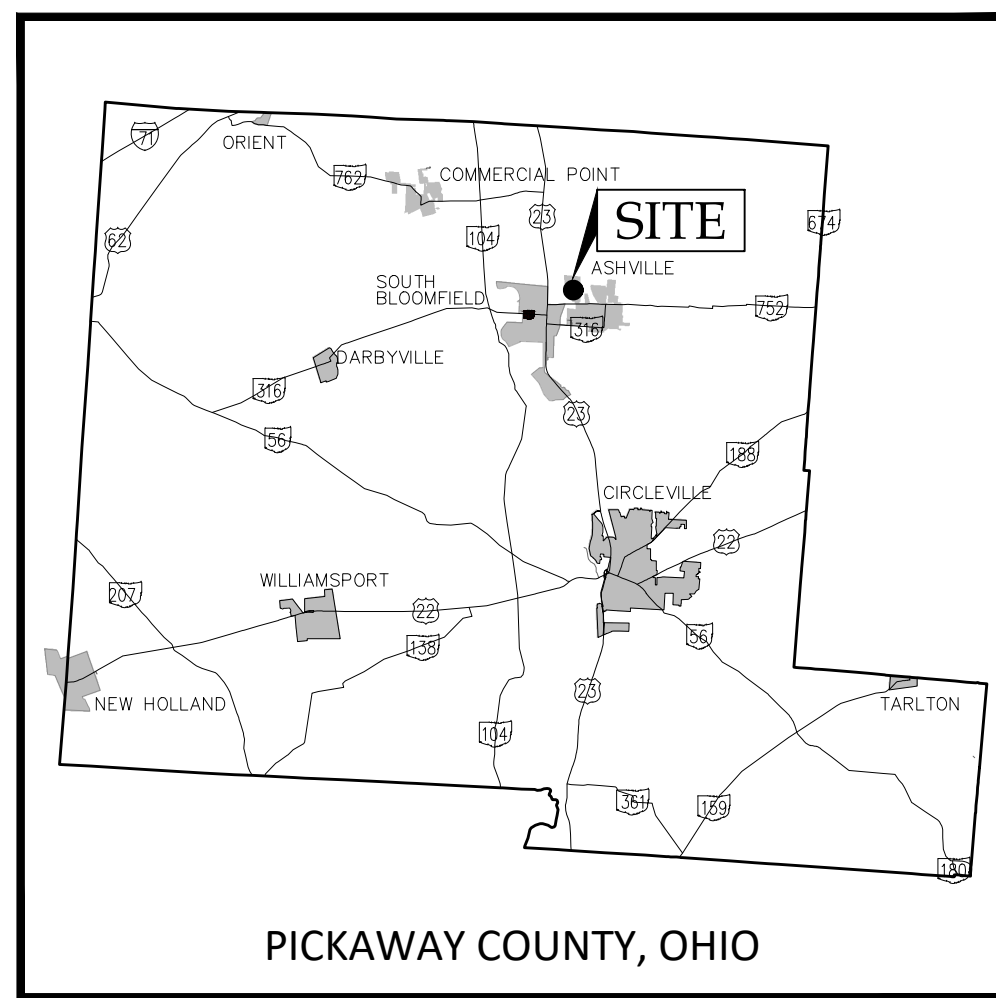


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FILE No. A:\Kleinfielder Projects\2022\2022\4880.001A\PHL NOTES AND DETAILS-2022\4880.001A.dwg 02/02/23 08:54-ikemer



LOCATION MAP
NO SCALE

LEGENDS

| EXISTING LEGEND | | PROPOSED LEGEND | |
|-------------------------|---------------------------------|-------------------|--|
| --- 625 --- | EXISTING MAJOR CONTOUR | --- ST --- ST --- | PROPOSED STORM SEWER |
| --- 624 --- | EXISTING MINOR CONTOUR | --- WAT --- | PROPOSED WATERLINE |
| X 673.85 | EXISTING SPOT ELEVATION | --- SAN --- | PROPOSED SANITARY SEWER |
| - R/W - | RIGHT-OF-WAY | --- UT --- | PROPOSED COMMUNICATIONS LINE |
| --- | EDGE OF PAVEMENT | □ | PROPOSED HALF-HEIGHT HEADWALL |
| --- ST --- ST --- | EXISTING STORM SEWER | ■ | PROPOSED CATCH BASIN |
| --- SAN --- | EXISTING SANITARY SEWER | ■ | PROPOSED FIRE HYDRANT |
| --- WAT --- | EXISTING WATERLINE | ▨ | PROPOSED ASPHALT PAVEMENT |
| --- OE --- OE --- | EXISTING OVERHEAD ELECTRIC | ▨ | PROPOSED CONCRETE PAVEMENT |
| --- | EXISTING TELECOMMUNICATIONS | | |
| X --- X --- X --- X --- | EXISTING FENCE LINE | | |
| ⊗ | EXISTING CATCH BASIN | | |
| ⊗ | EXISTING SANITARY MANHOLE | | |
| ⊗ | EXISTING SANITARY CLEANOUT | | |
| ⊗ | EXISTING DOWN SPOUT | | |
| ⊗ | EXISTING FIRE HYDRANT | X 674.00 | PROPOSED SPOT ELEVATION |
| ⊗ | EXISTING WATER VALVE | X 674.00 | PROPOSED SPOT ELEVATION AT FACE OF CURB ADD 0.50' FOR TOP OF CURB ELEVATION |
| ⊗ | EXISTING POWER POLE | ~> | DRAINAGE FLOW ARROW |
| ⊗ | EXISTING ELECTRICAL TRANSFORMER | | |
| ⊗ | EXISTING ELECTRIC MANHOLE | | |
| ⊗ | EXISTING ELECTRIC METER | | |
| ⊗ | EXISTING GUY WIRE | | |
| ⊗ | EXISTING POST | | |
| ⊗ | SOIL BORING | | |
| ● | P.K.S. | | |
| ● | NAIL SET | | |

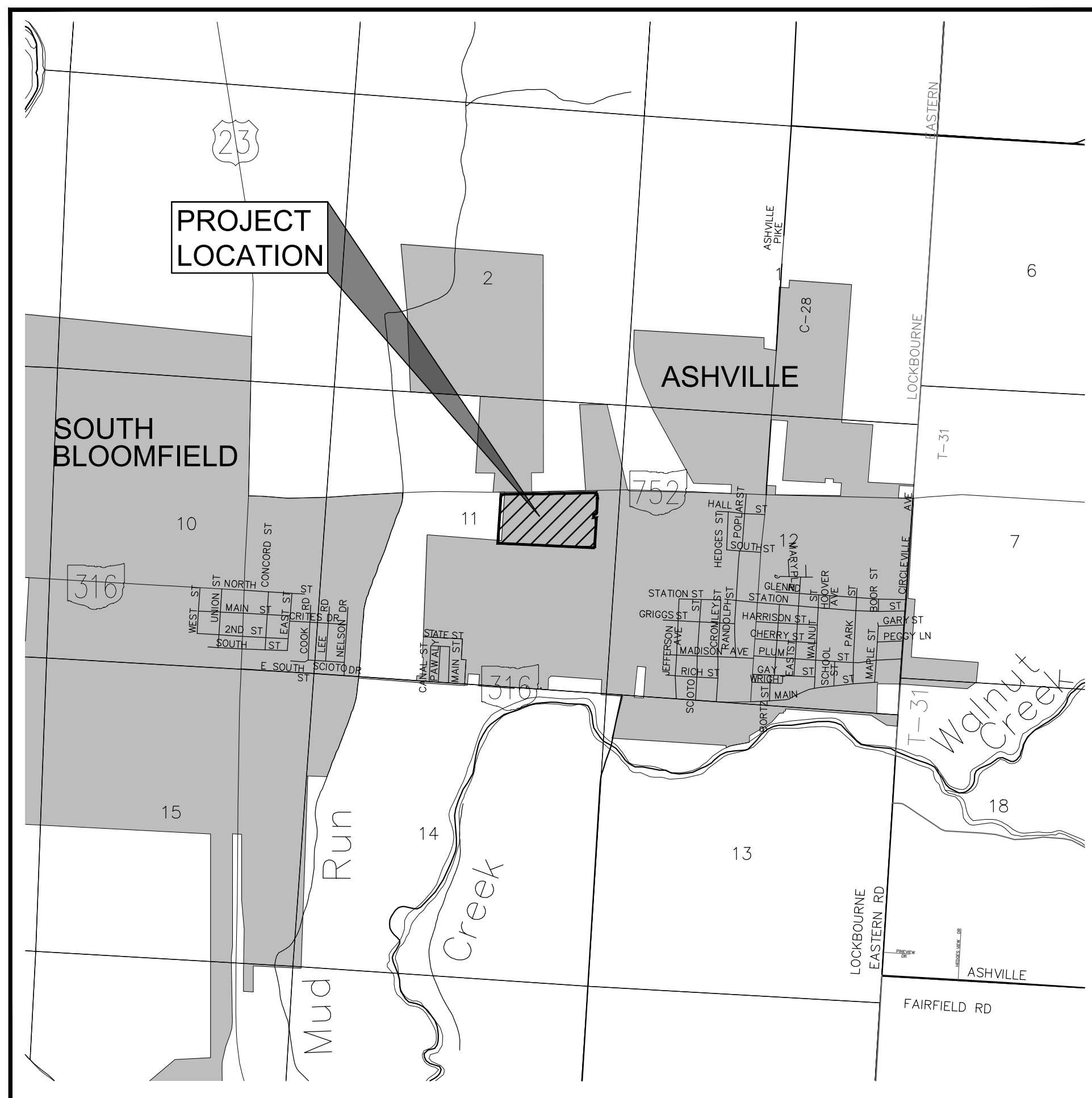
GRADING LEGEND

| | |
|-------------|--|
| --- 625 --- | PROPOSED MAJOR CONTOUR |
| --- 624 --- | PROPOSED MINOR CONTOUR |
| 0.5% | PROPOSED SLOPE |
| X 674.00 | PROPOSED SPOT ELEVATION |
| X 674.00 | PROPOSED SPOT ELEVATION AT FACE OF CURB ADD 0.50' FOR TOP OF CURB ELEVATION |
| ~> | DRAINAGE FLOW ARROW |

UTILITY LIST

| | | |
|---|--|--|
| FRONTIER COMMUNICATIONS (FORMER VERIZON) 500 LANCASTER PIKE CIRCLEVILLE, OH 43113 (740) 474-5033 | AMERICAN ELECTRIC POWER 1320 SUGAR GROVE ROAD LANCASTER, OHIO 43130 EMAIL PLANS TO: DRBROWN@AEP.COM (740) 689-4700 | SPECTRUM / TIME WARNER COMMUNICATIONS 1315 GRANVILLE PIKE LANCASTER, OHIO 43130 (740) 635-9685 |
| COLUMBIA GAS TRANSMISSION 1440 MCNAUGHTON ROAD COLUMBUS, OH 43232 | SPRINT COMMUNICATIONS STEVE HUGHES 3873 TWP RD 134 CARDINGTON, OH 43315 | SBC 140 WEST WHEELING STREET LANCASTER, OHIO 43130 (740) 687-6696 |
| SOUTH CENTRAL POWER COMPANY 720 MILL PARK DR. LANCASTER, OHIO 43130 MIKE CHALFAN (740)-689-6168 | MOX NETWORKS (FIBER OPTICS) MICK SHIELDS, MICK@MOXNETWORKS.COM (312) 502-5590 | *VILLAGE OF ASHVILLE SERVICE DEPARTMENT 160 CHERRY STREET ASHVILLE, OHIO 43103 (740) 983-4053 |
| COLUMBIA GAS OF OHIO 843 PIATT AVENUE CHILLICOTHE, OHIO 45601 MICHAEL PAULUS (740) 774-8229 HUDSON PARK - ASSOCIATE FIELD ENGINEER (740) 637-9378 | | 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 OUPSOHIO 45601 (614) 772-9224 |

DHL SUPPLY CHAIN ASHVILLE LOGISTICS PARK ASHVILLE, OHIO



INDEX MAP

SCALE: 1 inch = 2000 feet

SIGNATURES

SERVICE DEPARTMENT, SUPERVISOR

VILLAGE ENGINEER, VILLAGE OF ASHVILLE

MAYOR, VILLAGE OF ASHVILLE

VILLAGE ADMINISTRATOR, VILLAGE OF ASHVILLE

OWNER
PRAIRIE ACRES LLC
CIMS PROPERTY MANAGEMENT
32 MILLER ST. SUITE A
ASHVILLE, OHIO 43103

DEVELOPER
DHL SUPPLY CHAIN
360 WESTAR BLVD
WESTERVILLE, OH 43082

DESIGN ENGINEER
POGGEMEYER DESIGN GROUP
A KLEINFELDER COMPANY
1168 NORTH MAIN STREET
BOWLING GREEN, OH 43402
PH: (419) 352-7537



NOTE: APPROVAL OF THESE PLANS DOES NOT CONSTITUTE ASSURANCE TO OPERATE AS INTENDED. THE REVIEWER DOES NOT ACCEPT RESPONSIBILITY FOR THE INTEGRITY OF THE PLANS. ALL TECHNICAL DETAILS REMAIN THE RESPONSIBILITY OF THE ENGINEER PREPARING THE PLAN.

SPECIFICATIONS

ALL MATERIAL AND CONSTRUCTION MUST MEET THE REQUIREMENTS OF THE VILLAGE OF ASHVILLE:

STORM SEWER

THE STANDARDS AND SPECIFICATIONS OF THE VILLAGE OF ASHVILLE AND THE OHIO ENVIRONMENTAL PROTECTION AGENCY

WATERLINES

THE STANDARDS AND SPECIFICATIONS OF THE VILLAGE OF ASHVILLE AND THE OHIO ENVIRONMENTAL PROTECTION AGENCY

SANITARY SEWER

THE STANDARDS AND SPECIFICATIONS OF THE VILLAGE OF ASHVILLE AND THE OHIO ENVIRONMENTAL PROTECTION AGENCY

PAVEMENT

THE STANDARDS AND SPECIFICATIONS OF THE OHIO DEPARTMENT OF TRANSPORTATION

STORM WATER POLLUTION PREVENTION PLAN (SWP3)

A STORM WATER POLLUTION PREVENTION PLAN HAS BEEN PREPARED FOR THIS PROJECT AND SHALL BE CONSIDERED TO BE A PART OF THE CONSTRUCTION DOCUMENTS.

BENCHMARK

THE VERTICAL DATUM IS BASED ON NAVD88 AS OBSERVED FROM CONTINUALLY OPERATED BASE STATION MANAGED BY OHIO DEPARTMENT OF TRANSPORTATION.

THE COORDINATES ARE REFERENCED TO OHIO STATE PLANE GRID COORDINATES OH-S NAD83 (2011).

ZONING

ZONING - LI (LIMITED INDUSTRIAL DISTRICT)

SETBACKS

25' FRONT YARD SETBACK
50' SIDE YARD SETBACK
50' REAR YARD SETBACK
MAX. BLDG. HEIGHT 50'

SITE DATA

TOTAL SITE40.366 ACRES
EXISTING R/W.....1.001 ACRES
WETLANDS.....0.70 ACRES

SHEET INDEX

| SHEET # | DRAWING DESCRIPTION |
|---------|--|
| 1 | COVER SHEET |
| 2 | GENERAL SUMMERY |
| 3 | GENERAL NOTES |
| 4 | GENERAL NOTES |
| 5 | SEWER DETAIL SHEET |
| 6 | WATERLINE DETAIL SHEET |
| 7 | WATERLINE DETAIL SHEET |
| 8 | WATERLINE DETAIL SHEET |
| 9 | DETAIL SHEET |
| 10 | DETAIL SHEET |
| 11 | DETAIL SHEET |
| 12 | DETAIL SHEET |
| 13 | STORM WATER PUMP STATION PLAN AND DETAILS |
| 14 | EROSION AND SEDIMENT CONTROL DETAILS |
| 15 | EROSION AND SEDIMENT CONTROL NOTES |
| 16 | EXISTING TOPOGRAPHY AND DEMOLITION PLAN |
| 17 | OVERALL PROPOSED SITE PLAN |
| 18 | DIMENSION AND PAVEMENT PLAN |
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| 25 | WATERLINE PROFILES |
| 26 | STORM SEWER PROFILES |
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| 28 | PRE CONSTRUCTION EROSION AND SEDIMENT CONTROL PLAN |
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| 30 | LANDSCAPE PLAN |

| REV. | DATE | DESCRIPTION |
|--------|------|-------------------|
| 2/3/23 | | VILLAGE SUBMITTAL |



**POGGEMEYER
DESIGN GROUP**
A KLEINFELDER COMPANY

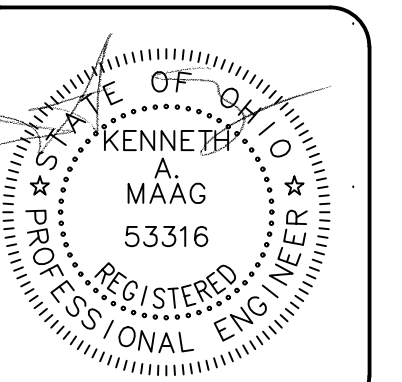
1168 NORTH MAIN STREET
BOWLING GREEN, OH 43402
PH: (419) 352-7537



**DHL SUPPLY CHAIN
ASHVILLE LOGISTICS PARK
ASHVILLE, OHIO**

COVER SHEET

DRAWN BY: **MEK** CHECKED BY: **KAM**



1

DATE
09/13/2022

PROJECT NUMBER
20224880.001A

VILLAGE OF ASHVILLE GENERAL NOTES

GENERAL PLAN NOTES (08-01-20)
GEN 1 THE VILLAGE OF ASHVILLE REQUIREMENTS, TOGETHER WITH THE LATEST EDITION OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION AND THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATION, SHALL COVER ALL CONSTRUCTION ITEMS, MATERIAL, WORKMANSHIP, ETC THAT ARE A PART OF THIS PLAN, ENFORCE ON THE DATE OF CONSTRUCTION, UNLESS OTHERWISE NOTED. EXCEPT AS SUCH SPECIFICATIONS ARE MODIFIED BY THE FOLLOWING GENERAL NOTES AND/OR SPECIFICATIONS OR BY THE CONSTRUCTION DETAILS SET FORTH HEREIN, THE CONTRACTOR SHALL ALSO CONFORM TO REQUIREMENTS OF THE VILLAGE OF ASHVILLE GENERAL PROVISIONS AND THE STANDARD CITY OF COLUMBUS DETAIL CONSTRUCTION DRAWINGS. IF THERE ARE ANY DISCREPANCIES, THE VILLAGE OF ASHVILLE REQUIREMENTS SHALL GOVERN.

GEN 2 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, OHIO.

ROW 9 CONCRETE CURBS ARE TO BE BRANDED DURING PLACEMENT USING THE STANDARD BRAND SET PROVIDED BY THE VILLAGE OF ASHVILLE ENGINEER. BRAND CURBS ARE AS FOLLOWS:
- ON TOP OF CURB FOR SANITARY MANHOLES AND MANHOLE
"Y" - ON FACE OF CURB FOR HYDRANT WATER VALVE LOCATIONS
"NY" - ON FACE OF CURB FOR HYDRANT WATCH VALVE LOCATIONS
"MY" - ON FACE OF CURB FOR WATER MAIN VALVE LOCATIONS
BRANDS THAT ARE MISSED MUST BE MECHANICALLY GROUNDED INTO CURB AFTER THE CONCRETE IS SET.

SAS 16 ALL PIPES SHALL BE INSTALLED WITH STONE OR GRAVEL BEDDING AS SHOWN IN THE STANDARD DRAWINGS.
SAS 17 SANITARY TRENCH DETAILS SHALL BE IN ACCORDANCE WITH THE CITY OF COLUMBUS STANDARD DRAWINGS AS-549 UNLESS OTHERWISE INDICATED BY VILLAGE OF ASHVILLE STANDARD DRAWINGS. ALL PIPES SHALL BE INSTALLED WITH STONE OR GRAVEL TYPE BEDDING.
SAS 18 REMEDIATED BARRELSHIPS SHALL BE PLACES WHERE INDICATED ON THE PLANS AND SHALL REMAIN IN PLACE UNTIL REMOVAL IS DIRECTED BY THE VILLAGE ENGINEER.

SAS 19 SANITARY LATERALS INSTALLED IN A COMMON TRENCH ARE TO BE INSTALLED WITH A MINIMUM 2'-0" CENTER TO CENTER SEPARATION IN PIPES IN A 4'-0" MINIMUM TRENCH WITH A 2'-0" MINIMUM BEDDING AROUND PIPES. PIPE ENDS ARE TO BE FLARED TO A MINIMUM 10'-0" CENTER TO CENTER SEPARATION OF PIPES AT 5'-0" FROM THE PROPERTY LINE RIGHT-OF-WAY.
SAS 20 A PERMANENT FLEXIBLE WATER JOINT SEALANT BETWEEN THE TOPS OF SANITARY MANHOLES AND MANHOLE CASTINGS SHALL BE INSTALLED. SEALANT TO BE "CONCREAL" AS MANUFACTURED BY CONCRETE SEALANTS, INC. NEW CARLSBURG, OHIO OR APPROVED EQUAL.
SAS 21 EACH MANHOLE SHALL BE PROVIDED WITH A "CHIMNEY SEAL" CONSISTING OF A THRIPE TREATED RUBBER SLEEVE HAVING A MINIMUM THICKNESS OF 3/16 INCH A MINIMUM UNDEPAINTED VERTICAL HEIGHT OF 18" (6) INCHES, CAPABLE OF EXPANDING NOT MORE THAN TWO (2) INCHES VERTICALLY WHEN INSTALLED, EQUIPPED WITH SIXTEEN (16) GAUGE BT 1-3/4 INCH WIDE A.S.T.M. STAINLESS STEEL TYPE 304 EXPANSION BANDS, THE ENTIRE UNIT IS MANUFACTURED BY GREYX SPECIALTY PRODUCTS OR APPROVED EQUAL.

STM 2 FLEXIBLE STORM SEWERS ARE SUBJECT TO MANHOLES TESTING AND/OR VIDEO INSPECTION AS DIRECTED BY THE VILLAGE ENGINEER. TESTING SHALL BE PERFORMED NOT SOONER THAN THIRTY (30) DAYS AFTER THE PIPE TRENCH HAS BEEN BACKFILLED AND ALL ROADWAY AND SITE FILLS OVER THE STORM LINES HAVE BEEN COMPLETED. MAXIMUM DEFLECTION SHALL NOT EXCEED 7.5% OF THE BASE INSIDE DIAMETER. COST OF TESTING SHALL BE AT THE EXPENSE OF THE CONTRACTOR.
STM 3 ALL STORM MANHOLES SHALL BE MARKED WITH A 4" X 4" X 10" - 0" PRESSURE TREATED WOODEN POST PROTECTING 4" - 0" ABOVE THE FINISHED GRADE AND WITH THE TOP 1" - 0" PAINTED GREEN ON FOUR SIDES.
STM 4 THE COST OF ANY BENCHMARKING OPERATIONS REQUIRED FOR THE CONSTRUCTION OF THE STORM SEWER SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS SEWER ITEMS.

STM 5 THE COST OF ANY ROCK EXCAVATION SHALL BE INCLUDED IN THE PRICE BID FOR THE STORM SEWER. THE BODDER SHALL DETERMINE IF ANY ROCK EXCAVATION WILL BE REQUIRED AND ADJUST THEIR BID ACCORDINGLY.
STM 6 THE FLOW IN ALL SEWERS, DRAINS, AND INTERCROSSINGS ENCOUNTERED SHALL BE DETERMINED BY THE CONTRACTOR AT THEIR OWN EXPENSE, AND MEASUREMENTS SHALL BE TAKEN AT REGULAR INTERVALS 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.
STM 7 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.
STM 8 EROSION CONTROL MEASURES ARE TO BE INSTALLED BY THE CONTRACTOR DURING CONSTRUCTION TO PREVENT CAUTION BASINS AND CURB INLETS FROM SILT, MUD, AND DEBRIS.

STM 9 ALL DRAINAGE FLOOD TRENCHES, CHANNELS, AND DITCHES ARE TO BE DESIGNED AND GRADED WITH A MINIMUM FLOW TO CLEARANCE OF TWO (2) PERCENT, AND A MINIMUM SIDE SLOPE OF 6:1.
STM 10 ALL CATCH BASINS, MANHOLES, AND CURB INLETS SHALL HAVE CONCRETE CHANNELS POURED IN PLACE TO ASSURE POSITIVE DRAINAGE THROUGH THESE STRUCTURES.
STM 11 PUBLIC STORM SEWER MAINLINE LOS ARE TO BE EAST JORDAN IRON WORKS NUMBER 1660 - A2 OR EQUIVALENT AND BARROSSED VILLAGE OF ASHVILLE STORM SEWER.
STM 12 STORM SEWER CURB INLETS ARE TO BE ADJUSTED WITHIN 1" OF PLAN ELEVATION USING STEEL SHIMS.

STM 13 WATER SERVICE BOXES SHALL BE LOCATED 6" TO 12" FROM THE ROADWAY RIGHT-OF-WAY LINE, UNLESS OTHERWISE AUTHORIZED BY THE VILLAGE ENGINEER.
STM 14 DETECTABLE UNDERGROUND UTILITY MARKING TAPE SHALL BE INSTALLED APPROXIMATELY 18" BELOW GRADE THIS TAPE SHALL CONFORM TO A MINIMUM 5/16" OVERALL THICKNESS, WITH A SOLID ALUMINUM FOL, WITH A 2 MIL CLEAR FILM REVERSE PRINT LAMINATED TO 2 MIL CLEAR FILM MARKING 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, AND OPERATIONAL BODIES PIPE SHALL HAVE A NO. 6 BRANDED INSOLE INSTALLED WITH THE PIPE. COST SHALL BE INCLUDED WITH THE PRICE OF PIPE. NO SEPARATE PAYMENT WILL BE MADE.
STM 15 THE CONTRACTOR SHALL SUBMIT TO THE VILLAGE ENGINEER FOR REVIEW THE COPIES OF SHOP DRAWINGS FOR ALL MATERIALS, STRUCTURES, GRADATION CERTIFICATIONS AND EQUIPMENT BEFORE ANY OF THE S/D MATERIALS, STRUCTURES OR 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 S/D 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 OTHER AN INDEX WITH # OF SHEETS FOR EACH ITEM OR PAGES IDENTIFIED THROUGHOUT.

STM 16 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 UPDATED OR MODIFIED BY THE FOLLOWING NOTES OR BY THE CONSTRUCTION DETAILS SET FORTH HEREIN.
STM 17 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 AFFECTED CUSTOMERS SHALL BE NOTIFIED BY THE CONTRACTOR AT LEAST TWENTY-FOUR (24) HOURS PRIOR TO THE SHUT DOWN.
STM 18 WATER MAINS SHALL BE DUCTILE IRON PIPE (DESIGNED IN ACCORDANCE WITH THE LATEST REVISIONS OF A.N.S.I./A.W.W.A. C151/A21.50 FOR A MINIMUM 150 PSI (OR PROJECT REQUIREMENTS, WHICHEVER IS GREATER)) RATED WORKING PRESSURE PLUS A 100% MINIMUM SURGE ALLOWANCE; A 2 TO 1 FACTOR OR SAFETY ON THE SIZE OF WORKING PRESSURE PLUS SURGE PRESSURE.

