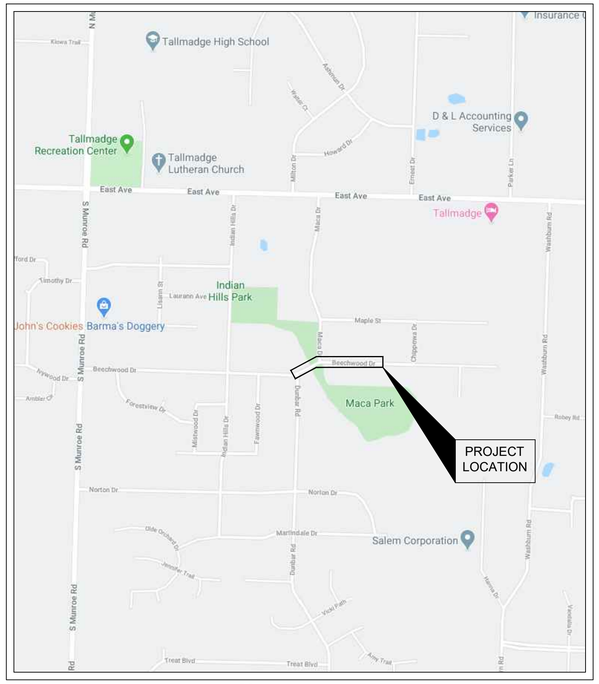
PLOTTED: 11/2/2020 3:04:30 PM

CITY OF TALLMADGE
BEECHWOOD DRIVE
WATERLINE LOOPING
SUMMIT COUNTY, OHIO

OCTOBER 2020

SHT #	SHEET TITLE
1	TITLE SHEET
2	SYMBOLS AND ABBREVIATIONS
3 - 4	GENERAL NOTES
5	GENERAL DETAILS
6	TRENCH DETAILS
7	SEDIMENT & EROSION CONTROL
8	BASE BID - PLAN & PROFILE
9	ADD ALTERNATE - PLAN & PROFILE



N

LOCATION MAP
NOT TO SCALE

CITY OF TALLMADGE OFFICIALS

DAVID G. KLINE	MAYOR
DONALD COOPER, PhD, MBA	DIRECTOR OF ADMINISTRATION
MOLLIE GILBRIDE	DIRECTOR OF FINANCE
MICHAEL RORAR	DIRECTOR OF PUBLIC SERVICE
MEGAN RABER	DIRECTOR OF LAW
DARRELL STINEMAN	SUPERINTENDENT UTILITIES DEPARTMENT
MIKE WEIGAND	SUPERINTENDENT STREET DEPARTMENT

COUNCIL

CRAIG SISAK	WARD 1
REBECCA ALLMAN	WARD 2
JONATHON BOLLAS	WARD 3
CAROL KILWAY	WARD 4 - PRESIDENT
MICHAEL CARANO	AT LARGE
DENNIS LOUGHRY	AT LARGE
JAMES M. DONOVAN	AT LARGE

APPROVALS:

David G. Kline — 10-21-2020
DAVID G. KLINE, MAYOR — DATE

Michael T. Rorar — 10-21-20
MICHAEL RORAR, DIRECTOR OF PUBLIC SERVICE — DATE

STATE OF OHIO · JEFFREY A. MARNICIO · E-71748 · REGISTERED PROFESSIONAL ENGINEER

JEFFREY A. MARNICIO, PE.
BURGESS & NIPLE, INC.
OHIO P.E. No. E-71748
10/20/2020
DATE

OHIO811.org Before You Dig

B&N burgessniple.com
50 SOUTH MAIN STREET,
SUITE 600
AKRON, OHIO 44308

CITY OF TALLMADGE
BEECHWOOD DRIVE
WATERLINE LOOPING
SUMMIT COUNTY, OH

NO:	DESCRIPTION	DATE
	REVISIONS	

JOB NO: PR58719
DATE: OCT 2020
DESIGNED BY: GCB
DRAWN BY: GCB
CHECKED BY: JAM
APPROVED BY: JAM
SCALE: NONE

TITLE

1

SHEET: 1 OF 9

P:\PR58719\Cadd\Sheets\1 TITLE.dwg 10/22/2020 1:25:45 PM Jeff Marnicio

ABBREVIATIONS

AGG.	AGGREGATE
APPROX.	APPROXIMATE
ASPH.	ASPHALT
℄ OR B/L	BASE LINE
BM	BENCH MARK
BIT.	BITUMINOUS
BLK.	BLOCK
BLKG.	BLOCKING
BLDG	BUILDING
CI	CAST IRON
C.I.P.CONC.	CAST-IN-PLACE CONCRETE
CB	CATCH BASIN
CEM.	CEMENT
C/L	CENTERLINE
C-C OR C/C	CENTER TO CENTER
CLD	CENTERLINE DITCH
CONC.	CONCRETE
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CONN.	CONNECTION
CONST.	CONSTRUCTION
CONT.	CONTINUOUS
CFM	CUBIC FEET PER MINUTE
CF	CUBIC FOOT
CY	CUBIC YARD
CTS	COPPER TUBING SIZE
DET.	DETAIL
DIA.	DIAMETER
DIM.	DIMENSION
D.T.	DRAIN TILE
DWG.	DRAWING
DR.	DRIVE OR DIMENSION RATIO
DI	DUCTILE IRON
DIP	DUCTILE IRON PIPE
E	EAST OR ELECTRIC OR EASTING
EA	EACH
EASE	EASEMENT
ELEC.	ELECTRIC(AL)
EL. OR ELEV.	ELEVATION
EOC	EDGE OF CURB
EOP	EDGE OF PAVEMENT
EQPT.	EQUIPMENT
EX. OR EXIST	EXISTING
EXT.	EXTERIOR
FO	FIBER OPTIC
FT	FEET OR FOOT
FH	FIRE HYDRANT
FPVC	FUSIBLE POLYVINYL CHLORIDE
GAL	GALLON
GPM	GALLONS PER MINUTE
GPH	GALLONS PER HOUR
G	GAS
GT	GAS TEST
GEN	GENERAL
GR OR GRAV	GRAVEL
HDD	HORIZONTAL DIRECTIONAL DRILL
HT.	HEIGHT
HDPE	HIGH DENSITY POLYETHYLENE
HOR.	HORIZONTAL
HP	HORSEPOWER OR HIGH POINT
HPPP	HIGH PRESSURE PETROLEUM PRODUCTS PIPELINE
HSE	HOUSE
I.D.	INSIDE DIAMETER
INSUL.	INSULATE
INT.	INTERIOR
INV.	INVERT
IP	IRON PIN
IPS	IRON PIN SET
IPF	IRON PIN FOUND
LB	POUND
LF	LINEAL FEET

MH	MANHOLE
MFR.	MANUFACTURE(ER)
MTL.	MATERIAL(S)
MAX.	MAXIMUM
MECH.	MECHANIC(AL)
MJ	MECHANICAL JOINT
MGD	MILLION GALLONS PER DAY
MIN.	MINIMUM
MISC.	MISCELLANEOUS
N	NORTH OR NORTHING
NE	NORTHEAST
N.T.S.	NOT TO SCALE
NW	NORTHWEST
O.D.	OUTSIDE DIAMETER
PNT.	PAINT(ED)
PVMT.	PAVEMENT
PED	PEDESTAL
PKF	PK NAIL FOUND
PKS	PK NAIL SET
PT.	TANGENT POINT
PE	POLYETHYLENE OR PLAIN END
PVC	POLYVINYL CHLORIDE
PVCO	POLYVINYL CHLORIDE MOLECULARLY ORIENTED
PCF	POUNDS PER CUBIC FOOT
PLF	POUNDS PER LINEAL FOOT
PROP.	PROPOSED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
P/L OR ℙ	PROPERTY LINE
RCP	REINFORCED CONCRETE PIPE
REQ'D	REQUIRED
R/W	RIGHT OF WAY
S	SOUTH
SAN	SANITARY SEWER
SE	SOUTHEAST
SHT.	SHEET
SPEC.	SPECIFICATION(S)
SWLK	SIDEWALK
SQ.	SQUARE
SF	SQUARE FEET
SY	SQUARE YARD
S. STL.	STAINLESS STEEL
STD.	STANDARD
STA.	STATION
S.D.	STORM DRAIN
STS	STORM SEWER
SW	SOUTHWEST
TEL.	TELEPHONE
TEMP	TEMPORARY
THK.	THICK(NESS)
TOC.	TOP OF CASTING
TYP.	TYPICAL
UGT	UNDERGROUND TELEPHONE
UGE	UNDERGROUND ELECTRIC
U.N.O.	UNLESS NOTED OTHERWISE
VIT. OR VCP	VITRIFIED CLAY PIPE
W	WEST
WG	WATER GAGE
WH	WATER HEATER OR WALL HYDRANT
WTR	WATER
W/L	WATERLINE
WM	WATER MAIN
W/S	WHITE STRIPE
W/	WITH
W/O	WITHOUT
YH	YARD HYDRANT

SYMBOLS

- EXISTING FENCE
- RIGHT–OF–WAY
- PROPERTY LINE, PROPERTY PIN
- EXISTING UNDERGROUND TELECOMMUNICATIONS
- EXISTING UNDERGROUND ELECTRIC
- OVERHEAD ELECTRIC
- GUARDRAIL
- EXISTING GAS LINE, GAS METER, GAS SERVICE VALVE
- EXISTING STORM SEWER, CATCH BASIN, MANHOLE
- EXISTING LARGE DIAMETER STORM SEWER CROSSING
- EXISTING SANITARY SEWER AND SANITARY MANHOLE
- EXISTING WATERLINE, FIRE HYDRANT, SERVICE WITH SERVICE VALVE, LINE VALVE AND WATER MANHOLE.
- NEW WATERLINE, PLUG (CUT AND CAP), FIRE HYDRANT, LINE VALVE AND WATER SERVICE

- EXISTING CONTOUR
- GAS MARKER
- WATER MARKER, WATER METER
- ELEC. PULL BOX, ELEC. PED. BOX
- LAMP POST, GROUND LIGHT
- GUY WIRE, CABLE POLE
- POWER POLE
- IRON PIN FOUND, BENCH MARK
- MAILBOX, SIGN
- TREE, BUSHES
- TELECOMMUNICATIONS PEDESTAL
- MAIL BOX
- YARD DRAIN

50 SOUTH MAIN STREET,
SUITE 600
AKRON, OHIO 44308
B&N
burgessniple.com

CITY OF TALLMADGE
BEECHWOOD DRIVE
WATERLINE LOOPING
SUMMIT COUNTY, OH

NO:	DESCRIPTION REVISIONS	DATE

JOB NO:	PR58719
DATE:	OCT 2020
DESIGNED BY:	GCB
DRAWN BY:	GCB
CHECKED BY:	JAM
APPROVED BY:	JAM
SCALE:	NONE

SYMBOLS AND ABBREVIATIONS

2

SHEET: 2 OF 9

GENERAL NOTES AND UTILITIES

1. ALL WORK MUST CONFORM TO THE REQUIREMENTS AND DIRECTIONS THE CITY OF TALLMADGE. THE CONTRACTOR MUST CONFORM TO ALL FEDERAL, STATE AND LOCAL REQUIREMENTS, LAWS, RESOLUTIONS OR ORDINANCES RELATING TO PERMITS, SAFETY, INSURANCE WORK CONDITIONS, WORKMEN'S COMPENSATION, PATENTS, TAXES, USE OF HIGHWAYS OR STREETS AND SHALL SAVE HARMLESS FROM DAMAGES, LIABILITY OR CLAIMS THE CITY OF TALLMADGE.

2. THE TERM "CONTRACTOR" AS USED IN THESE GENERAL NOTES, SHALL REFER TO THE CONTRACTOR OF CONTRACT, AS APPROPRIATE.

3. THE LOCATION OF KNOWN EXISTING UNDERGROUND UTILITIES ARE SHOWN ON THE PLAN SHEETS AND ARE BELIEVED TO BE ESSENTIALLY CORRECT. THE LOCATIONS WERE OBTAINED FROM THE OWNERS OF THE UTILITIES AS REQUIRED BY SECTION 153.64 O.R.C. NO GUARANTEE IS MADE RELATIVE TO THE COMPLETENESS OR ACCURACY AND THE CONTRACTOR IS REQUIRED TO CONTACT THE REGISTERED UTILITY PROTECTION SERVICE AND THE OWNERS OF EACH UNDERGROUND UTILITY FACILITY SHOWN ON THE PLANS AT LEAST THREE (3) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION IN ANY AREA.

4. ALL EXISTING UTILITIES, SERVICES, POLES, AND CONNECTIONS SHALL BE PROTECTED AND SUPPORTED AT THE CONTRACTOR'S EXPENSE. IF DAMAGE IS CAUSED BY CONSTRUCTION TO ANY EXISTING UTILITY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR RESTORATION OF SAME AT HIS EXPENSE, IN ACCORDANCE WITH THE DIRECTIONS OF THE ENGINEERS AND FOR ANY RESULTING CONTINGENT DAMAGES. EXISTING UTILITIES INCLUDE, BUT ARE NOT LIMITED TO WATERLINES, STORM SEWERS, SANITARY SEWERS, GAS, OIL, ELECTRICAL, TELEPHONE, FIBER OPTIC CABLE, TELEVISION CABLE, AND INDIVIDUAL SERVICE CONNECTIONS AND LATERALS.

5. BEFORE BEGINNING WORK, THE CONTRACTOR SHALL FIELD VERIFY AND EXPOSE ALL UTILITIES, AND STRUCTURES PRIOR TO CONSTRUCTION TO VERIFY THE VERTICAL AND HORIZONTAL LOCATIONS, DIMENSIONS, SIZE, MATERIAL, AND CLEARANCES OF THE UTILITY, AND STRUCTURE AND ITS IMPACT ON THE NEW CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE UTILITY OWNER.

6. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL WORK NECESSARY FOR THE SUPPORT/RESTRAINT/SECURING/RELOCATION/PROTECTION/REMOVAL/RESETTING/REPAIR OF EXISTING UTILITY POLES, WHETHER PERFORMED BY THE CONTRACTOR OR THE UTILITY OWNER, THE COST OF WHICH SHALL BE THE CONTRACTORS RESPONSIBILITY. THIS COST SHALL BE INCLUDED IN THE BID PRICES FOR WATER MAIN ITEMS. FOR WORK PERFORMED BY THE CONTRACTOR, THE UTILITY OWNER MUST BE INFORMED BY THE CONTRACTOR OF THE PROPOSED METHODS VIA DETAILED SUBMITTAL BEFOREHAND TO VERIFY AND APPROVE THE ADEQUACY OF SAID METHODS. OSHA PROHIBITS CRANE AND BACKHOE OPERATIONS WITHIN 10 FEET OF ENERGIZED PRIMARY CONDUCTORS. TEMPORARY RELOCATION OF ELECTRICAL UTILITIES, INCLUDING RESTRAINT OF POLES, RELOCATION OF POLES, AND RUBBER COVERING OF ENERGIZED CONDUCTORS MAY BE REQUIRED.

