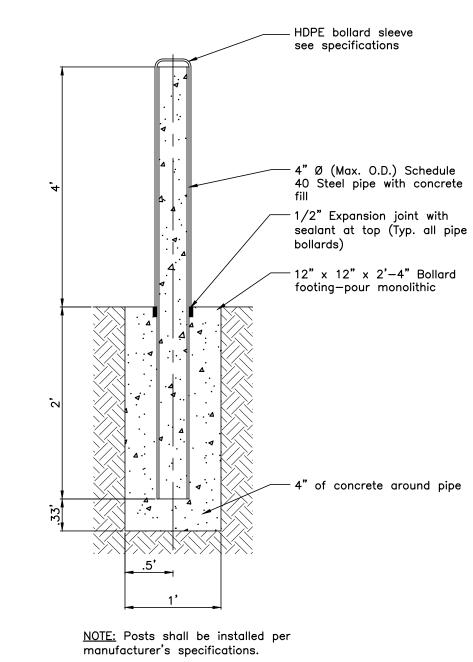
# DUMPSTER PAD/CONCRETE APRON SECTION

Not to Scale



## **CONCRETE APRON ELEVATION DETAIL**

Not to Scale



**BOLLARD DETAIL** 

Not to Scale

10440.A-HANDICAPPED PARKING ONLY MAXIMUM FINE \$500 Note #1characters on a light background. NOTE: Van accessible sign to be ACCESSIBLE installed on minimum oñe sign. HANDICAPPED PARKING ONLY ACCESSIBLE HANDICAP SIGN DETAIL

Of 3'-0". GENERAL NOTES 10440. A. 18"x12"x16 GA. Steel Handicap Sign B. 9"x12"x16 GA.

Steel Handicap Sign

Conc. To A Min. Depth

GENERAL NOTES

1. U-Type Flanged Steel

Sign Post. Set In

\*NOTE: The characters and background of signs shall be egg—shell, matte or other non glare finish. Characters and symbols shall be contrast with their background — either light characters on a dark background or dark

NOTE: SIGN MAY ALTERNATIVELY BE AFFIXED TO SIDE OF BUILDING.