STM 19 WATER MAINS SHALL BE DUCTILE IRON PIPE, CLASS 52 (ANNA C151) WITH GEMENT MORTAR LINING AND SEAL COATING (ANNACIO) IN ACCORDANCE WITH VILLAGE SPECIFICATIONS. JOINTS SHALL BE RUBBER GASKET PUSH-ON MECHANICAL (ANNA C111). WATER MAIN FITTINGS SHALL BE OF DUCTILE IRON WITH GEMENT MORTAR LINING AND SEAL COATING WITH MECHANICAL JOINTS AND SHALL CONFORM TO ANNA C153.
STM 20 ALL 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 MANUFACTURE.
STM 21 PIPE SHALL HAVE STANDARD ASPHALTIC COATING ON THE EXTERIOR PIPE SHALL ALSO HAVE A GEMENT MORTAR ON THE INTERIOR IN ACCORDANCE WITH A.N.S.I./A.W.W.A. C151/A21.51 OF THE LATEST REVISION.

STM 22 THE CONTRACTOR SHALL SUBMIT TO THE VILLAGE ENGINEER FOR REVIEW THE COPIES OF SHOP DRAWINGS FOR ALL MATERIALS, STRUCTURES, GRADATION CERTIFICATIONS AND EQUIPMENT BEFORE ANY OF THE S/D 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 S/D 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 OTHER AN INDEX WITH # OF SHEETS FOR EACH ITEM OR PAGES IDENTIFIED THROUGHOUT.
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STM 24 THE CONTRACTOR SHALL MAINTAIN FLOWS IN THE EXISTING SEWER AT ALL TIMES - DURING CONSTRUCTION METHODS FOR MAINTAINING FLOWS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL. PAYMENT SHALL BE CONSTRUCTED TO MAINTAIN EXISTING SECTION OR IN ONE INCHES OF NEW LOW ASHRAE CONCRETE, WHOEVER IS GREATER. AS AN OPTION, THE CONCRETE BASE EXTENDING ONE (1) FOOT BEYOND EITHER EDGE OF THE EXCAVATION, WITH TWO (2) INCHES OF ONE 40# ASHRAE WEARING COURSE PLACED ON TOP.

STM 25 THE CONTRACTOR SHALL MAINTAIN FLOWS IN THE EXISTING SEWER AT ALL TIMES - DURING CONSTRUCTION METHODS FOR MAINTAINING FLOWS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL. PAYMENT SHALL BE CONSTRUCTED TO MAINTAIN EXISTING SECTION OR IN ONE INCHES OF NEW LOW ASHRAE CONCRETE, WHOEVER IS GREATER. AS AN OPTION, THE CONCRETE BASE EXTENDING ONE (1) FOOT BEYOND EITHER EDGE OF THE EXCAVATION, WITH TWO (2) INCHES OF ONE 40# ASHRAE WEARING COURSE PLACED ON TOP.
STM 26 ALL SANITARY SEWERS SHALL BE RECORDED AND LOG FORMAT AFTER THE CONSTRUCTION PRIOR TO ACCEPTANCE OF THE SEWER BY THE VILLAGE OF ASHVILLE. THE LOG SHALL REMAIN THE PROPERTY OF THE VILLAGE OF ASHVILLE. THE LOG SHALL CLEARLY IDENTIFY THE LOCATION OF THE CAMERA WITH THE SEWER DATE AND TIME OF THE LOG AND BE OF SUFFICIENT QUALITY TO DETERMINE THE CONDITIONS OF THE SANITARY SEWER. AN ADDITIONAL DVD FORMAT COPY SHALL BE PROVIDED JUST PRIOR TO THE EXPIRE OF THE ONE (1) YEAR WARRANTY PERIOD.
STM 27 THE MAXIMUM VELOCITY IN ANY NEW SANITARY SEWER SHALL NOT EXCEED TEN FEET PER SECOND (10 FPS).
STM 28 TESTING OF LATERAL CONNECTIONS SHALL BE ADHERED TO.

STM 29 THE CONTRACTOR SHALL MAKE PROVISIONS TO MAINTAIN FLOWS IN THE EXISTING SEWER AT ALL TIMES - DURING CONSTRUCTION METHODS FOR MAINTAINING FLOWS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL. PAYMENT SHALL BE CONSTRUCTED TO MAINTAIN EXISTING SECTION OR IN ONE INCHES OF NEW LOW ASHRAE CONCRETE, WHOEVER IS GREATER. AS AN OPTION, THE CONCRETE BASE EXTENDING ONE (1) FOOT BEYOND EITHER EDGE OF THE EXCAVATION, WITH TWO (2) INCHES OF ONE 40# ASHRAE WEARING COURSE PLACED ON TOP.
STM 30 ALL SANITARY SEWERS SHALL BE RECORDED AND LOG FORMAT AFTER THE CONSTRUCTION PRIOR TO ACCEPTANCE OF THE SEWER BY THE VILLAGE OF ASHVILLE. THE LOG SHALL REMAIN THE PROPERTY OF THE VILLAGE OF ASHVILLE. THE LOG SHALL CLEARLY IDENTIFY THE LOCATION OF THE CAMERA WITH THE SEWER DATE AND TIME OF THE LOG AND BE OF SUFFICIENT QUALITY TO DETERMINE THE CONDITIONS OF THE SANITARY SEWER. AN ADDITIONAL DVD FORMAT COPY SHALL BE PROVIDED JUST PRIOR TO THE EXPIRE OF THE ONE (1) YEAR WARRANTY PERIOD.
STM 31 THE MAXIMUM VELOCITY IN ANY NEW SANITARY SEWER SHALL NOT EXCEED TEN FEET PER SECOND (10 FPS).
STM 32 TESTING OF LATERAL CONNECTIONS SHALL BE ADHERED TO.

STM 33 WATER SERVICE BOXES SHALL BE LOCATED 6" TO 12" FROM THE ROADWAY RIGHT-OF-WAY LINE, UNLESS OTHERWISE AUTHORIZED BY THE VILLAGE ENGINEER.
STM 34 DETECTABLE UNDERGROUND UTILITY MARKING TAPE SHALL BE INSTALLED APPROXIMATELY 18" BELOW GRADE THIS TAPE SHALL CONFORM TO A MINIMUM 5/16" OVERALL THICKNESS, WITH A SOLID ALUMINUM FOL, WITH A 2 MIL CLEAR FILM REVERSE PRINT LAMINATED TO 2 MIL CLEAR FILM MARKING 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, AND OPERATIONAL BODIES PIPE SHALL HAVE A NO. 6 BRANDED INSOLE INSTALLED WITH THE PIPE. COST SHALL BE INCLUDED WITH THE PRICE OF PIPE. NO SEPARATE PAYMENT WILL BE MADE.
STM 35 THE CONTRACTOR SHALL SUBMIT TO THE VILLAGE ENGINEER FOR REVIEW THE COPIES OF SHOP DRAWINGS FOR ALL MATERIALS, STRUCTURES, GRADATION CERTIFICATIONS AND EQUIPMENT BEFORE ANY OF THE S/D 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 S/D 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 OTHER AN INDEX WITH # OF SHEETS FOR EACH ITEM OR PAGES IDENTIFIED THROUGHOUT.

STM 36 THE METER PIT FOR SINGLE-FAMILY RESIDENTIAL APPLICATION, INCLUDING ALL FITTINGS, UTILITY, EQUIPMENT, AND APPURTENANCES ARE SUBJECT TO APPROVAL BY THE VILLAGE OF ASHVILLE PRIOR TO INSTALLATION. METER PITS UNABLE TO BE PROVIDED WITH A GRAVITY FLOW RETURN MUST BE INSTALLED IN A DEDICATED METER ROOM. GRAVITY DRAINS SHALL HAVE A BACKFLOW PREVENTION INSTALLED.
STM 37 THE PRESSURE REQUIRED TO PERFORM HYDROSTATIC TESTING ON WATER MAINS MUST BE 150 PSI FOR DOMESTIC LINES AND 200 PSI FOR FIRE SUPPRESSION LINES (PER MFA 13). HYDROSTATIC TESTS (AS REQUIRED IN SECTION 5 OF ANNA C 600) SHALL CONFORM TO ITEM 801.12 CMC3.

STM 38 CHLORINATION OF COMPLETED PIPELINE SHALL CONFORM TO ITEM 801.13 CMC3/CE OF ASHVILLE WATER DEPARTMENT FORTY-EIGHT.
STM 39 THE CONTRACTOR SHALL SUBMIT TO THE VILLAGE ENGINEER FOR REVIEW THE COPIES OF SHOP DRAWINGS FOR ALL MATERIALS, STRUCTURES, GRADATION CERTIFICATIONS AND EQUIPMENT BEFORE ANY OF THE S/D 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 S/D 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 OTHER AN INDEX WITH # OF SHEETS FOR EACH ITEM OR PAGES IDENTIFIED THROUGHOUT.

STM 40 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 UPDATED OR MODIFIED BY THE FOLLOWING NOTES OR BY THE CONSTRUCTION DETAILS SET FORTH HEREIN.
STM 41 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 AFFECTED CUSTOMERS SHALL BE NOTIFIED BY THE CONTRACTOR AT LEAST TWENTY-FOUR (24) HOURS PRIOR TO THE SHUT DOWN.
STM 42 WATER MAINS SHALL BE DUCTILE IRON PIPE (DESIGNED IN ACCORDANCE WITH THE LATEST REVISIONS OF A.N.S.I./A.W.W.A. C151/A21.50 FOR A MINIMUM 150 PSI (OR PROJECT REQUIREMENTS, WHICHEVER IS GREATER)) RATED WORKING PRESSURE PLUS A 100% MINIMUM SURGE ALLOWANCE; A 2 TO 1 FACTOR OR SAFETY ON THE SIZE OF WORKING PRESSURE PLUS SURGE PRESSURE.

STM 43 WATER MAINS SHALL BE DUCTILE IRON PIPE, CLASS 52 (ANNA C151) WITH GEMENT MORTAR LINING AND SEAL COATING (ANNACIO) IN ACCORDANCE WITH VILLAGE SPECIFICATIONS. JOINTS SHALL BE RUBBER GASKET PUSH-ON MECHANICAL (ANNA C111). WATER MAIN FITTINGS SHALL BE OF DUCTILE IRON WITH GEMENT MORTAR LINING AND SEAL COATING WITH MECHANICAL JOINTS AND SHALL CONFORM TO ANNA C153.
STM 44 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 MANUFACTURE.
STM 45 PIPE SHALL HAVE STANDARD ASPHALTIC COATING ON THE EXTERIOR PIPE SHALL ALSO HAVE A GEMENT MORTAR ON THE INTERIOR IN ACCORDANCE WITH A.N.S.I./A.W.W.A. C151/A21.51 OF THE LATEST REVISION.

STM 46 THE CONTRACTOR SHALL SUBMIT TO THE VILLAGE ENGINEER FOR REVIEW THE COPIES OF SHOP DRAWINGS FOR ALL MATERIALS, STRUCTURES, GRADATION CERTIFICATIONS AND EQUIPMENT BEFORE ANY OF THE S/D 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 S/D 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 OTHER AN INDEX WITH # OF SHEETS FOR EACH ITEM OR PAGES IDENTIFIED THROUGHOUT.
STM 47 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 UPDATED OR MODIFIED BY THE FOLLOWING NOTES OR BY THE CONSTRUCTION DETAILS SET FORTH HEREIN.
STM 48 THE CONTRACTOR SHALL MAINTAIN FLOWS IN THE EXISTING SEWER AT ALL TIMES - DURING CONSTRUCTION METHODS FOR MAINTAINING FLOWS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL. PAYMENT SHALL BE CONSTRUCTED TO MAINTAIN EXISTING SECTION OR IN ONE INCHES OF NEW LOW ASHRAE CONCRETE, WHOEVER IS GREATER. AS AN OPTION, THE CONCRETE BASE EXTENDING ONE (1) FOOT BEYOND EITHER EDGE OF THE EXCAVATION, WITH TWO (2) INCHES OF ONE 40# ASHRAE WEARING COURSE PLACED ON TOP.

STM 49 WATER MAINS SHALL BE DUCTILE IRON PIPE (DESIGNED IN ACCORDANCE WITH THE LATEST REVISIONS OF A.N.S.I./A.W.W.A. C151/A21.50 FOR A MINIMUM 150 PSI (OR PROJECT REQUIREMENTS, WHICHEVER IS GREATER)) RATED WORKING PRESSURE PLUS A 100% MINIMUM SURGE ALLOWANCE; A 2 TO 1 FACTOR OR SAFETY ON THE SIZE OF WORKING PRESSURE PLUS SURGE PRESSURE.
STM 50 ALL 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 MANUFACTURE.
STM 51 PIPE SHALL HAVE STANDARD ASPHALTIC COATING ON THE EXTERIOR PIPE SHALL ALSO HAVE A GEMENT MORTAR ON THE INTERIOR IN ACCORDANCE WITH A.N.S.I./A.W.W.A. C151/A21.51 OF THE LATEST REVISION.

STM 52 THE CONTRACTOR SHALL SUBMIT TO THE VILLAGE ENGINEER FOR REVIEW THE COPIES OF SHOP DRAWINGS FOR ALL MATERIALS, STRUCTURES, GRADATION CERTIFICATIONS AND EQUIPMENT BEFORE ANY OF THE S/D 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 S/D 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 OTHER AN INDEX WITH # OF SHEETS FOR EACH ITEM OR PAGES IDENTIFIED THROUGHOUT.
STM 53 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 UPDATED OR MODIFIED BY THE FOLLOWING NOTES OR BY THE CONSTRUCTION DETAILS SET FORTH HEREIN.
STM 54 THE CONTRACTOR SHALL MAINTAIN FLOWS IN THE EXISTING SEWER AT ALL TIMES - DURING CONSTRUCTION METHODS FOR MAINTAINING FLOWS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL. PAYMENT SHALL BE CONSTRUCTED TO MAINTAIN EXISTING SECTION OR IN ONE INCHES OF NEW LOW ASHRAE CONCRETE, WHOEVER IS GREATER. AS AN OPTION, THE CONCRETE BASE EXTENDING ONE (1) FOOT BEYOND EITHER EDGE OF THE EXCAVATION, WITH TWO (2) INCHES OF ONE 40# ASHRAE WEARING COURSE PLACED ON TOP.

STM 55 THE CONTRACTOR SHALL MAINTAIN FLOWS IN THE EXISTING SEWER AT ALL TIMES - DURING CONSTRUCTION METHODS FOR MAINTAINING FLOWS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL. PAYMENT SHALL BE CONSTRUCTED TO MAINTAIN EXISTING SECTION OR IN ONE INCHES OF NEW LOW ASHRAE CONCRETE, WHOEVER IS GREATER. AS AN OPTION, THE CONCRETE BASE EXTENDING ONE (1) FOOT BEYOND EITHER EDGE OF THE EXCAVATION, WITH TWO (2) INCHES OF ONE 40# ASHRAE WEARING COURSE PLACED ON TOP.
STM 56 ALL SANITARY SEWERS SHALL BE RECORDED AND LOG FORMAT AFTER THE CONSTRUCTION PRIOR TO ACCEPTANCE OF THE SEWER BY THE VILLAGE OF ASHVILLE. THE LOG SHALL REMAIN THE PROPERTY OF THE VILLAGE OF ASHVILLE. THE LOG SHALL CLEARLY IDENTIFY THE LOCATION OF THE CAMERA WITH THE SEWER DATE AND TIME OF THE LOG AND BE OF SUFFICIENT QUALITY TO DETERMINE THE CONDITIONS OF THE SANITARY SEWER. AN ADDITIONAL DVD FORMAT COPY SHALL BE PROVIDED JUST PRIOR TO THE EXPIRE OF THE ONE (1) YEAR WARRANTY PERIOD.
STM 57 THE MAXIMUM VELOCITY IN ANY NEW SANITARY SEWER SHALL NOT EXCEED TEN FEET PER SECOND (10 FPS).
STM 58 TESTING OF LATERAL CONNECTIONS SHALL BE ADHERED TO.

STM 59 THE CONTRACTOR SHALL MAKE PROVISIONS TO MAINTAIN FLOWS IN THE EXISTING SEWER AT ALL TIMES - DURING CONSTRUCTION METHODS FOR MAINTAINING FLOWS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL. PAYMENT SHALL BE CONSTRUCTED TO MAINTAIN EXISTING SECTION OR IN ONE INCHES OF NEW LOW ASHRAE CONCRETE, WHOEVER IS GREATER. AS AN OPTION, THE CONCRETE BASE EXTENDING ONE (1) FOOT BEYOND EITHER EDGE OF THE EXCAVATION, WITH TWO (2) INCHES OF ONE 40# ASHRAE WEARING COURSE PLACED ON TOP.
STM 60 ALL SANITARY SEWERS SHALL BE RECORDED AND LOG FORMAT AFTER THE CONSTRUCTION PRIOR TO ACCEPTANCE OF THE SEWER BY THE VILLAGE OF ASHVILLE. THE LOG SHALL REMAIN THE PROPERTY OF THE VILLAGE OF ASHVILLE. THE LOG SHALL CLEARLY IDENTIFY THE LOCATION OF THE CAMERA WITH THE SEWER DATE AND TIME OF THE LOG AND BE OF SUFFICIENT QUALITY TO DETERMINE THE CONDITIONS OF THE SANITARY SEWER. AN ADDITIONAL DVD FORMAT COPY SHALL BE PROVIDED JUST PRIOR TO THE EXPIRE OF THE ONE (1) YEAR WARRANTY PERIOD.
STM 61 THE MAXIMUM VELOCITY IN ANY NEW SANITARY SEWER SHALL NOT EXCEED TEN FEET PER SECOND (10 FPS).
STM 62 TESTING OF LATERAL CONNECTIONS SHALL BE ADHERED TO.

STM 63 WATER SERVICE BOXES SHALL BE LOCATED 6" TO 12" FROM THE ROADWAY RIGHT-OF-WAY LINE, UNLESS OTHERWISE AUTHORIZED BY THE VILLAGE ENGINEER.
STM 64 DETECTABLE UNDERGROUND UTILITY MARKING TAPE SHALL BE INSTALLED APPROXIMATELY 18" BELOW GRADE THIS TAPE SHALL CONFORM TO A MINIMUM 5/16" OVERALL THICKNESS, WITH A SOLID ALUMINUM FOL, WITH A 2 MIL CLEAR FILM REVERSE PRINT LAMINATED TO 2 MIL CLEAR FILM MARKING 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, AND OPERATIONAL BODIES PIPE SHALL HAVE A NO. 6 BRANDED INSOLE INSTALLED WITH THE PIPE. COST SHALL BE INCLUDED WITH THE PRICE OF PIPE. NO SEPARATE PAYMENT WILL BE MADE.
STM 65 THE CONTRACTOR SHALL SUBMIT TO THE VILLAGE ENGINEER FOR REVIEW THE COPIES OF SHOP DRAWINGS FOR ALL MATERIALS, STRUCTURES, GRADATION CERTIFICATIONS AND EQUIPMENT BEFORE ANY OF THE S/D 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 S/D 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 OTHER AN INDEX WITH # OF SHEETS FOR EACH ITEM OR PAGES IDENTIFIED THROUGHOUT.

STM 66 THE METER PIT FOR SINGLE-FAMILY RESIDENTIAL APPLICATION, INCLUDING ALL FITTINGS, UTILITY, EQUIPMENT, AND APPURTENANCES ARE SUBJECT TO APPROVAL BY THE VILLAGE OF ASHVILLE PRIOR TO INSTALLATION. METER PITS UNABLE TO BE PROVIDED WITH A GRAVITY FLOW RETURN MUST BE INSTALLED IN A DEDICATED METER ROOM. GRAVITY DRAINS SHALL HAVE A BACKFLOW PREVENTION INSTALLED.
STM 67 THE PRESSURE REQUIRED TO PERFORM HYDROSTATIC TESTING ON WATER MAINS MUST BE 150 PSI FOR DOMESTIC LINES AND 200 PSI FOR FIRE SUPPRESSION LINES (PER MFA 13). HYDROSTATIC TESTS (AS REQUIRED IN SECTION 5 OF ANNA C 600) SHALL CONFORM TO ITEM 801.12 CMC3.

STM 68 CHLORINATION OF COMPLETED PIPELINE SHALL CONFORM TO ITEM 801.13 CMC3/CE OF ASHVILLE WATER DEPARTMENT FORTY-EIGHT.
STM 69 THE CONTRACTOR SHALL SUBMIT TO THE VILLAGE ENGINEER FOR REVIEW THE COPIES OF SHOP DRAWINGS FOR ALL MATERIALS, STRUCTURES, GRADATION CERTIFICATIONS AND EQUIPMENT BEFORE ANY OF THE S/D 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 S/D 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 OTHER AN INDEX WITH # OF SHEETS FOR EACH ITEM OR PAGES IDENTIFIED THROUGHOUT.

STM 70 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 UPDATED OR MODIFIED BY THE FOLLOWING NOTES OR BY THE CONSTRUCTION DETAILS SET FORTH HEREIN.
STM 71 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 AFFECTED CUSTOMERS SHALL BE NOTIFIED BY THE CONTRACTOR AT LEAST TWENTY-FOUR (24) HOURS PRIOR TO THE SHUT DOWN.
STM 72 WATER MAINS SHALL BE DUCTILE IRON PIPE (DESIGNED IN ACCORDANCE WITH THE LATEST REVISIONS OF A.N.S.I./A.W.W.A. C151/A21.50 FOR A MINIMUM 150 PSI (OR PROJECT REQUIREMENTS, WHICHEVER IS GREATER)) RATED WORKING PRESSURE PLUS A 100% MINIMUM SURGE ALLOWANCE; A 2 TO 1 FACTOR OR SAFETY ON THE SIZE OF WORKING PRESSURE PLUS SURGE PRESSURE.

STM 73 WATER MAINS SHALL BE DUCTILE IRON PIPE, CLASS 52 (ANNA C151) WITH GEMENT MORTAR LINING AND SEAL COATING (ANNACIO) IN ACCORDANCE WITH VILLAGE SPECIFICATIONS. JOINTS SHALL BE RUBBER GASKET PUSH-ON MECHANICAL (ANNA C111). WATER MAIN FITTINGS SHALL BE OF DUCTILE IRON WITH GEMENT MORTAR LINING AND SEAL COATING WITH MECHANICAL JOINTS AND SHALL CONFORM TO ANNA C153.
STM 74 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 MANUFACTURE.
STM 75 PIPE SHALL HAVE STANDARD ASPHALTIC COATING ON THE EXTERIOR PIPE SHALL ALSO HAVE A GEMENT MORTAR ON THE INTERIOR IN ACCORDANCE WITH A.N.S.I./A.W.W.A. C151/A21.51 OF THE LATEST REVISION.

STM 76 THE CONTRACTOR SHALL SUBMIT TO THE VILLAGE ENGINEER FOR REVIEW THE COPIES OF SHOP DRAWINGS FOR ALL MATERIALS, STRUCTURES, GRADATION CERTIFICATIONS AND EQUIPMENT BEFORE ANY OF THE S/D 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 S/D 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 OTHER AN INDEX WITH # OF SHEETS FOR EACH ITEM OR PAGES IDENTIFIED THROUGHOUT.
STM 77 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 UPDATED OR MODIFIED BY THE FOLLOWING NOTES OR BY THE CONSTRUCTION DETAILS SET FORTH HEREIN.
STM 78 THE CONTRACTOR SHALL MAINTAIN FLOWS IN THE EXISTING SEWER AT ALL TIMES - DURING CONSTRUCTION METHODS FOR MAINTAINING FLOWS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL. PAYMENT SHALL BE CONSTRUCTED TO MAINTAIN EXISTING SECTION OR IN ONE INCHES OF NEW LOW ASHRAE CONCRETE, WHOEVER IS GREATER. AS AN OPTION, THE CONCRETE BASE EXTENDING ONE (1) FOOT BEYOND EITHER EDGE OF THE EXCAVATION, WITH TWO (2) INCHES OF ONE 40# ASHRAE WEARING COURSE PLACED ON TOP.

STM 79 WATER MAINS SHALL BE DUCTILE IRON PIPE (DESIGNED IN ACCORDANCE WITH THE LATEST REVISIONS OF A.N.S.I./A.W.W.A. C151/A21.50 FOR A MINIMUM 150 PSI (OR PROJECT REQUIREMENTS, WHICHEVER IS GREATER)) RATED WORKING PRESSURE PLUS A 100% MINIMUM SURGE ALLOWANCE; A 2 TO 1 FACTOR OR SAFETY ON THE SIZE OF WORKING PRESSURE PLUS SURGE PRESSURE.
STM 80 ALL 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 MANUFACTURE.
STM 81 PIPE SHALL HAVE STANDARD ASPHALTIC COATING ON THE EXTERIOR PIPE SHALL ALSO HAVE A GEMENT MORTAR ON THE INTERIOR IN ACCORDANCE WITH A.N.S.I./A.W.W.A. C151/A21.51 OF THE LATEST REVISION.

STM 82 THE CONTRACTOR SHALL SUBMIT TO THE VILLAGE ENGINEER FOR REVIEW THE COPIES OF SHOP DRAWINGS FOR ALL MATERIALS, STRUCTURES, GRADATION CERTIFICATIONS AND EQUIPMENT BEFORE ANY OF THE S/D 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 S/D 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 OTHER AN INDEX WITH # OF SHEETS FOR EACH ITEM OR PAGES IDENTIFIED THROUGHOUT.
STM 83 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 UPDATED OR MODIFIED BY THE FOLLOWING NOTES OR BY THE CONSTRUCTION DETAILS SET FORTH HEREIN.
STM 84 THE CONTRACTOR SHALL MAINTAIN FLOWS IN THE EXISTING SEWER AT ALL TIMES - DURING CONSTRUCTION METHODS FOR MAINTAINING FLOWS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL. PAYMENT SHALL BE CONSTRUCTED TO MAINTAIN EXISTING SECTION OR IN ONE INCHES OF NEW LOW ASHRAE CONCRETE, WHOEVER IS GREATER. AS AN OPTION, THE CONCRETE BASE EXTENDING ONE (1) FOOT BEYOND EITHER EDGE OF THE EXCAVATION, WITH TWO (2) INCHES OF ONE 40# ASHRAE WEARING COURSE PLACED ON TOP.

STM 85 WATER MAINS SHALL BE DUCTILE IRON PIPE (DESIGNED IN ACCORDANCE WITH THE LATEST REVISIONS OF A.N.S.I./A.W.W.A. C151/A21.50 FOR A MINIMUM 150 PSI (OR PROJECT REQUIREMENTS, WHICHEVER IS GREATER)) RATED WORKING PRESSURE PLUS A 100% MINIMUM SURGE ALLOWANCE; A 2 TO 1 FACTOR OR SAFETY ON THE SIZE OF WORKING PRESSURE PLUS SURGE PRESSURE.
STM 86 ALL 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 MANUFACTURE.
STM 87 PIPE SHALL HAVE STANDARD ASPHALTIC COATING ON THE EXTERIOR PIPE SHALL ALSO HAVE A GEMENT MORTAR ON THE INTERIOR IN ACCORDANCE WITH A.N.S.I./A.W.W.A. C151/A21.51 OF THE LATEST REVISION.