7. ANY EXISTING PROPERTY PINS OR MONUMENTS DAMAGED OR DESTROYED BY CONSTRUCTION SHALL BE RESET BY THE CONTRACTOR AT THE CONTRACTORS EXPENSE UPON COMPLETION OF THE PROJECT AND PRIOR TO FINAL PAYMENT. A CERTIFICATION SHALL BE FURNISHED BY A REGISTERED SURVEYOR, STATING THAT SAID PINS AND MONUMENTS HAVE BEEN RESTORED.

8. THE CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF ALL CONSTRUCTION DEBRIS INCLUDING BUT NOT LIMITED TO EXCESS SOIL, BEDDING, BACKFILL, BASE, PAVEMENT, DIRECTIONAL DRILL CUTTINGS AND SLURRY, ROCK, AND ANY OTHER TYPE MATERIALS. THE CONTRACTOR SHALL NOT FILL ANY WETLANDS, LOW LANDS, FLOOD PLAINS, OR DRAINAGE WAYS WITH SAID DEBRIS WITHOUT OBTAINING PROPER APPROVALS, PERMITS, LICENSES, ETC. FROM LOCAL, STATE, OR FEDERAL AGENCIES.

9. CONTRACTOR SHALL PROVIDE ONE MARK-UP SET OF AS-BUILT DRAWINGS TO THE OWNER AT THE COMPLETION OF THE PROJECT, THE MARK-UP SET MUST BE NEAT AND LEGIBLE AND MUST DOCUMENT ALL DEVIATIONS FROM THE ORIGINAL CONTRACT DOCUMENTS.

10. THE SCALE SHOWN ON THE DRAWINGS IS FOR FULL SIZE SHEETS (22"x34"). UNLESS OTHERWISE NOTED.

11. THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES AT LEAST THREE (3) WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS, PRIOR TO WATER MAIN CONSTRUCTION TO HAVE UTILITIES STAKED, MARKED OR OTHERWISE DESIGNATED IN THE CONSTRUCTION AREA IN SUCH A MANNER AS TO INDICATE THEIR COURSE TOGETHER WITH THE APPROXIMATE DEPTH AT WHICH THEY WERE INSTALLED. THE MARKING OR LOCATING SHALL BE COORDINATED BY THE CONTRACTOR TO STAY APPROXIMATELY TWO DAYS AHEAD OF THE PLANNED CONSTRUCTION. A PARTIAL LIST OF UTILITIES THAT MAY HAVE LINES OR STRUCTURES IN THE AREA ARE:

OHIO 811	800-362-2764
DOMINION EAST OHIO (ATTN: BRYAN D. DAYTON)	330-664-2409
OHIO EDISON (ATTN: MICHAEL JANSON)	330-830-7092
SPECTRUM CABLE	330-800-1192
AT&T (ATTN: VERN LUNTSFORD)	330-384-8057
TALLMADGE WATER & SEWER (ATTN: DARRELL STINEMAN)	330-633-0851
TALLMADGE SERVICE DEPARTMENT (ATTN: MIKE ROAR)	330-633-0854
TALLMADGE STREET DEPARTMENT (ATTN: MIKE WEIGAND)	330-633-5130

12. INDIVIDUAL STORM, SANITARY, GAS, WATER, ELECTRIC, TELEPHONE AND CABLE SERVICE CONNECTIONS MAY NOT BE SHOWN. THE CONTRACTOR SHALL LOCATE AND PROTECT SERVICE CONNECTIONS THROUGH THE COURSE OF THE WORK. IN THE EVENT SERVICE CONNECTIONS ARE BROKEN OR DISTURBED, THE CONTRACTOR SHALL REPAIR OR REPLACE THE SERVICE CONNECTIONS TO THE SATISFACTION THE CITY OF TALLMADGE AND THE UTILITY AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHOULD EXPECT EACH RESIDENCE/BUSINESS PROPERTY ALONG THE ROUTE TO HAVE AT LEAST ONE SERVICE CONNECTION FOR EACH UTILITY.

13. ACCESS TO ALL ADJOINING PROPERTIES SHALL BE MAINTAINED AT ALL TIMES, INCLUDING ACCESS FOR RESIDENCES, BUSINESSES, MAIL SERVICE, SCHOOL, GARBAGE, DELIVERY, POLICE, FIRE, AND EMERGENCY VEHICLES.

14. RIGHT-OF-WAYS AND PROPERTY LINES WERE PLACED USING SUMMIT COUNTY GIS INFORMATION AND DO NOT REPRESENT A BOUNDARY SURVEY.

15. THROUGHOUT THESE DRAWINGS AND THE SPECIFICATIONS, REFERENCES MADE TO THE "OWNER", "COUNTY ENGINEER", OR "ENGINEER" SHALL BE INTERPRETED AS THE CITY OF TALLMADGE OR THEIR AUTHORIZED REPRESENTATIVE.

16. THE CONTRACTOR SHALL REMOVE AND REINSTALL CULVERT AND/OR DRAINAGE PIPES AS IS NECESSARY TO FACILITATE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS. PROPER DRAINAGE MUST BE MAINTAINED AT ALL TIMES. ANY CULVERT OR DRAINAGE PIPE DAMAGED OR BROKEN DURING CONSTRUCTION BY THE CONTRACTOR SHALL BE REPLACED, COMPLETE IN LENGTH AND KIND BY THE CONTRACTOR.

17. THE STAGING AND STORAGE OF CONSTRUCTION MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AS APPROVED BY THE OWNER. MATERIAL STORAGE MUST BE KEPT NEAT AND WELL MAINTAINED AS DIRECTED BY THE ENGINEER. THE MATERIAL STORAGE AREA SHALL BE RESTORED, AT A MINIMUM, TO THE SAME CONDITION AS EXISTED PRIOR TO CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING ALL COSTS FOR A CONSTRUCTION STAGING AREA. THE COUNTY DOES NOT OWN ANY PROPERTY ALONG THE PROJECT FOR USE AS A STAGING AREA.

18. CONTRACTOR SHALL NOT BE PERMITTED TO STORE MATERIALS, EQUIPMENT, OR VEHICLES ON PROPERTY WITHOUT FIRST ASKING FOR AND THEN RECEIVING PERMISSION FROM THE PROPERTY OWNER.

19. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FROM THE CITY OF TALLMADGE PRIOR TO THE START OF CONSTRUCTION. ANY RELATED FEES SHALL BE RESPONSIBILITY OF CONTRACTOR.

20. CONTRACTOR SHALL NOTIFY THE CITY OF TALLMADGE, RESIDENCES, AND BUSINESSES AT LEAST 48-HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY AND SUBMIT A LIST OF ALL SUBCONTRACTORS.

21. ANY DIGGING WITHIN THE RIGHT-OF-WAY AT ANY STREET REQUIRES A ROAD OPENING PERMIT. PLEASE CONTACT THE APPROPRIATE LOCAL GOVERNMENT ENTITY FOR INFORMATION REGARDING THE PERMITTING PROCESS AND/OR FEES DUE.

22. PRIOR TO CONSTRUCTION, AUDIO-VIDEO COLOR PRE-CONSTRUCTION VIDEO SHALL BE COMPLETED AND SUBMITTED FOR REVIEW ALONG ALL ROADS WHERE WORK WILL BE PERFORMED. A DUPLICATE COPY OF ALL MEDIA SHALL BE SUBMITTED TO THE CITY. SEE SPECIFICATION SECTION 01 32 34.

23. NO BLASTING WILL BE PERMITTED.

24. CONTRACTOR SHALL KEEP ALL WORK WITHIN RIGHT-OF-WAYS, AND CONSTRUCTION STAGING/STORAGE AREAS FOR WHICH THE CONTRACTOR HAS OBTAINED PERMISSION FROM THE PROPERTY OWNER.

25. CONTRACTOR SHALL MAINTAIN ACCESS AND SAFETY IN DRIVES AND PARKING LOTS FOR RESIDENTS, EMPLOYEES, VENDORS, CUSTOMERS, MOTORISTS, AND PEDESTRIANS OF PROPERTY OWNERS AND BUSINESSES.

26. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH INDIVIDUAL PROPERTY OWNERS TO DETERMINE COURSE OF ACTION (REMOVE/DISPOSE/REPLACE NEW IN KIND/RELOCATE/RETURN TO ORIGINAL LOCATION/REPLANT/ETC.) FOR ADDRESSING LANDSCAPING AND YARD RELATED ITEMS, INCLUDING BUT NOT LIMITED TO: SHRUBS; BUSHES; HEDGES; ORNAMENTAL TREES; FLOWERS; MULCH; FENCING; RAILROAD TIES; MAILBOXES; LIGHT POSTS; SPRINKLERS/IRRIGATION; ORNAMENTAL/DECORATIVE ITEMS. THE COST FOR THIS WORK SHALL BE INCLUDED IN THE LINEAL FOOT BID PRICE FOR WATER MAIN.

WATER OUTAGES

1. THE CONTRACTOR SHALL SUPPLY A TEMPORARY SAFE WATER SERVICE TO ANY CUSTOMER THAT WILL HAVE AN INTERRUPTION OF SERVICE DUE TO THIS PROJECT. CONTRACTOR MUST NOTIFY ANY PARTIES OR RESIDENTS 24 HOURS IN ADVANCE OF AN ANTICIPATED INTERRUPTION DUE TO CONSTRUCTION.

2. A MINIMUM OF 35 PSI PRESSURE SHALL BE MAINTAINED TO THE CURB STOP DURING NORMAL OPERATING CONDITIONS

3. THE CITY OF TALLMAKDGE WATER DEPARTMENT WILL OPERATE ALL VALVES AND DETERMINE THE DATE AND TIME OF ANY WATER TURN OFFS.

TESTING

1. PRIOR TO ACCEPTANCE, WATERLINE SHALL BE PRESSURE TESTED (AWWA C-600, C-605) AND DISINFECTED (AWWA C-651). NO TAPS SHALL BE MADE UNTIL ACCEPTANCE BY THE CITY OF TALLMADGE WATER DEPARTMENT. WATER SAMPLES FOR BACTERIOLOGICAL TEST SHALL BE TAKEN BY THE CITY OF TALLMADGE WATER DEPARTMENT. THE CONTRACTOR WILL BE CHARGED FOR TESTING COSTS AFTER TWO FAILED SETS OF TESTS.

EXCAVATION

1. THE CONTRACTOR SHALL EXCAVATE TO A WIDTH AND DEPTH SUFFICIENT TO ACCOMMODATE THE PIPE LAYING. THE EXCAVATION SHALL BE ADEQUATELY BRACED AND SUPPORTED TO PROTECT WORKMEN AND ADJACENT STRUCTURES AND PAVEMENTS. TRENCH BOXES SHALL BE UTILIZED. BACKFILL SHALL BE MADE AS SHOWN OR DIRECTED. MAXIMUM PERMISSIBLE TRENCH WIDTHS SHALL BE AS FOLLOWS:

   - 6" - 24" = NOMINAL PIPE DIAMETER + 2'-0"
   - 27" - 30" = NOMINAL PIPE DIAMETER + 2'-6"
   - 36" AND OVER = NOMINAL PIPE DIAMETER + 3'-0"

BACKFILL

1. COMPACTED TRENCH GRANULAR BACKFILL (ODOT ITEM 304) SHALL BE USED UNDER ANY EXISTING OR FUTURE SIDEWALK OR DRIVEWAY; UNDER ALL ROADWAYS; IN ANY EXCAVATION THAT LIES WITHIN THE 1:1 INFLUENCE LINE FROM ANY EXISTING EDGE OF SIDEWALKS, DRIVEWAYS, OR ROADWAYS; AND AS DIRECTED BY THE ENGINEER ACCORDING TO SPECIFICATION SECTION 31 23 00. ALL OTHER BACKFILL SHALL CONFORM WITH SPECIFICATION SECTION 33 05 30 AND OTHER DETAILS ON THESE PLANS.

2. WHERE WATER MAINS CROSS SEWER TRENCHES. THE TRENCH IS TO BE BACKFILLED WITH APPROVED GRANULAR MATERIAL.

OPEN TRENCHES

1. NO OPEN TRENCHES WILL BE PERMITTED OVERNIGHT. FENCES MAY BE REQUIRED AT THE DISCRETION OF THE ENGINEER TO PROTECT PEDESTRIAN TRAFFIC.

TESTING AND STERILIZATION

1. ALL WATER MAINS SHALL BE SUBJECT TO BOTH HYDROSTATIC AND A BACTERIOLOGICAL TEST. THE BACTERIAL TEST SHALL BE TAKEN BY A REPRESENTATIVE OF THE CITY OF TALLMADGE. HYDROSTATIC TESTING SHALL BE DONE IN THE PRESENCE OF A REPRESENTATIVE OF THE CITY OF TALLMADGE AND SHALL COMPLY WITH AWWA C600.

2. STERILIZATION SHALL COMPLY WITH AWWA C651-68.

WATER MAIN INSTALLATION

1. THE SYSTEM SHALL BE DESIGNED TO MAINTAIN A MINIMUM PRESSURE OF 20 PSI (140 kPA) AT GROUND LEVEL AT ALL POINT IN THE DISTRIBUTION SYSTEM UNDER ALL CONDITIONS OF FLOW.

2. BOOSTER PUMPS SHALL NOT BE ALLOWED FOR ANY SERVICE CONNECTIONS FROM THE PUBLIC SUPPLY MAIN.

3. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND ELEVATION OF THE WATER LINE AT ALL PROPOSED SEWER AND UTILITY CROSSINGS PRIOR TO ANY WATER LINE CONSTRUCTION, AND IS RESPONSIBLE FOR CONTACTING OUPS UTILITY PROTECTION SERVICES PRIOR TO ANY EXCAVATION OR SURVEYING.

4. CONTRACTOR SHALL ESTABLISH AND STAKE OUT THE WATER MAIN ALIGNMENT FOR CONSTRUCTION FROM THE HORIZONTAL CONTROL AS NOTED ON THE PLANS WATER MAINS AND SERVICES SHALL BE LAID WITH PIPE AXIS FIVE FEET BELOW TOP OF CURB OR FINISHED GRADE, UNLESS SPECIFIED OTHERWISE ON THE PLANS. PIPES SHALL BE LAID DIRECTLY ON THE TRENCH BOTTOM AFTER IT HAS BEEN GRADED AND TAMPED TO SUPPORT THE PIPE ALONG ITS ENTIRE LENGTH.

5. RESTRAINED JOINTS, CREATED BY THE USE OF RESTRAINING GASKETS MAY BE REQUIRED AS FIELD CONDITIONS DICTATE AS DIRECTED BY THE ENGINEER.

6. IN ADDITION TO THRUST BLOCKING, RESTRAINED JOINT SHALL BE USED AT ALL FITTINGS OR CHANGES IN PIPE ALIGNMENT EQUAL OR GREATER THAN 11.25 DEGREES.