Not To Scale

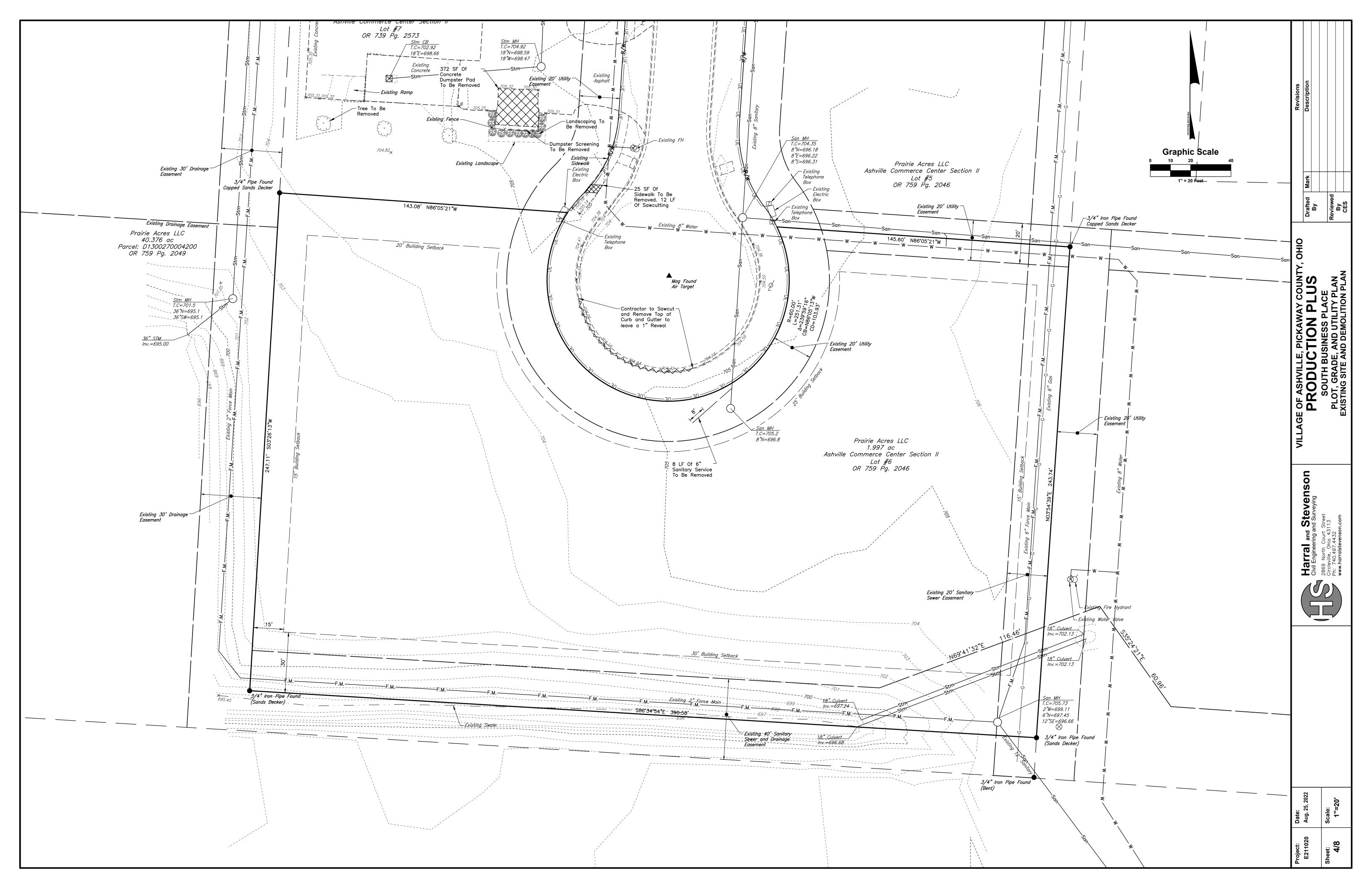
To Be Installed @ All H/C Spaces

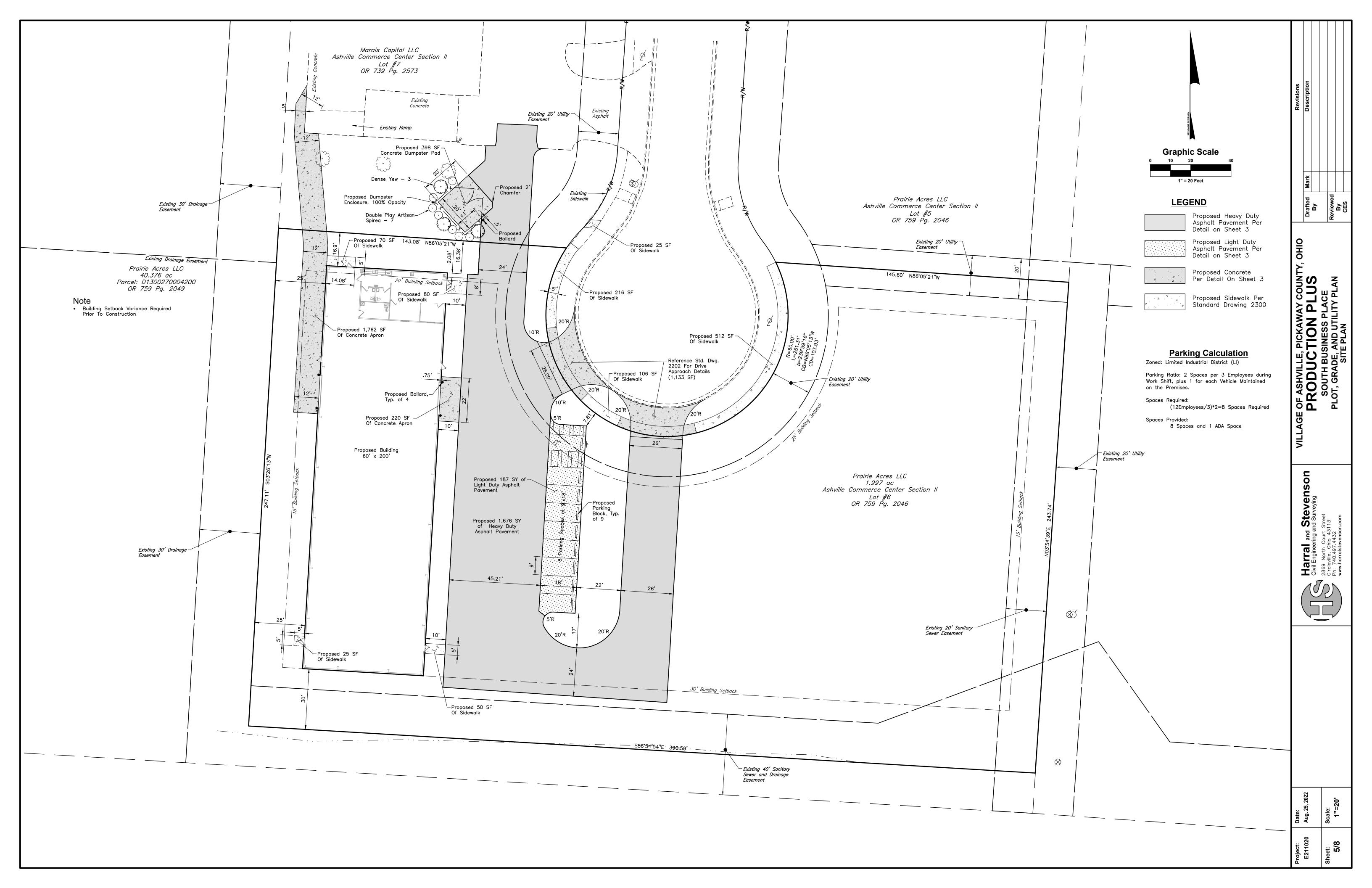
COUNTY CO WAY