STM 88 THE CONTRACTOR SHALL SUBMIT TO THE VILLAGE ENGINEER FOR REVIEW THE COPIES OF SHOP DRAWINGS FOR ALL MATERIALS, STRUCTURES, GRADATION CERTIFICATIONS AND EQUIPMENT BEFORE ANY OF THE S/D 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 S/D 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 OTHER AN INDEX WITH # OF SHEETS FOR EACH ITEM OR PAGES IDENTIFIED THROUGHOUT.
STM 89 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 UPDATED OR MODIFIED BY THE FOLLOWING NOTES OR BY THE CONSTRUCTION DETAILS SET FORTH HEREIN.
STM 90 THE CONTRACTOR SHALL MAINTAIN FLOWS IN THE EXISTING SEWER AT ALL TIMES - DURING CONSTRUCTION METHODS FOR MAINTAINING FLOWS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL. PAYMENT SHALL BE CONSTRUCTED TO MAINTAIN EXISTING SECTION OR IN ONE INCHES OF NEW LOW ASHRAE CONCRETE, WHOEVER IS GREATER. AS AN OPTION, THE CONCRETE BASE EXTENDING ONE (1) FOOT BEYOND EITHER EDGE OF THE EXCAVATION, WITH TWO (2) INCHES OF ONE 40# ASHRAE WEARING COURSE PLACED ON TOP.

STM 91 WATER MAINS SHALL BE DUCTILE IRON PIPE (DESIGNED IN ACCORDANCE WITH THE LATEST REVISIONS OF A.N.S.I./A.W.W.A. C151/A21.50 FOR A MINIMUM 150 PSI (OR PROJECT REQUIREMENTS, WHICHEVER IS GREATER)) RATED WORKING PRESSURE PLUS A 100% MINIMUM SURGE ALLOWANCE; A 2 TO 1 FACTOR OR SAFETY ON THE SIZE OF WORKING PRESSURE PLUS SURGE PRESSURE.
STM 92 ALL 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 MANUFACTURE.
STM 93 PIPE SHALL HAVE STANDARD ASPHALTIC COATING ON THE EXTERIOR PIPE SHALL ALSO HAVE A GEMENT MORTAR ON THE INTERIOR IN ACCORDANCE WITH A.N.S.I./A.W.W.A. C151/A21.51 OF THE LATEST REVISION.

STM 94 THE CONTRACTOR SHALL SUBMIT TO THE VILLAGE ENGINEER FOR REVIEW THE COPIES OF SHOP DRAWINGS FOR ALL MATERIALS, STRUCTURES, GRADATION CERTIFICATIONS AND EQUIPMENT BEFORE ANY OF THE S/D 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 S/D 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 OTHER AN INDEX WITH # OF SHEETS FOR EACH ITEM OR PAGES IDENTIFIED THROUGHOUT.
STM 95 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 UPDATED OR MODIFIED BY THE FOLLOWING NOTES OR BY THE CONSTRUCTION DETAILS SET FORTH HEREIN.
STM 96 THE CONTRACTOR SHALL MAINTAIN FLOWS IN THE EXISTING SEWER AT ALL TIMES - DURING CONSTRUCTION METHODS FOR MAINTAINING FLOWS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL. PAYMENT SHALL BE CONSTRUCTED TO MAINTAIN EXISTING SECTION OR IN ONE INCHES OF NEW LOW ASHRAE CONCRETE, WHOEVER IS GREATER. AS AN OPTION, THE CONCRETE BASE EXTENDING ONE (1) FOOT BEYOND EITHER EDGE OF THE EXCAVATION, WITH TWO (2) INCHES OF ONE 40# ASHRAE WEARING COURSE PLACED ON TOP.

STM 97 WATER MAINS SHALL BE DUCTILE IRON PIPE (DESIGNED IN ACCORDANCE WITH THE LATEST REVISIONS OF A.N.S.I./A.W.W.A. C151/A21.50 FOR A MINIMUM 150 PSI (OR PROJECT REQUIREMENTS, WHICHEVER IS GREATER)) RATED WORKING PRESSURE PLUS A 100% MINIMUM SURGE ALLOWANCE; A 2 TO 1 FACTOR OR SAFETY ON THE SIZE OF WORKING PRESSURE PLUS SURGE PRESSURE.
STM 98 ALL 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 MANUFACTURE.
STM 99 PIPE SHALL HAVE STANDARD ASPHALTIC COATING ON THE EXTERIOR PIPE SHALL ALSO HAVE A GEMENT MORTAR ON THE INTERIOR IN ACCORDANCE WITH A.N.S.I./A.W.W.A. C151/A21.51 OF THE LATEST REVISION.

STM 100 THE CONTRACTOR SHALL SUBMIT TO THE VILLAGE ENGINEER FOR REVIEW THE COPIES OF SHOP DRAWINGS FOR ALL MATERIALS, STRUCTURES, GRADATION CERTIFICATIONS AND EQUIPMENT BEFORE ANY OF THE S/D 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

ANY INFORMATION OR DATA ON THIS DRAWING IS NOT INTENDED TO BE SUITABLE FOR REUSE BY ANY PERSON, FIRM OR CORPORATION OR ANY OTHERS ON EXTENSIONS OF THIS PROJECT OR FOR ANY USE ON ANY OTHER PROJECT WITHOUT WRITTEN VERIFICATION AND ADAPTATION BY THE ENGINEER, ARCHITECT OR SURVEYOR. FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT USER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO THE ENGINEER, ARCHITECT, ARCHITECT OR SURVEYOR.

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ADDITIONAL GENERAL NOTES

- 1. CONSTRUCTION SURVEYING
A. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR LAYING OUT THE LOCATION, ALIGNMENT, ELEVATION, AND GRADE OF ALL WORK SHOWN ON THE DRAWINGS AND SPECIFICATIONS.
B. THE CONTRACTOR SHALL USE COMPETENT PERSONNEL AND SUITABLE EQUIPMENT. IF NECESSARY, THE CONTRACTOR SHALL EMPLOY A REGISTERED ENGINEER OR SURVEYOR TO SUPERVISE THE WORK.
C. VERIFICATION AND PROTECTION
1. VERIFY LOCATIONS OF SURVEY CONTROL POINTS PRIOR TO STARTING WORK. PROMPTLY NOTIFY OWNER OF ANY DISCREPANCIES DISCOVERED.
2. PROTECT OR RELOCATE SURVEY CONTROL POINTS PRIOR TO STARTING SITE WORK. PRESERVE PERMANENT REFERENCE POINTS DURING CONSTRUCTION.
D. ELEVATION DATUM: ALL ELEVATIONS ARE BASED ON U.S.G.S. DATUM. (ONLY IF NEEDED).
2. PROJECT RECORD DRAWINGS
KEEP A CURRENT SET OF DRAWINGS AT JOB SITE THAT ARE MARKED TO SHOW LOCATION OF ITEMS CONCEALED UPON COMPLETION OF WORK AND ALL CHANGES MADE DURING CONSTRUCTION. DIMENSION UNDERGROUND AND CONCEALED WORK AND UTILITIES FROM PERMANENT REFERENCE POINTS; RECORD VERTICAL DISTANCES. SUBMIT PROJECT RECORD DRAWINGS TO OWNER UPON COMPLETION OF WORK IN THE FORM OF EITHER AUTOCAD OR MICROSTATION ELECTRONIC FILES.
3. COORDINATION
A. THE CONTRACTOR SHALL COORDINATE THE STAGING AREA LOCATION FOR MATERIALS, EQUIPMENT, AND EMPLOYEE PARKING WITH THE OWNER.
B. THE OWNER'S BUILDING OPERATIONS SHALL BE MAINTAINED AT ALL TIMES; CONSTRUCTION SCHEDULE AND TRAFFIC MAINTENANCE SHALL BE APPROVED BY THE OWNER.
4. REMOVALS
REMOVAL OF EXISTING PAVEMENT SHALL BE ACCOMPLISHED BY SAW CUTTING IN A NEAT, STRAIGHT LINE TO PROVIDE A SMOOTH VERTICAL SURFACE. FOR ASPHALT PAVEMENT ENSURE THAT THE JUNCTURE BETWEEN NEW AND EXISTING PAVEMENT IS FLUSH AND MADE IN A MANNER TO ENSURE A CONTINUOUS BOND. CLEAN FACE AND APPLY A TACK COAT JUST PRIOR TO PLACING NEW ASPHALT PAVEMENT PER THE APPROPRIATE SECTION SHOWN ON THE PLANS. FOR CONCRETE PAVEMENT APPLY A BONDING AGENT JUST PRIOR TO PLACING NEW CONCRETE PAVEMENT PER THE SECTION ON THIS PLANS.
5. PROTECTION
A. PROTECT IMPROVEMENTS ON SITE AND ON ADJOINING PROPERTIES. PROVIDE BARRICADES, COVERINGS, OR OTHER TYPES OF PROTECTION AS NECESSARY TO PREVENT DAMAGE AND TO SAFEGUARD AGAINST INJURY. RESTORE TO ORIGINAL CONDITION IMPROVEMENTS DAMAGED BY THE WORK OR IMPROVEMENTS WHICH REQUIRED TEMPORARY REMOVAL DURING CONSTRUCTION.
B. THE CONTRACTOR SHALL PROVIDE SHORING, BRACING, LATERAL SUPPORTS, ETC. AND TAKE WHATEVER PRECAUTIONS NECESSARY TO PREVENT THE UNDERMINING OF ADJACENT EXISTING FOUNDATIONS AND MAINTAIN THE STRUCTURAL INTEGRITY OF EXISTING STRUCTURES.
C. THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION AGAINST DAMAGE TO ALL EXISTING UTILITIES, STRUCTURES, AND COMPLETED PORTIONS OF THE WORK, AND TO PREVENT INJURIES TO PERSONS. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF ALL UTILITIES, STRUCTURES, AND ADJUTING PROPERTIES. THE COST OF ANY REPAIR OR REPLACEMENT OF DAMAGED ITEMS SHALL BE BORNE SOLELY BY THE CONTRACTOR. THE CONTRACTOR SHALL MAINTAIN FULL RESPONSIBILITY FOR ALL METHODS, MEANS AND PROCEDURES RELATED TO CONSTRUCTION.
6. TESTING
A. TESTING LABORATORY SERVICES
1. CONTRACTOR SHALL EMPLOY AND PAY FOR SERVICES OF AN INDEPENDENT TESTING LABORATORY TO PERFORM SPECIFIED INSPECTION AND TESTING.
7. CLEARING AND GRUBBING
A. THIS WORK SHALL CONSIST OF ALL CLEARING AND GRUBBING, REMOVAL OF EXISTING STRUCTURES UNLESS OTHERWISE STATED. PROPER AND APPROVED DISPOSAL OF MATERIALS NOT REUSED FOR THE PROJECT. PREPARATION OF THE LAND TO BE FILLED, FILLING OF THE LAND, SPREADING AND COMPACTION OF THE FILL, AND ALL SUBSIDIARY WORK NECESSARY TO COMPLETE THE GRADING OF THE CUT AND FILL AREAS TO CONFORM WITH THE LINES, GRADES, SLOPES AND SPECIFICATIONS.
B. SUBSURFACE CONDITIONS: PRIOR TO BIDDING THE WORK, THE CONTRACTOR SHALL EXAMINE, INVESTIGATE, AND INSPECT THE CONSTRUCTION SITE AS TO THE NATURE AND LOCATION OF THE WORK AND THE GENERAL AND LOCAL CONDITIONS AT THE CONSTRUCTION SITE, INCLUDING, WITHOUT LIMITATION, THE CHARACTER OF SURFACE OR SUBSURFACE CONDITIONS AND OBSTACLES TO BE ENCOUNTERED ON AND AROUND THE CONSTRUCTION SITE, AND SHALL MAKE SUCH ADDITIONAL INVESTIGATION NECESSARY FOR THE PLANNING AND PROPER EXECUTION OF THE WORK.
C. BORINGS AND/OR SOILS INVESTIGATIONS HAVE BEEN MADE FOR THE PURPOSE OF THE DESIGN OF THIS PROJECT. RESULTS OF THESE BORINGS AND STUDIES WILL BE MADE AVAILABLE BY THE OWNER TO THE CONTRACTOR UPON REQUEST, BUT THE OWNER AND GEOTECHNICAL FIRM ARE NOT RESPONSIBLE FOR ANY INTERPRETATIONS OR CONCLUSIONS WITH RESPECT THERE TO MADE BY THE CONTRACTOR ON THE BASIS OF SUCH INFORMATION AND THE OWNER FURTHER HAS NO RESPONSIBILITY FOR THE ACCURACY OF THE BORINGS AND THE SOIL INVESTIGATIONS.
D. REMOVE TREES, STUMPS, SNAGS, SHRUBS, BRUSH, HEAVY GROWTHS OF GRASS, WEEDS AND OTHER VEGETATION, IMPROVEMENTS, RUBBISH AND DEBRIS, AND OBSTRUCTIONS THAT INTERFERE WITH PROPOSED CONSTRUCTION; REMOVE ITEMS ONLY AS NECESSARY FOR COMPLETION OF WORK.
E. CUT BRUSH AND VEGETATION FLUSH WITH GROUND. GRUB OUT STUMPS, AND ROOTS HAVING A DIAMETER OF 2" OR LARGER, AND ROOT CLUSTERS TO A DEPTH OF AT LEAST 24 INCHES BELOW SUBGRADE ELEVATION FOR PAVEMENTS, STRUCTURES, AND EMBANKMENTS AND 6" BELOW GROUND SURFACE IN OTHER AREAS.
8. TOP SOIL STRIPPING
A. STRIP TOPSOIL FROM PROJECT AREA TO WHATEVER DEPTHS ENCOUNTERED; PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL OR OTHER OBJECTIONABLE MATERIAL. REMOVE HEAVY GROWTHS OF GRASS FROM AREAS BEFORE STRIPPING TOPSOIL.
B. STOCKPILE TOPSOIL IN STORAGE PILES IN AREAS AS DESIGNATED BY OWNER. CONSTRUCT STORAGE PILES TO FREELY DRAIN SURFACE WATER. COVER OR SPRINKLE WATER ON STORAGE PILES TO PREVENT WINDBLOW DUST.
9. EARTH WORK AND GRADING CONSTRUCTION
A. ALL EARTH AND GRADING SHALL BE IN ACCORDANCE WITH THE CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE STATE DEPARTMENT OF TRANSPORTATION LATEST EDITION.
B. THE GRADING OPERATIONS SHALL BE CLOSELY SUPERVISED AND INSPECTED, PARTICULARLY DURING THE REMOVAL OF UNSUITABLE MATERIAL AND THE CONSTRUCTION OF EMBANKMENTS OR BUILDING PADS, BY THE GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE. ALL TESTING, INSPECTION AND SUPERVISION OF THE SOILS RELATED OPERATIONS SHALL BE ENTIRELY THE RESPONSIBILITY OF THE GEOTECHNICAL ENGINEER.
C. THE GRADING AND CONSTRUCTION OF THE SITE IMPROVEMENTS SHALL NOT CAUSE PONDING OF STORMWATER. ALL AREAS ADJACENT TO THESE IMPROVEMENTS SHALL BE GRADED TO ALLOW POSITIVE DRAINAGE.

- D. THE PROPOSED GRADING ELEVATIONS SHOWN ON THE PLANS ARE FINISHED GRADE, EXCEPT FOR AREAS AS DESIGNATED FOR FUTURE DEVELOPMENT.
E. THE DETENTION BASIN AND BERMS MAY BE OVER EXCAVATED TO MEET FILL REQUIREMENTS. THE OVER EXCAVATED AREAS WILL BE REFILLED WITH SUITABLE MATERIAL.
F. THE SELECTED FILL MATERIAL SHALL BE PLACED IN UNIFORM LAYERS SO THAT THE COMPACTED THICKNESS IS APPROXIMATELY SIX INCHES (6"). EACH LAYER SHALL BE THOROUGHLY MIXED DURING SPREADING TO INSURE UNIFORMITY.
G. PLACE FILL IN PAVEMENT AREAS, DETENTION POND DIKES, UNDER BUILDING FOUNDATIONS AND SLABS, UNDER LOT BUILDING PADS, AND WITHIN 10 FEET OF BUILDING LINES IN LOOSE LIFTS NOT MORE THAN 8 INCHES THICK, AT A MOISTURE CONTENT AT OR NEAR OPTIMUM, AND COMPACT TO AT LEAST 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM SPECIFICATION D-1557 (MODIFIED PROCTOR METHOD), OR TO OTHER DENSITY AS DETERMINED BY THE GEOTECHNICAL ENGINEER. PLACE FILL IN LANDSCAPE AREAS IN LOOSE LIFTS 12 INCHES THICK AND COMPACT TO 90% OF MAXIMUM STANDARD PROCTOR DENSITY.
FILL-FILL MATERIALS SHALL BE CLEAN GRANULAR MATERIAL. SUITABLE ON-SITE CUT MATERIAL MAY BE USED FOR REQUIRED FILLS. PROVIDE ADDITIONAL OFF-SITE FILL AS NECESSARY TO BRING SITE TO REQUIRED GRADES. FILL MATERIALS SHALL BE APPROVED BY GEOTECHNICAL ENGINEER.
H. THE SURFACE VEGETATION, TOPSOIL AND ANY OBVIOUSLY SOFT UNDERLYING SOIL SHOULD BE STRIPPED FROM ALL AREAS TO RECEIVE FILL. IF THE UNDERLYING SUBGRADE SOILS RUP DEEPER THAN ONE INCH (1") UNDER THE CONSTRUCTION EQUIPMENT OR IF THE MOISTURE CONTENT EXCEEDS THAT NEEDED FOR PROPER COMPACTION, THE SOIL SHALL BE SCARIFIED, DRIED AND RE-COMPACTED TO NINETY-FIVE PERCENT (95%) OF MODIFIED PROCTOR WITHIN BUILDING PAD AND PAVEMENT AREAS.
IF UNSUITABLE BEARING SOILS ARE REMOVED FROM BENEATH PROPOSED FOOTINGS, EXCAVATION SHALL EXTEND LATERALLY BEYOND PERIMETER OF FOUNDATION FOR A DISTANCE AT LEAST EQUAL TO THICKNESS OF BACKFILL BELOW FOOTING BASE. THIS PROVISION SHALL ALSO APPLY WHERE A RAISED STRUCTURAL PAD IS CONSTRUCTED TO ACHIEVE A BEARING ELEVATION GREATER THAN THE EXISTING GRADES.
UNUSITABLE MATERIALS: EXCAVATE ORGANIC, FROZEN, WET, SOFT, AND LOOSE SOILS (INCLUDING PREVIOUSLY PLACED UNCOMPACTED FILL SOILS); BOULDERS; REMNANTS OF PREVIOUS CONSTRUCTION; AND OTHER UNSUITABLE MATERIALS FROM BENEATH PROPOSED FOUNDATIONS, SLABS, PAVEMENTS, AND DETENTION POND DIKES. THE COST OF THIS WORK SHALL BE INCLUDED IN THE BIDD BID FOR THE PROJECT.
ALL UNSUITABLE MATERIAL AND ALL SURPLUS EXCAVATED MATERIAL NOT REQUIRED SHALL BE REMOVED FROM THIS SECTION. THE LOCATION OF DUMP AND LENGTH OF HAUL SHALL BE THE CONTRACTOR'S RESPONSIBILITY WITH THE OWNER'S APPROVAL, PRIOR TO EXPORTING FILL FROM SITE. AN ADDITIONAL EROSION AND SEDIMENT CONTROL PLAN MUST BE SUBMITTED AS AN AMENDMENT/ADDITION TO THIS PROJECT.
I. TOLERANCE FOR AREAS TO RECEIVE SLABS OR PAVEMENTS SHALL BE 0.10 FT. ABOVE OR BELOW ESTABLISHED SUBGRADE. TOLERANCE FOR AREAS TO RECEIVE TOPSOIL SHALL BE 0.30 FT. ABOVE OR BELOW ESTABLISHED SUBGRADE.
J. THE SUBGRADE FOR PAVEMENT AREAS SHALL BE PROOF-ROLLED BY THE CONTRACTOR AND ANY UNSUITABLE AREAS ENCOUNTERED SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
SUBGRADE: PRIOR TO FILLING, PROOF-ROLL EXPOSED SUBGRADE TO DETECT AREAS WHICH MUST BE UNDERCUT OR IMPROVED BY APPROPRIATE PREPARATION AND COMPACTION TECHNIQUES. SUBGRADE FOR FOUNDATIONS, SLABS, PAVEMENTS, AND FILL SHALL BE APPROVED BY GEOTECHNICAL ENGINEER.
K. UPON COMPLETION OF THE SURFACE IMPROVEMENTS, THE CONTRACTOR SHALL RE-SPREAD A MINIMUM OF THREE INCHES (4") OF TOPSOIL ON ALL DISTURBED AREAS.
L. BACKFILL: PLACE FILL OR BACKFILL ADJACENT TO STRUCTURES IN A MANNER TO PREVENT DAMAGE AND ALLOW STRUCTURES TO ASSUME LOADS GRADUALLY AND UNFORMALLY, AT APPROXIMATELY SAME RATE ON ALL SIDES. BACKFILL FOR FOUNDATION WALLS AND BEHIND RETAINING WALLS FOR A LATERAL DISTANCE OF AT LEAST 3 TO 4 FT., OR FOR A DISTANCE AT LEAST EQUAL TO WIDTH OF BASE OF FOOTING, WHICHEVER IS GREATER, SHALL BE WELL-GRADED, FREE DRAINING GRANULAR MATERIAL.
DEWATERING: PERFORM SITE GRADING IN A MANNER TO PREVENT SURFACE WATER AND GROUND WATER FROM FLOWING INTO WORK AREA. PROMPTLY REMOVE WATER FROM EXCAVATIONS USING PUMPS, SUMP, AND DEWATERING SYSTEM COMPONENTS NECESSARY TO CONVEY WATER AWAY FROM EXCAVATIONS. CONVEY WATER REMOVED FROM EXCAVATIONS AND RAIN WATER TO COLLECTION OR RUN-OFF AREAS. PROVIDE AND MAINTAIN TEMPORARY DRAINAGE DITCHES. FUNDUNDERGROUND SPRINGS OR DRAIN TILE ARE ENCOUNTERED, NOTIFY GEOTECHNICAL ENGINEER BEFORE PROCEEDING. WHEN POSSIBLE MAINTAIN EXISTING DRAIN TILE OR REROUTE INTO NEW STORM SEWER.
10. MAINTAINING FOR UTILITIES
A. EXCAVATE TRENCHES SO THAT PIPE CAN BE LAID SAFELY AND ACCURATELY TO REQUIRED LINE AND GRADE. HAND EXCAVATE FOR BELLS, FITTINGS AND PROJECTIONS TO ALLOW FOR PROPER JOINTING AND TO INSURE THAT PIPE RESTS EVENLY ALONG BARREL AND IS NOT RESTING ON BELL.
B. IF ROCK IS ENCOUNTERED DURING TRENCHING, CONTACT OWNER BEFORE PROCEEDING FURTHER WITH AFFECTED PIPELINE.
C. DEWATER TRENCHES AS REQUIRED TO PROVIDE STABLE BEDDING FOR PIPE. DEWATERING WILL BE INCIDENTAL TO WORK; NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
D. WHEN TRENCH BOTTOM IS UNSTABLE BECAUSE OF GROUND WATER, GEOTECHNICAL ENGINEER MAY REQUIRE EXTRA EXCAVATION TO REMOVE UNSUITABLE MATERIAL AND REPLACE IT WITH CRUSHED STONE.
E. IN SAND AND GRAVEL SOILS, BOTTOM OF TRENCH MAY BE SHAPED TO FIT BOTTOM 1/3 OF PIPE. IN SILT AND CLAY SOILS, BOTTOM OF TRENCH SHALL BE 4 INCHES BELOW PIPE BARREL AND 3 INCHES BELOW BELL. IN ROCK, BOTTOM OF TRENCH SHALL BE 6 INCHES BELOW PIPE BARREL. UNDER FOUNDATIONS AND FOOTINGS, BOTTOM OF TRENCH SHALL BE 8 INCHES BELOW PIPE BARREL.
F. BEDDING, HAUNCHING, AND INITIAL BACKFILL FOR RIGID PIPES SHALL BE IN ACCORDANCE WITH ASTM #72, CLASS C OR BETTER. TRENCHES DIG-IN SANDY OR GRAVEL MATERIALS MAY USE UNDISTURBED EARTH FOR BEDDING PROVIDED SURFACE IS SHAPED TO CONFORM TO PIPE. PROVIDE GRANULAR BEDDING IN ALL OTHER TRENCHES FROM SUBGRADE TO A POINT SUPPORTING BOTTOM 1/3 OF PIPE FOR RIGID PIPE AND TO SPRINGLINE (MID-HEIGHT) FOR FLEXIBLE PIPE. PLACE AND COMPACT BEDDING SO THAT IT FILLS AND SUPPORTS PIPE HAUNCH AREA.
G. PROVIDE TAMPED GRANULAR INITIAL BACKFILL UP TO A MINIMUM DEPTH OF 1 FOOT ABOVE PIPE. TAKE SPECIAL CARE IN PLACING AND TAMPING INITIAL BACKFILL MATERIAL SO ALIGNMENT AND GRADE OF PIPE IS NOT DISTURBED NOR PIPE DAMAGED.
H. BACKFILL MORE THAN 1 FOOT OVER PIPE SHALL BE GRANULAR BACKFILL. COMPACT BACKFILL IN ACCORDANCE WITH REQUIREMENTS OF "SITE GRADING" ARTICLE.
I. GRANULAR BEDDING SHALL BE PLACED WITH A MINIMUM THICKNESS OF 6 INCHES (6") BENEATH THE BARREL AND BELL OF THE PIPE. THE 6 INCH (6") GRANULAR BEDDING BENEATH THE PIPE SHALL BE TAMPERED PRIOR TO THE PIPE PLACEMENT. GRANULAR BEDDING SHALL EXTEND UP AND AROUND THE PIPE TO 12 INCHES (12") ABOVE THE PIPE AND SHALL BE COMPACTED IN GRAVEL AGGREGATE FOR PVC PIPE. BEDDING SHALL BE COMPACTED IN ACCORDANCE WITH STATE DOT STANDARD SPECIFICATIONS.
J. PIPE BACKFILL SHALL INCLUDE THE MATERIAL PLACED OVER THE PIPE EMBEDMENT MATERIAL. TRENCHES COMING WITHIN FIVE FEET (5') OF PAVED OR STONED STREETS, ALLEYS, DRIVEWAYS, SIDEWALKS, AND PARKING AREAS SHALL BE BACK FILLED FOR THEIR FULL DEPTH WITH GRANULAR MATERIAL MEETING THE REQUIREMENT OF BACKFILL FOR TYPE "B" CONDUITS. THE TOP OF THE BACKFILL SHALL EXTEND FROM FIVE FEET (5') OUTSIDE CURB TO FIVE FEET (5') IF APPLICABLE. THE COST OF PROVIDING THE COMPACTED GRANULAR BACKFILL SHALL BE INCLUDED IN THE CONTRACTORS BID. GRANULAR BACKFILL SHALL BE MECHANICALLY COMPACTED 304 STONE AND SHALL BE COMPACTED TO 98% OF MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST.