7. PIPE JOINTS SHALL BE DEFLECTED OR FITTINGS SHALL BE PROVIDED TO MAINTAIN HORIZONTAL ALIGNMENT AND VERTICAL ELEVATIONS SHOWN. DEFLECTIONS ARE TO BE MAXIMUM OF ONE-HALF THE MANUFACTURER'S RECOMMENDATION. IF THE CONTRACTOR CHOOSES TO USE FITTINGS TO OBTAIN THE ALIGNMENT SHOWN, IT SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

WATER MAIN PIPE

1. DUCTILE IRON PIPE

   A. PIPE SHALL BE EQUAL TO AWWA/ANSI C151/A21.51, CLASS 53.
   B. JOINTS SHALL BE RUBBER-GASKET JOINTS EQUAL TO THE MECHANICAL JOINT OR PUSH-ON JOINT.
   C. PIPE SHALL HAVE A SINGLE COAT OF CEMENT LINING IN ACCORDANCE WITH AWWA/ANSI C104/A21.4. CEMENT LINING SHALL BE GIVEN A SEAL COAT OF AN APPROVED ASPHALTIC MATERIAL.
   D. ALL NUTS, BOLTS, AND WASHERS SHALL BE STAINLESS STEEL.
   E. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE WRAPPED OR BAGGED IN 8 MIL POLYETHYLENE FILM.

2. PVCO C909

   A. UNLESS OTHERWISE SPECIFIED, ALL NEW PVC WATER MAIN INSTALLED VIA OPEN-CUT SHALL MEET AWWA C909, PRESSURE CLASS 235 PSI.
   B. PIPE COMPOUND SHALL MEET ASTM D1784, CELL CLASS 12454.
   C. PIPE SHALL HAVE AN OUTSIDE DIMENSION EQUAL TO DUCTILE IRON PIPE.
   D. PIPE SHALL HAVE AN INTEGRAL BELL END AND THE GASKET SEAL SHALL BE REINFORCED WITH A STEEL BAND OR OTHER RIGID MATERIAL.
   E. JOINTS SHALL COMPLY WITH ASTM D3139.
   F. A SINGLE STRAND OF 10 AWG TRACER WIRE INSTALLED. TRACER WIRE SHALL BE FULLY ANNEALED, HIGH CARBON 1055 GRADE STEEL, HIGH STRENGTH SOLID COPPER CLAD STEEL CONDUCTOR (HS-CCS), INSULATED WITH A 30 MIL, HIGH-DENSITY, HIGH MOLECULAR WEIGHT HDPE INSULATION. TRACER WIRE SHALL BE BY COPPERHEAD, OR EQUAL. TRACER WIRE SHALL BE CONNECTED TO VALVE BOXES, SERVICE METER PITS, AND HYDRANTS AT A MAXIMUM SPACING OF 5,000 FT.
   G. METALLIC BLUE CODED LOCATING TAPE BY ALARMGUARD OR LINEGUARD SHALL BE PLACED 18-IN BELOW GRADE, IN THE WATER MAIN TRENCH.

3. FUSIBLE PVC (FPVC)

   A. UNLESS OTHERWISE SPECIFIED, ALL NEW PVC WATER MAIN INSTALLED VIA HORIZONTAL DIRECTIONAL DRILL SHALL BE FUSIBLE PVC (FPVC) C900, DR 18.
   B. PIPE SHALL HAVE AN OUTSIDE DIMENSION EQUAL TO DUCTILE IRON PIPE.
   C. PIPE SHALL BE FUSED IN ACCORDANCE WITH THE PIPE MANUFACTURER.
   D. TWO (2) STRANDS OF 10 AWG TRACER WIRE SHALL BE INSTALLED 180 DEGREES APART. TRACER WIRE SHALL BE FULLY ANNEALED, HIGH CARBON 1055 GRADE STEEL, EXTRA-HIGH STRENGTH SOLID COPPER CLAD STEEL CONDUCTOR (EHS-CCS), INSULATED WITH A 45 MIL, HIGH-DENSITY, HIGH MOLECULAR WEIGHT HDPE INSULATION. TRACER WIRE SHALL HAVE A MINIMUM BREAK LOAD OF 2,000 LBS. TRACER WIRE SHALL BE COPPERHEAD SOLOSHOT, OR EQUAL.TRACER WIRE SHALL BE BY COPPERHEAD, OR EQUAL. TRACER WIRE SHALL BE CONNECTED TO VALVE BOXES, SERVICE METER PITS, AND HYDRANTS AT A MAXIMUM SPACING OF 5,000 FT.

HYDRANT LEADS AND ANCHOR PIPING

1. ALL HYDRANT LEADS AND ANCHOR PIPING SHALL BE DUCTILE IRON PIPE AND WRAPPED OR BAGGED IN 8 MIL POLYETHYLENE FILM.

2. PVC PIPE WILL NOT BE ACCEPTED FOR HYDRANT LEADS OR ANCHOR PIPING.

3. WHERE ANCHOR PIPE ARE USED IN LIEU OF RESTRAINING GLANDS, THE T-HEAD BOLTS AND ZINC ANODE CAPS MUST BE USED AS SPECIFIED ABOVE.

4. FIRE HYDRANT ASSEMBLIES SHALL BE INSTALLED PER THE CITY OF TALLMADGE STANDARDS

5. ALL HYDRANTS SHALL CONFORM TO AWWA C-502, WITH MECHANICAL JOINT HUBS AND OPEN LEFT (COUNTER-CLOCKWISE).

6. ALL HOSE CONNECTIONS SHALL HAVE CITY OF AKRON THREADS.

7. HYDRANTS SHALL BE PLACED A MINIMUM OF THREE FEET FROM THE FACE OF THE CURB OR EDGE OF PAVEMENT.

8. BREAKAWAY SAFETY FLANGE SHALL BE 2-4" ABOVE FINISHED GRADE.

9. THE FOLLOWING ARE A CURRENT LIST OF ACCEPTABLE FIRE HYDRANTS:
   a. MUELLER CENTURION MODEL A 423
   b. EAST JORDAN IRON WORKS 6" BR

7. ALL EXISTING HYDRANTS TO BE REMOVED, ARE THE PROPERTY OF THE CITY OF TALLMADGE

8. MINIMUM 4' BETWEEN WATCH VALVE AND HYDRANT

EMBEDMENT

1. CONTRACTOR SHALL EMBED THE NEW WATER MAIN IN SAND TO A MINIMUM OF 18-INCH OVER THE TOP OF THE PIPE.

VALVES

1. ALL VALVES 4" THROUGH 12" SHALL BE RESILIENT WEDGE, MECHANICAL JOINT GATE VALVES WITH DUCTILE IRON BODIES PER AWWA C-515. THE VALVES SHALL OPEN TO THE RIGHT AND INCLUDE A COMPLETE VALVE BOX.

FITTINGS

1. MECHANICAL JOINT FITTINGS SHALL BE EQUAL TO CLOW BELL TIGHT OF U.S. "TYTON" ASA A21.10 WITH JOINTS EQUAL TO ASA A21.11.

2. DUCTILE IRON FITTINGS FOR DIP, PVC, AND PVCO SHALL BE AWWA/ANSI C153 FOR MECHANICAL AND PUSH JOINTS WHICH SHALL CONFORM TO AWWA/ANSI C111/A21.

3. ALL FITTINGS, VALVES, HYDRANTS, ETC., SHALL BE BLOCKED WITH CLASS "B" CONCRETE BLOCKING AS INDICATED ON THE FOLLOWING DETAIL SHEETS AND HAVE MECHANICAL RESTRAINING DEVICES INSTALLED. EBAA 200PV OR EQUIVALENT FOR PVC PIPE OR EBAA MEGALUG SYSTEM OR EQUIVALENT FOR DUCTILE IRON PIPE

4. ALL FITTINGS (BENDS; TEES; CROSSES; REDUCERS; SOLID SLEEVES; COUPLINGS; CAPS; ETC) SHALL BE DIP MATERIAL. THE COST FOR ALL FITTINGS SHALL BE INCLUDED BY THE CONTRACTOR IN THE BID PRICE FOR WATER MAIN PIPE.

5. ALL FITTINGS AND JOINTS SHALL BE RESTRAINED. FITTINGS SHALL BE CEMENT-LINED PER AWWA C104.

THRUST BLOCKING

1. BLOCKING MUST TAKE PLACE IN AN AREA WHERE THE SUPPORTING WALL HAS BEEN UNDISTURBED

2. ALL FITTINGS 8" AND LARGER SHALL HAVE POURED CONCRETE THRUST BLOCKS, ALL VERTICAL BENDS SHALL HAVE POURED CONCRETE THRUST BLOCKS.

3. CONCRETE SHALL NOT COME IN CONTACT WITH THE JOINT (PIPE PROTECTED WITH A POLYETHYLENE ENCASEMENT) AND MUST LEAVE ROOM FOR ACCESS TO NUTS AND BOLTS

4. FIRE HYDRANTS MAY BE BLOCKED WITH HARD WOOD.

5. THE CONTRACTOR SHALL USE DOMESTIC MADE, AWWA APPROVED MATERIALS AT ALL TIMES, UNLESS OTHERIWSE APPROVED BY THE CITY.

SERVICE CONNECTIONS

1. ALL WATER SERVICE MATERIAL FOR SERVICES 2" AND SMALLER WILL BE SUPPLIED BY THE CITY OF TALLMADGE. THIS MATERIAL INCLUDES METER SETTINGS, METER PIT AND CASTINGS. ALL WATER SERVICES SHALL BE 1" MINIMUM.

SEPARATIONS AND CROSSINGS

1. LOCATE WATER PIPE AT LEAST 10 FEET AWAY, HORIZONTALLY, FROM SEWER PIPES MEASURED EDGE TO EDGE. WHEN IT IS NOT PRACTICAL TO MAINTAIN A 10 FOOT SEPARATION, THE TCSE DEPARTMENT MAY ALLOW DEVIATION, IF SUPPORTED BY DATA FROM THE DESIGN ENGINEER. THEN, THE WATER LINE MAY BE INSTALLED CLOSER TO THE SEWER. IF SO, THE SEWER MUST BE LOCATED IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE WATER MAIN AND AT AN ELEVATION SO THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER PIPE.

2. IF IT IS IMPOSSIBLE TO MEET PROPER HORIZONTAL AND VERTICAL SEPARATIONS AS DESCRIBED ABOVE, BOTH THE WATER MAIN AND SEWER MUST BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT PIPE COMPLYING WITH TCSE DESIGN SPECIFICATIONS AND BE PRESSURE TESTED TO 150 PSI TO ASSURE WATER TIGHTNESS NOT BEFORE 30 DAYS.

3. WATER MAINS CROSSING SEWERS SHALL BE LAID WITH A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER. THIS SHALL BE THE CASE WHERE THE WATER MAIN IS EITHER ABOVE OR BELOW THE SEWER. THE CROSSINGS SHALL BE ARRANGED SO THAT THE WATER MAIN JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER JOINTS. WHERE THE WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO MAINTAIN LINE AND GRADE.

4. IF IT IS IMPOSSIBLE TO MEET PROPER HORIZONTAL SEPARATION, EITHER THE WATER MAIN OR THE SEWER LINE MAY BE ENCASED IN A WATERTIGHT CARRIER PIPE WHICH EXTENDS 10 FEET ON BOTH SIDES OF THE CROSSING, MEASURED PERPENDICULAR TO THE OTHER LINE. THE CARRIER PIPE SHALL BE OF MATERIALS APPROVED BY TCSE FOR USE IN WATER MAIN CONSTRUCTION.

WATER USAGE

1. ALL WATER FOR THE FIRST FLUSHING AND TESTING OF THE WATER MAIN WILL BE PROVIDED BY THE CITY. CONTRACTOR'S CONNECTION TO CITY'S SYSTEM SHALL INCLUDE A CHECK VALVE. ALL WATER FOR ADDITIONAL FLUSHING AND TESTING OPERATIONS FOR THE WATER MAIN SHALL BE PAID FOR BY THE CONTRACTOR AT THE CURRENT CITY OF TALLMADGE RATE. CONTRACTOR MUST OBTAIN A BACKFLOW PREVENTOR FROM THE CITY WATER DEPARTMENT FOR ALL WATER USAGE. PLEASE COORDINATE WITH DARRELL STINEMAN, UTILITIES SUPERINTENDENT, AT 330-633-0851.

SUBSURFACE INVESTIGATION

1. SUBSURFACE INVESTIGATIONS HAVE NOT BEEN MADE ON THIS PROJECT.

2. IT IS THE RESPONSIBILITY OF THE BIDDER TO MAKE HIS/HER OWN SURFACE AND SUBSURFACE INVESTIGATIONS OF THE SITE CONDITIONS PRIOR TO SUBMITTING HIS/HER BID PROPOSAL, IF NECESSARY IN HIS/HER JUDGEMENT. IF THE BIDDER DESIRES TO OBTAIN SUCH INFORMATION AS TO SOIL AND ROCK CONDITIONS, THEY MUST DO SO AT THEIR EXPENSE AND SECURE ALL APPLICABLE APPROVALS AND PERMITS. THE CONTRACTOR SHALL FILL ALL EXCAVATIONS WITH LIKE MATERIAL, AND RESTORE ALL DISTURBED PAVEMENT AND GROUND SURFACES TO MATCH EXISTING.

CONSTRUCTION RESTRICTIONS

1. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, ANY POWER-OPERATED CONSTRUCTION TYPE DEVICE SHALL NOT BE OPERATED BETWEEN THE HOURS OF 7:00PM AND 7:00 AM, UNLESS AUTHORIZED BY THE CITY.

2. WORK DAYS SHALL BE LIMITED TO MONDAY THROUGH FRIDAY, UNLESS CONTRACTOR RECEIVES AUTHORIZATION/APPROVAL FROM THE CITY. WORK ON SUNDAYS AND HOLIDAYS WILL NOT BE PERMITTED.

3. ALL REQUESTS FOR WORK ACTIVITIES OUTSIDE OF THE RESTRICTIONS DISCUSSED HEREIN SHALL BE SUBMITTED FOR REVIEW AND APPROVAL TO THE CITY A MINIMUM OF 72-HRS IN ADVANCE.