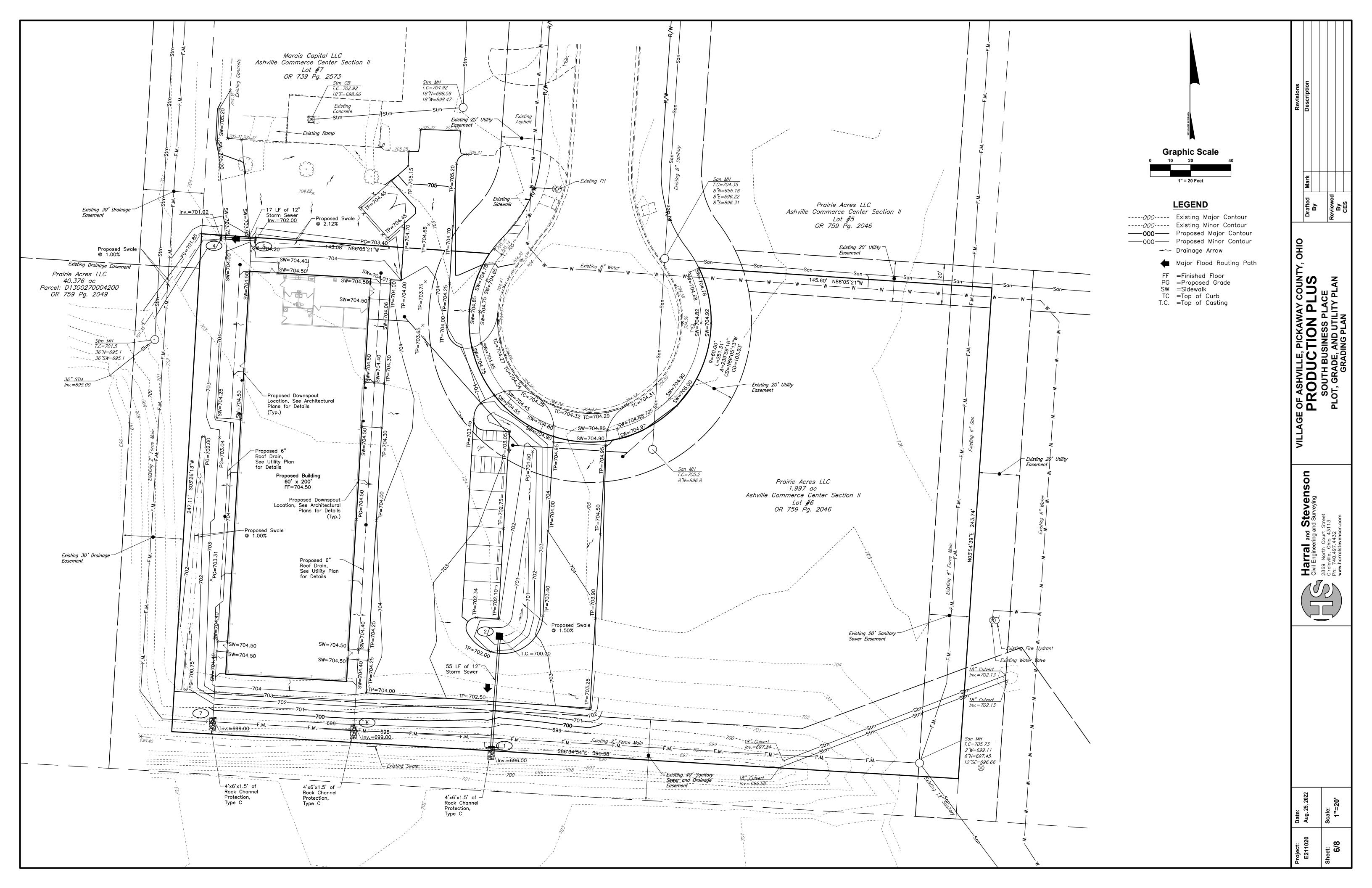
| PLACE
|

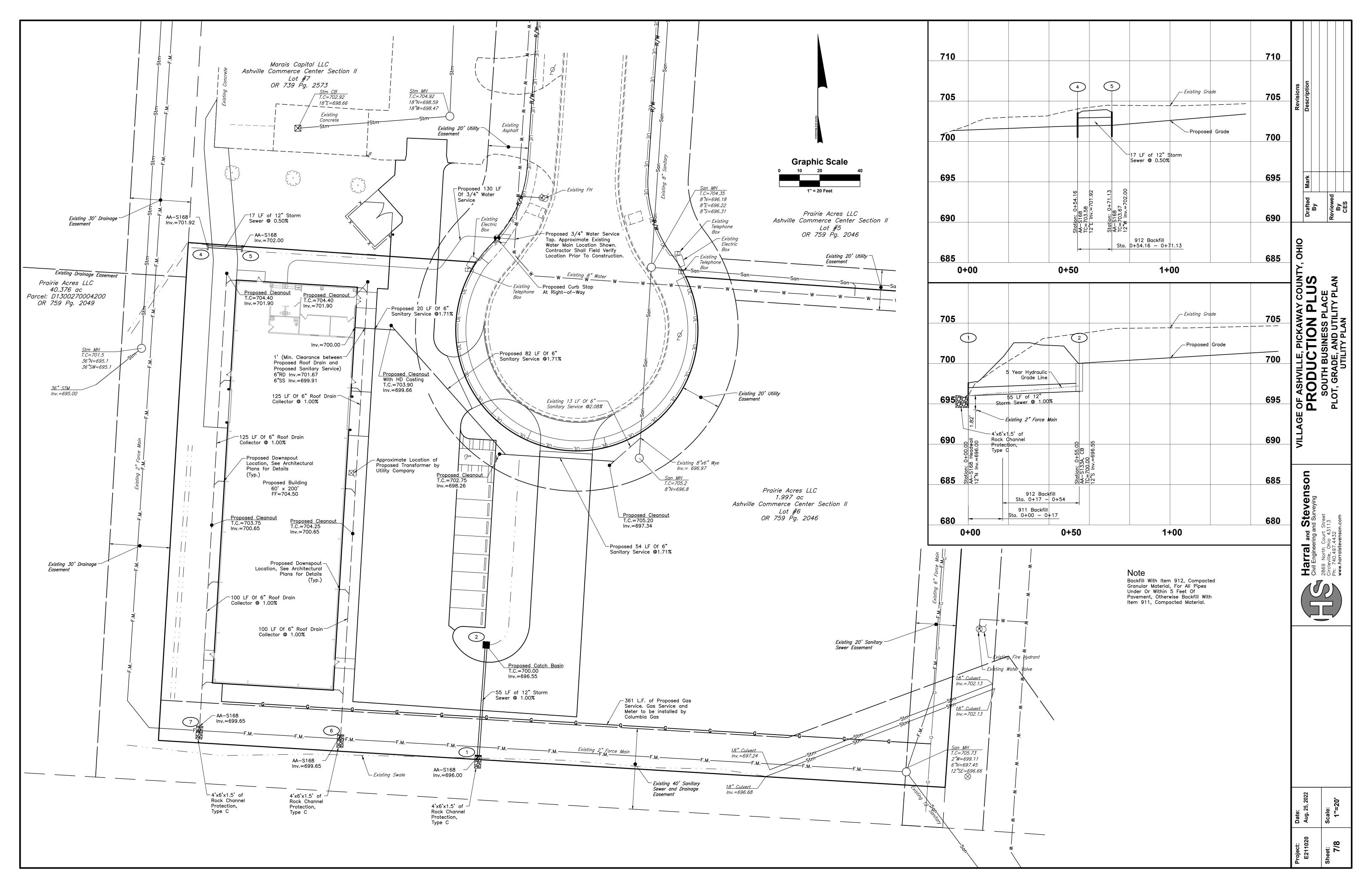
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TION
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AND UT PRODUCT SOUTH BUS PLOT, GRADE, A GENERAL NOT

> Store Survey J.S.