ADDITIONAL STORM SEWER NOTES

- FINGER DRAINS SHALL BE INSTALLED IN ALL CATCH BASINS. 10' LONG IN ALL FOUR DIRECTIONS.
THE STORM DRAINAGE SYSTEM SHALL BE CLEANED BY THE CONTRACTOR PRIOR TO ACCEPTANCE BY OWNERS.
INSPECTION AND TESTING: CONTRACTOR SHALL PERFORM THE FOLLOWING INSPECTIONS AND TESTS IN PRESENCE OF ENGINEER.
1. LEAKAGE INSPECTION: STORM SEWERS SHALL BE INSPECTED FOR EXCESSIVE INFILTRATION AND SAND LEAKAGE. CONTRACTOR SHALL REPAIR ALL SAND LEAKS AND INFILTRATION LEAKS WHICH MAY CAUSE A CONTINUED MAINTENANCE PROBLEM.
2. ALIGNMENT AND GRADE: CHECK ALIGNMENT AND GRADE BY LAMPING METHOD. IF PIPE SHOWS POOR ALIGNMENT, OFFSET OR OPEN JOINTS, SAGS, OR KINKS, DEFECTS SHALL BE CORRECTED BY CONTRACTOR BEFORE FINAL ACCEPTANCE. PIPELINE SHALL BE RELIED IF LAMP CANNOT BE VIEWED BETWEEN ADJACENT MANHOLES.
3. DEFLECTION LIMITATION: DEFLECTIONS IN PVC AND PE PIPE SHALL BE LIMITED TO 5% PERCENT OF NOMINAL PIPE DIAMETER. IF VISUAL INSPECTION INDICATES A GREATER DEFLECTION, CONTRACTOR SHALL SUPPLY AND PULL A BALL WITH A DIAMETER 5% PERCENT LESS THAN INTERNAL PIPE SIZE THROUGH SEWER; FAILURE TO FREELY PASS THROUGH SHALL BE CAUSE FOR REJECTION OF SEWER.
11. DOWN SPOUT LATERALS
A. PIPE: PVC DRAINS FROM DOWN SPOUTS TO STORM SEWER SHALL BE PVC PIPE, ASTM D2865, WITH SOLID WELDED JOINTS.
B. STONE BACKFILL: WASHED, EVENLY GRADED GRAVEL OR CRUSHED STONE WITH 100% PASSING 1 INCH SIEVE AND NOT MORE THAN 5% PASSING NO. 8 SIEVE.
12. PAVEMENT AND RETAINING WALL DRAIN LINE
A. UNDER DRAIN PIPE: PERFORATED CORRUGATED POLYETHYLENE DRAINAGE PIPE COMPLYING WITH AASHTO M252.
B. PIPE WRAP: SYNTHETIC FABRIC WITH AN APPROXIMATE WEIGHT OF 3 OZ./SQ. YD; ADS SOOK, OR APPROVED EQUAL.
C. UNDER DRAIN AGGREGATE: CLEAN, WASHED, 1/2 INCH STONE CHIPS OR PEA GRAVEL, 1/2 INCH STONE CHIPS SHALL BE GRADED IN ACCORDANCE WITH ASTM C33, SIZE NO. 7. PEA GRAVEL SHALL CONSIST OF ROUND, FREE FLOWING AGGREGATE WITH PARTICLE SIZE NOT MORE THAN 3/4 INCH AND NOT LESS THAN 1/8 INCH IN DIAMETER.
D. GEOTEXTILE FABRIC: DRAINAGE FILTRATION FABRIC COMPLYING WITH STATE DOT STD. SPEC.
13. MANHOLES AND INLETS
A. MANHOLES: MANHOLES SHALL BE PRECAST REINFORCED CONCRETE RINGS, ASTM C478 OF SIZES SHOWN ON DRAWINGS. JOINT SHAPE SHALL BE COMPATIBLE WITH DESIGNATED JOINT MATERIALS. STEPS AND PIPE SEAL COMPONENTS SHALL BE CAST INTO RISER SECTIONS. JOINT MATERIALS SHALL BE RUBBER RING GASKETS OR PLASTIC GASKET MATERIAL. PIPE SEALS SHALL BE FLEXIBLE, WATER TIGHT, GASKETED SEALS FOR PIPE ENTRANCE HOLES, EXCEPT THAT MORTAR SEALS MAY BE USED FOR STORM SEWER PIPE. ALL INVERTS SHALL BE POURED OR PRECAST.
B. CASTINGS: FRAMES AND LIDS SHALL BE CAST IRON, ASTM A48, CLASS 30, OR UNIFORM QUALITY, FREE FROM BLOW HOLES, POROSITY, HARD SPOTS, SHRINKAGE DEFECTS, CRACKS OR OTHER SERIOUS DEFECTS. MANHOLE CASTINGS SHALL BE TRUE TO PATTERN WITH MACHINED BEARING FACES BETWEEN FRAME AND COVER. TYPE OF CASTINGS SHALL BE AS DESIGNATED ON DRAWINGS. LIDS FOR SANITARY MANHOLES SHALL HAVE SELF-SEALING NEOPRENE O-RING GASKETS AND CONCEALED PICK HOLES.
C. STEPS: ASTM C478, CAST IRON OR STEEL REINFORCED COPOLYMER POLYPROPYLENE.
D. CONCRETE: CONCRETE FOR INVERTS SHALL HAVE 3 TO 5 PERCENT AIR-ENTRAINMENT AND A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.
E. INSTALLATION: MANHOLES WITH MORE THAN ONE ENTRANCE PIPE AND MANHOLES AT CHANGES IN ALIGNMENT OR GRADE SHALL HAVE FORMED FLOW CHANNELS WITH SMOOTH RADIUS TRANSITIONS. PIPE SEALS SHALL BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS. PIPES WITH FLEXIBLE SEALS SHALL BE SUPPORTED OUTSIDE MANHOLES BY BEDDING AS SPECIFIED FOR TYPE OF PIPE INSTALLED.
14. OUTFALLS
A. END WALLS: APPROX END WALLS SHALL BE PRE-FABRICATED FLARED END SECTIONS OF SAME MATERIAL AS SEWER PIPE OR OF REINFORCED CONCRETE. PROVIDE TRASH GUARDS AND PIPE TEES AS DETAILED ON DRAWINGS.
B. RIPRAP: RIPRAP SHALL BE IN ACCORDANCE WITH STATE DOT.
C. GEOTEXTILE FILTER FABRIC: FILTER FABRIC SHALL BE IN ACCORDANCE WITH STATE DOT.
D. INSTALLATION: INSTALL FILTER FABRIC AS SHOWN AND IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. SURFACE TO RECEIVE FABRIC SHALL BE SMOOTH AND FREE OF OBSTRUCTIONS, DEPRESSIONS, AND DEBRIS. LAY FABRIC PARALLEL TO DIRECTION OF WATER FLOW. IF LAPPING OF FABRIC IS REQUIRED, MINIMUM OVERLAP SHALL BE 2 FT. OVERLAPS MAY BE ELIMINATED IF FABRIC SECTIONS ARE EITHER FACTORY OR FIELD SEW. SEAM STRENGTH SHALL BE AT LEAST 80% OF FABRIC TENSILE STRENGTH. SECURE FABRIC IN PLACE TO PREVENT SHIFTING BEFORE OR DURING PLACEMENT OF STONE OR RIPRAP. PLACE RIPRAP FROM BASE OF SLOPE UPWARD; HEIGHT OF RIPRAP FREE FALL SHALL BE NO MORE THAN 1 FT. REPAIR OR REPLACE TOP OR PUNCTURED FABRIC IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS; NO EXTRA COMPENSATION WILL BE ALLOWED.

ADDITIONAL PAVEMENT NOTES

- 15. PAVEMENT CONSTRUCTION
A. ALL PAVEMENT CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE STATE DEPARTMENT OF TRANSPORTATION LATEST EDITION.
B. UNSUITABLE MATERIAL ENCOUNTERED IN EXCAVATING FOR PAVEMENT SUBGRADE SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL TO THE LIMITS APPROVED BY THE ENGINEER. UNSUITABLE MATERIAL THAT IS EXCAVATED SHALL BE DISPOSED OF ELSEWHERE AT THE CONTRACTORS EXPENSE.
C. THE PAVEMENT SUBGRADE AND BASE COURSE MATERIAL SHALL BE INSPECTED AND APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF THE AGGREGATE BASE COURSE, AT WHICH TIME, THE SUBGRADE AND BASE COURSE SHALL BE "PROOF ROLLED" BY THE CONTRACTOR WITH LEGALLY LOADED SIX-WHEELED TRUCK IN THE PRESENCE OF THE ENGINEER AND OWNER.
D. SUBGRADE COMPACTION: COMPACTED SUB-BASE SOIL UNDER ROADWAY WILL BE "PROOF ROLLED" FOR COMPACTION BY CONTRACTOR BY A TANDEM DUMP TRUCK LOADED WITH A LEGAL LOAD OF STONE, BEFORE STONE BASE IS PLACED. ALL SOFT SPOTS FOUND DURING PROOF ROLL OF SUB-BASE SHALL BE DUG OUT AND REPLACED WITH SUITABLE SOIL OR #2 STONE. IN LIEU OF USING #2 STONE, FABRIC OR GEOTEXTILES MAY BE USED. STONE BASE WILL BE "PROOF ROLLED" AGAIN BY DUMP TRUCK OUT TO THE EDGES OF THE PAVEMENT, BEFORE PAVING BEGINS. SUB-BASE SOIL COMPACTION TESTS SHALL MEET CURRENT SPECIFICATIONS FOR SUBGRADE COMPACTION.
16. CURB AND GUTTER, WALKS, AND SLABS
A. CURBS SHALL BE DERESSED AT LOCATIONS WHERE PUBLIC WALKS/PEDESTRIAN PATHS INTERSECT CURB LINE AT PAVEMENT INTERSECTION, CONCRETE SPILLWAYS, AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER.
B. CONCRETE CURB AND GUTTER SHALL BE IN ACCORDANCE WITH DOT STANDARD SPEC. LOCATE CONTRACTION JOINTS AT 20 FT. ON CENTER, UNLESS OTHERWISE SHOWN. LOCATE EXPANSION JOINTS AS REQUIRED BY STATE DOT STD. SPEC.
C. CONCRETE WALKS SHALL BE IN ACCORDANCE WITH DOT STANDARD SPEC. UNLESS OTHERWISE SHOWN, LOCATE SIDEWALK CONTRACTION JOINTS AT 5 FT. ON CENTER AND EXPANSION JOINTS AT 50 FT. ON CENTER. UNLESS OTHERWISE SHOWN, LOCATE CONTRACTION JOINTS IN LARGER SLABS AT 15 FT. INTERVALS IN EACH DIRECTION, REINFORCED WITH LUBRICATED SMOOTH DONEL BARS (3/4 INCH DIAMETER, 18 INCH LENGTH, AT 12 INCH CENTERS).
D. ALL CONCRETE CURB AND GUTTER AND PAVEMENT SHALL BE BROOMED FINISHED. CONCRETE TEST CYLINDERS SHALL BE TAKEN EACH DAY THAT CONCRETE IS POURED. A COMPRESSIVE STRENGTH OF AT LEAST 3,500 PSI FOR CURB AND GUTTER AND 4,000-4,500 PSI FOR PAVEMENT SHALL BE VERIFIED BY AN INDEPENDENT LABORATORY TO BE ACCEPTABLE. RESULT OF THE TESTING SHALL BE SUBMITTED TO THE ENGINEER AND OWNER.
E. FOR ALL CONCRETE CURB AND GUTTER AREAS, THREE-QUARTER INCH (3/4") THICK PRE-MOLDED FIBER EXPANSION JOINTS WITH 3/4" X 20" PLAN ROUND STEEL DONEL BARS SHALL BE INSTALLED AT ALL P.C.'S, P.T.'S, CURB RETURNS, AND AT THE END OF EACH POUR. ALTERNATE ENDS OF THE DONEL BARS SHALL BE GREASED AND FITTED WITH METAL EXPANSION TUBES. THREE-QUARTER INCH (3/4") THICK FIBER EXPANSION JOINTS SHALL BE USED IN EVERY CASE AT TWELVE FOOT (12') MAXIMUM INTERVALS IN THE CURB AND CUT 4" DEEP. CURB JOINTING SHALL BE LOCATED AT CONCRETE PAVEMENT JOINTS. THE GRANULAR CURB BASE SHALL BE A MINIMUM OF SIX (6) INCHES OF AGGREGATE BASE MATERIAL TO ALLOW FOR PROPER SUBGRADE DRAINAGE. COMPACTED CURB SUBGRADE SHALL BE SHAPED PARALLEL TO THE CURB FLOW LINE AND POSITIVELY DRAINED TO INLETS AND CATCH BASINS. ALL ROADWAYS SHALL BE CONSTRUCTED TO A SELECT COMPACTED SUBGRADE, GRADED PARALLEL TO THE FINISH SURFACE.
17. BASE COURSE
PLACE CRUSHED AGGREGATE BASE COURSE TO THE LINES AND GRADES SHOWN IN ACCORDANCE WITH STATE DOT STD. SPEC. BASE COURSE SHALL BE GRADUATION NO. 2. COMPACT BASE COURSE IN 6 INCH MAXIMUM LIFTS TO 95% OF STANDARD PROCTOR DENSITY, ASTM D688.
18. P.C.C. PAVEMENT
A. THIRTY DAYS PRIOR TO THE START OF PAVING THE CONTRACTOR SHALL SUBMIT A MIX DESIGN ANALYSIS OF THE PROPOSED CONCRETE. THE MIX DESIGN SHALL INCLUDE THE SOURCE AND QUANTITY OF ALL CONSTITUENTS, COMPRESSIVE STRENGTH, FLEXURAL STRENGTH, AIR CONTENT, SLUMP AND YIELD. PAVING MAY NOT BEGAIN PRIOR TO OWNER'S APPROVAL OF THE MIX DESIGN.
B. CONCRETE SHALL CONFORM TO THE DEPARTMENT OF TRANSPORTATION AND ALL OTHER APPLICABLE SECTIONS WITH A WATER/CEMENT RATIO OF .45 OR LESS AND AIR CONTENT OF 6% (-1 TO +2).
C. FOR EACH 1500 CUBIC YARDS OR PORTION THEREOF PLACED PER DAY, THE FOLLOWING TESTS SHALL BE PERFORMED: SLUMP, AIR CONTENT, TEMPERATURE, ON SET OF 3 COMPRESSIVE STRENGTH CYLINDERS. FOR EVERY FIFTH SET OF CYLINDERS ONE SET OF THREE FLEXURAL STRENGTH BEAMS SHALL BE CAST. ALL TESTING SHALL COMPLY WITH ASTM STANDARDS: C-31, C-39, C-78, C-143.
D. AFTER CONCRETE HAS SET, ALL EXPANSION JOINTS ADJACENT TO BUILDINGS SHALL BE CLEANED AND SEALED WITH HOT APPLIED RUBBERIZED SEALANT MEETING FEDERAL SPECIFICATION SS-5-1401C AND ASTM D3405.
E. CONTRACTOR SHALL PROVIDE A JOINTING AND EXPANSION LAYOUT PLAN TO OWNER FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION.
19. ASPHALTIC CONCRETE PAVEMENT
PLACE ASPHALTIC CONCRETE BINDER AND WEAR COURSES TO THE LINES AND GRADES SHOWN IN ACCORDANCE WITH DOT STD. SPEC. ASPHALT CEMENT SHALL BE PENETRATION GRADE 85-100 OR PERFORMANCE GRADE PG 58-28. COMPACT PAVEMENT UNTIL ROLLER MARKS ARE ELIMINATED AND NOT LESS THAN 92% OF THE TARGET MAXIMUM DENSITY IS OBTAINED.
A. THE BITUMINOUS PAVEMENT COURSE MATERIAL SHALL BE INSPECTED BY AN INDEPENDENT TESTING LABORATORY AT THE ASPHALT MIXING PLANT TO VERIFY THAT THE PORTIONS OF MATERIAL ARE WITHIN THE ALLOWABLE LIMITS OF THE SPECIFICATIONS AS DEFINED BY THE DEPARTMENT OF TRANSPORTATION APPLICABLE SECTIONS. WRITTEN CONFIRMATION OF CONFORMANCE SHALL BE SUBMITTED TO THE OWNER.
B. AFTER THE BITUMINOUS AGGREGATE BASE COURSE HAS BEEN PROOF ROLLED AND REPAIRED WHEN REQUIRED AND PRIOR TO PLACING THE SURFACE COURSE, THE BITUMINOUS AGGREGATE BASE COURSE SHALL BE SURFACE TESTED BY THE CONTRACTOR. ANY VARIATIONS IN THE SURFACE OF THE BITUMINOUS AGGREGATE BASE COURSE EXCEEDING ONE HALF (1/2) INCH SHALL BE CORRECTED BY THE REMOVAL AND REPLACEMENT OF ANY SUB-STANDARD AREAS OR THE CONSTRUCTION OF CORRECTIVE LEVELING COURSE AT THE DIRECTION OF THE ENGINEER.
C. AFTER THE INSTALLATION OF THE AGGREGATE BASE COURSE, ALL TRAFFIC SHALL BE KEPT OFF THE AGGREGATE BASE UNTIL THE BITUMINOUS AGGREGATE BASE COURSE IS LAID. AFTER INSTALLATION OF THE BITUMINOUS AGGREGATE BASE COURSE AND UPON THE COMPLETION OF INSPECTION OF SAME AND APPROVED BY THE ENGINEER AND OWNER, THE PAVEMENT SHALL BE CLEANED, PRIMED AND THE INTERMEDIATE AND SURFACE COURSES LAID. ALL DAMAGED AREAS IN THE BITUMINOUS AGGREGATE BASE COURSE, AGGREGATE BASE OR CURB AND GUTTER SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AND OWNER, PRIOR TO LAYING THE SURFACE COURSE. THE PAVING CONTRACTOR SHALL PROVIDE WHATEVER EQUIPMENT AND MANPOWER IS NECESSARY, INCLUDING THE USE OF POWER BROOMS, TO PREPARE THE PAVEMENT FOR APPLICATION OF THE SURFACE COURSE. EQUIPMENT AND MANPOWER FOR CLEANING SHALL BE CONSIDERED AS INCIDENTAL TO THE COST OF THE CONTRACT OR AS NOTED IN THE PROPOSAL.
D. AFTER COMPLETION OF THIS ITEM, AN ASPHALT-SEALING BAND SHALL BE PLACED AT ALL INTERSECTIONS, FEATHERS, TRANSITIONS AND ASPHALT DRIVEWAYS.

- 20. PAVEMENT MARKING
A. PAINT LINE WORK ON ASPHALTIC PAVING, CONCRETE CURBS, WALKS, AND RAMPS AS SHOWN. PAINT SHALL BE FACTORY MIXED, QUICK DRYING, NON-BLEEDING TRAFFIC MARKING PAINT COMPLYING WITH AASHTO M249, TYPE S. COLOR SHALL BE WHITE, EXCEPT WHERE ANOTHER COLOR IS REQUIRED BY CODE.
B. CLEAN SURFACE IN AREAS TO RECEIVE MARKINGS. PAINT MARKINGS AND SYMBOLS WITH TRAFFIC MARKING PAINT. APPLY PAINT WITH MECHANICAL EQUIPMENT TO PRODUCE UNIFORM STRAIGHT EDGES. APPLY TWO COATS AT MANUFACTURERS RECOMMENDED RATES.
21. HANDICAPPED PARKING SIGNS
A. MINIMUM 12 INCH, X 18 INCH X 18 GA. COLD ROLLED GALVANIZED STEEL, TREATED WITH A BAKED ENAMEL FINISH. COLORS, TEXT AND DESIGN AS SHOWN ON DETAILS.
B. SIGN SHALL BE MOUNTED ON A SINGLE 2 INCH SQUARE STEEL POST WITH PAINTED ENAMEL FINISH.
C. SIGNS SHALL BE SET PLUMB AND LEVEL. TOUCH-UP ANY ABRASIONS TO FINISH. COMPLETELY CLEAN SIGNS OF ALL FOREIGN MATTER.
22. TRAFFIC SIGNS
TRAFFIC SIGNS SHALL COMPLY WITH THE PERTINENT STATE AND LOCAL REQUIREMENTS FOR THE SIGN TYPE(S) DESIGNATED ON DRAWINGS.
23. SEEDING
DISTURBED AREAS (EXCLUDING PAVEMENT AND BUILDING AREAS) SHALL RECEIVE MINIMUM 4 INCHES OF SALVAGED TOPSOIL, FERTILIZER, LIME, SEED, AND MULCH. SEE EROSION AND SEDIMENT CONTROL PLAN.
24. DISPOSAL
REMOVE FROM OWNER'S PROPERTY AND LEGALLY DISPOSE OF EXCESS EXCAVATED MATERIAL, TRASH, DEBRIS, AND WASTE MATERIALS.

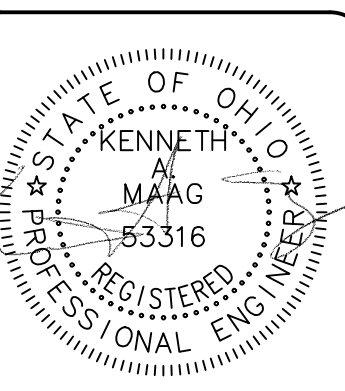


Table with 3 columns: REV., DATE, DESCRIPTION. Row 1: 2/3/23, VILLAGE SUBMITTAL



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ASHVILLE LOGISTICS PARK
ASHVILLE, OHIO

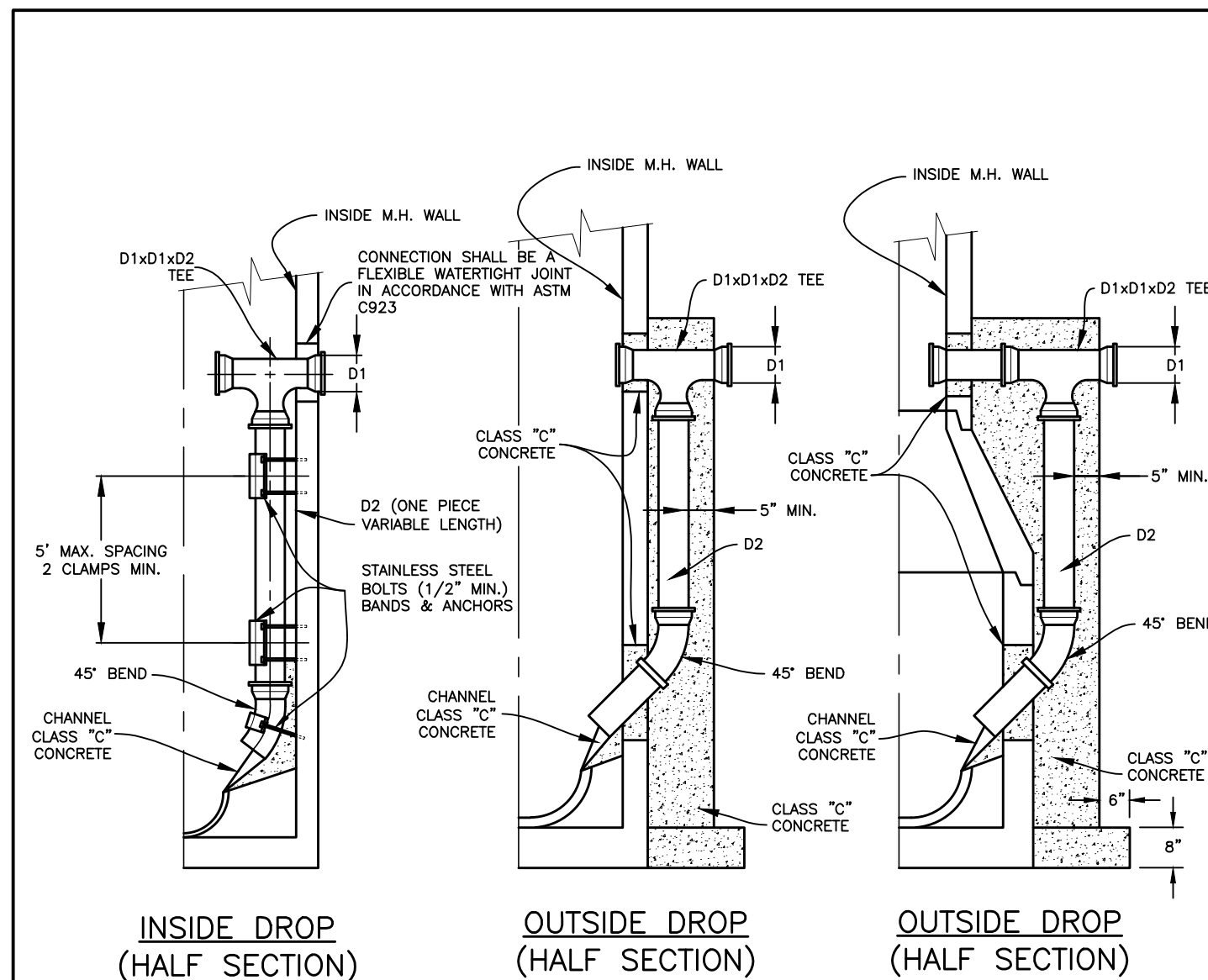
GENERAL NOTES



4
DATE 09/13/2022
PROJECT NUMBER 20224880.001A

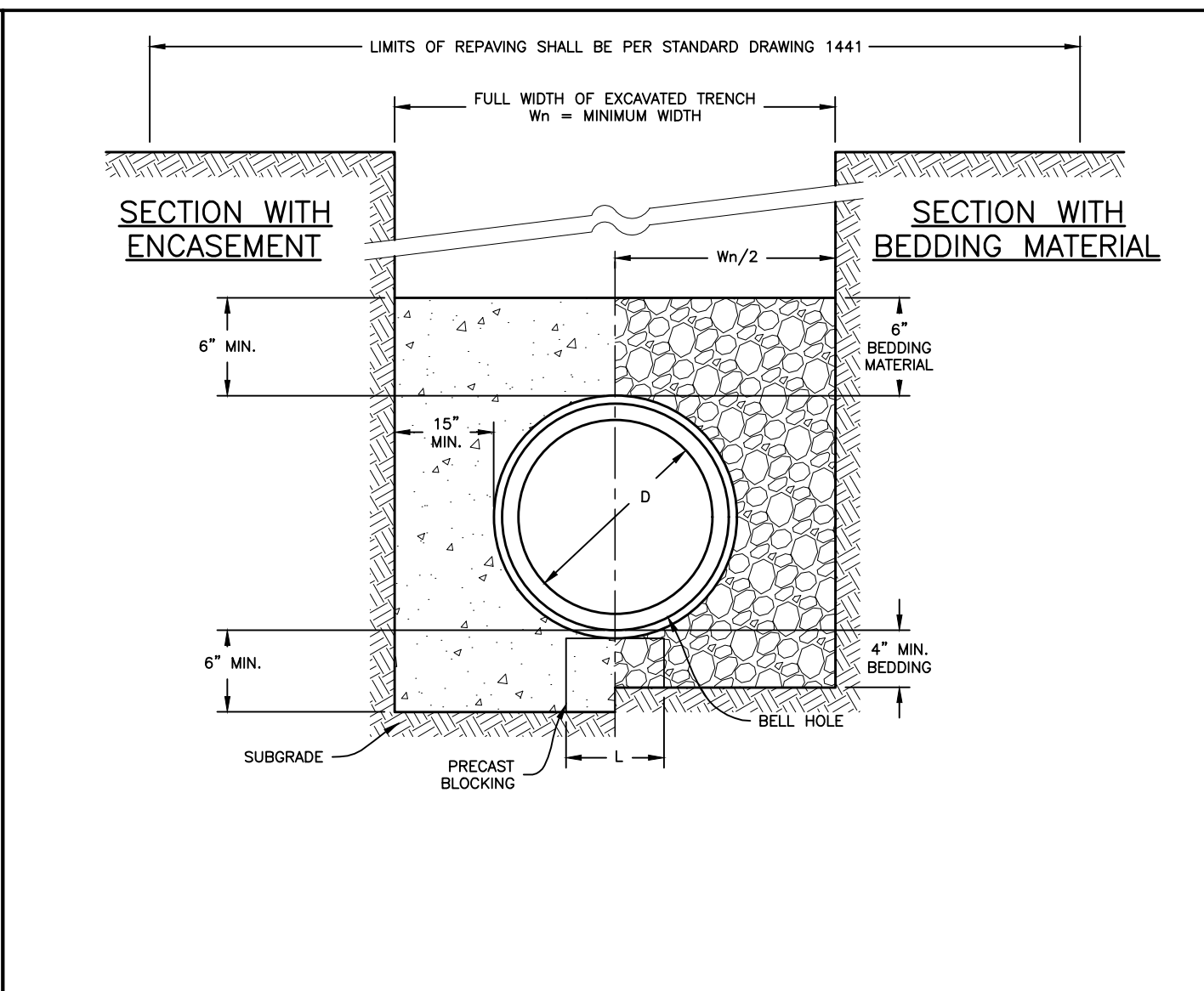
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FILE No. 1, Kiewit Projects 2022\OH-Ashville-Leathenood - 20224880.001A.dwg 02/02/23 10:33-4Kiemer