B&N
50 SOUTH MAIN STREET,
SUITE 600
AKRON, OHIO 44308
burgessniple.com

CITY OF TALLMADGE
BEECHWOOD DRIVE
WATERLINE LOOPING
SUMMIT COUNTY, OH

NO:	DESCRIPTION	DATE
	REVISIONS	

JOB NO:	PR58719
DATE:	OCT 2020
DESIGNED BY:	GCB
DRAWN BY:	GCB
CHECKED BY:	JAM
APPROVED BY:	JAM
SCALE:	NONE

GENERAL NOTES

3

SHEET: 3 OF 9

PAVEMENT

1. WHERE NECESSARY TO DISTURB ASPHALT OR CONCRETE PAVEMENT, PAVEMENT SHALL BE SAW CUT IN NEAT STRAIGHT LINES.
2. CONTRACTOR SHALL BE REQUIRED TO MAINTAIN VEHICULAR TRAFFIC ACCESSIBILITY THROUGHOUT THE ENTIRE SITE DURING CONSTRUCTION.
3. THE CONTRACTOR SHALL NOTIFY EACH RESIDENT AND BUSINESS BY LETTER A MINIMUM OF 48 HRS IN ADVANCE OF WORK WHICH SHALL LIMIT ACCESS TO THEIR DRIVEWAYS.
4. CONTRACTOR SHALL CLEAN THE ROADWAY AT THE END OF EACH DAY OF OPERATION. CLEANING SHALL BE PERFORMED USING A POWER BROOM OR HYDROSPRAYER, OR AS DIRECTED BY ENGINEER.
5. CONTRACTOR SHALL FURNISH AND APPLY WATER AND/OR CALCIUM CHLORIDE FOR DUST CONTROL AS DIRECTED BY ENGINEER. SUFFICIENT QUANTITIES OF CALCIUM CHLORIDE SHALL BE PRESENT ON THE JOB SITE AT ALL TIMES TO BE USED FOR DUST CONTROL.

PROJECT SAFETY

1. THE CONTRACTOR SHALL MAINTAIN A SAFE WORKING ENVIRONMENT AT THE PROJECT SITE AT ALL TIMES. THE CONTRACTOR SHALL PROPERLY SUPPORT AND/OR MAINTAIN ALL EXCAVATIONS PER APPLICABLE SAFETY REQUIREMENTS AND COMPLY WITH ALL OSHA REGULATIONS. ADEQUATE BARRICADES, WARNING LIGHTS, SIGNS, FENCING, ETC. SHALL BE ERECTED AROUND THE CONSTRUCTION AREA DURING ALL NON-WORKING HOURS TO ALERT PERSONS OF THE POTENTIAL DANGERS ASSOCIATED WITH THE AREA UNDER CONSTRUCTION AS WELL AS TO PREVENT ACCESS BY UNAUTHORIZED PERSONNEL TO THE CONSTRUCTION SITE/AREA. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THE SAFETY OF THE GENERAL PUBLIC AS WELL AS ALL CONSTRUCTION PERSONNEL. PUBLIC STREETS SHALL BE KEPT CLEAN AND FREE OF DEBRIS (MUD,STONE, ETC.) AT ALL TIMES. THE CONTRACTOR SHALL ALERT ALL LOCAL EMERGENCY AGENCIES (FIRE, POLICE, AMBULANCE, ETC.) OF THE NATURE OF THE PROPOSED PROJECT PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY. ACCESS FOR EMERGENCY VEHICLES SHALL BE MAINTAINED AT ALL TIMES.

CLEAN-UP AND RESTORATION

1. THE ENTIRE AREA OF WORK SHALL BE CLEANED UP, RESEEDED AND RESTORED SO THAT UPON COMPLETION OF THE WORK, THE AREA IS IN A CONDITION EQUAL TO OR BETTER THAN IT WAS PRIOR TO THE START OF WORK.
2. ALL DISTURBED ARES OUTSIDE OF THE WALKS, DRIVEWAYS, ROADWAYS, AND STRUCTURES SHALL BE SEEDED AN MULCHED AFTER THE AREAS HAVE BEEN FINISH GRADED AND TOPSOIL HAS BEEN ADDED.
3. CONTRACTOR SHALL RESTORE YARDS, LANDSCAPING, DRIVEWAYS, DITCHES, SWALES, ROADS, DRIVE CULVERTS, AND OTHER AREAS AND ITEMS, WHETHER SPECIFICALLY MENTIONED OR NOT, DISTURBED DURING CONSTRUCTION ACTIVITIES BACK TO THEIR ORIGINAL CONDITION WITHIN FORTY-FIVE (45) DAYS OF DISTURBANCE, WEATHER PERMITTING.

HORIZONTAL DIRECTIONAL DRILLING (HDD)

1. THE CONTRACTOR SHALL CALL THE OHIO UTILITY PROTECTION SERVICE (OUPS) AND THE OHIO OIL AND GAS PROVIDERS UNDERGROUND PROTECTION SERVICE (OGPUPS) PRIOR TO ANY DIRECTIONAL DRILLING. THE DEPTH OF ANY EXISTING UTILITIES TO BE CROSSED SHALL BE COORDINATED BY THE CONTRACTOR WITH THE OWNER OF THE UTILITY.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND DISPOSAL OF THE SLURRY AND CUTTINGS. THE SLURRY SHALL BE CONTAINED BY MEANS APPROVED BY THE ENGINEER. THE SLURRY SHALL NOT BE PERMITTED TO BE DUMPED ON THE GROUND, IN DITCHES, OR WETLANDS.
3. THE DEPTH OF THE DIRECTIONAL DRILL SHALL BE THE DEEPER OF THE FOLLOWING:
   - 5 FEET BELOW EXISTING SURFACE GRADE
   - 5 FEET BELOW INVERT OF EXISTING WATER WAY
   - 5 FEET BELOW ROADWAY SURFACE
   - 4 FEET BELOW THE BOTTOM OF DRAINAGE FEATURE
   - 18 INCHES BELOW ANY EXISTING UTILITY OR SEWER
4. UNLESS OTHERWISE NOTED ON PLANS, THE MAXIMUM DIRECTIONAL DRILL DEPTH SHALL BE 8 FEET TO THE TOP OF PIPE UNLESS AUTHORIZED BY THE OWNER.
5. HEAVING AND CRACKING OF EXISTING PAVEMENT DUE TO DIRECTIONAL DRILLING MUST BE REPLACED AT THE CONTRACTOR'S EXPENSE. THE ENGINEER MUST REVIEW AND APPROVE THE PROPOSED PAVEMENT REPLACEMENT.
6. WHEN A DIRECTIONAL DRILL EXCEEDS 200 FEET IN LENGTH, THE CONTRACTOR MAY SURFACE AND RESUME DRILLING AT ACCESS AREAS APPROVED BY AND COORDINATED WITH THE OWNER/ENGINEER OR OWNER'S FIELD REPRESENTATIVE. THESE AREAS SHALL BE RESTORED TO THEIR PRE-EXISTING CONDITIONS BY THE CONTRACTOR, AT THE CONTRACTOR'S EXPENSE. REPARATIONS SHALL INCLUDE, BUT NOT BE LIMITED TO EXISTING UTILITIES, SIGNAGE, CURB AND GUTTER, GUARDRAILS, FENCES, AND LANDSCAPING AS REQUIRED BY THE OWNER.
7. CONTRACTOR SHALL SUBMIT A DETAILED HDD PLAN OF PROPOSED EQUIPMENT; METHODS; LOCATING AND MONITORING DEPTH AND HORIZONTAL; DOCUMENTATION OF PULL FORCE/STRESS ON PIPE; DRILLING THRU ROCK; PLAN TO MONITOR/PREVENT/ADDRESS/CLEAN-UP A "FRACK-OUT" SITUATION RESULTING IN LOSS OF BORE FLUID/GEL AND OTHER RELATED HDD MATERIALS TO WATER WAYS/WETLANDS/DRAINAGE FEATURES.
8. LOCATIONS AND SIZES/DIMENSIONS FOR BOTH HDD AND JACK/BORE ACCESS POINTS/PITS ARE SUGGESTED. ACTUAL LOCATIONS AND DIMENSIONS OF SAID ITEMS, AS NECESSARY TO COMPLETE WATER LINE INSTALLATION, IS THE RESPONSIBILITY OF THE CONTRACTOR. DIFFERENCES BETWEEN THE PLANS AND ACTUAL FIELD INSTALLATIONS WILL NOT BE GROUNDS FOR CHANGE ORDERS.
9. FOR ALL HDD INSTALLATIONS, TWO CONTINUOUS NO.6 INSULATED STRANDED COPPER WIRES SHALL BE INSTALLED/PULLED IN PLACE 180 DEGREES APART.
10. CONTRACTOR SHALL PROVIDE THE FOLLOWING INFORMATION:

A. PIPE MANUFACTURER'S PRODUCT DATA INCLUDING PHYSICAL PROPERTIES AND DIMENSIONS. CERTIFICATES OF COMPLIANCE WITH SPECIFICATIONS FOR MATERIALS TO BE SUPPLIED, PIPE SIZE, DIMENSIONALITY, PRESSURE CLASS, COLOR, RECOMMENDED MINIMUM BENDING RADIUS, RECOMMENDED MAXIMUM SAFE PULL FORCE, DOCUMENTATION VERIFYING THE SPECIFIED PIPE EXCEEDS THE REQUIRED BENDING RADIUS, PULL FORCE, TENSILE STRENGTH NECESSARY TO COMPLETE HDD INSTALLATION.

B. FUSION TECHNICIAN QUALIFICATION AND TRAINING CERTIFICATION, PIPE MANUFACTURER APPROVED FUSING EQUIPMENT AND DATA LOGGERS, APPROVED DATALOGGER DEVICE REPORTS, FUSION JOINT DOCUMENTATION CONTAINING PIPE SIZE AND THICKNESS; MACHINE SIZE; FUSION TECHNICIAN IDENTIFICATION; JOB IDENTIFICATION; FUSION JOINT NUMBER; FUSION, HEATING, AND DRAG PRESSURE SETTINGS; HEAT PLATE TEMPERATURE; TIME STAMP; HEATING AND COOLING DOWN TIME OF FUSION; AND AMBIENT TEMPERATURE.

C. FIELD RECORDED PULL FORCES DURING HDD INSTALLATION FOR EACH INSTALLED RUN.

ACCESS PITS/POINTS FOR HDD AND BORE & JACK

1. THE DIMENSIONS AND ORIENTATIONS OF HDD ACCESS PITS/POINTS AND BORING/RECEIVING PITS AS SHOWN ON THE PLANS ARE APPROXIMATE IN NATURE AND BASED UPON TYPICAL REQUIREMENTS FOR FACILITATING SAID INSTALLATIONS. ANY VARIATION BETWEEN WHAT IS SHOWN ON THE PLANS AND ACTUAL LOCATIONS, DIMENSIONS, AND ORIENTATIONS OF ACTUAL PITS UTILIZED BY THE CONTRACTOR WILL NOT BE GROUNDS FOR CHANGE ORDERS. THE BEGIN/END LOCATIONS FOR HDD ARE SUGGESTED, ACTUAL LOCATIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR.

MECHANICAL JOINT RESTRAINING GLANDS

1. RESTRAINING GLANDS FOR PVC PIPE SHALL BE EBAA 2000PV, OR EQUAL.
2. RESTRAINING GLANDS FOR DUCTILE IRON PIPE SHALL BE EBAA IRON SERIES 1100, OR EQUAL.
3. RESTRAINING GLANDS SHALL HAVE WEDGES WITH AUTO-TORQUING HEADS AND BE PACKED WITH T-HEADED BOLTS.
4. NUTS AND T-HEAD BOLTS SHALL BE CONSTRUCTION GRADE ALLOY CARBON STEEL.
5. T-HEAD BOLT HEADS SHALL BE 1/2" LONGER THAN THE LENGTH SPECIFIED FOR AWWA C153 FITTINGS TO ACCOMMODATE THE ZINC ANODE NUT.
6. ZINC ANODE CAPS SHALL BE THREADED ONTO EVERY OTHER T-HEAD BOLT. ZINC ANODE CAPS SHALL WEIGH SIX (6) OUNCES EACH AND UNIFORM TO THE CHEMICAL REQUIREMENTS OF ASTM B418-88.
7. MECHANICAL JOINT GASKETS SHALL BE PER AWWA C111.

CONSTRUCTION ZONE POLICY

1. ALL WORK PERFORMED WITHIN THE RIGHT-OF-WAY OF A STREET OR HIGHWAY UNDER THE JURISDICTION OF THE CITY OF TALLMADGE SHALL BE SUBJECT TO ALL REQUIREMENTS OF PART 7 (CONSTRUCTION AND MAINTENANCE OPERATIONS) OF THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES." A ROAD-OPENING PERMIT IS REQUIRED FOR ALL WORK THAT IS WITHIN A STREET RIGHT-OF-WAY WITHIN THE CITY OF TALLMADGE. UNDER NO CIRCUMSTANCES SHALL A PERMIT BE ISSUED UNTIL A COMPLETED "NOTICE OF TRAFFIC DISRUPTION" FORM HAS BEEN RETURNED TO THE CITY OF TALLMADGE A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO THE DESIRED START OF A PROJECT. THE FORM SHALL BE ACCOMPANIED BY A SKETCH SHOWING ALL APPLICABLE SIGNS, BARRICADES, LIGHTS, ETC.
2. IN ADDITION TO THESE REQUIREMENTS, THE FOLLOWING SPECIFICATIONS SHALL APPLY AT ALL TIMES:

HIGH PRESSURE GAS LINES

1. THIS PROJECT INCLUDES CROSSINGS OF HIGH PRESSURE GAS LINES OWNED AND OPERATED BY SUNOCO PIPELINE L.P. (SPLP).
2. CONTRACTOR SHALL REFER TO SUNOCO LOGISTICS GENERAL RESTRICTIONS FOR SPECIFIC REQUIREMENTS FOR CROSSING THE HIGH PRESSURE GAS LINES.
3. NO MATERIALS OR EQUIPMENT ARE TO BE STORED WITHIN THE EXISTING PIPELINE RIGHT-OF-WAY WITHOUT SPLP'S PRIOR WRITTEN APPROVAL.
4. CONSTRUCTION ITEMS SUCH AS TEMPORARY DRAINAGE SWALES, SILT FENCING, GATES, SIGNS, ETC., ARE STILL REQUIRED TO MEET SPLP'S CLEARANCE REQUIREMENTS.
5. TRENCHING ACTIVITIES SHALL BE DESIGNED AS TO AVOID ADVERSELY AFFECTING THE INTEGRITY OF THE PIPELINE AND THE STABILITY OF THE PIPELINE TRENCH.