### **EROSION CONTROL**

<u>Narrative</u> Developer:

Production Plus Corp

Project: Ashville Commerce Center

Mud Run

Type: Private

Receiving Water:

Development of an undeveloped lot with a Description:

building and parking. Regional detention water quality treatment provided offsite.

Schedule: July 2022 to November 2022

Total Site Area: 1.997 acres

1.057 acres Disturbed Area:

Construction: Construction activity will consist of earthwork, paving, and utility installation

Erosion and sedimentation will be Erosion Control: controlled through a combination of inlet

protection, silt fence, and seeding and mulching in appropriate areas.

Ko 0-2% Slopes, CrA 0-2% Slopes, MkB 2-6%Existing Soils:

Existing Site: Vacant Field

NOI Permit: 4GC08584\*AG

Vegetative Practices Shall Be Initiated within 7 days for areas that have been disturbed that will remain dormant for 14 days or

Silt Fence To Be Placed In All Areas Indicated Prior To Commencement Of Work Where Applicable.

All Erosion And Sediment Control Measures Are To Be Inspected At Least Once Every 7 Days And Within 24 Hours After Any Storm event Greater Than 0.5 Inches Of Rain Per 24 Hour Period.

Upon Completion Of Construction The Entire Site Is To Be Permanently Seeded or Sodded per Alternate.

All Temporary Erosion And Sediment Control Measures Shall Be Maintained In Working Order Until Final Site Stabilization Is Obtained. After These Controls Are No Longer Needed. They Shall Be Disposed Of Within 30 Days. Trapped Sediment Shall Be Permanently Stabilized To Prevent Further Erosion.

This Storm Water Pollution Prevention Plan Is intended to Meet Or Exceed The Minimum Standards for Controlling Sources Or Pollutants On This Construction Site As Set Forth Under The Ohio EPA NPDES Permit No. 0H1C000004 Which Requires The Use Of Guidelines For Best Management Practices.

This Erosion Control plan has been prepared to offer a recommended Best Management Practice for The improvements to be made. It shall be the responsibility of the Contractor to prepare their own SWP3 plan prior to the commencement of work on the site and gain co-permit status with Ohio EPA under the general permit. No extra payment will be made to the contractor for any work in connection with any sedimentation and erosion control. Sediment Is To be Removed From Wheels Prior To Entrance Onto Public Right Of Way. When Washing Is Required, It Shall Be Done On An Area Stabilized With Crushed Stone Which Drains Into An Approved Sediment Trap. All Sediment Shall be Prevented From Entering Any Storm Drain, Ditch, or Watercourse Through Use Of Sand Bags, Gravel, Boards or Other Approved Methods. The Entrance Shall Be Maintained In A Condition Which Will Prevent Tracking Or Flowing Of Sediment Onto Public Right Of Way. This May Require Periodic Top Dressing With Stone As Conditions Demand And Repair And/Or Spilled Dropped, Washed Or Tracked Onto Public Right Of Way Must Be Removed Immediately.

All Storm sewer Inlets shall Be Protected So That Sediment-Laden Water Will Not Enter The Storm Sewer System Without First Being Filtered Or Otherwise Treated To Remove Sediment.