- NOTES:**
- DROP IS REQUIRED WHEN INVERT DIFFERENTIAL IS 24 INCHES OR GREATER.
 - HEIGHT OF DROP PIPE IS TO BE SHOWN ON THE PLANS OR WILL BE DETERMINED AT THE TIME OF CONSTRUCTION.
 - ALL WORK AND MATERIALS REQUIRED TO CONSTRUCT THE INSIDE OR OUTSIDE DROP SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 604, OR ITEM 901.
 - UNLESS OTHERWISE REQUIRED BY THE PLANS AN OUTSIDE DROP WILL BE CONSTRUCTED ON NEW MANHOLES.
 - MATERIALS FOR THE TEE, DROP PIPE AND BEND SHALL BE OF ONE TYPE AND BE ONE OF THE FOLLOWING: INSIDE DROP: CAST-IRON OR PVC. OUTSIDE DROP: CAST IRON, VCP, OR PVC.
 - OUTSIDE DROP PIPES REQUIRE A 5" THICK (MINIMUM) CLASS "C" CONCRETE ENCASEMENT ON THREE SIDES OF PIPE AND SHALL BE TIED TO MANHOLE WALL WITH 5/8" STAINLESS STEEL-1/2" RODS x 5' LONG @ 12".
 - INSIDE DROP MAY BE USED ON NEW CONSTRUCTION PROVIDED THAT 60" BASE AND RISER SECTIONS ARE USED.

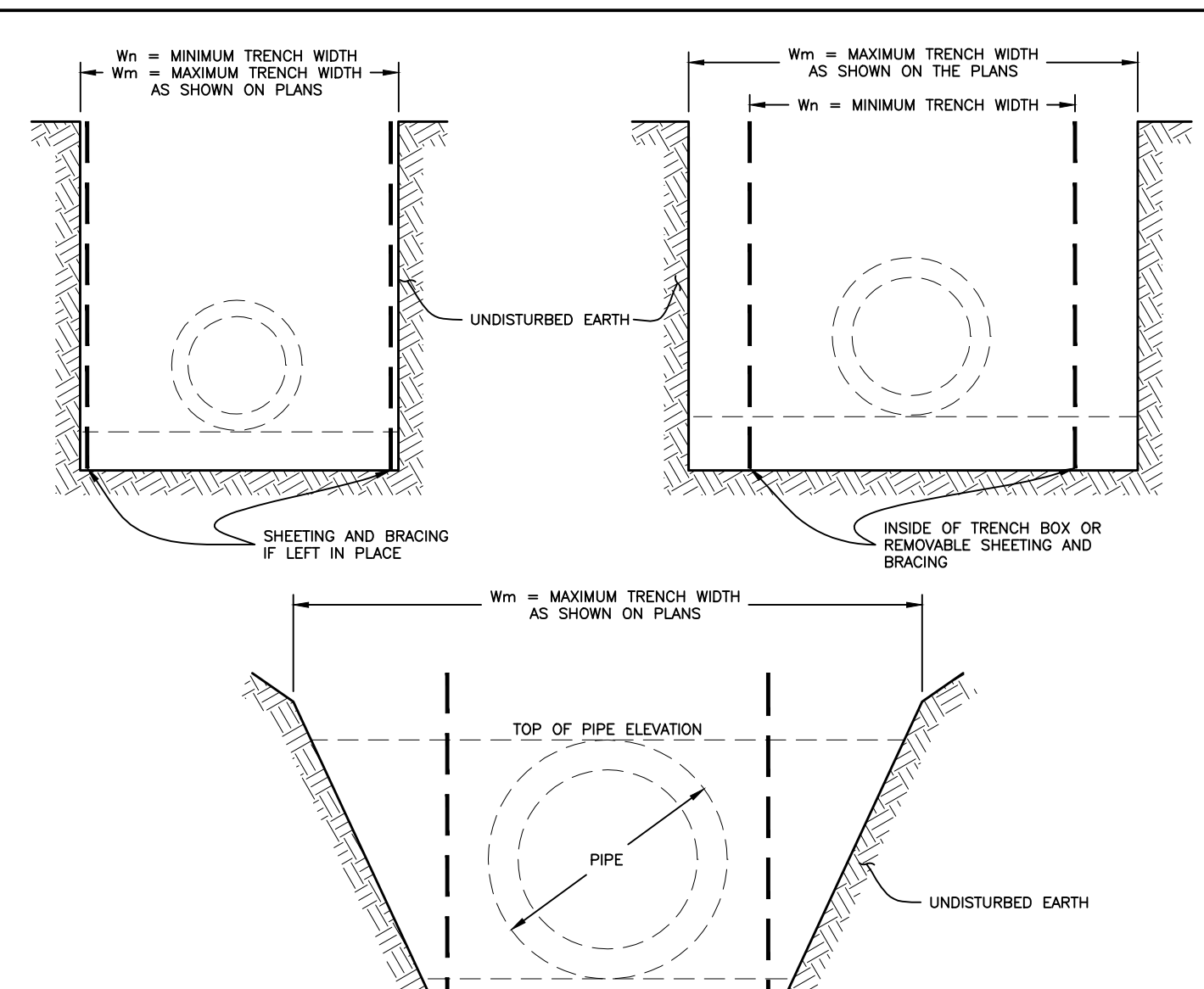
| PIPE DIAMETER | |
|---------------|-----|
| D1 | D2 |
| 8" | 8" |
| 10" | 8" |
| 12" | 8" |
| 15" | 10" |
| 18" | 10" |
| 21" | 12" |
| 24" | 12" |



| DIA | Wn | L |
|-----|-----|-----|
| 6" | 30" | 12" |
| 8" | 30" | 12" |
| 10" | 30" | 12" |
| 12" | 32" | 12" |
| 15" | 36" | 12" |
| 18" | 40" | 12" |
| 21" | 44" | 12" |
| 24" | 48" | 12" |
| 27" | 52" | 12" |
| 30" | 56" | 15" |
| 36" | 64" | 18" |
| 42" | 72" | 21" |
| 48" | 80" | 24" |
| 60" | 96" | 30" |

NOTES:

- SECTIONS SYMMETRICAL ABOUT ϕ .
- PIPE DIMENSIONS ON CHART ARE MINIMUM AND EXPRESSED IN INCHES.
- FOR SANITARY SEWER CONSTRUCTION TRENCH DAMS ARE REQUIRED AS SPECIFIED UNDER 901.11.
- PROVIDE EMBEDMENT IN ACCORDANCE WITH THE RECOMMENDATIONS OF ASTM D2321, 7.5.
- ENCASEMENT TO BE CLASS "A" CONCRETE, ITEM 905.
- THE PIPE SHALL BE SUPPORTED BY 12" CONCRETE BLOCKING WHEN CONCRETE ENCASEMENT IS REQUIRED.
- BLOCKING SHALL HAVE THE LENGTH SHOWN IN THE CHART OR OF SUFFICIENT LENGTH SO THAT THE PIPE LOAD ON THE SUBGRADE SHALL NOT EXCEED 3,000 LBS/SF. SEE CHART FOR MINIMUM BLOCKING LENGTHS.



- NOTES:**
- QUANTITIES AS SHOWN ON THE STANDARD DRAWINGS ARE BASED ON THE MINIMUM WIDTH OF TRENCH (Wn). IF ANY ALTERNATIVE TRENCH IS USED THE CONTRACTOR WILL BE REQUIRED TO EXTEND THE BEDDING, BACKING OR ENCASEMENT MATERIAL ACROSS THE ENTIRE EXCAVATED TRENCH AT THE DEPTH SPECIFIED. THE COST OF THE INCREASED MATERIAL SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 901.
 - THE MAXIMUM WIDTH OF THE TRENCH (Wm) AS SHOWN ON PLANS, AT TOP OF PIPE, WILL BE STRICTLY ENFORCED AND WILL APPLY TO ANY TYPE OF TRENCH CONSTRUCTION TECHNIQUE USED.
 - IF NO MAXIMUM WIDTH OF THE TRENCH (Wm) IS SHOWN ON PLANS, THE BACKFILL LOAD ON THE PIPE IS AT A MAXIMUM AND WILL REMAIN CONSTANT REGARDLESS OF ANY INCREASE IN THE WIDTH OF THE TRENCH.

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE & DRAINAGE

INSIDE DROP & OUTSIDE DROP PIPE FOR MANHOLES

STANDARD DRAWING AA-S110
REVISED 9/20/12
PAGE 1

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE & DRAINAGE

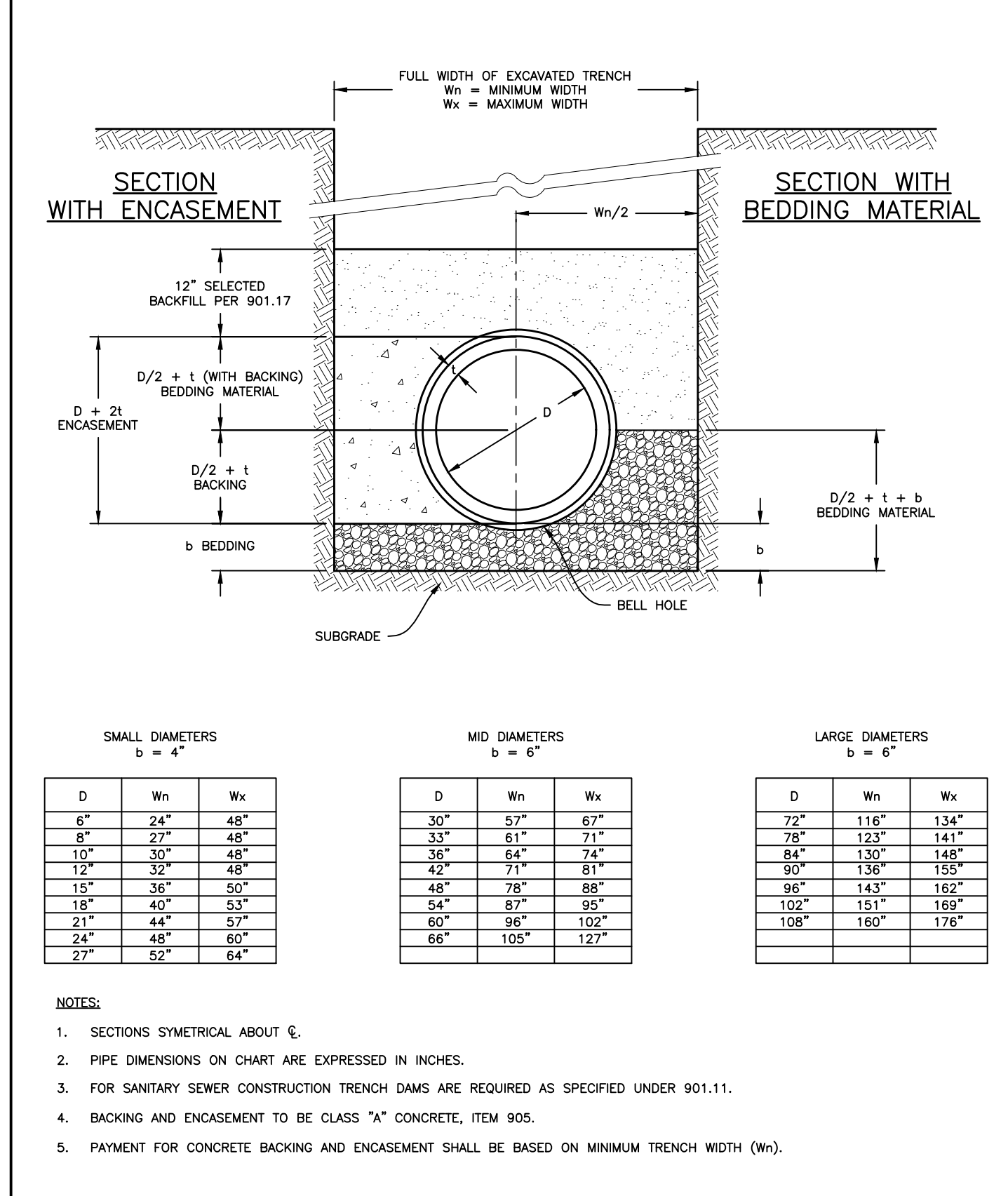
TYPE I BEDDING FOR FLEXIBLE SEWER PIPE 6" TO 60" DIAMETER

STANDARD DRAWING AA-S149
REVISED 10/15/14
PAGE 1

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE & DRAINAGE

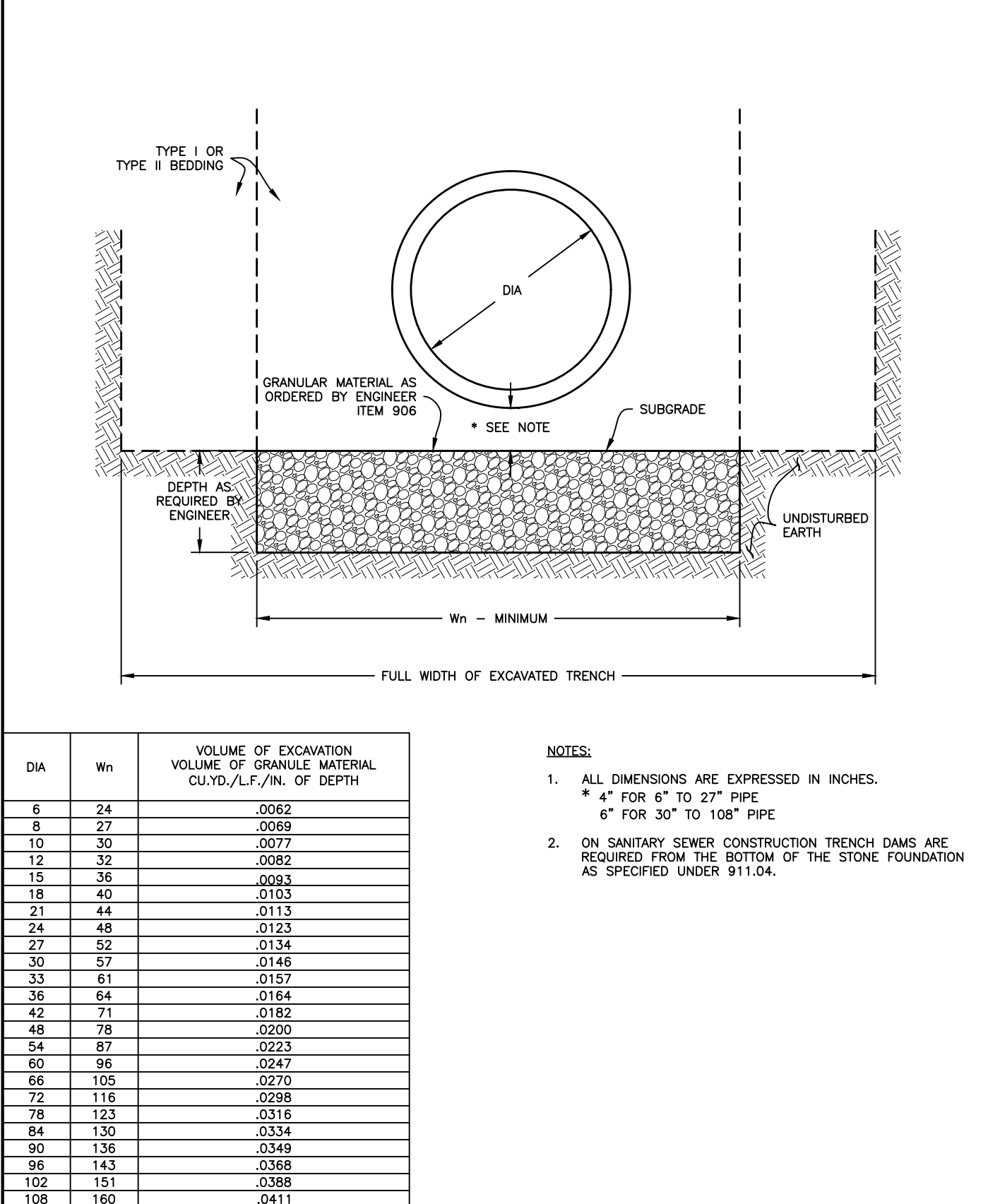
TRENCH INSTALLATION WITH MAXIMUM WIDTH SPECIFIED

STANDARD DRAWING AA-S150
REVISED 7/9/12
PAGE 1



| SMALL DIAMETERS b = 4" | | | MID DIAMETERS b = 6" | | | LARGE DIAMETERS b = 8" | | |
|---------------------------|-----|-----|-------------------------|------|------|---------------------------|------|------|
| D | Wn | Wm | D | Wn | Wm | D | Wn | Wm |
| 6" | 24" | 48" | 30" | 57" | 67" | 72" | 116" | 134" |
| 8" | 27" | 48" | 33" | 61" | 71" | 78" | 123" | 141" |
| 10" | 30" | 48" | 36" | 64" | 74" | 84" | 130" | 148" |
| 12" | 32" | 48" | 42" | 71" | 81" | 90" | 136" | 155" |
| 15" | 36" | 50" | 48" | 78" | 88" | 96" | 143" | 162" |
| 18" | 40" | 53" | 54" | 87" | 95" | 102" | 151" | 169" |
| 21" | 44" | 57" | 60" | 96" | 102" | 108" | 160" | 176" |
| 24" | 48" | 60" | 66" | 105" | 127" | | | |
| 27" | 52" | 64" | | | | | | |

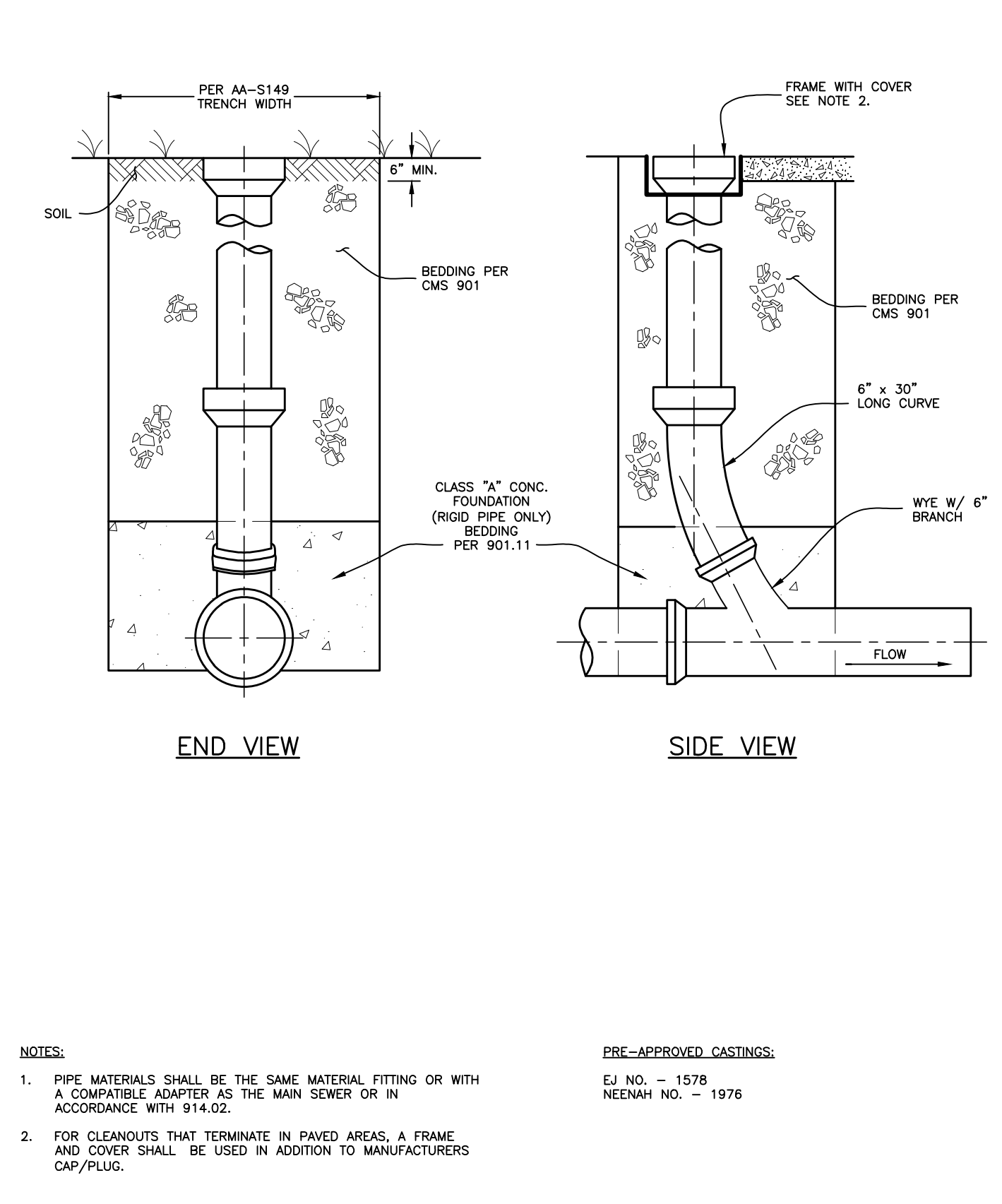
- NOTES:**
- SECTIONS SYMMETRICAL ABOUT ϕ .
 - PIPE DIMENSIONS ON CHART ARE EXPRESSED IN INCHES.
 - FOR SANITARY SEWER CONSTRUCTION TRENCH DAMS ARE REQUIRED AS SPECIFIED UNDER 901.11.
 - BACKING AND ENCASEMENT TO BE CLASS "A" CONCRETE, ITEM 905.
 - PAYMENT FOR CONCRETE BACKING AND ENCASEMENT SHALL BE BASED ON MINIMUM TRENCH WIDTH (Wn).



| DIA | Wn | VOLUME OF EXCAVATION VOLUME OF GRANULE MATERIAL CU.YD./L.F. OF DEPTH |
|-----|-----|--|
| 6 | 24 | .0062 |
| 8 | 27 | .0069 |
| 10 | 30 | .0077 |
| 12 | 32 | .0082 |
| 15 | 36 | .0093 |
| 18 | 40 | .0103 |
| 21 | 44 | .0113 |
| 24 | 48 | .0123 |
| 27 | 52 | .0134 |
| 30 | 57 | .0146 |
| 33 | 61 | .0157 |
| 36 | 64 | .0164 |
| 42 | 71 | .0182 |
| 48 | 78 | .0200 |
| 54 | 87 | .0223 |
| 60 | 96 | .0247 |
| 66 | 105 | .0270 |
| 72 | 116 | .0298 |
| 78 | 123 | .0316 |
| 84 | 130 | .0334 |
| 90 | 136 | .0349 |
| 96 | 143 | .0368 |
| 102 | 151 | .0388 |
| 108 | 160 | .0413 |

NOTES:

- ALL DIMENSIONS ARE EXPRESSED IN INCHES.
* 4" FOR 6" TO 27" PIPE
6" FOR 30" TO 108" PIPE
- ON SANITARY SEWER CONSTRUCTION TRENCH DAMS ARE REQUIRED FROM THE BOTTOM OF THE STONE FOUNDATION AS SPECIFIED UNDER 911.04.