SUNOCO LOGISTICS GENERAL REQUIREMENTS

1. DETAILED PLANS FOR PROPOSED CONSTRUCTION IN ACCORDANCE WITH SUNOCO PIPELINE L.P.'S ("SPLP") ENGINEERING RESTRICTIONS MUST BE SUMITTED TO SPLP'S ENGINEERING DEPARTMENT FOR REVIEW AND APPROVAL TO DETERMINE TO WHAT EXTENT, IF ANY, THE PIPELINE OR RIGHT-OF-WAY WILL BE AFFECTED BY THE PROPOSED CONSTRUCTION AND/OR DEVELOPMENT.
2. A DRIVEWAY OR ROADWAY MAY CROSS THE RIGHT-OF-WAY AND PIPELINE PERPENDICULARLY, BUT AT NO TIME WILL IT BE PARALLEL TO, OVER AND WITHING THE RIGHT-OF-WAY.
3. BUILDINGS, SWIMMING POOLS, SHEDS, DECKS, TREES, SHRUBS OR ANY OBSTRUCTION OF A PERMANENT NATURE SHALL NOT BE CONSTRUCTED, PLANTED OR PLACED WITHIN THE RIGHT-OF-WAY AND EASEMENT. THE WIDTH OF THE EASEMENTS VARY, BUT TYPICALLY STRUCTURES CLOSER THAN (25') FEET TO ANY EXISTING PIPELINE (50' EASEMENT) ARE NOT PERMITTED. YOU MUST CONTACT SPLP'S RIGHT-OF-WAY DEPARMENT AT (610) 670-3322 (EASTERN U.S.) TO DETERMINE THE EASEMENT WIDTH FOR A SPECIFIC PROPERTY.
4. WELLS, LEACH BEDS, CESSPOOLS OR SEWER SYSTEMS OF ANY TYPE SHALL NOT BE PLACED WITHIN THE RIGHT-OF-WAY.
5. ALL UNDERGROUND FACILITIES CROSSING SPLP'S RIGHT-OF-WAY SHALL CROSS UNDER THE EXISTING PIPELINE WITH A MINIMUM OF 24-INCH CLEARANCE. THIS INCLUDES, BUT IS NOT LIMITED TO, SEWER DRAINS.
6. THE EARTH COVER OVER THE SPLP'S PIPELINES SHALL BE MAINTAINED AND NEVER CHANGED IN ANY MANNER WITHOUT THE EXPRESS WRITTEN PERMISSION OF SPLP.
7. ANY PARKING AREA PLACED OVER THE PIPELINE WITH PERMISSION OF SPLP SHALL BE SUBJECT TO AN AMENDMENT TO AGREEMENT ENTERED INTO BY SUBJECT PARTIES PRIOR TO CONSTRUCTION OF SAME.
8. IF HEAVY EQUIPMENT IS TO CROSS THE EXISTING PIPELINE FOR ANY REASON, IT WILL BE NECESSARY FOR THE CROSSING PARTY TO PROVIDE AND MAINTAIN A RAMP OF SUFFICIENT MATERIAL TO PROTECT SAID PIPELINE. SUNOCO LOGISTICS WILL MAKE THE DECISION AS TO HOW MUCH FILL AND WHAT OTHER TYPE OF PROTECTIVE STRUCTURE, IF ANY; WILL BE REQUIRED FOR THE RAMP. UPON COMPLETION OF CONSTRUCTION AND DISCONTINUATION OF HEAVY EQUIPMENT PASSAGE OVER THE PIPELINE, THE RAMP MAY BE REMOVE.
9. A SPLP INSPECTOR MUST BE PRESENT AT THE TIME THAT ANY WORK IS DONE WITHIN SUNOCO LOGISTICS' RIGHT-OF-WAY.
10. PLEASE CONTACT SPLP'S RIGHT-OF-WAY DEPARTMENT AT (610) 670-3322 (EASTERN U.S.) SHOULD YOU HAVE ANY QUESTIONS OR NEED ADDITIONAL INFORMATION.
11. STATE LAW REQUIRES YOU TO CONTACT YOUR STATE ONE CALL CENTER AT LEAST TWO OR THREE DAYS IN ADVANCED, AS REQUIRED BY YOUR STATE, PRIOR TO ANY CONSTRUCTION ACTIVITY. THE NATIONWIDE TELEPHONE NUMBER FOR YOUR STATE ONE CALL CENTER IS "811".
12. IN ADDITION TO THE LEGALLY REQUIRED NOTICE REFERENCED ABOVE AND TO SCHEDULE A SPLP INSPECTOR TO WITNESS WORK IN THE VICINITY OF THE PIPELINE, PLEASE CALL THE SELECTED SPLP OFFICE BELOW. NOTE: CONTACTING SUNOCO PIPELINE L.P. DIRECTLY DOES NOT RELIEVE YOU OF THE LEGAL OBLIGATION TO NOTIFY YOUR STATE ONE CALL CENTER. (PLEASE CALL COLLECT IF OUTSIDE THE AREA CODE)

AKRON, OHIO (330) 374-0570

SUNOCO LOGISTICS CONSTRUCTION RESTRICTIONS

1. TRENCHING OR BORING ACTIVITIES SHALL BE DESIGNED TO AVOID ADVERSELY AFFECTING THE INTEGRITY OF THE PIPELINES OR THE STABILITY OF THE PIPELINES' TRENCH.
2. EXCESSIVE EXCAVATIONS THAT LEAVE THE PIPELINES UNSUPPORTED AND SUSPENDED WILL HAVE TO BE EVALUATED ON A CASE BY CASE BASIS. SUNOCO PIPELINE L.P. (SPLP) WILL PERFORM STRESS CALCULATIONS ON THE PIPELINE AND GRANT APPROVAL FOR EXCESSIVE SPANS.
3. ALL VIBRATORY ROLLERS USED FOR COMPACTION ARE TO BE USED IN STATIC MODE IN VICINITY OF THE PIPELINE.
4. AN SPLP INSPECTOR SHALL REMAIN ON SITE FOR THE DURATION OF THE CONSTRUCTION ACTIVITY WITHIN SPLP'S RIGHT-OF-WAY. ALL COSTS ASSOCIATED WITH THE SPLP INSPECTOR SHALL BE INCLUDED IN THE BID PRICE FOR THE WATER MAIN.
5. CARE SHALL BE TAKEN WHEN WORKING AROUND THE PIPELINES. EQUIPMENT IS NOT PERMITTED TO WORK ABOVE OR CROSS THE PIPELINES WITHOUT WRITTEN PERMISSION GRANTED BY SPLP. EQUIPMENT CROSSINGS AND EQUIPMENT WORKING OVER THE PIPELINES ARE TO BE APPROVED ON A CASE BY CASE BASIS. THE CONTRACTOR OR ENGINEER SHALL PROVIDE AN EQUIPMENT LIST OF ALL EQUIPMENT THAT IS TO WORK ABOVE OR ACROSS THE PIPELINES THAT SPECIFIES THE FOLLOWING:

   MAKE OF EQUIPMENT
   MODEL OF EQUIPMENT
   FULLY LOADED WEIGHT

6. PROPOSED MATERIAL STOCKPILES AND EQUIPMENT STAGING AREAS SHALL BE REMOVED FROM THE SPLP RIGHT-OF-WAY UNLESS APPROVAL IS PROVIDED BY SPLP'S ENGINEERING, MAINTENANCE, AND RIGHT-OF-WAY DEPARTMENTS.
7. TEMPORARY CONSTRUCTION ITEMS SUCH AS DRAINAGE SWALES, SILT FENCING, GATES, SIGNS, ETC., MUST ALSO MEET SPLP'S CLEARANCE REQUIREMENTS.

CITY OF TALLMADGE NOTES

ITEM 1- OPERATIONS IN ROADWAY

1. ANY AND ALL OPERATIONS WHICH RESULT IN EITHER THE INTERRUPTION OR SHIFTING OF TRAFFIC INTO ADJACENT TRAVEL LANE SHALL BE PROHIBITED IN COMPLIANCE WITH THE OMUTCD IN EFFECT, ANY OPERATION CAUSING THIS STOPPING/SHIFTING SHALL BE INTERPRETED AS THE CLOSING OF THE LANE AND MUST BE TREATED AS SUCH, FOLLOWING ALL APPLICABLE SECTIONS OF PART 7 OF THE OMUTCD.

ITEM 2- EXCAVATION WITHIN 8 FEET OF PAVEMENT

1. ALL EXCAVATION WITHIN 8 FEET OF THE PAVEMENT EDGE SHALL BE BACKFILLED TO EXISTING GRADE BY THE END OF THE WORKING DAY SAID EXCAVATION WAS BEGUN. ONLY WITH THE EXPRESSED WRITTEN CONSENT AND TRAFFIC CONTROL APPROVAL OF THE CITY PUBLIC WORKS MAY EXCAVATION OF THIS NATURE BE PERMITTED TO REMAIN OPEN BEYOND THE END OF THE WORK DAY. IN NO EVENT SHALL THE EXISTENCE OF THIS CONDITION BE ACCEPTABLE AT THE END OF THE FOLLOWING DAY'S WORK. THIS WORK SHALL NOT BEGIN UNTIL ALL EQUIPMENT AND MATERIAL REQUIRED TO COMPLETE ALL WORK WITHIN 8 FEET OF THE PAVEMENT EDGE IS ON-SITE.

ITEM 3- EXCAVATION WITHIN THE PAVEMENT

UNDER NO CIRCUMSTANCES SHALL ANY EXCAVATION WHICH ENCROACHES UPON THE PAVEMENT EDGE BEGIN UNTIL THE FOLLOWING CONDITIONS HAVE BEEN MET:

1. EXPRESSED WRITTEN CONSENT OF THE OWNER HAS BEEN OBTAINED.
2. STEEL PLATE(S) (CAPABLE OF SPANNING THE ENTIRE EXCAVATED PAVEMENT AND SUPPORTING TRAFFIC) AND "BUMP" SIGNS WITH "20 MPH" ADVISORY SPEED SIGNS ARE ON THE JOB SITE; OR ARRANGEMENTS HAVE BEEN MADE AND VERIFIED ASSURING "NIGHT LANE CLOSURE" TRAFFIC CONTROL AS DEFINED BY ITEM 4 OF THESE SPECIFICATIONS.
3. ALL EQUIPMENT AND MATERIALS REQUIRED TO COMPLETE ALL WORK BEING STARTED IN AND WITHIN 8 FEET OF THE PAVEMENT IS EITHER ON-SITE OR ARRANGEMENTS HAVE BEEN MADE FOR ITS DELIVERY TO THE SITE WITHIN 2 HOURS OF A CALL FOR SAME.

ITEM 4- NIGHT LANE CLOSURE

1. A NIGHT LANE CLOSURE SHALL BE CONSIDERED ONLY WHEN IT IS DETERMINED THAT NO FEASIBLE MEANS OF MAINTAINING THE FULL PAVEMENT WIDTH FREE OF OBSTRUCTION IS AVAILABLE.
2. A NIGHT LANE CLOSURE OF A MULTI-LANE ROAD SHALL REQUIRE TRAFFIC CONTROL DEVICES AS SHOWN IN FIGURE C-21 OF OMUTCD USING APPROPRIATE LEFT OF RIGHT LANE SIGNING. THE DIRECTOR OF PUBLIC SERVICE MUST BE CONTACTED FOR APPROVAL OF JOB-SITE TRAFFIC CONTROL.
3. A NIGHT LANE CLOSURE OF A 2-LANE ROAD SHALL REQUIRE TRAFFIC CONTROL DEVICES AS SHOWN IN FIGURE C-18 OF OMUTCD WITH THE SUBSTITUTION OF AT LEAST ONE LAW ENFORCEMENT OFFICER AND A CRUISER WITH OPERATING LIGHT-BAR FOR THE FLAGPERSON AND WORK VEHICLE. THE REQUIRED NUMBER OF OFFICERS/CRUISERS SHALL BE DETERMINED BY THE DIRECTOR OF PUBLIC SERVICE. THE TAPER SHOWN IN ADVANCE OF THE JOB-SITE SHALL BE NO LONGER THAN 50 FEET AND SHALL UTILIZE DRUMS OF ACCEPTABLE DESIGN AS OPPOSED TO CONES.

ITEM 5- EQUIPMENT AND MATERIAL STORAGE

THE FOLLOWING STORAGE/STOCKPILING REGULATIONS SHALL BE IN EFFECT AT ALL TIMES THROUGHOUT THE DURATION OF THE PROJECT. ALL REFERENCES TO "STOCK" SHALL APPLY TO ALL EQUIPMENT, MACHINERY, MATERIALS AND SUPPLIES ASSOCIATED WITH THE WORK BEING PERFORMED.

1. NO MATERIALS OR SUPPLIES SHALL BE PLACED BETWEEN THE DITCH-LINE AND THE PAVEMENT OR WITHIN 10 FEET OF THE PAVEMENT IF LITTLE OR NO DITCH EXISTS UNLESS THE MATERIALS/SUPPLIES ARE TO BE USED AT THAT MOMENT. ALL EXCESS MATERIALS /SUPPLIES ARE TO BE MOVED TO SATISFY THIS OFFSET CRITERIA IMMEDIATELY UPON SUSPENSION OF WORK.
2. AT THE END OF EACH WORK DAY, ALL "STOCK" WITHIN 20 FEET OF THE PAVEMENT EDGE SHALL BE CLEARLY DELINEATED WITH DRUMS/BARRICADES SPACED AT A MAXIMUM OF 50 FEET INTERVALS (2 DRUM/BARRICADE W/LIGHTS MINIMUM).

ITEM 6- EXCAVATION SITE PROTECTION

1. OPEN EXCAVATIONS SHALL BE PROTECTED WITH DRUMS/BARRICADES W/LIGHTS SPACED AT A DISTANCE NOT TO EXCEED THE DISTANCE FROM THE PAVEMENT EDGE TO THE EXCAVATION AT ALL TIMES WORK IS NOT ACTIVELY ENGAGED IN ANY CERTAIN PART OF THE SAME. ANY EXCAVATION LEFT OPEN OVERNIGHT MUST BE SURROUNDED BY TEMPORARY SAFETY FENCE. THIS SHALL APPLY TO ALL EXCAVATED AREAS WITHIN THE RIGHT-OF-WAY. EXCAVATED MATERIALS NOT IMMEDIATELY REMOVED FROM THE SITE SHALL BE TREATED AS PER "ITEM 5 - EQUIPMENT AND MATERIAL STORAGE."

ITEM 7- FULL ROAD CLOSING

1. UNDER NO CIRCUMSTANCES SHALL ANY ROAD BE COMPLETELY CLOSED TO THROUGH TRAFFIC WITHOUT THE APPROVAL AND EXPRESSED WRITTEN CONSENT OF THE DIRECTOR OF PUBLIC SERVICE.
2. THE ISSUANCE OF THESE RULES DOES NOT PRECLUDE THE OWNER OR ENGINEER FROM REQUIRING ADDITIONAL TRAFFIC CONTROL. ANY FAILURE TO COMPLY WITH THESE OR ANY SUPPLEMENTAL RULES WILL RESULT IN THE JOB BEING SHUT DOWN AND THE ROAD OPENING PERMIT REVOKED. ANY WORK WITHOUT A PERMIT IS A VIOLATION OF THE OHIO REVISED CODE.
3. ALL COSTS ASSOCIATED WITH THE ABOVE REQUIREMENTS FOR MAINTENANCE OF TRAFFIC SHALL BE INCLUDED IN BID ITEM MAINTAINING TRAFFIC, LUMP SUM.