The contractor is responsible for controlling soil erosion, resulting

from his operations. It shall be the objective of the Contractor to

contain erosion siltation and sedimentation to the project site in—so—far as practical. The Engineer may require additional activities when and where the work as set forth herein is not sufficient to control the effects of erosion, siltation, and sedimentation on non— project site properties. Topsoil should be removed and stockpiled from all work areas prior to the commencement of construction of basin, swales, pavement or building pad. Topsoil from the stockpile shall be spread over the exposed areas and graded as required to prepare areas for permanent seeding, agricultural lime, fertilizing, and mulching. Seeding should be applied the same day that grading operations are complete. All constructed slopes and cuts shall be seeded as each vertical interval of no more than ten (10) feet is completed. The Contractor shall irrigate or water as necessary to establish a healthy, erosion resistant cover crop or grass stand. When grading operations shall cease for a period of ten (10) calendar days or more, temporary seeding shall be immediately applied. If an unexpected delay is encountered, seed immediately when recognized. If construction takes place from October 1 to February 28, all exposed areas are to be temporarily mulched until March 1 and then permanently seeded as previously specified. Mulching shall be applied at a rate of 100 pounds per 1000 square feet. It shall be anchored with liquid asphalt rapid curing (R.C. 70 250 or 800) at a rate of 0.04 gallons per square yard. When applied during freezing weather it shall be cut back with a kerosene-like product. In areas where runoff water is concentrated mulch nettings of jute,

biodegradable synthetic materials or is concentrated concentrated

mulch netting of jute, bio—degradable synthetic materials or light

weight paper shall be used to hold the mulch in place. Substitute anchoring methods may be used such as straight disk or notched

disk to tuck the straw into the seeded three (3) inches horizontal

to the slope.

This plan must be posted on—site. A copy of the SWPPP plan and the approved EPA Stormwater Permit (with the site-specific NOI number) shall be kept on—site at all times.

All erosion and sediment control practices are subject to field modification at the discretion of the City of Columbus and/or the Ohio EPA.

Street cleaning (on an as—needed basis) is required through the duration of this construction project. This includes sweeping, power cleaning and (if necessary) manual removal of dirt or mud in the street gutters.

#### IMPLEMENTATION SCHEDULE

-Install Temporary Sedimentation Control Devices

-Grade Site -Temporary Seeding and Mulching

-Construct Building -Install Utilities

-Install Parking Lot

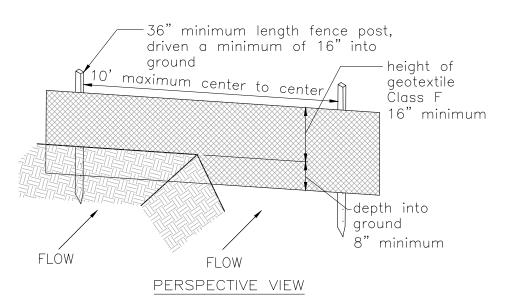
-Remove Temporary Sedimentation Control Devices

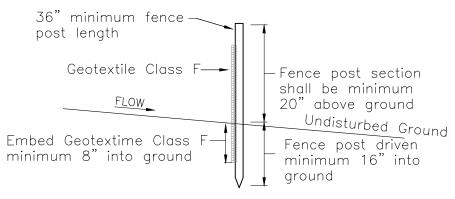
-Final Seeding and Mulching

TEMPORARY STABILIZATION						
AREA REQUIRING TEMPORARY STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS					
Any disturbed areas within 50 feet of a surface water of the State and not at final grade.	Within four days of the most recent disturbance if the area will remain idle for more than 21 days.					
For all construction activities, any disturbed areas that will be dormant for more than 21 days but less than one year, and not within 50 feet of a surface water of the State.	Within seven days of the most recent disturbance within the area.  For residential subdivisions, disturbed areas must be stabilized at least seven days prior to transfer of permit coverage for the individual lot(s).					
Disturbed areas that will be idle over winter.	Prior to the onset of winter weather.					

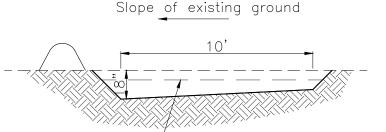
PERMANENT STABILIZATION						
AREA REQUIRING PERMANENT STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS					
Any areas that will lie dormant for one year or more.	Within seven days of the most recent disturbance.					
Any areas within 50 feet of a surface water of the State and at final grade.	Within two days of reaching final grade.					
Any other areas at final grade.	Within seven days of reaching final grade within that area.					

NOTE: Where vegetative stabilization techniques may cause structural instability or are otherwise unobtainable, alternative stabilization techniques must be employed. These techniques may include mulching or erosion matting.