- NOTES:**
- PIPE MATERIALS SHALL BE THE SAME MATERIAL FITTING OR WITH A COMPATIBLE ADAPTER AS THE MAIN SEWER OR IN ACCORDANCE WITH 914.02.
 - FOR CLEANOUTS THAT TERMINATE IN PAVED AREAS, A FRAME AND COVER SHALL BE USED IN ADDITION TO MANUFACTURERS CAP/PLUG.
- PRE-APPROVED CASTINGS:**
EJ NO. - 1578
NEENAH NO. - 1976

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE & DRAINAGE

TYPE I BEDDING FOR RIGID SEWER PIPE 6" TO 108" DIAMETER

STANDARD DRAWING AA-S151
REVISED 7/9/12
PAGE 1

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE & DRAINAGE

STONE FOUNDATION FOR 6" TO 108" DIAMETER PIPE

STANDARD DRAWING AA-S154
REVISED 7/9/12
PAGE 1

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE & DRAINAGE

TYPICAL CLEANOUT

STANDARD DRAWING AA-S161
REVISED 12/6/13
PAGE 1

POGGEMEYER
DESIGN GROUP
A KLEINFELDER COMPANY
1168 NORTH MAIN STREET
BOWLING GREEN, OH 43402
PH: (419) 352-7537

DHL SUPPLY CHAIN
ASHVILLE LOGISTICS PARK
ASHVILLE, OHIO

SEWER
DETAIL
SHEET

DRAWN BY: MEK
CHECKED BY: KAM

5
DATE
09/13/2022

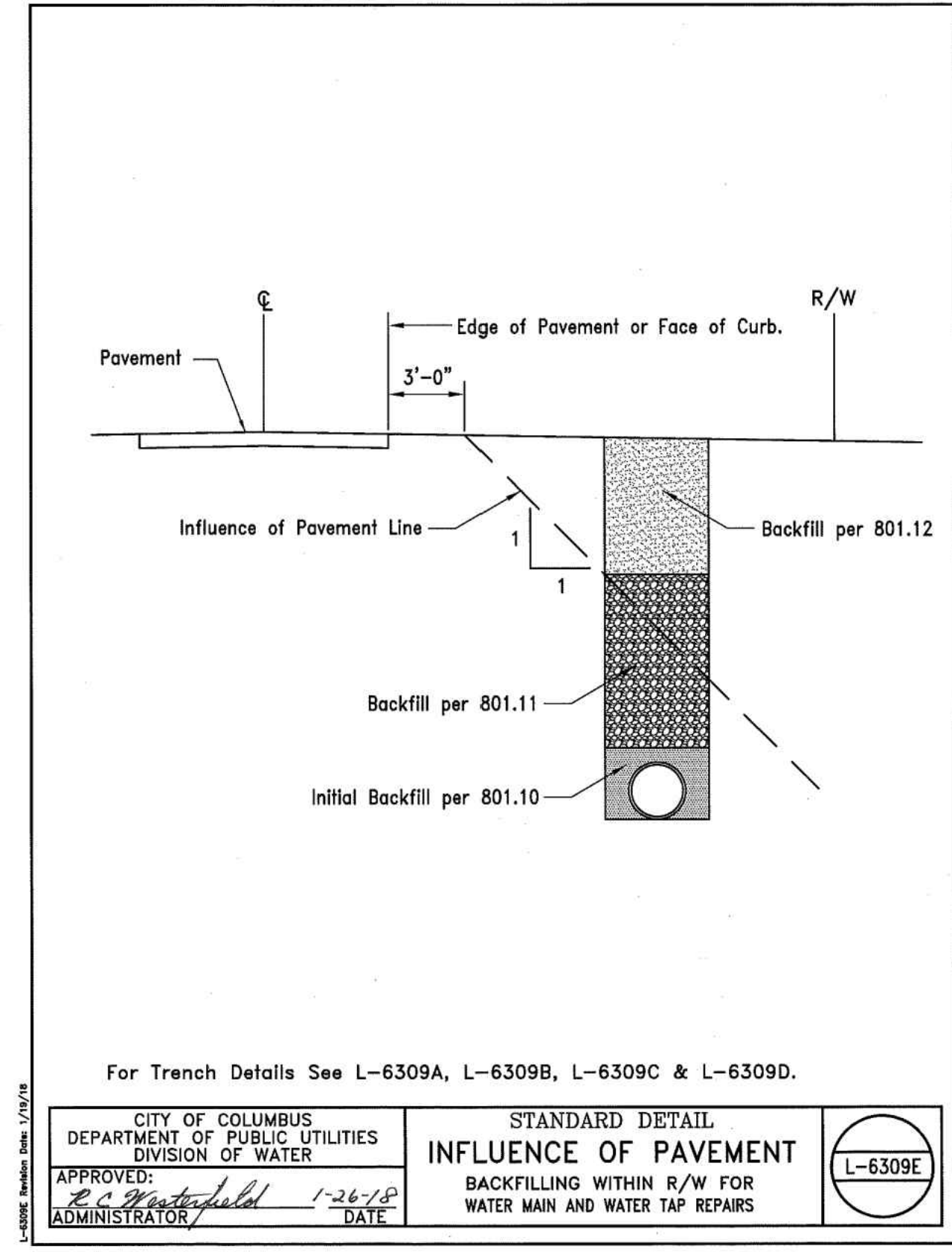
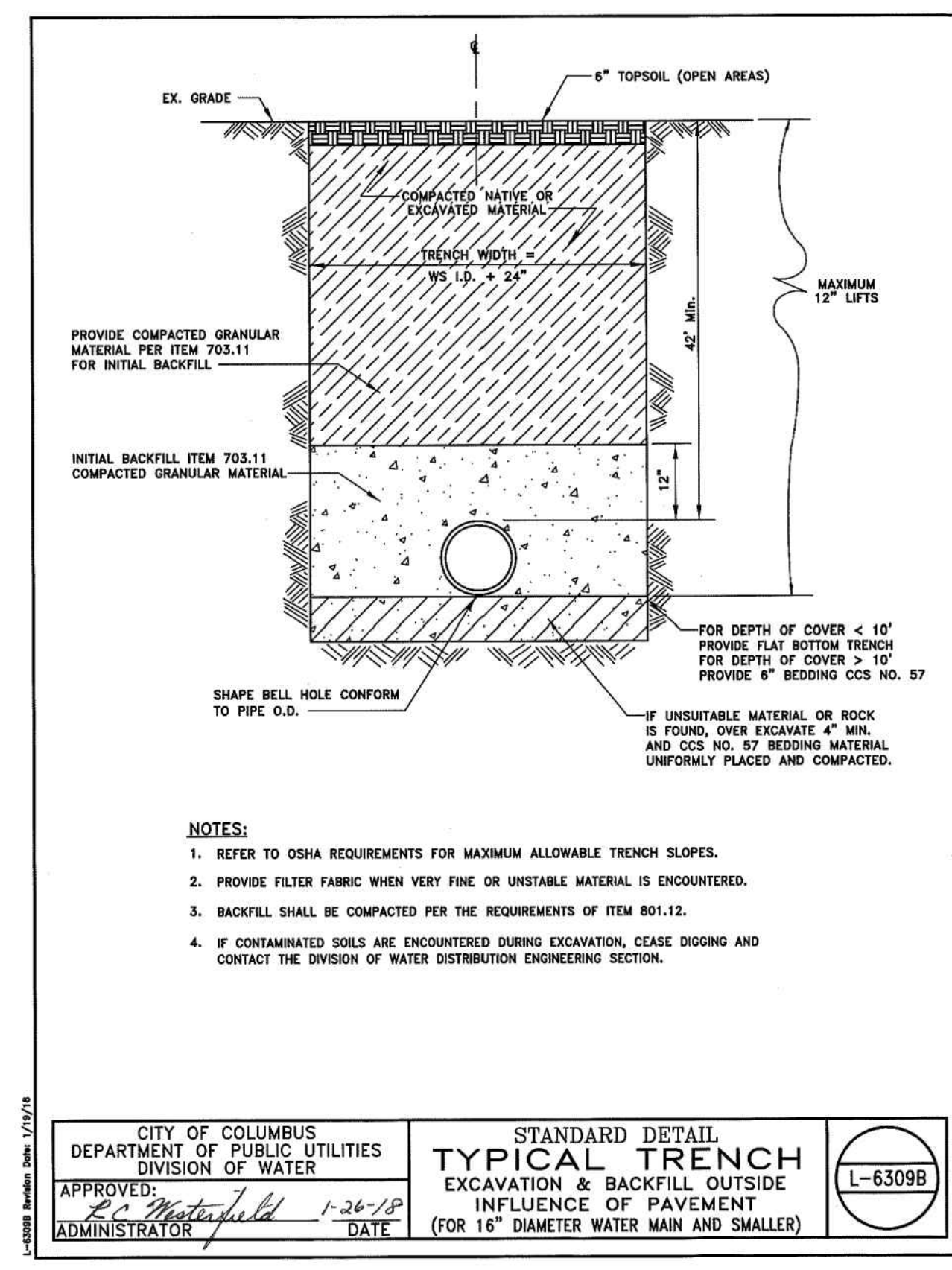
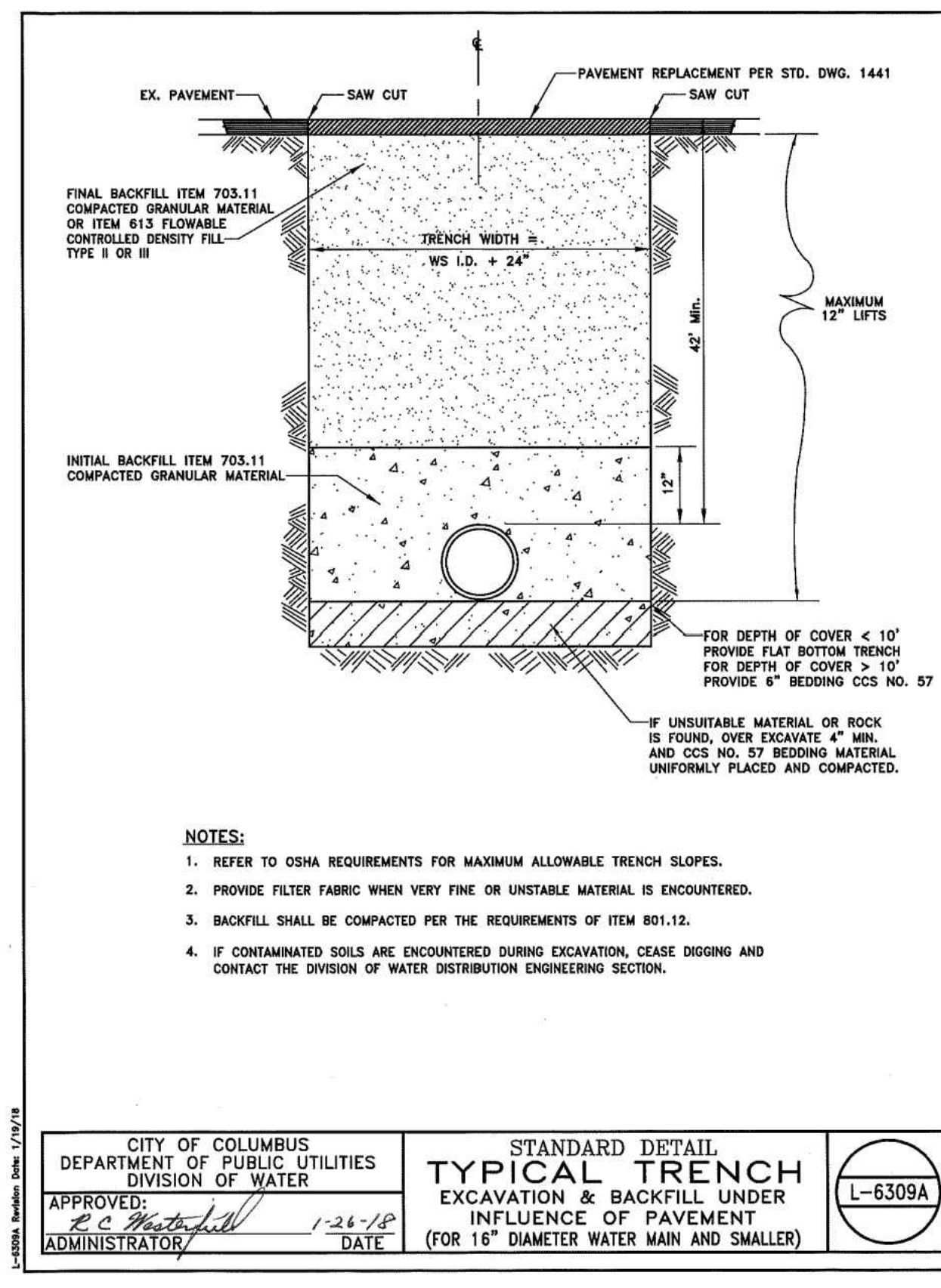
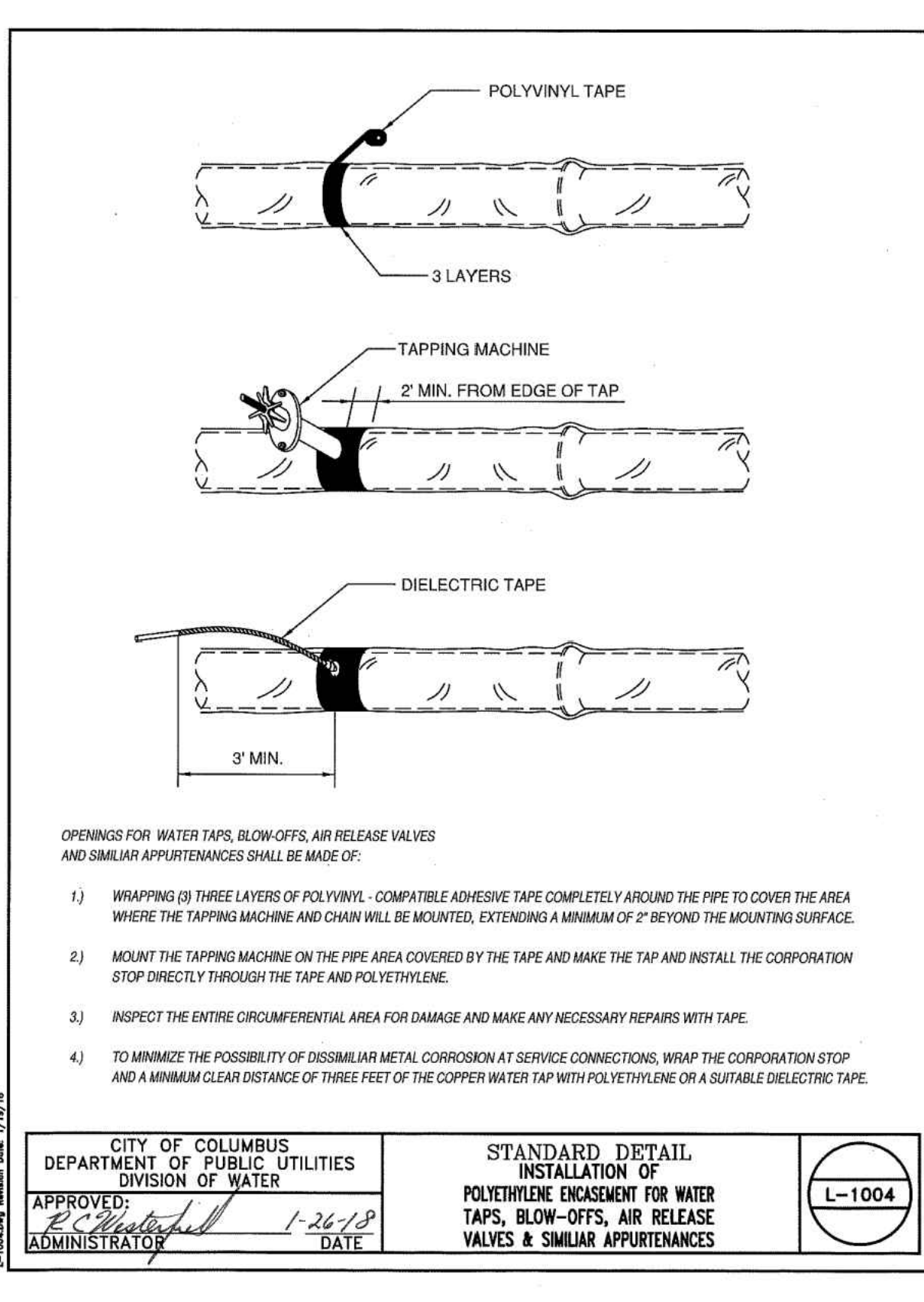
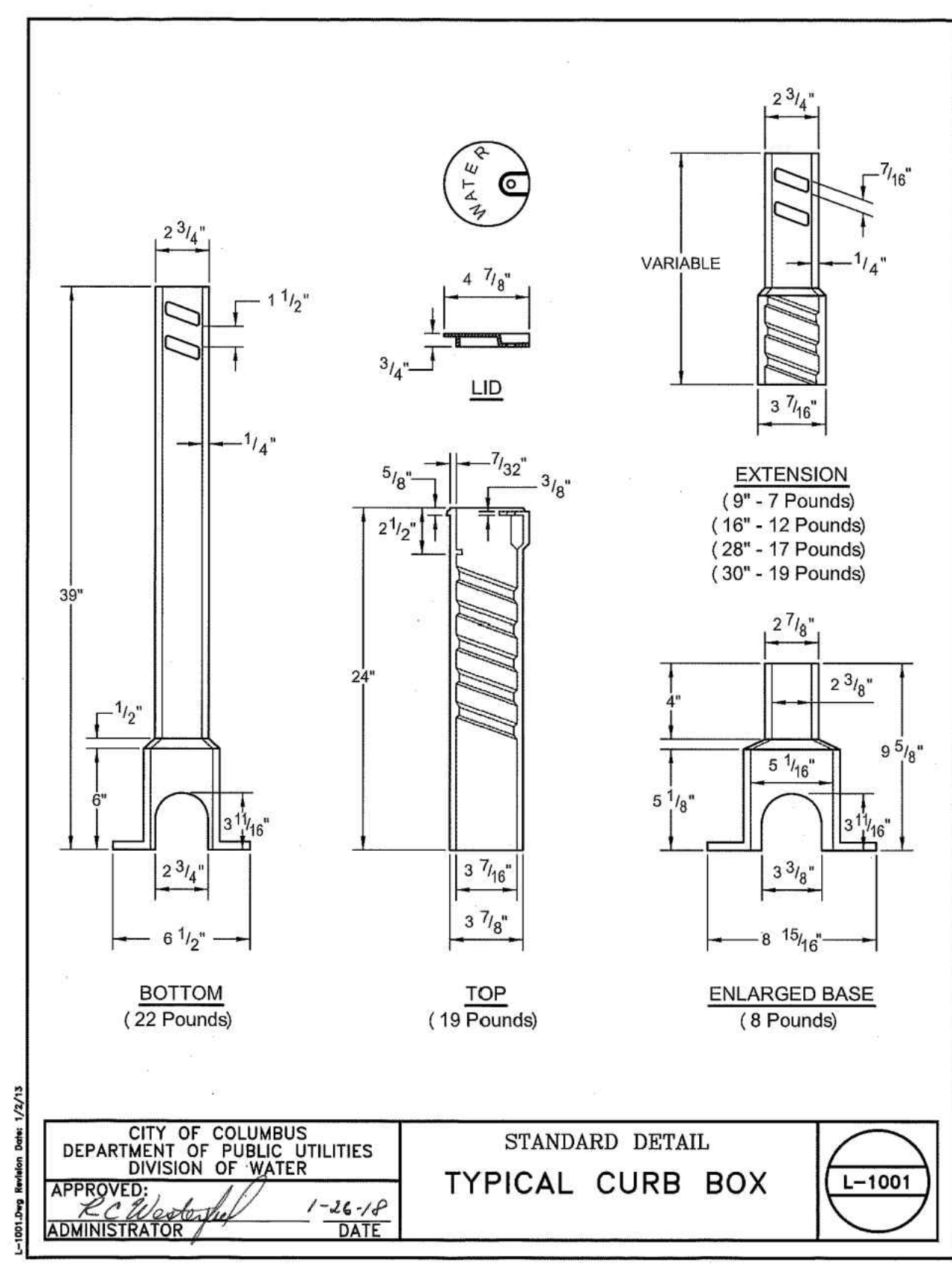
PROJECT NUMBER
20224880.001A

Before You Dig
1-800-362-2764

| REV. | DATE | DESCRIPTION |
|--------|------|-------------------|
| 2/3/23 | | VILLAGE SUBMITTAL |

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FILE No. 1, Klemmer Projects 2022\OH-Ashtville-Leathwood - 20224880.001A\OH-Ashtville-Leathwood - 20224880.001A.dwg 02/02/23 10:32-4Klemmer



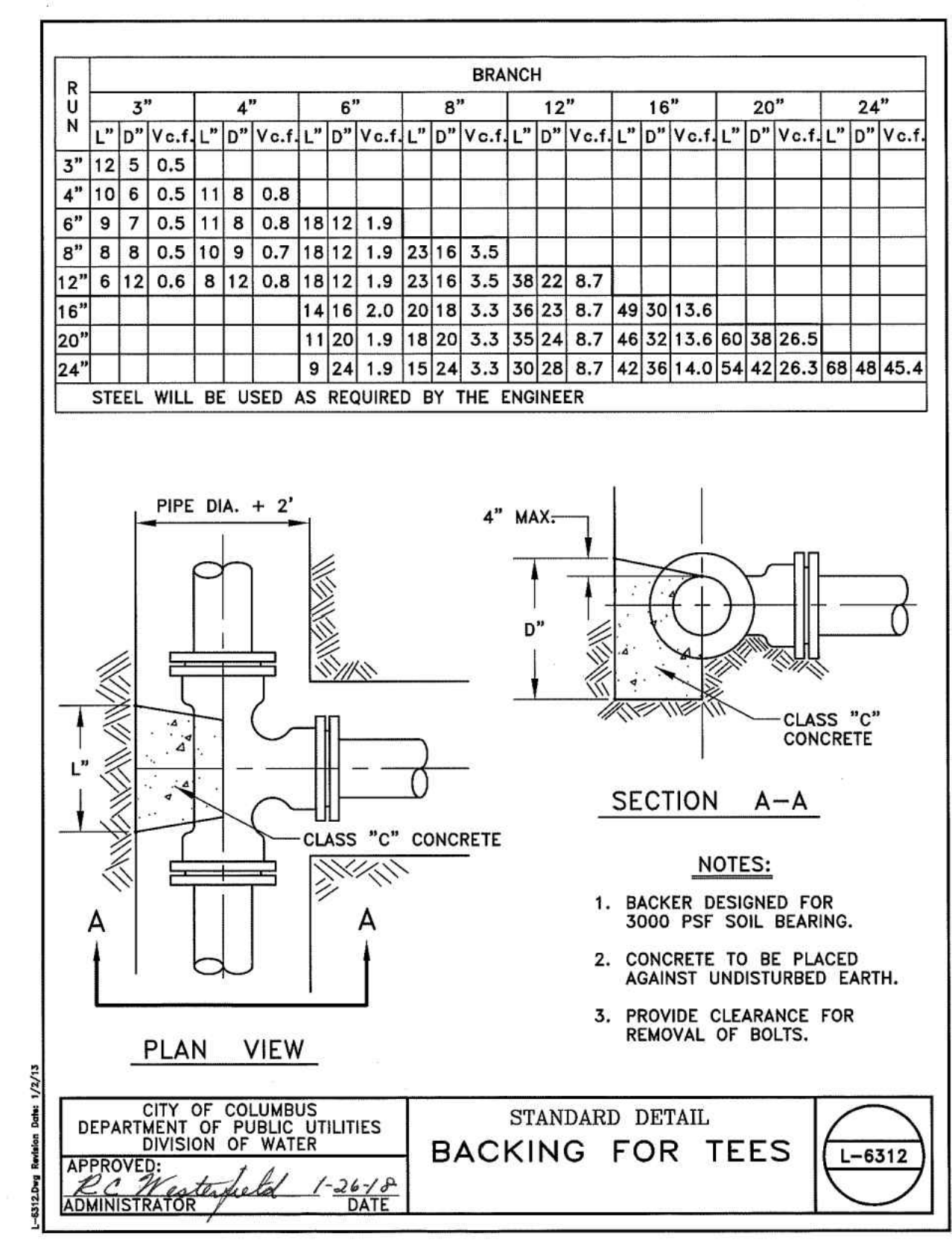
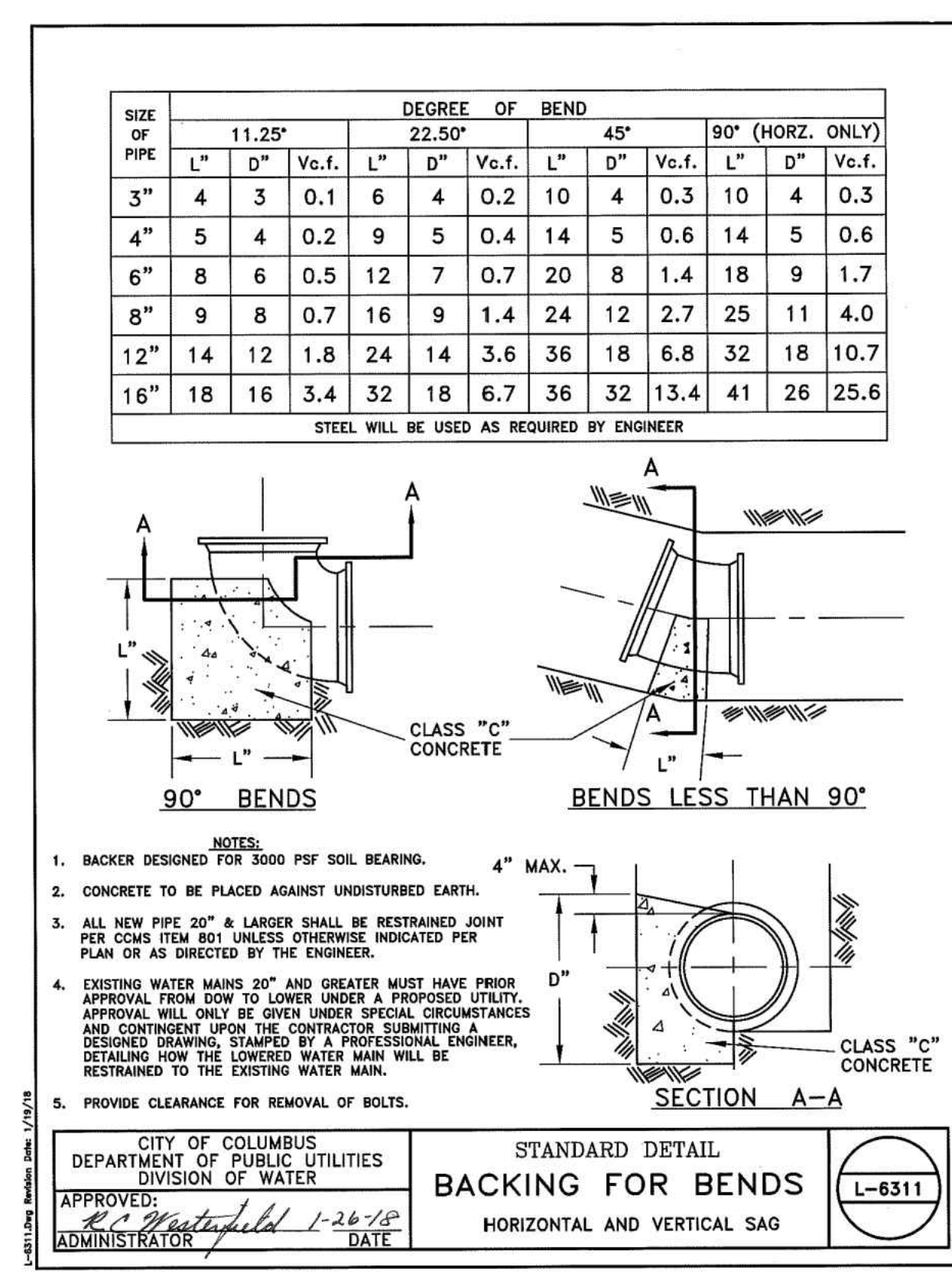
| PIPE SIZE | 11.25° | | | | 22.5° | | | | 45° | | | |
|-----------|--------|----|----|------|-------|----|----|------|-----|----|----|-------|
| | L" | W" | H" | Vol. | L" | W" | H" | Vol. | L" | W" | H" | Vol. |
| 3" | 12 | 18 | 12 | 1.5 | 13 | 25 | 16 | 3.0 | 18 | 30 | 19 | 5.9 |
| 4" | 12 | 24 | 16 | 2.6 | 16 | 30 | 18 | 5.0 | 22 | 36 | 24 | 11.0 |
| 6" | 12 | 48 | 18 | 6.0 | 15 | 43 | 36 | 13.4 | 30 | 55 | 24 | 22.9 |
| 8" | 12 | 63 | 24 | 10.5 | 18 | 57 | 34 | 20.2 | 36 | 57 | 33 | 39.2 |
| 12" | 20 | 54 | 36 | 22.6 | 37 | 62 | 37 | 49.0 | 48 | 62 | 51 | 87.9 |
| 16" | 31 | 65 | 38 | 44.3 | 60 | 65 | 39 | 88.1 | 65 | 65 | 65 | 159.2 |

NOTES:

- VOLUMES GIVEN IN CUBIC FEET.
- BACKER TO BE CENTERED HORIZONTALLY ON BEND.
- STEEL WILL BE USED AS REQUIRED BY THE ENGINEER.
- ALL NEW PIPE 20" & LARGER SHALL BE RESTRAINED JOINT PER CCMS ITEM 801 UNLESS OTHERWISE PER PLAN OR AS DIRECTED BY THE ENGINEER.
- EXISTING WATER MAINS 20" AND GREATER MUST HAVE PRIOR APPROVAL FROM DOW TO LOWER UNDER A PROPOSED UTILITY. APPROVAL WILL ONLY BE GIVEN UNDER SPECIAL CIRCUMSTANCES AND CONTINGENT UPON THE CONTRACTOR SUBMITTING A DESIGNED DRAWING, STAMPED BY A PROFESSIONAL ENGINEER, DETAILING HOW THE LOWERED WATER MAIN WILL BE RESTRAINED TO THE EXISTING WATER MAIN.
- WHERE POLYETHYLENE ENCASEMENT IS REQUIRED, ALL GLANDS & BOLTS SHALL BE WRAPPED PRIOR TO PLACEMENT OF CONCRETE BACKING, SEE "L-1004".