B&N burgessniple.com
50 SOUTH MAIN STREET,
SUITE 600
AKRON, OHIO 44308

CITY OF TALLMADGE
BEECHWOOD DRIVE
WATERLINE LOOPING
SUMMIT COUNTY, OH

NO:	DESCRIPTION REVISIONS	DATE

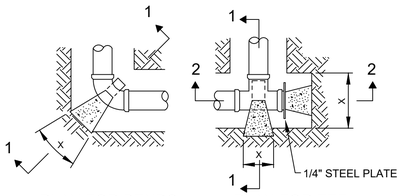
JOB NO:	PR58719
DATE:	OCT 2020
DESIGNED BY:	GCB
DRAWN BY:	GCB
CHECKED BY:	JAM
APPROVED BY:	JAM
SCALE:	NONE

GENERAL NOTES

4

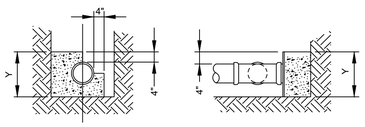
SHEET: 4 OF 9

SIZING SCHEDULE	BEARING FACE (X Y) IN SQ. FT. / CONCRETE VOLUME IN CU. YD.					
PIPE SIZE	22 1/2° BEND SOIL BEARING CAPACITY			45° BEND SOIL BEARING CAPACITY		
	1000 P.S.F.	3000 P.S.F.	5000 P.S.F.	1000 P.S.F.	3000 P.S.F.	5000 P.S.F.
4	1.40 / 0.14	0.46 / 0.09	0.26 / 0.06	2.70 / 0.12	0.90 / 0.06	0.54 / 0.06
6	2.80 / 1.15	0.93 / 0.10	0.56 / 0.07	5.50 / 0.15	1.83 / 0.10	1.10 / 0.07
8	4.80 / 0.20	1.60 / 0.13	0.96 / 0.09	9.60 / 0.23	3.20 / 0.15	1.92 / 0.09
10	7.90 / 0.53	2.63 / 0.34	1.96 / 0.22	15.70 / 0.34	5.23 / 0.20	3.14 / 0.13
12	11.30 / 0.62	3.76 / 0.40	2.26 / 0.26	22.30 / 0.75	7.43 / 0.49	4.46 / 0.32
14	15.30 / 0.74	5.10 / 0.48	3.06 / 0.31	30.20 / 0.98	10.06 / 0.64	6.04 / 0.42
16	19.80 / 1.17	6.60 / 0.76	3.96 / 0.49	39.10 / 1.21	13.03 / 0.79	7.82 / 0.51
	90° BEND SOIL BEARING CAPACITY			TEE OR DEAD END SOIL BEARING CAPACITY		
	1000 P.S.F.	3000 P.S.F.	5000 P.S.F.	1000 P.S.F.	3000 P.S.F.	5000 P.S.F.
4	4.90 / 0.14	1.63 / 0.09	0.96 / 0.06	3.50 / 0.12	1.16 / 0.06	0.70 / 0.06
6	10.20 / 0.22	3.40 / 0.14	2.04 / 0.09	7.20 / 0.17	2.40 / 0.11	1.44 / 0.07
8	17.70 / 0.35	5.54 / 0.23	3.54 / 0.15	12.50 / 0.25	4.16 / 0.16	2.50 / 0.14
10	28.90 / 0.54	9.60 / 0.35	5.76 / 0.23	20.40 / 0.38	6.80 / 0.25	4.06 / 0.16
12	41.10 / 1.31	13.70 / 0.85	8.22 / 0.55	29.10 / 0.97	9.70 / 0.63	5.82 / 0.42
14	55.80 / 1.70	18.60 / 1.11	11.16 / 0.72	39.50 / 1.22	13.16 / 0.79	7.90 / 0.51
16	72.20 / 2.14	24.06 / 1.39	14.44 / 0.90	51.10 / 1.54	17.03 / 1.00	10.22 / 0.65



PLAN FOR BENDS

PLAN FOR TEE AND DEAD END



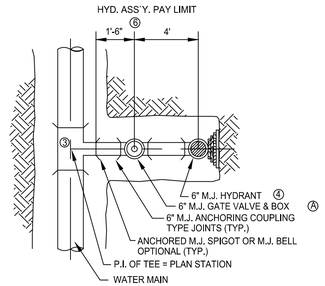
SECTION 1 - 1

SECTION 2 - 2

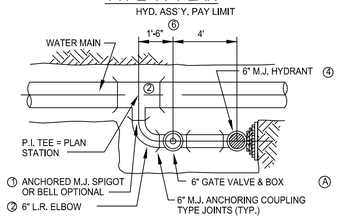
ALL CONCRETE BLOCKING MUST HAVE ITS ENTIRE FACE (X & Y) BEARING SURFACE AGAINST UNDISTURBED SOIL AND ALL VERTICAL NON-BEARING SURFACES SHALL BE FORMED SO AS TO KEEP CONCRETE FROM JOINTS. BLOCKING DESIGN BASED ON COMBINED WORKING PRESSURE PLUS WATER HAMMER OF 240 PSI AND FOR BEARING CAPACITY FOR SAND - 1000 PSF, SAND AND GRAVEL - 3000 PSF, SHALE - 5000 PSF.

THRUST BLOCKING DETAIL

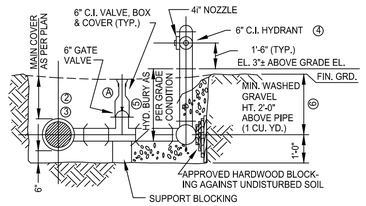
01/00 SD-4-6



TYPE `A` PLAN



TYPE `B` PLAN



SECTION

TYPICAL HYDRANT ASSEMBLY

12/88 SD-4-3

IF CAST IRON PIPE: USE APPROPRIATE TEE FITTINGS.*
IF P.C.C.P.: USE SIDE OUTLET AS REQUIRED. *

* TEE FITTING OR SIDE OUTLET IS NOT PART OF HYDRANT ASSEMBLY. PRICE OF SUCH TO BE INCLUDED WITH UNIT BID OF C.I.P. & FITTINGS OR OF MAIN PIPE SIZE ITEM PER CONTRACT BASIS OF PAYMENT.

NOTE:
(A) VALVE BOX TO BE SUPPORTED AT ITS BASE SO AS TO NOT CAUSE DAMAGE TO ANY OF THE OPERATING MECHANISM. (TOP OF BOX TO BE FLUSH WITH FINISH GRADE.

HYDRANT NOTES

(1) ANCHORED M.J. SPIGOT OR M.J. BELL - OPTIONAL AS REQUIRED FOR LATEREL CLEARANCE.

(2) HYDRANT TEE (CLOW NO. F-1224 OR APPROVED EQUAL) ON DUCTILE IRON PIPE FOR MAIN SIZES 6" THRU 12" DIA.

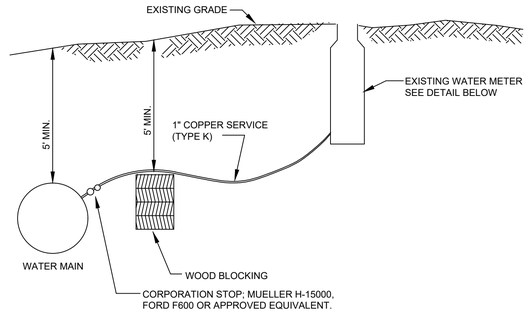
STANDARD M.J. TEE WITH 6" BRANCH ON DUCTILE IRON PIPE FOR MAIN SIZES 16" & LARGER OR 6" C.I. M.J. OUTLET FOR ALL PRESTRESSED CONRETE CYLINDER PIPE, ALONG WITH 6" C.I. M.J. 90°ELBOW.

(3) STANDARD M.J. TEE WITH 6" BRANCH FOR ALL SIZES OF DUCTILE IRON PIPE OR 6" C.I. M.J. OUTLET FOR ALL PRESTRESSED CONCRETE CYLINDER PIPE - ONLY.

(4) HYDRANT TO BE IN ACCORDANCE WITH SPECIFICATIONS.

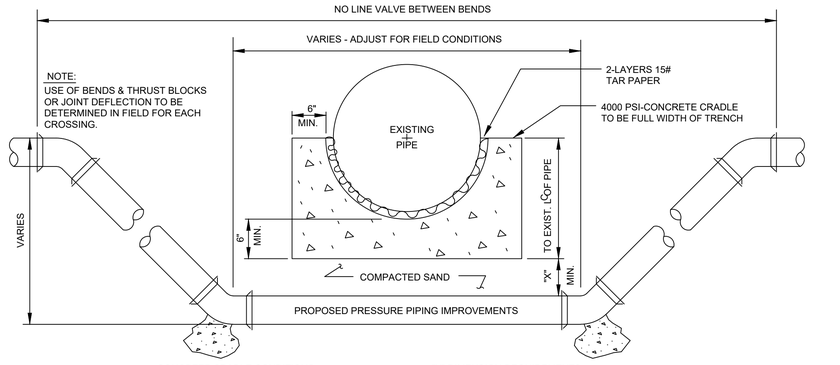
(5) THE STANDARD HYD. BURY IS 5'. HOWEVER, TO MEET THE SPECIFIED AND ILLUSTRATED MAIN COVER AND HYDRANT SETTINGS RESPECTIVE TO EACH HYDRANT LOCATION, IT WILL BE NECESSARY TO INSTALL A HYDRANT BURY THAT IS COMMENSURATE WITH THE LOCAL DEPTH REQUIREMENTS. IN EACH SUCH CASE , THE CONTRACTOR SHALL PROVIDE, AS PART OF HYDRANT ITEM INVOLVED, A LENGTHENED OR SHORTENED HYDRANT BURY, AS NECESSARY TO ACHIEVE PROPER ASSEMBLY.

(6) ADDITIONAL LENGTH IF REQUIRED AND APPROVED BY THE ENGINEER , TO BE PAID UNDER ITEM FOR CAST IRON PIPE & FITTINGS.



SERVICE TIE-IN FOR INSIDE METER

9/93 SD-4-8



CONCRETE CRADLE CONDITIONS

a) IF SANITARY OR STORM SEWER PIPE JOINT IS WITHIN PROPOSED IMPROVEMENT TRENCH LIMITS

b) IF CROSSING A WATER LINE AT ANY POINT

C) IF CROSSING SPACE IS LESS THAN MIN. SPACE OF CRADLE BELOW PIPE BOTTOM PLUS "X" DIMENSION THEN OMIT SAND FILL AND USE CONCRETE

"X" DIMENSION REQUIREMENTS:

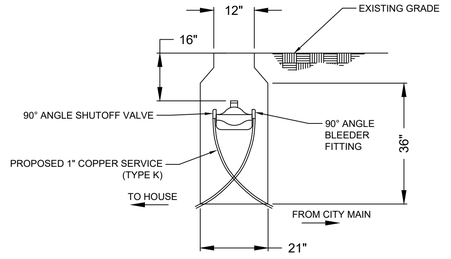
a) 6" FOR WATER LINE CROSSING (ALSO FOR GAS & O.B.T. LINES w/NO CRADLE NEEDED)

b) 18" FOR SANITARY OR STORM SEWER PIPE

c) IF CROSSING SPACE IS MORE THAN MIN. SPACE OF CRADLE BELOW PIPE BOTTOM PLUS AFOREMENTIONED "X" DIMENSION THEN EXTEND "X" DIMENSION TO MAKE UP DIFFERENCE.

PIPE LOWERING DETAIL

11/88 SD-4-13



EX. WATER METER

NOTES:

1. IF EXISTING WATER METER BOX NEEDS REPLACED, THE CITY OF TALLMADGE WILL PROVIDE TO THE CONTRACTOR.
2. THE CONTRACTOR IS TO TAP INTO THE PROPOSED 8" WATER MAIN, BORE THE WATER SERVICE TO THE EXISTING WATER METER AND TIE INTO THE SHUTOFF VALVE.

B&N burgessniple.com
50 SOUTH MAIN STREET, SUITE 600
AKRON, OHIO 44308

CITY OF TALLMADGE
BEECHWOOD DRIVE
WATERLINE LOOPING
SUMMIT COUNTY, OH

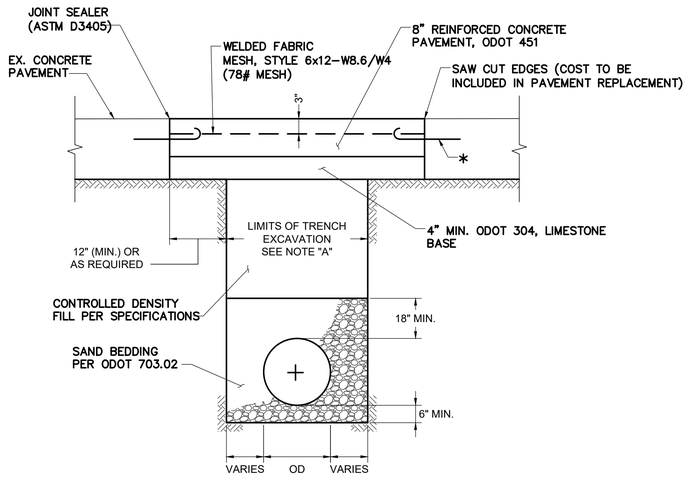
NO:	DESCRIPTION REVISIONS	DATE

JOB NO:	PR58719
DATE:	OCT 2020
DESIGNED BY:	GCB
DRAWN BY:	GCB
CHECKED BY:	JAM
APPROVED BY:	JAM
SCALE:	NONE

GENERAL DETAILS

5

SHEET: 5 OF 9



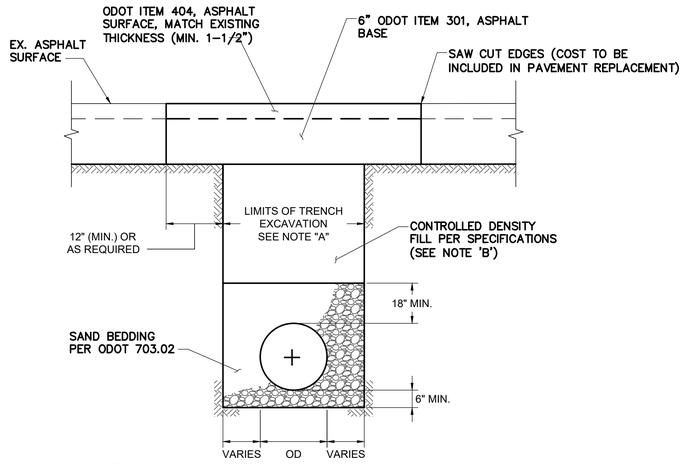
MAXIMUM TRENCH WIDTH AT TOP OF PIPE: OD + 24"

NOTE "A":
TRENCH WIDTH PER ODOT 603.06. MINIMUM TRENCH WIDTH SHALL ALLOW FOR THOROUGH COMPACTION OF BEDDING AND BACKFILL MATERIAL.

* 3/4" HOOK BOLTS AT 30" CENTERS LONGITUDINALLY AND 12" CENTERS TRANSVERSELY.