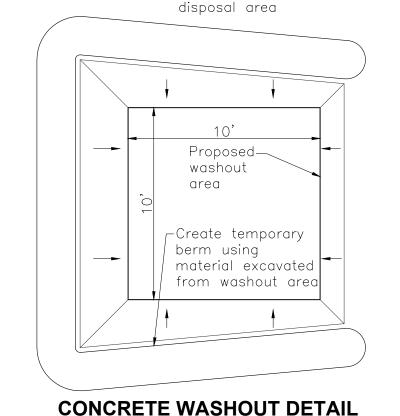




#### CROSS SECTION SILT FENCE DETAIL



If hardened concrete reaches a level 6" from the top of the pit it shall be removed and hauled to an acceptable



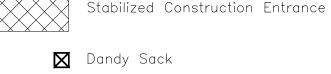
Not to Scale

# STORMWATER SUMMARY

-4'x6'x1.5' of

Protection,

Type C



4'x6'x1.5' of -

**LEGEND** 

— x — Silt Fence

Rock Channel

Protection,

Rock Ditch-

Rock Ditch-

Proposed 289 | Of Silt Fence

Check

Check

20' Builiding Setback

Proposed Building

60' x 200'

4'x6'x1.5' of -

Rock Channel

Protection,

roposed Dandy Sack

==EProposed 81 L

— Of Silt Fence

Concrete Washout

	Predev	reloped	Postdeveloped		
Year	Peak Rate (CFS)	Volume (C.F.)	Peak Rate (CFS)	Volume (C.F.)	
1	0.833	3,171	1.721	5,591	
2	1.417	4,909	2.476	7,891	
5	2.334	7,669	3.610	11,342	
10	3.153	10,162	4.580	14,333	
25	4.442	14,082	6.039	18,883	
50	5.543	17,437	7.239	22,679	
100	6.756	21,161	8.532	26,817	

Proposed Concrete

Washout

Construction Entrance

F Of Silt Fence

# <u>As Noted on Plan</u> Existing Roadway-

STONE SIZE - No. 2 (2-1/2) to 1-1/2 or its Equivalent

WIDTH — Not less than full width of all points of ingress or egress

LENGTH - As effective, but not less than 50 feet

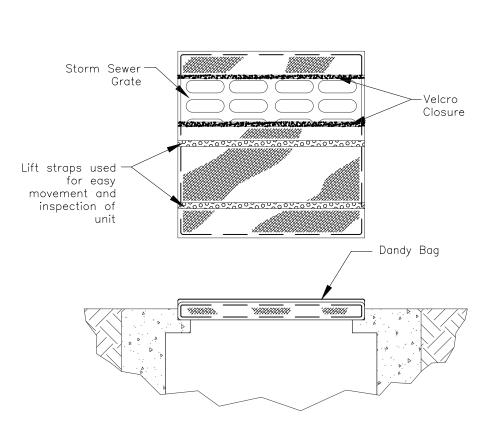
Existing Ground—

THICKNESS — Not less than eight (8) Inches

WASHING — When Necessary, wheels shall be cleaned to remove sediment prior to Entrance onto public Right—of—Way. When washing is required, it shall be done on an area stabilized with crushed stone which drains into an approved sediment trap. All sediment shall be prevented from entering any storm drain, ditch, or Watercourse through use of sand bags, gravel, boards or other approved methods.

MAINTENANCE — The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public Right—of—Way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public Right-of-Way must be removed immediately.

## STABILIZED CONSTRUCTION ENTRANCE



**CATCH BASIN PROTECTION DETAIL** Not to Scale

12" Layer of Washed -— Depth of Ditch, D 12" (Min.) Aggregate (Typ.) (Typ.) Y=D/2 or 2 - No. 4 to NO. 7 Stone (Typ.) Spacing, X - Nonwoven CHANNEL PROFILE └ No. 4 to NO. 7 Geotextile Stone (Typ.) 2' (Min.) Weir Key in Geotextile 6" -- Height to Weir Crest, Y Nonwoven -1. Place Nonwoven Geotextile, under the bottom and sides of the dam prior to placement of stone. Construct the check dam with washed 4 to 7 inch stone with side slopes of 2:1 or flatter and a minimum top width of 12 inches. Place the stone so that it completely covers the width of the channel and channel banks. Form the weir so that top of the outlet crest is approximately 6 inches lower than the outer edges.

2. Set the height for the weir crest equal to one—half the depth of the channel or ditch. To avoid scour the maximum height of the weir crest must not exceed 2.0 feet.

3. Remove accumulated sediment when it reaches one—half of the height of the weir crest. Maintain line, grade, and cross section.

**ROCK DITCH CHECK DETAIL** 

≱ 🗖

PRODI SOUTH

Stev nd Surve

**Graphic Scale** 

1" = 40 Feet

0 20 40