CITY OF COLUMBUS
 DEPARTMENT OF PUBLIC UTILITIES
 DIVISION OF WATER
 APPROVED: *R.C. Mastaglio* 1-26-18
 ADMINISTRATOR DATE

STANDARD DETAIL
**BACKING FOR VERTICAL BENDS
 (OVER BENDS ONLY)**
 L-6310



**DHL SUPPLY CHAIN
 ASHVILLE LOGISTICS PARK
 ASHVILLE, OHIO**

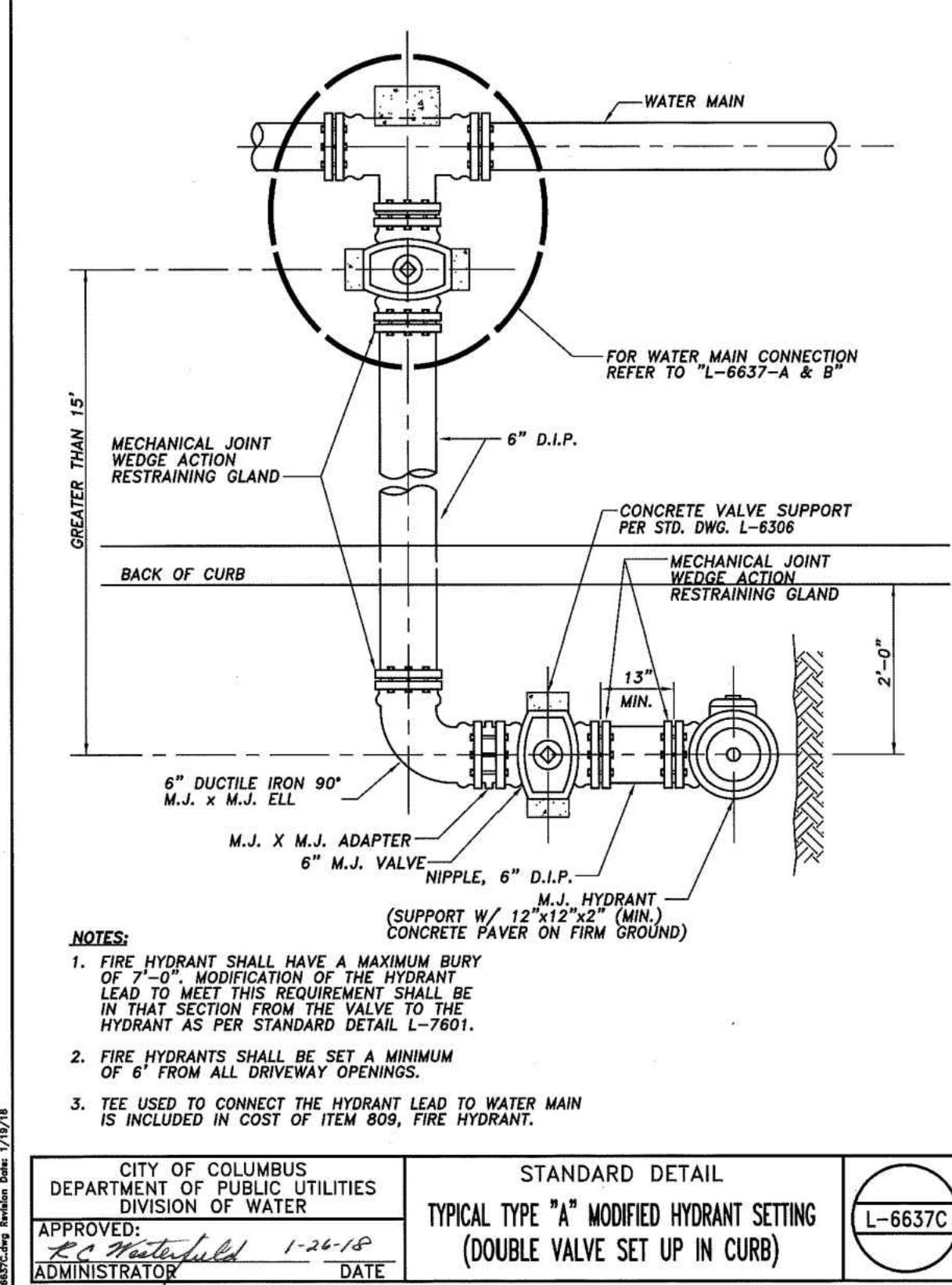
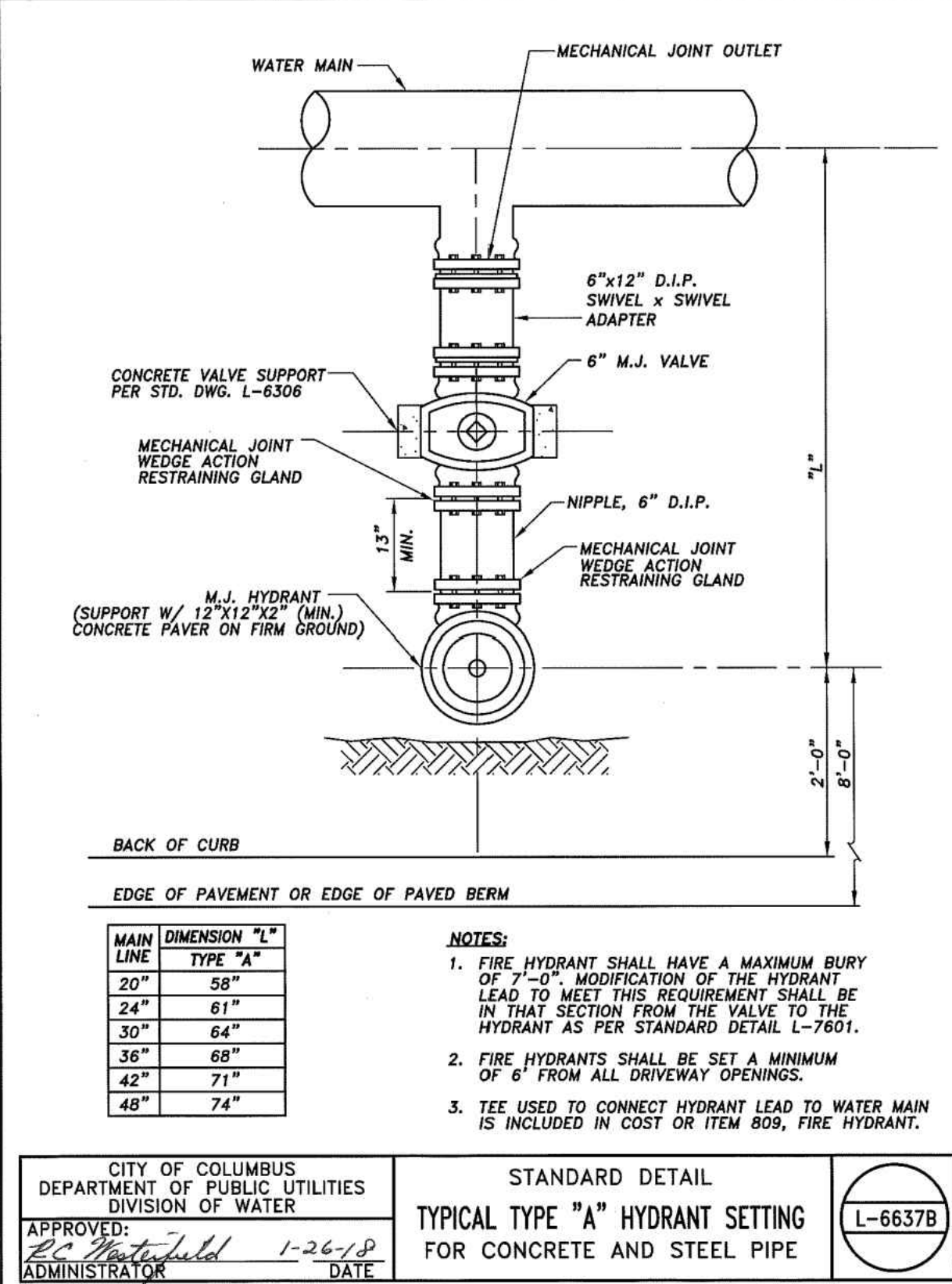
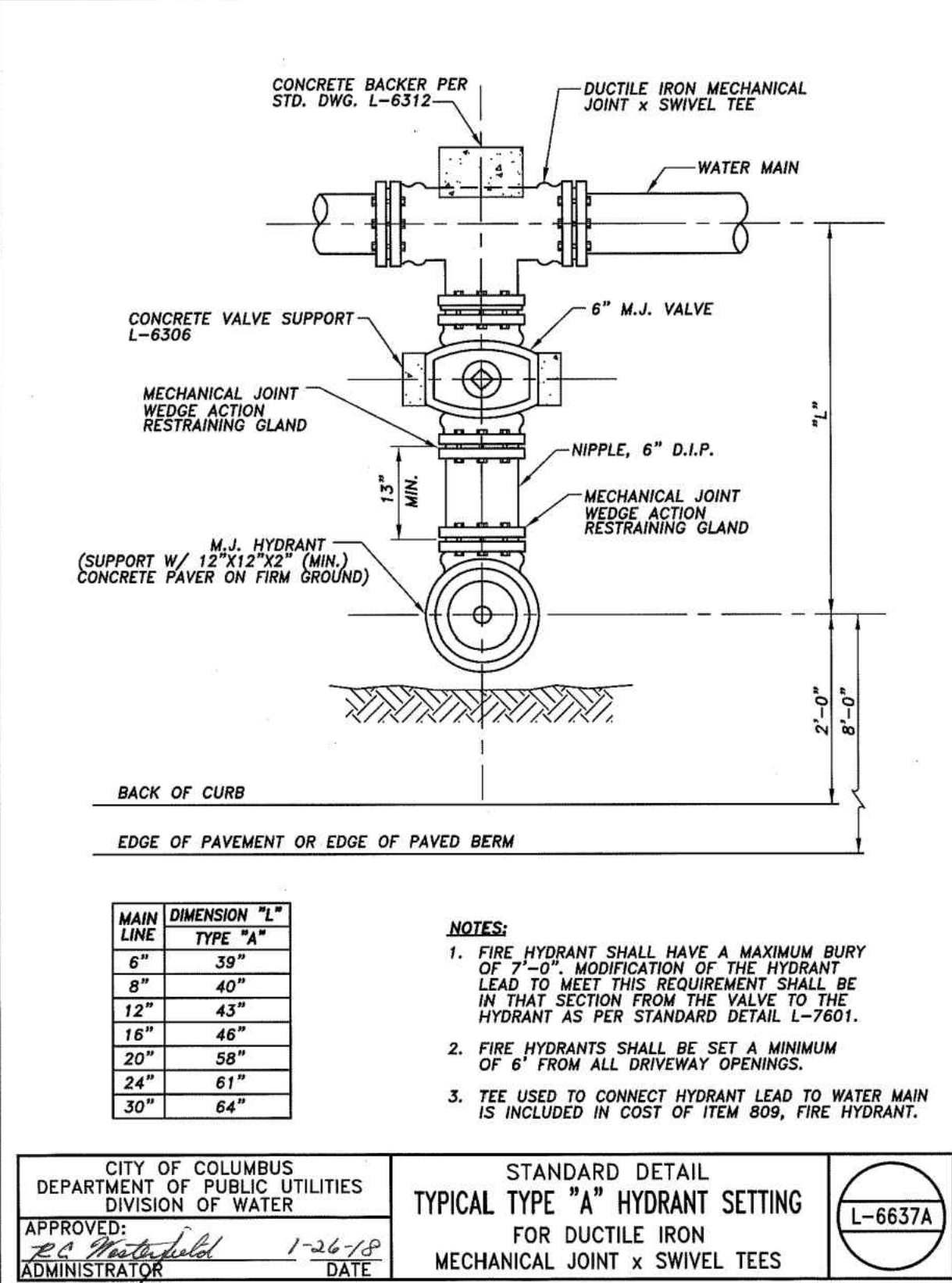
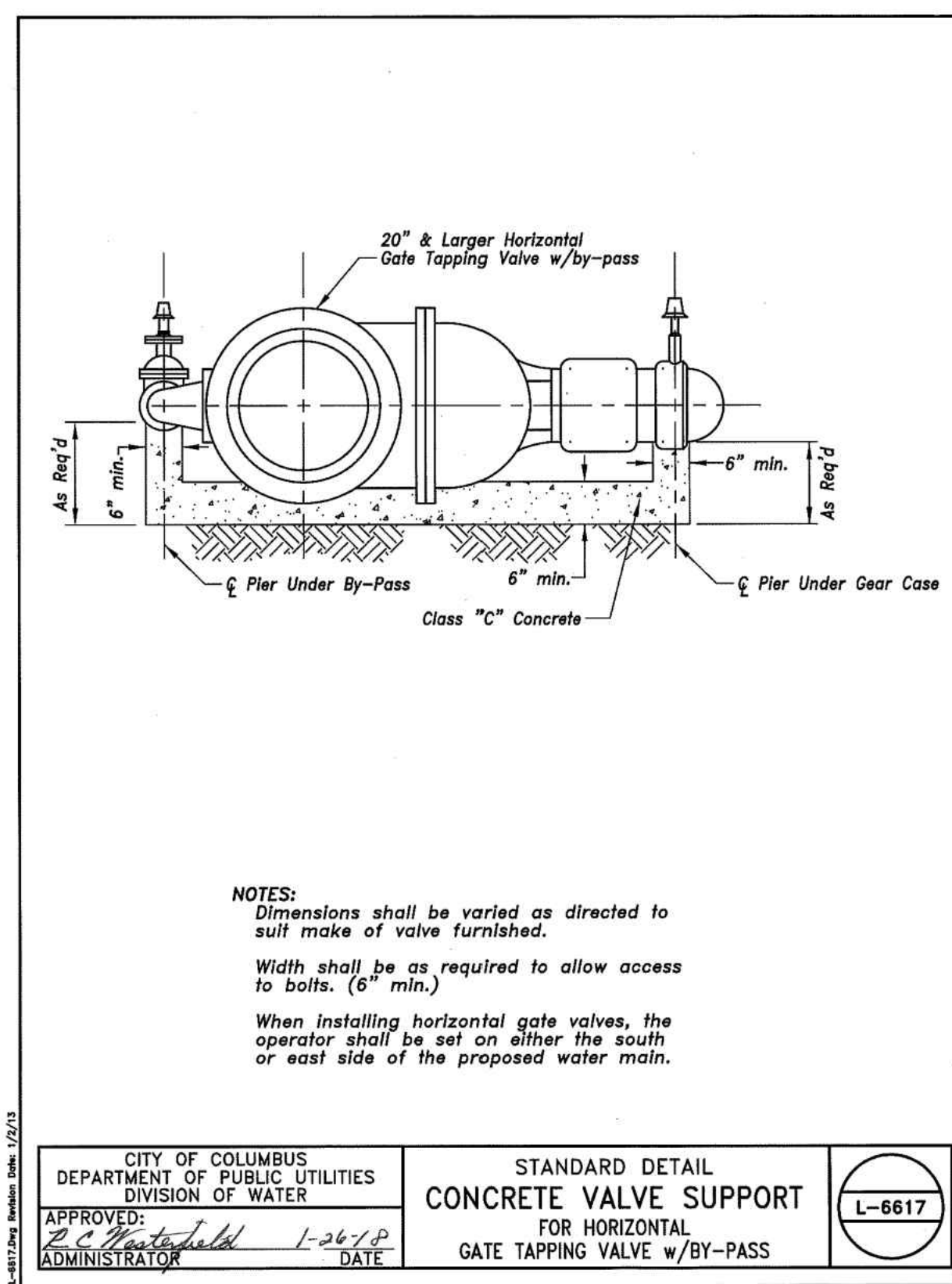
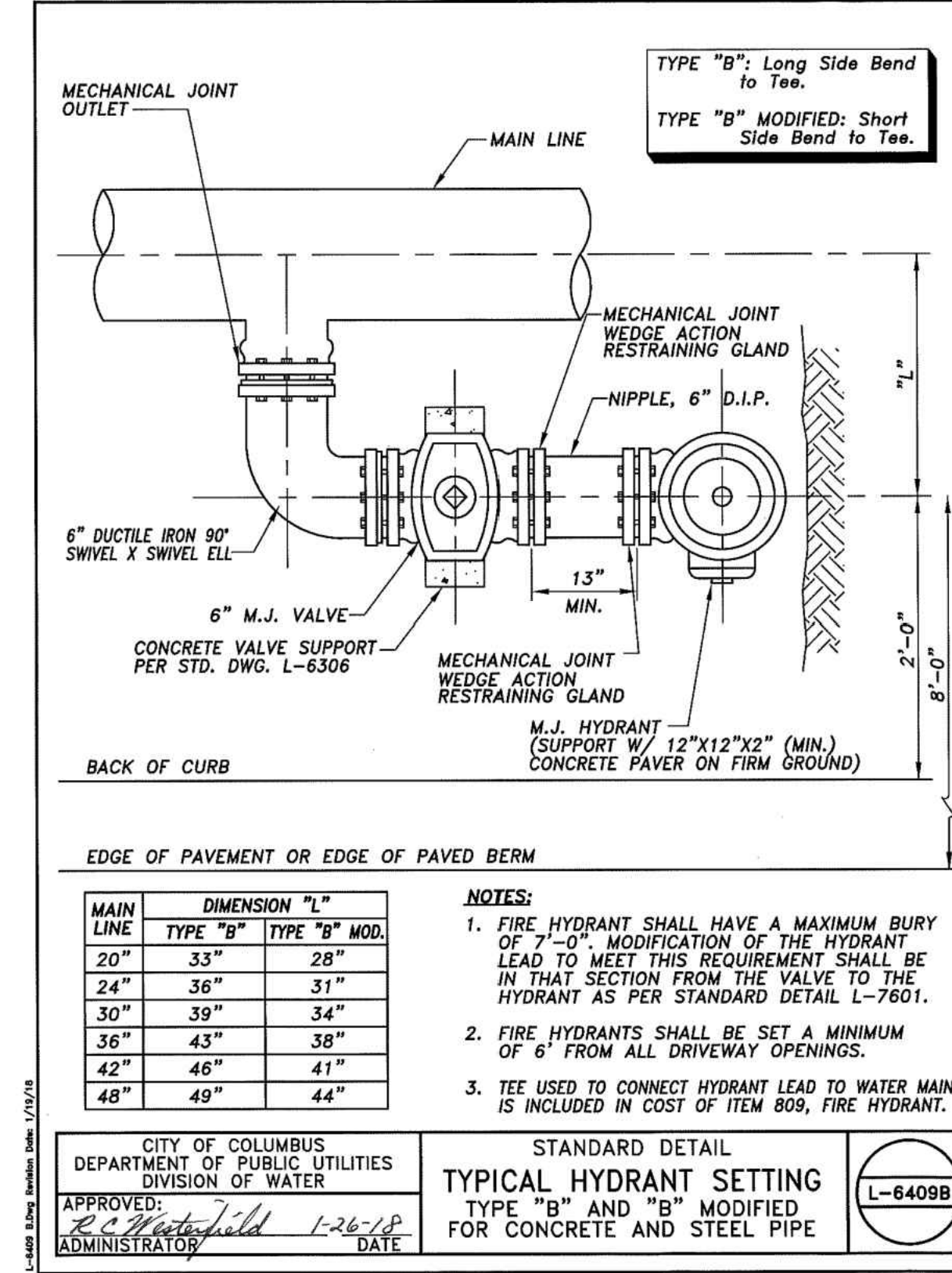
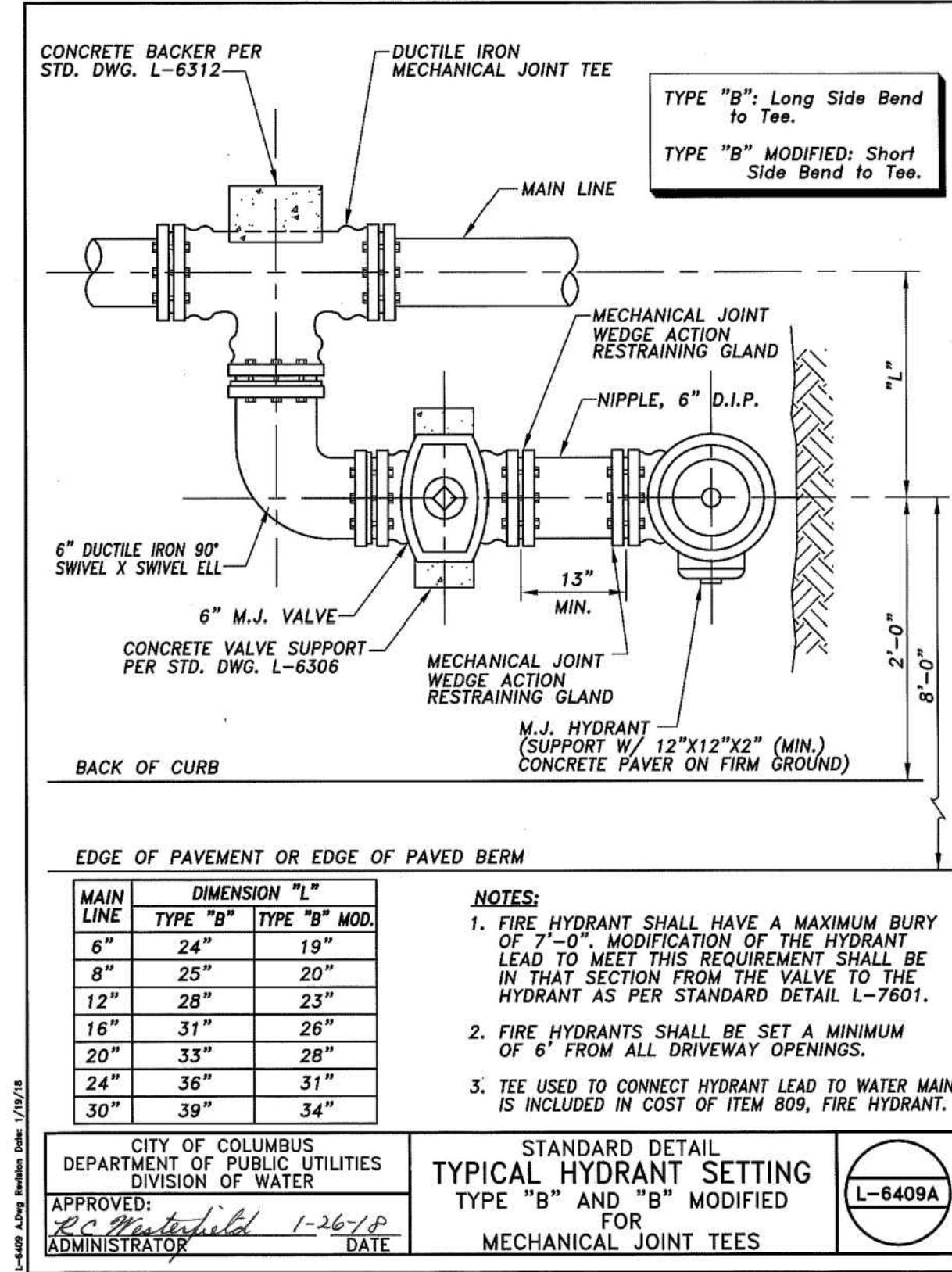
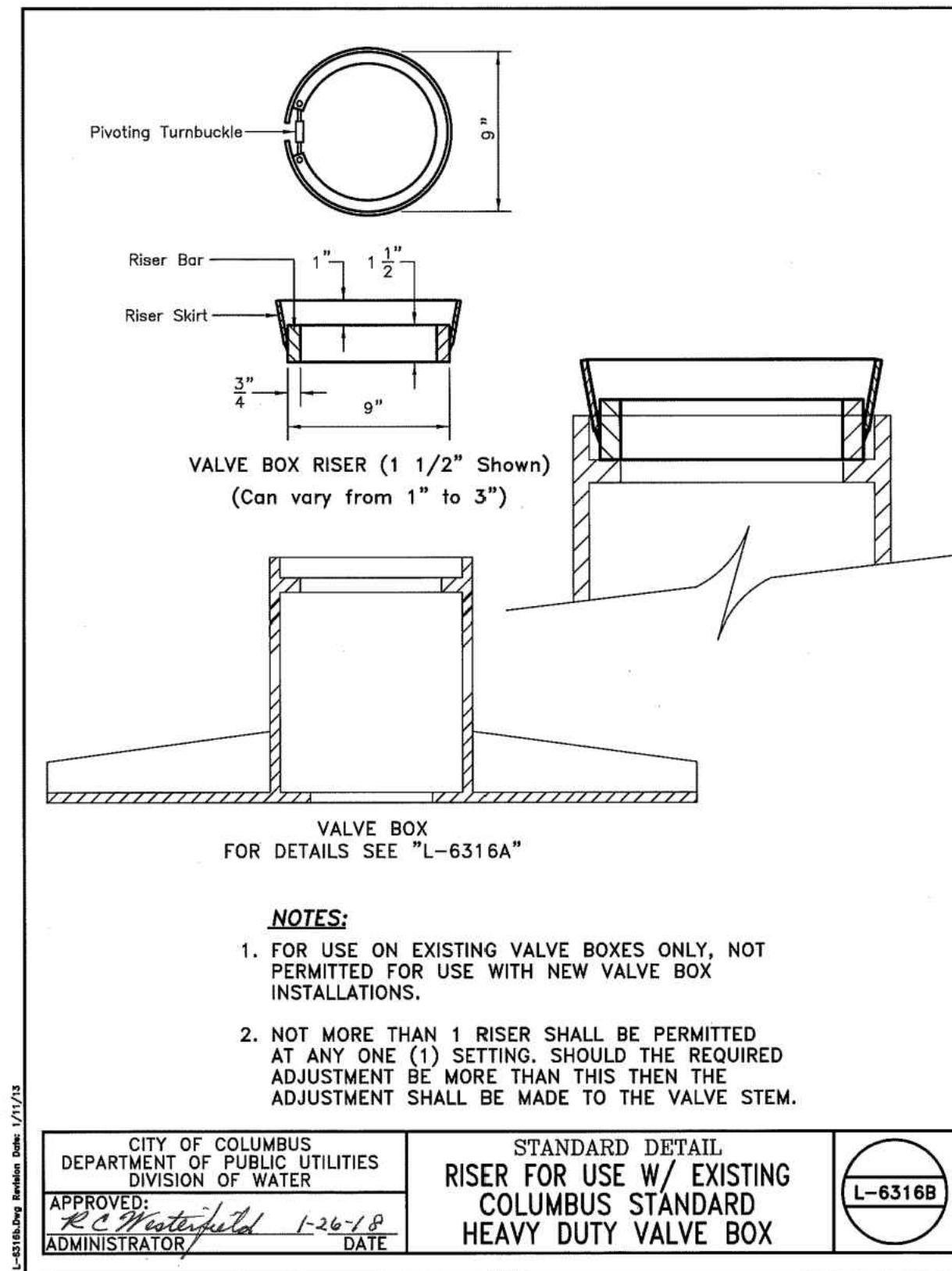
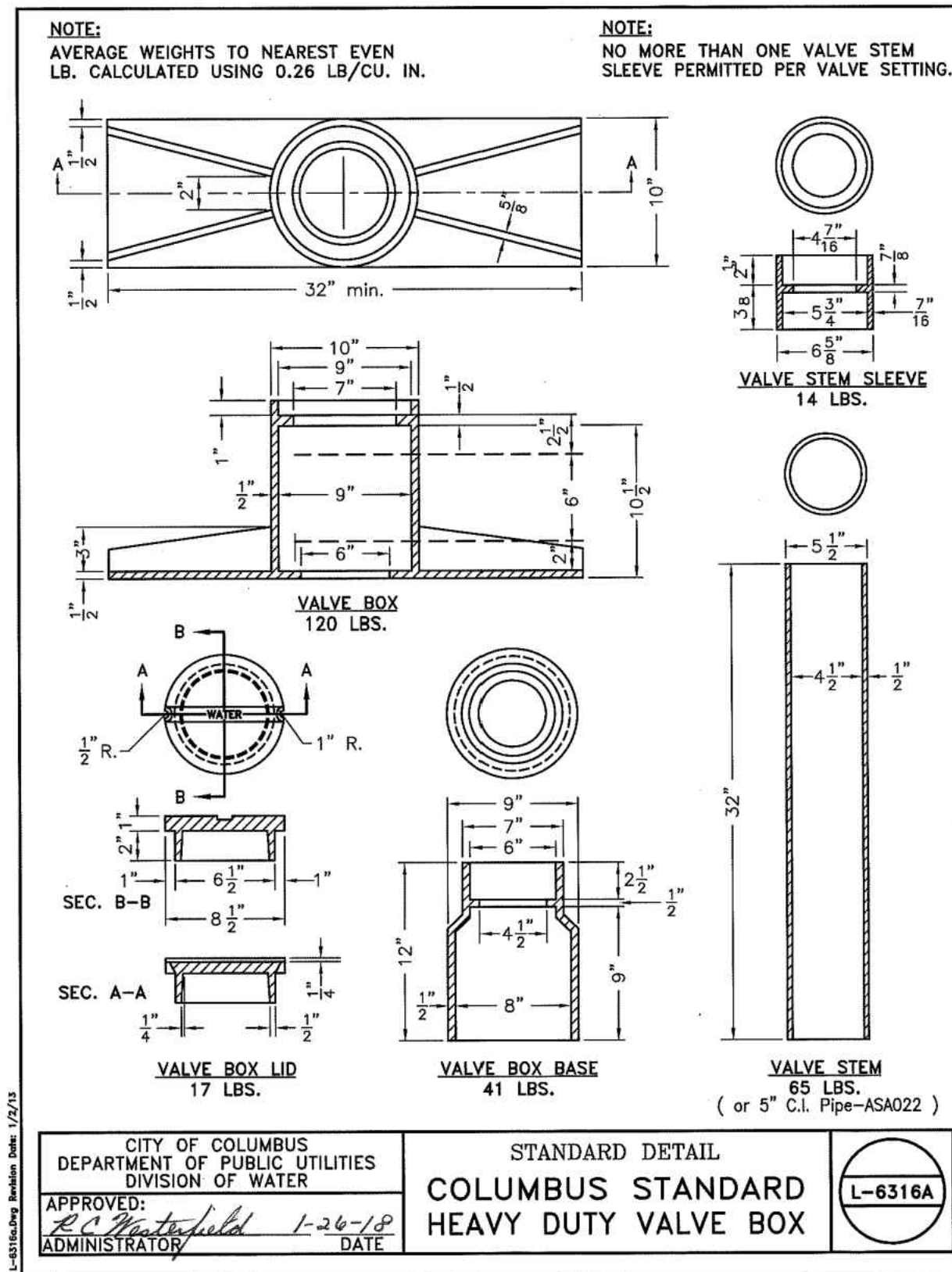
**WATERLINE
 DETAIL
 SHEET**