CONCRETE PAVEMENT RESTORATION

SCALE: NONE



NOTE 'A':

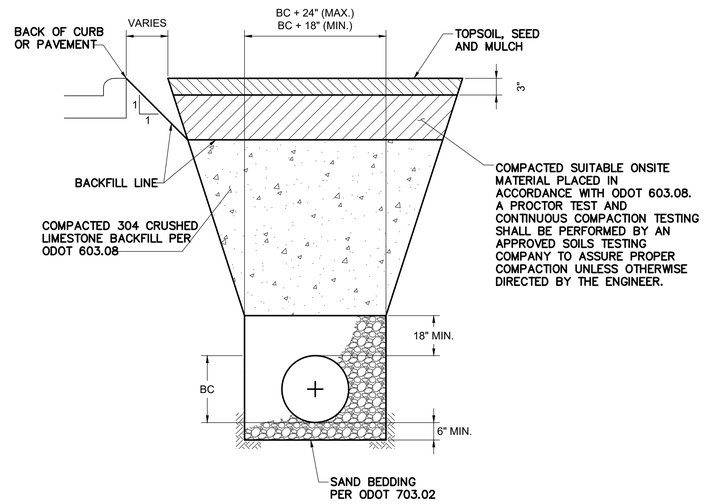
TRENCH WIDTH PER ODOT 603.03. MINIMUM TRENCH WIDTH SHALL ALLOW FOR THOROUGH COMPACTION OF BEDDING AND BACKFILL MATERIAL. MAXIMUM TRENCH WIDTH AT TOP OF PIPE: OD + 24".

NOTE 'B':

CONTROLLED DENSITY FILL PER ODOT ITEM 603, TYPE 2 SHALL BE PROVIDED FOR ALL PAVEMENT RESTORATION.

ASPHALT PAVEMENT RESTORATION

SCALE: NONE



UTILITY TRENCH WITHIN RIGHT-OF-WAY

SCALE: NONE

50 SOUTH MAIN STREET,
SUITE 600
AKRON, OHIO 44308
B&N
burgessniple.com

CITY OF TALLMADGE
BEECHWOOD DRIVE
WATERLINE LOOPING
SUMMIT COUNTY, OH

NO:	DESCRIPTION	DATE
	REVISIONS	

JOB NO: PR58719
DATE: OCT 2020
DESIGNED BY: GCB
DRAWN BY: GCB
CHECKED BY: JAM
APPROVED BY: JAM
SCALE: NONE

TRENCH DETAILS

6

SHEET: 6 OF 9

STORMWATER POLLUTION PREVENTION NOTES

1. UNLESS OTHERWISE NOTED, STANDARDS AND SPECIFICATIONS ESTABLISHED IN THE LATEST EDITION OF THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE MANUAL ENTITLED "WATER MANAGEMENT AND SEDIMENT CONTROL FOR URBANIZING AREAS" SHALL GOVERN THE EROSION AND SEDIMENT CONTROL INSTALLATIONS SPECIFIED ON THIS PLAN.
2. THE CONTRACTOR SHALL NOTIFY ALAN KELTYKA OF THE CITY OF BARBERTON UTILITIES DEPARTMENT (330-848-6720) AT LEAST 60 HOURS PRIOR TO BEGINNING ANY LAND DISTURBING OPERATIONS.
3. THE CONTRACTOR SHALL REMOVE EXISTING GROUND COVER ONLY AS NECESSARY FOR THE PROJECT PHASE CURRENTLY UNDER CONSTRUCTION.
4. ALL CLEARING AND GRADING OPERATIONS SHALL BE CONFINED TO THE EXISTING RIGHT-OF-WAY LIMITS SHOWN ON THIS PLAN NEAR THE PROPOSED WATER MAIN IMPROVEMENTS.
5. THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT SOIL TRANSPORT FROM THE CONSTRUCTION SITE ONTO PUBLIC OR PRIVATE LANDS WHERE SEDIMENT CONTROLS ARE NOT IN PLACE.
6. NO SOIL, ROCK, DEBRIS, OR OTHER MATERIAL SHALL BE DUMPED OR PLACED IN ANY AREAS NOT ADEQUATELY PROTECTED BY EROSION CONTROL INSTALLATIONS.
7. IN ADDITION TO THE SEEDING SPECIFICATIONS LISTED HEREIN, TEMPORARY AND PERMANENT SEEDING, AS SPECIFIED IN ODOT ITEMS 207 AND 659, IS ACCEPTABLE.
8. INLET PROTECTION SHALL BE INSTALLED FOR ALL CATCH BASINS AND STORM WATER MANHOLES WITH GRATED LIDS.

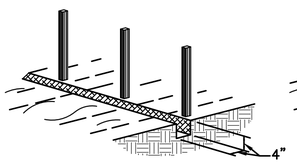
SEQUENCE OF INSTALLATION

1. ALL INLET PROTECTION FOR EXISTING CATCH BASINS SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION OPERATIONS AND SHALL REMAIN IN PLACE UNTIL CONSTRUCTION ACTIVITIES ARE COMPLETE AND UPSTREAM AREAS HAVE BEEN STABILIZED.
2. TEMPORARY SEEDING SHALL BE PROVIDED FOR ALL EXPOSED SURFACES AND SOIL STOCKPILES WHERE PERMANENT SEEDING OR ADDITIONAL WORK IS NOT SCHEDULED FOR A PERIOD OF FORTY-FIVE (45) DAYS. SEEDING SHALL BE PROVIDED WITHIN FOURTEEN (14) DAYS AFTER CONSTRUCTION OPERATIONS CEASE.
3. PERMANENT SEEDING SHALL BE PROVIDED FOR ALL EXPOSED SOIL SURFACES WITH IN FOURTEEN (14) DAYS AFTER FINISHED GRADE IS REACHED.
4. AREAS WHERE TEMPORARY OR PERMANENT SEEDING HAS FAILED TO GERMINATE SHALL BE RESEEDED AND MULCHED AS NECESSARY TO ACHIEVE STABILIZATION. IF SEEDING FAILS TO GERMINATE IN THE AREAS OF TOPSOIL STOCKPILES, RESEEDING OR ADDITIONAL SILT FENCING MAY BE REQUIRED, AS DIRECTED.
5. ALL TEMPORARY EROSION AND SEDIMENT CONTROL INSTALLATIONS SHALL BE REMOVED WITHIN 30 DAYS AFTER SITE STABILIZATION IS ACHIEVED.

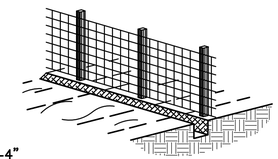
MAINTENANCE

1. THE CONTRACTOR SHALL MAINTAIN AND REPAIR EROSION CONTROL INSTALLATIONS AS NEEDED TO ENSURE THE CONTINUED PERFORMANCE OF THERE INTENDED FUNCTION. ON-GOING INSPECTION OF INSTALLATIONS WILL BE PERFORMED BY THE CITY OF BARBERTON.
2. ANY TRAPPED SEDIMENT OR DEBRIS REMOVED DURING CLEANING OF INSTALLATIONS SHALL BE PLACED IN AREAS NOT SUBJECT TO EROSION.

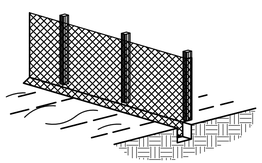
1. SET POSTS AND EXCAVATE A 4"x4" TRENCH UPSLOPE ALONG THE LINE OF POSTS.



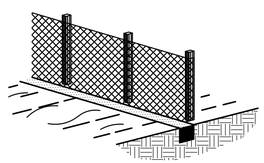
2. STAPLE WIRE FENCING TO THE POST.



3. ATTACH THE FILTER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH.



4. BACKFILL AND COMPACT THE EXCAVATED SOIL.



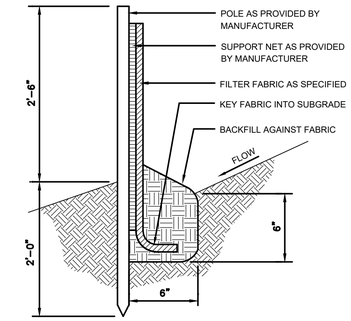
SILT FENCE INSTALLATION DETAIL

SCALE: NONE

NOTES

1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT THE LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS WHICH MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
3. TO PREVENT WATER PONDED BY THE SILT FENCE FROM FLOWING AROUND THE ENDS, EACH END SHALL BE CONSTRUCTED UPSLOPE SO THAT THE ENDS ARE AT A HIGHER ELEVATIONS.
4. WHERE POSSIBLE, SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FEET (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.
5. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
6. THE SILT FENCE SHALL BE PLACED IN A TRENCH CUT A MINIMUM 6 INCHES DEEP. THE TRENCH SHALL BE CUT WITH A TRENCHER, CABLE LAYING MACHINE, OR OTHER SUITABLE DEVICE WHICH WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.
7. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE AND SO THAT 8 INCHES OF CLOTH ARE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6 INCH DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED.
8. SEAMS BETWEEN SECTION OF SILT FENCE SHALL BE OVERLAPPED WITH THE END STAKES OF EACH SECTION WRAPPED TOGETHER BEFORE DRIVING INTO THE GROUND.
9. MAINTENANCE - SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER OR AROUND THE ENDS, OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE: 1.) THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED, 2.) ACCUMULATED SEDIMENT SHALL BE REMOVED, 3.) OTHER PRACTICES SHALL BE INSTALLED.
10. SILT FENCE MATERIALS:
    A.) FENCE POSTS - THE LENGTH SHALL BE A MINIMUM OF 32 INCHES LONG. WOOD POSTS WILL BE 2x2 INCH HARDWOOD OF SOUND QUALITY. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FEET.
    B.) SILT FENCE FABRIC (SEE CHART BELOW):

FABRIC PROPERTIES	VALUES	TEST METHOD
GRAB TENSILE STRENGTH	90 LB. MINIMUM	ASTM D 1682
MULLEN BURST STRENGTH	190 PSI MINIMUM	ASTM D 3786
SLURRY FLOW RATE	0.3 GAL/MIN./F2 MAXIMUM	
EQUIVALENT OPENING SIZE	40-80	US STD. SIEVE CW-02215
ULTRAVIOLET RADIATION STABILITY	90% MINIMUM	ASTM-G-26

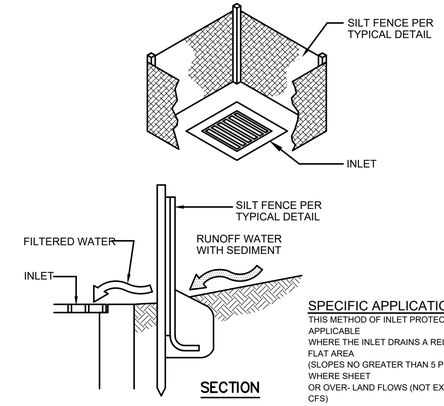


TYPICAL SILT FENCE DETAIL

SCALE: NONE

CONSTRUCTION ENTRANCE NOTES

1. STONE SIZE -- TWO INCH STONE SHALL BE USED, RECYCLED CONCRETE WILL NOT BE PERMITTED.
2. LENGTH -- THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 50 FT.
3. THICKNESS -- THE STONE LAYER SHALL BE AT LEAST 6 IN. THICK.
4. WIDTH -- THE ENTRANCE SHALL BE AT LEAST 14 FT. WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. BEDDING -- A GEOTEXTILE SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE. IT SHALL HAVE A GRAB TENSILE STRENGTH OF AT LEAST 200 LB. AND MULLEN BURST STRENGTH OF AT LEAST 190 LB.
6. CULVERT -- A 12" DIA. CULVERT PIPE SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FLOWING ACROSS THE ENTRANCE FROM BEING DIRECTED OUT ONTO PAVED SURFACES.
7. WATER BAR -- A WATER BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE RUNOFF FROM FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND OUT ONTO PAVED SURFACES.
8. MAINTENANCE -- TOP DRESSING OF ADDITIONAL STONE SHALL BE APPLIED AS CONDITIONS DEMAND. MUD SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS, OR ANY SEDIMENT CONTROLS, SHALL BE REMOVED IMMEDIATELY. REMOVAL SHALL BE ACCOMPLISHED BY SCRAPING OR SWEEPING.
9. CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES AND PREVENT OFF-SITE TRACKING.
10. NO METAL TRACK EQUIPMENT SHALL BE PERMITTED ON UNMATTED ROADWAY. ANY DAMAGE TO ROADWAYS SHALL BE REPAIRED AT CONTRACTORS' EXPENSE.
11. CONTRACTOR SHALL KEEP ROADWAY CLEAN AT ALL TIMES FROM DIRT, MUD AND MATERIAL CARRIED ONTO THE PAVEMENT.
12. CONTRACTOR TO INCLUDE COST FOR REMOVING ALL CONSTRUCTION ENTRANCES IN BID.
13. ANY DAMAGE TO CONSTRUCTION ACCESS ENTRANCE DURING WATER MAIN INSTALLATION TO BE REPAIRED BY CONTRACTOR AT NO COST TO THE CITY.
14. CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.



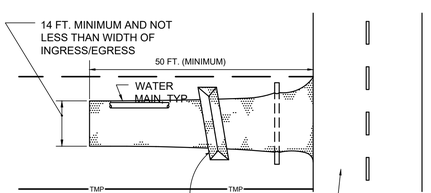
SECTION

SPECIFIC APPLICATION

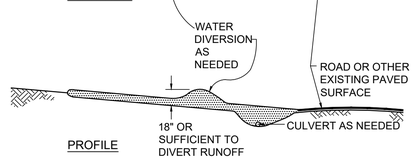
THIS METHOD OF INLET PROTECTION IS APPLICABLE
WHERE THE INLET DRAINS A RELATIVELY FLAT AREA
(SLOPES NO GREATER THAN 5 PERCENT)
WHERE SHEET
OR OVER- LAND FLOWS (NOT EXCEEDING 0.5 CFS)
ARE TYPICAL.

SILT FENCE DETAIL

SCALE: NONE



PLAN VIEW



PROFILE

CONSTRUCTION ENTRANCE DETAIL AND NOTES

50 SOUTH MAIN STREET,
SUITE 600
AKRON, OHIO 44308
B&N burgessniple.com

CITY OF TALLMADGE
BEECHWOOD DRIVE
WATERLINE LOOPING
SUMMIT COUNTY, OH

NO:	DESCRIPTION REVISIONS	DATE

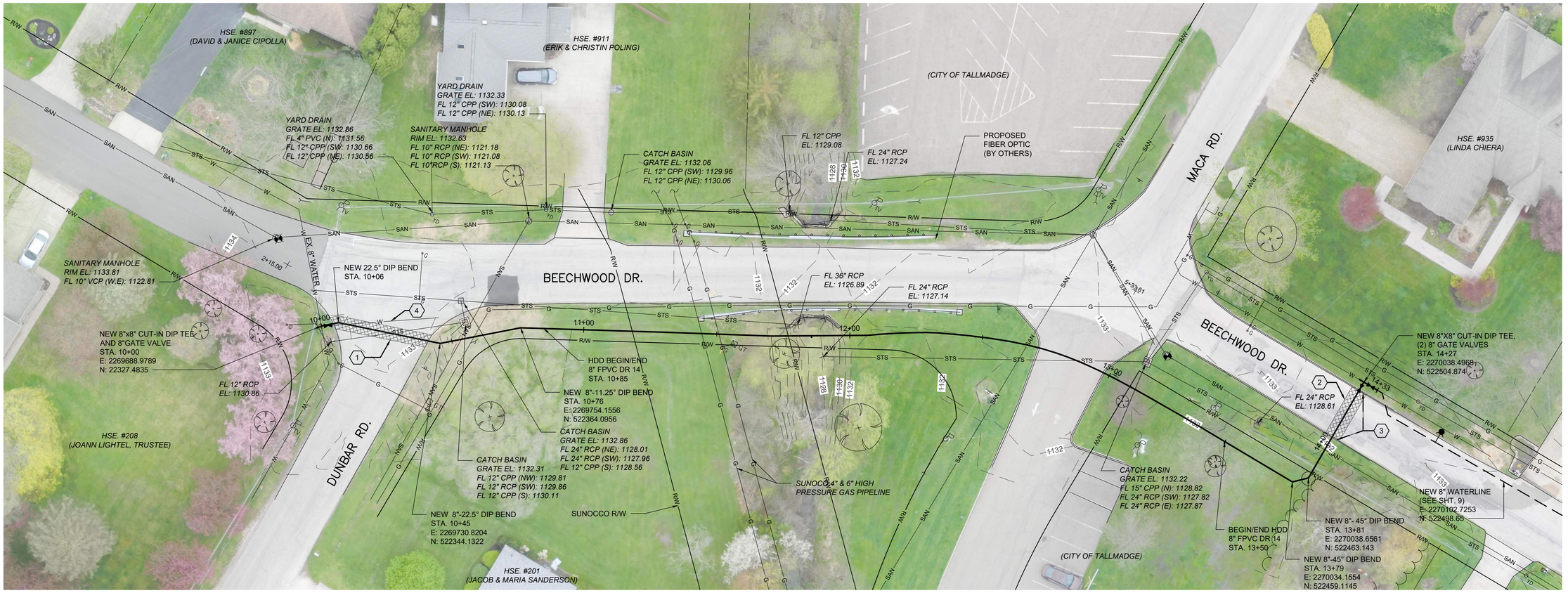
JOB NO:	PR58719
DATE:	OCT 2020
DESIGNED BY:	GCB
DRAWN BY:	GCB
CHECKED BY:	JAM
APPROVED BY:	JAM
SCALE:	NONE

SEDIMENT & EROSION CONTROL

7

SHEET: 7 OF 9

PLOTTED: 3/1/2021 2:39:18 PM

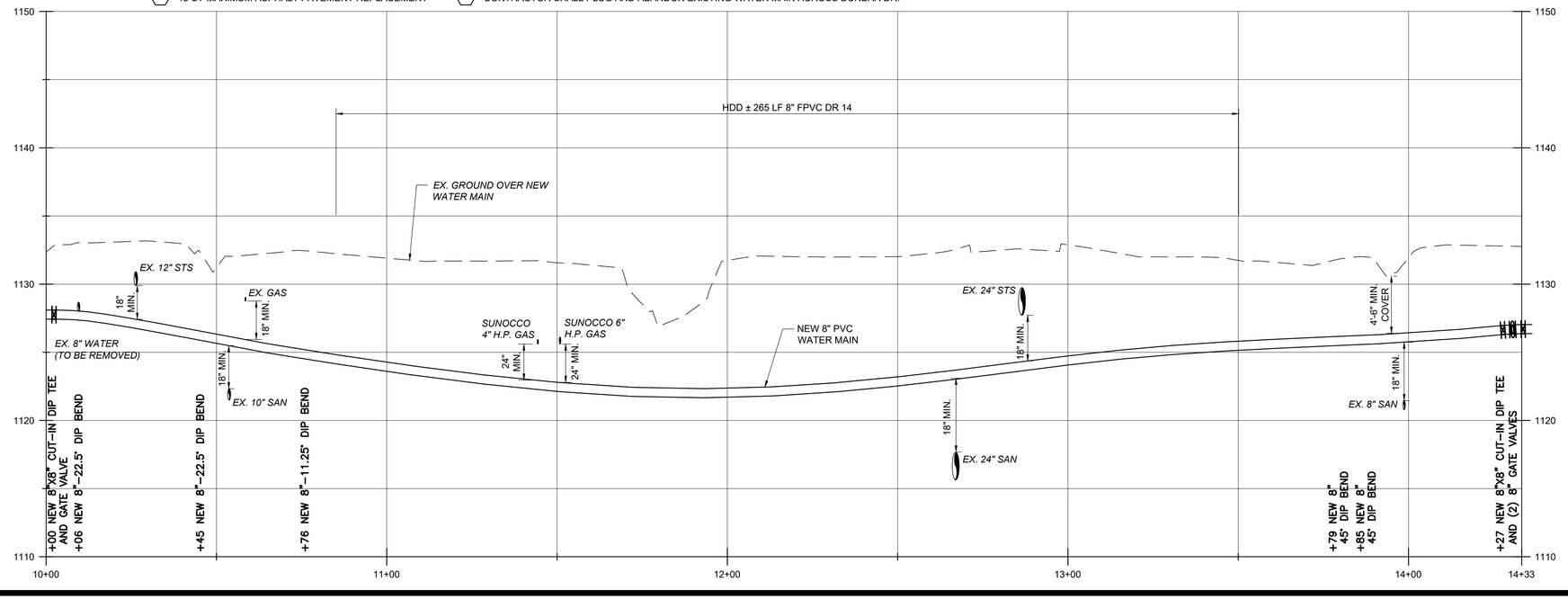


SCALE:
1" = 20' (HORIZ.)
1" = 5" (VERT.)

NOTES:

1. ALL WORK SHOWN ON THIS SHEET SHALL BE INCLUDED IN THE BASE BID FOR THE PROJECT.
2. HIGH PRESSURE GAS LINES ARE OWNED AND OPERATED BY SUNOCO PIPELINE L.P. CONTRACTOR SHALL REFER TO SUNOCO LOGISTICS GENERAL REQUIREMENTS NOTES ON PLAN SHEET 4 PRIOR TO PERFORMING WORK WITHIN THE SUNOCO PIPELINE RIGHT-OF-WAY.
3. A PROPOSED FIBER OPTIC LINE IS SCHEDULE TO BE INSTALLED IN THE SUMMER OF 2021. ALL WORK ASSOCIATED WITH THE FIBER OPTIC LINE WILL BE PERFORMED BY OTHERS AND IS NOT PART OF THIS PROJECT.

1 25 SY MAXIMUM ASPHALT PAVEMENT REPLACEMENT
2 15 SY MAXIMUM ASPHALT PAVEMENT REPLACEMENT
3 10 LF MAXIMUM CONCRETE CURB REPLACEMENT, EACH LOCATION
2 CONTRACTOR SHALL PLUG AND ABANDON EXISTING WATER MAIN ACROSS DUNBAR DR.



50 SOUTH MAIN STREET,
SUITE 600
AKRON, OHIO 44308
B&N
burgessniple.com

CITY OF TALLMADGE
BEECHWOOD DRIVE
WATERLINE LOOPING
SUMMIT COUNTY, OH

NO:	DESCRIPTION REVISIONS	DATE

JOB NO:	PR58719
DATE:	OCT 2020
DESIGNED BY:	GCB
DRAWN BY:	GCB
CHECKED BY:	JAM
APPROVED BY:	JAM
SCALE:	AS NOTED

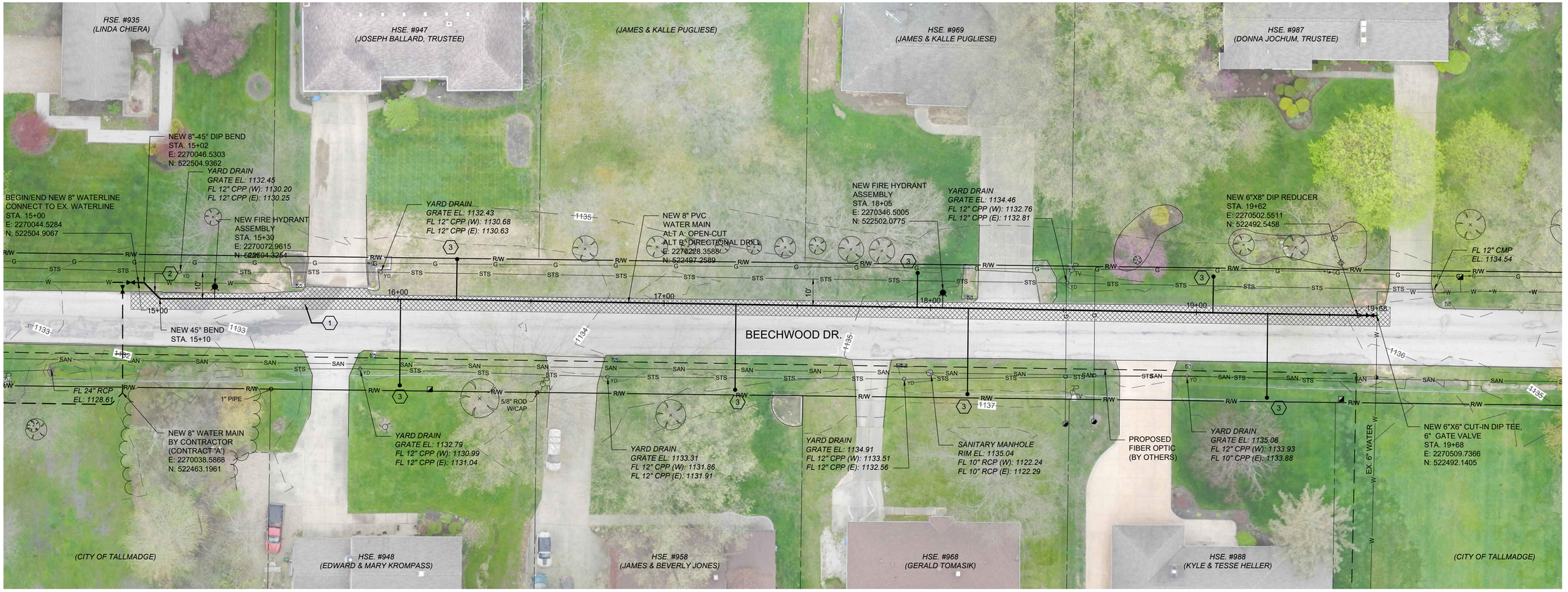
BASE BID
PLAN & PROFILE

STA. 10+00
TO
STA. 14+33

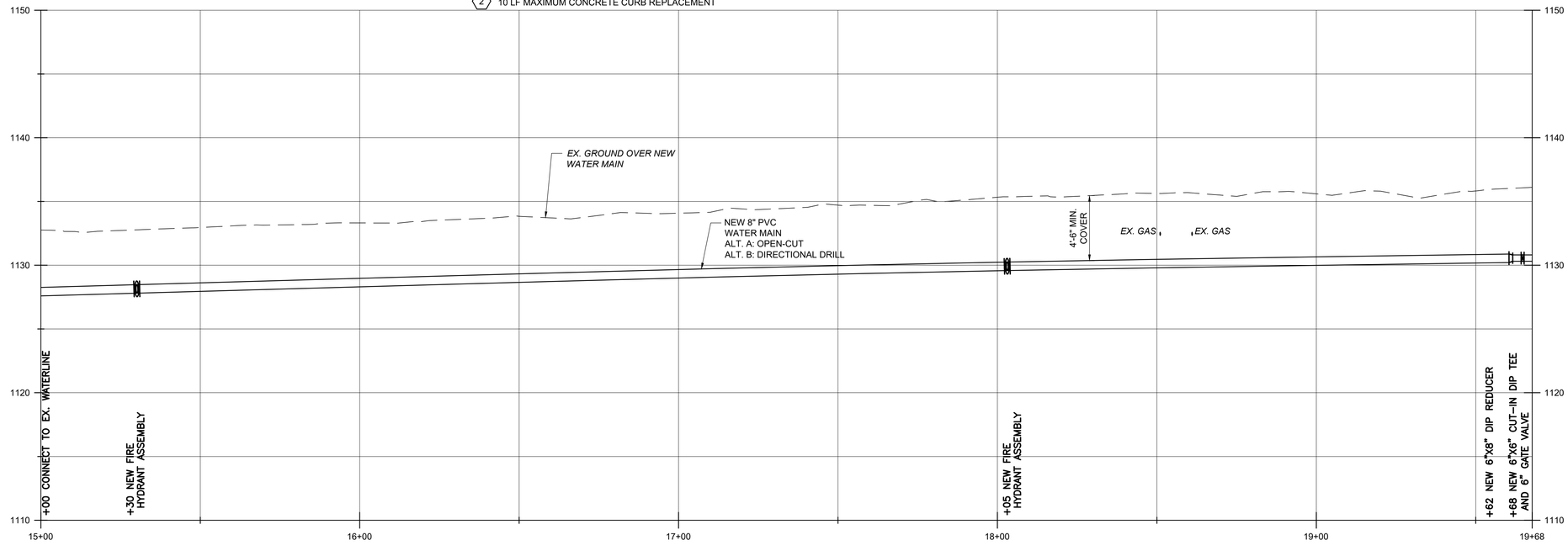
8

SHEET: 8 OF 9

P:\PR58719\Cadd\Sheets\PLAN AND PROFILE 1.dwg 2/19/2021 3:54:14 PM Jeff Mamicio



1. 215 SY MAXIMUM ASPHALT PAVEMENT REPLACEMENT
2. 10 LF MAXIMUM CONCRETE CURB REPLACEMENT
3. NEW WATER SERVICE CONNECTION. ACTUAL LOCATION TO BE DETERMINED IN THE FIELD.



SCALE:
1" = 20' (HORIZ.)
1" = 5" (VERT.)

NOTES:

1. ALL WORK SHOWN ON THIS SHEET SHALL BE INCLUDED IN THE ADD ALTERNATES.
2. WORK ASSOCIATED WITH ADD ALTERNATE A - MACA DR. TO MACA PARK (OPEN CUT) IS SHOWN ON THE PLANS.
3. WORK ASSOCIATED WITH ADD ALTERNATE B - MACA DR. TO MACA PARK (DIRECTIONAL DRILL) SHALL CONSIST OF INSTALLING THE NEW WATER MAIN FROM STA. 15+00 TO STA. 19+68 VIA HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION METHODS.
4. A PROPOSED FIBER OPTIC LINE IS SCHEDULED TO BE INSTALLED IN THE SUMMER OF 2021. ALL WORK ASSOCIATED WITH THE FIBER OPTIC LINE WILL BE PERFORMED BY OTHERS AND IS NOT PART OF THIS PROJECT.

B&N burgessniple.com
50 SOUTH MAIN STREET,
SUITE 600
AKRON, OHIO 44308

CITY OF TALLMADGE
BEECHWOOD DRIVE
WATERLINE LOOPING
SUMMIT COUNTY, OH

NO:	DESCRIPTION REVISIONS	DATE

JOB NO:	PR58719
DATE:	OCT 2020
DESIGNED BY:	GCB
DRAWN BY:	GCB
CHECKED BY:	JAM
APPROVED BY:	JAM
SCALE:	AS NOTED

ADD ALTERNATE
PLAN & PROFILE

STA. 15+00
TO
STA. 19+68

9

SHEET: 9 OF 9