DRAWN BY: **MEK**
 CHECKED BY: **KAM**

| REV. | DATE | DESCRIPTION |
|--------|------|-------------------|
| 2/3/23 | | VILLAGE SUBMITTAL |

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FILE No. 1, Kleinfield Projects 2022\OH-Ashville-Leatherhead - 20224880.001A.dwg 02/02/23 10:34-14Kiemer



DHL SUPPLY CHAIN
ASHVILLE LOGISTICS PARK
ASHVILLE, OHIO

WATERLINE
DETAIL
SHEET

DRAWN BY: **MEK**
CHECKED BY: **KAM**

DATE: **09/13/2022**

PROJECT NUMBER: **20224880.001A**



| REV. | DATE | DESCRIPTION |
|--------|------|-------------------|
| 2/3/23 | | VILLAGE SUBMITTAL |

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FILE No. 1, Klemminger Projects 2022\OH-Ashtville-Leatherwood - 20224880.001A\OH NOTES AND DETAILS-20224880.001A.dwg 02/02/23 10:34-4Klemmer

| LENGTH OF PIPE | GALLONS PER HOUR | | | | | | | | | | | | | | | |
|----------------|------------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | 8" Pipe | 8" Pipe | 12" Pipe | 16" Pipe | 20" Pipe | 24" Pipe | 30" Pipe | 36" Pipe | 42" Pipe | 48" Pipe | 54" Pipe | 60" Pipe | 66" Pipe | 66" Pipe | 66" Pipe | 66" Pipe |
| 50 | 0.02 | 0.03 | 0.05 | 0.07 | 0.08 | 0.10 | 0.12 | 0.15 | 0.17 | 0.20 | 0.22 | 0.25 | 0.27 | 0.27 | 0.27 | 0.27 |
| 100 | 0.05 | 0.07 | 0.10 | 0.13 | 0.17 | 0.20 | 0.25 | 0.30 | 0.35 | 0.40 | 0.45 | 0.50 | 0.55 | 0.55 | 0.55 | 0.55 |
| 200 | 0.10 | 0.13 | 0.20 | 0.26 | 0.33 | 0.40 | 0.50 | 0.60 | 0.70 | 0.79 | 0.89 | 0.99 | 1.09 | 1.09 | 1.09 | 1.09 |
| 300 | 0.15 | 0.20 | 0.30 | 0.40 | 0.50 | 0.60 | 0.74 | 0.89 | 1.04 | 1.19 | 1.34 | 1.49 | 1.64 | 1.64 | 1.64 | 1.64 |
| 400 | 0.20 | 0.26 | 0.40 | 0.53 | 0.66 | 0.79 | 0.99 | 1.19 | 1.39 | 1.59 | 1.79 | 1.99 | 2.18 | 2.18 | 2.18 | 2.18 |
| 500 | 0.25 | 0.33 | 0.50 | 0.66 | 0.83 | 0.99 | 1.24 | 1.49 | 1.74 | 1.99 | 2.23 | 2.48 | 2.73 | 2.73 | 2.73 | 2.73 |
| 600 | 0.30 | 0.40 | 0.60 | 0.79 | 0.99 | 1.19 | 1.49 | 1.79 | 2.09 | 2.38 | 2.68 | 2.98 | 3.28 | 3.28 | 3.28 | 3.28 |
| 700 | 0.35 | 0.46 | 0.70 | 0.93 | 1.16 | 1.39 | 1.74 | 2.09 | 2.43 | 2.78 | 3.13 | 3.48 | 3.82 | 3.82 | 3.82 | 3.82 |
| 800 | 0.40 | 0.53 | 0.79 | 1.06 | 1.32 | 1.59 | 1.99 | 2.38 | 2.78 | 3.18 | 3.57 | 3.97 | 4.37 | 4.37 | 4.37 | 4.37 |
| 900 | 0.45 | 0.60 | 0.89 | 1.19 | 1.49 | 1.79 | 2.23 | 2.68 | 3.13 | 3.57 | 4.02 | 4.47 | 4.92 | 4.92 | 4.92 | 4.92 |
| 1000 | 0.50 | 0.66 | 0.99 | 1.32 | 1.66 | 1.99 | 2.48 | 2.98 | 3.48 | 3.97 | 4.47 | 4.97 | 5.46 | 5.46 | 5.46 | 5.46 |
| 2500 | 1.24 | 1.66 | 2.48 | 3.31 | 4.14 | 4.97 | 6.21 | 7.45 | 8.69 | 9.93 | 11.17 | 12.41 | 13.65 | 13.65 | 13.65 | 13.65 |
| 5000 | 2.48 | 3.31 | 4.97 | 6.62 | 8.28 | 9.93 | 12.41 | 14.90 | 17.38 | 19.86 | 22.34 | 24.83 | 27.31 | 27.31 | 27.31 | 27.31 |
| 7500 | 3.72 | 4.97 | 7.45 | 9.93 | 12.41 | 14.90 | 18.62 | 22.34 | 26.07 | 29.79 | 33.51 | 37.24 | 40.96 | 40.96 | 40.96 | 40.96 |
| 10000 | 4.97 | 6.62 | 9.93 | 13.24 | 16.55 | 19.86 | 24.83 | 29.79 | 34.76 | 39.72 | 44.69 | 49.65 | 54.62 | 54.62 | 54.62 | 54.62 |

FORMULA: $L = \frac{SD \sqrt{P}}{148,000}$

Where: L = Allowable Leakage (gal./hr.)
 S = Length of pipe tested in feet.
 D = Nominal pipe diameter in inches.
 P = Test pressure (150 psi)

When testing against closed metal-seated valves, an additional leakage per closed valve of 0.0078 gal./hr./in. of nominal valve size will be allowed.

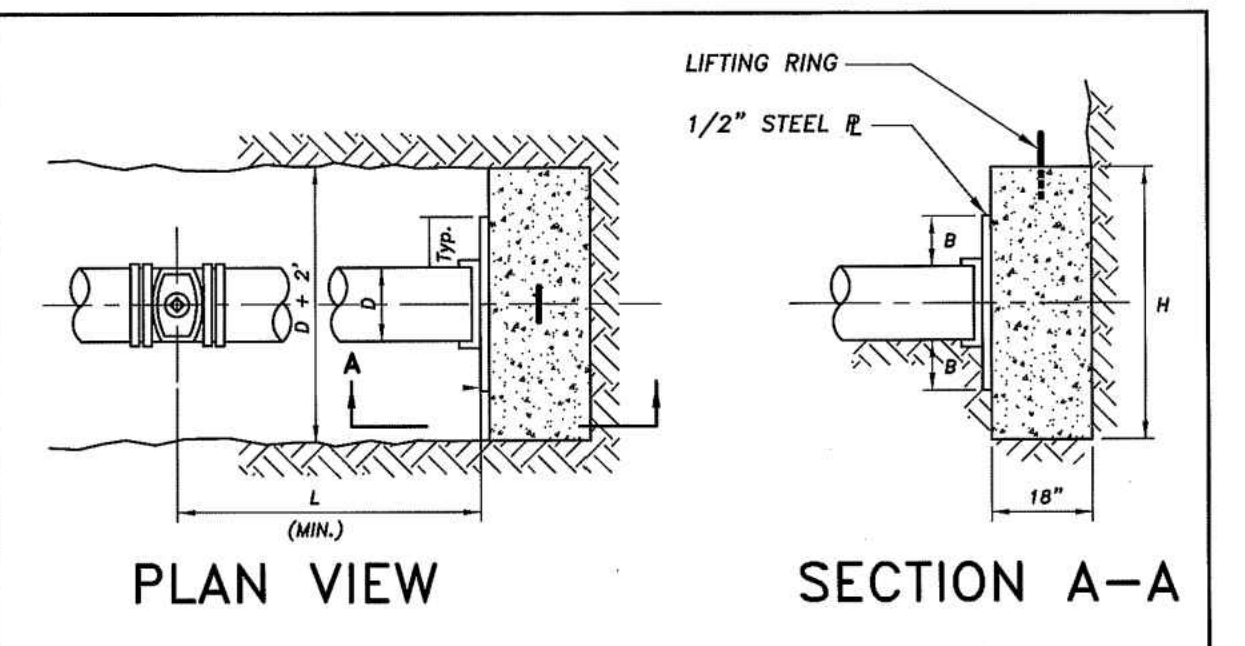
These calculations are based on "AWWA C-600-10" Specifications, Section 4, Hydrostatic Testing, Dated December 1, 2005.

CITY OF COLUMBUS
 DEPARTMENT OF PUBLIC UTILITIES
 DIVISION OF WATER

STANDARD DETAIL
 ALLOWABLE LEAKAGE TABLE

APPROVED: *[Signature]* 1-26-18
 ADMINISTRATOR DATE

L-6840



| PIPE DIAMETER (D) | H | B | L | VOLUME (cu. ft.) |
|-------------------|-----|----|-----|------------------|
| 3" | 5" | 1" | 10' | 1.43 |
| 4" | 6" | 1" | 10' | 1.76 |
| 6" | 8" | 1" | 10' | 2.52 |
| 8" | 12" | 1" | 10' | 4.00 |
| 12" | 23" | 3" | 18' | 8.64 |
| 16" | 37" | 3" | 18' | 15.39 |

NOTES:

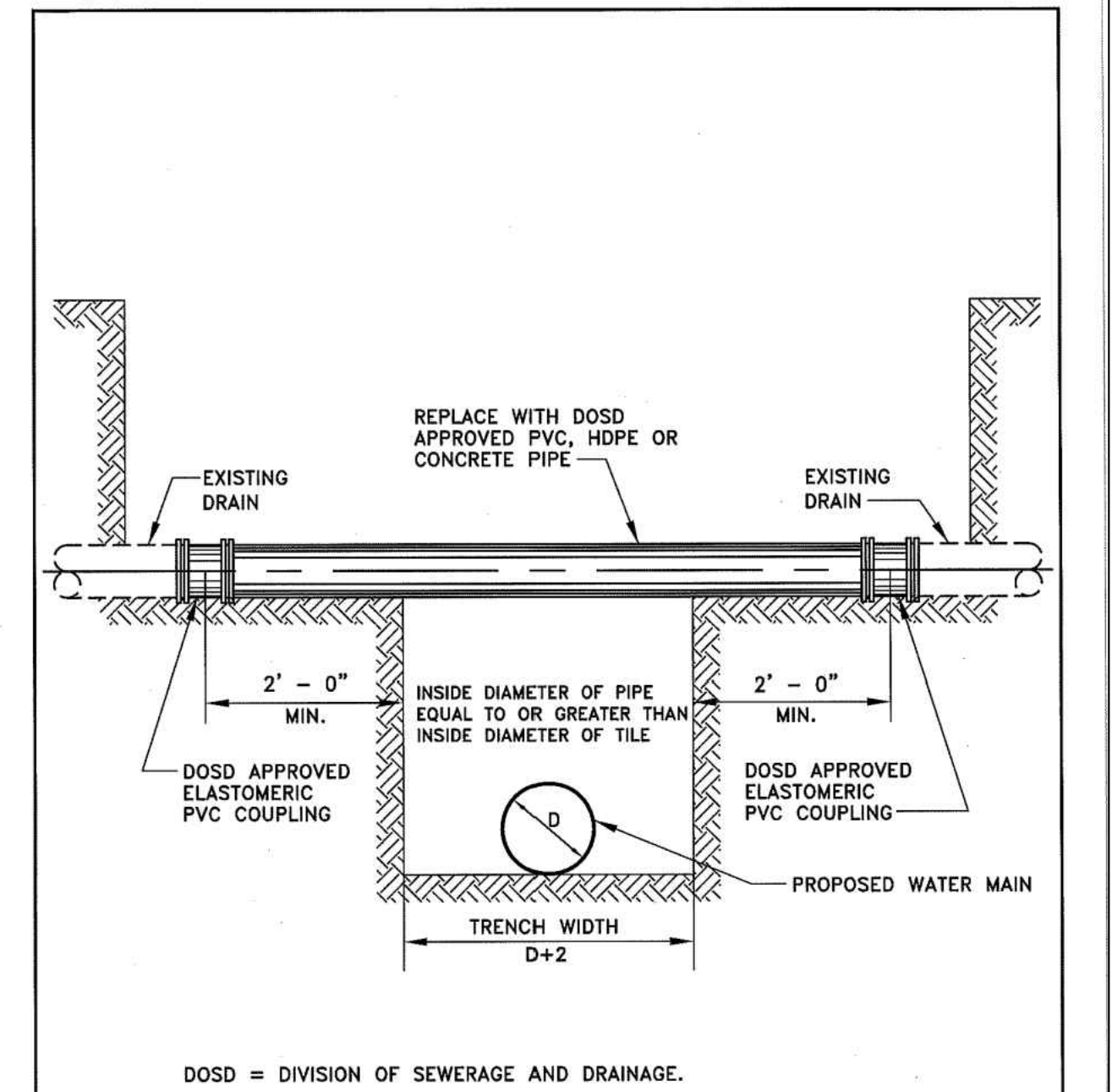
- BACKER DESIGNED FOR 3000 PSF SOIL BEARING.
- END OF PIPE CAPPED OR PLUGGED.
- GREASE STEEL PLATE WHERE IN CONTACT WITH CONCRETE BACKER.
- PLACE CONCRETE AGAINST UNDISTURBED SOIL.
- THOROUGHLY COMPACT BACKFILL BETWEEN VALVE AND END OF PIPE.
- FOR WATER MAINS 20" AND GREATER, A THRUST RESTRAINT SYSTEM FOR DEAD END PIPE MUST BE DESIGNED BASED UPON EXISTING SITE CONDITIONS AND PROJECT REQUIREMENTS. DESIGN DRAWINGS AND CALCULATIONS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER AND BE SUBMITTED TO DOW FOR REVIEW.

CITY OF COLUMBUS
 DEPARTMENT OF PUBLIC UTILITIES
 DIVISION OF WATER

STANDARD DETAIL
 THRUST BLOCK DETAIL
 END OF PIPE

APPROVED: *[Signature]* 1-26-18
 ADMINISTRATOR DATE

L-7001

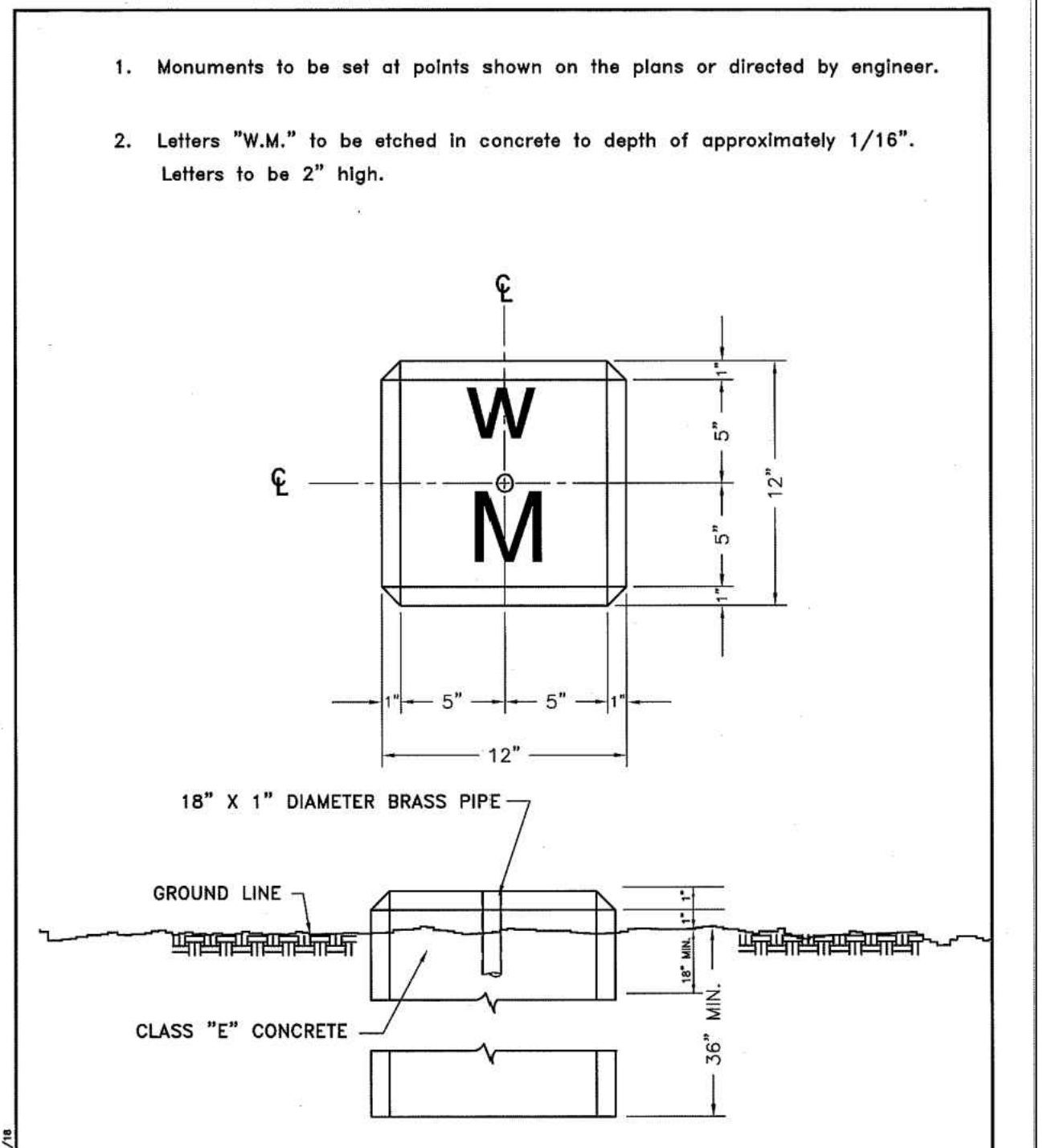


CITY OF COLUMBUS
 DEPARTMENT OF PUBLIC UTILITIES
 DIVISION OF WATER

STANDARD DETAIL
 DRAIN TILE REPLACEMENT

APPROVED: *[Signature]* 1-26-18
 ADMINISTRATOR DATE

L-7002

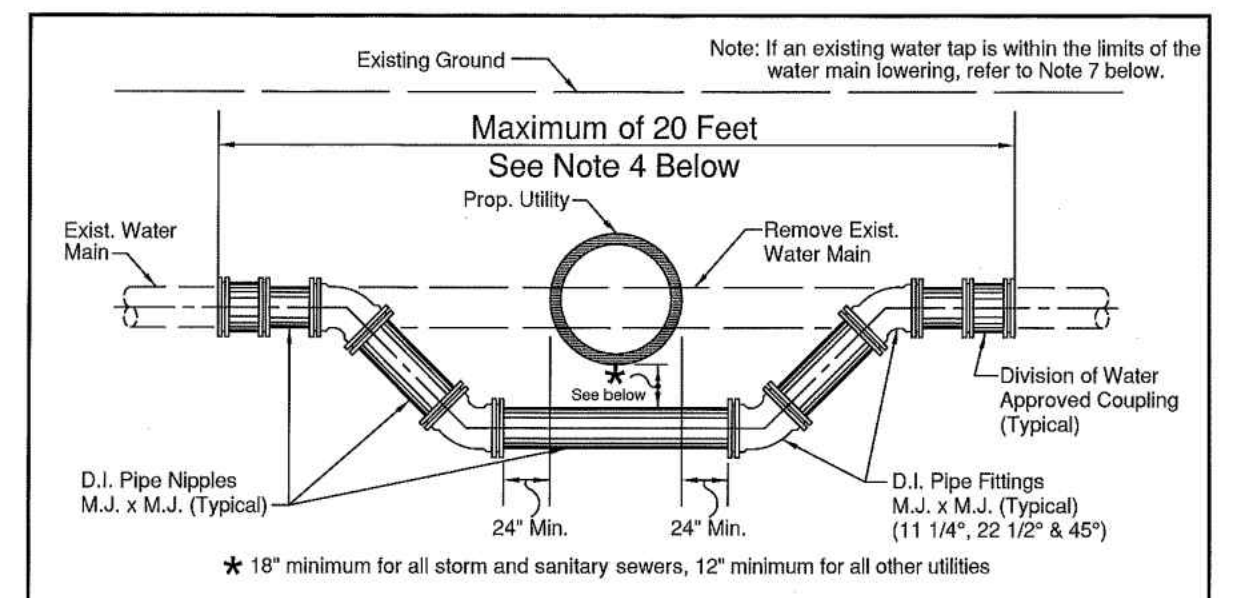


CITY OF COLUMBUS
 DEPARTMENT OF PUBLIC UTILITIES
 DIVISION OF WATER

STANDARD DETAIL
 WATER MAIN CENTERLINE
 REFERENCE MONUMENT

APPROVED: *[Signature]* 1-26-18
 ADMINISTRATOR DATE

L-7101



NOTES:

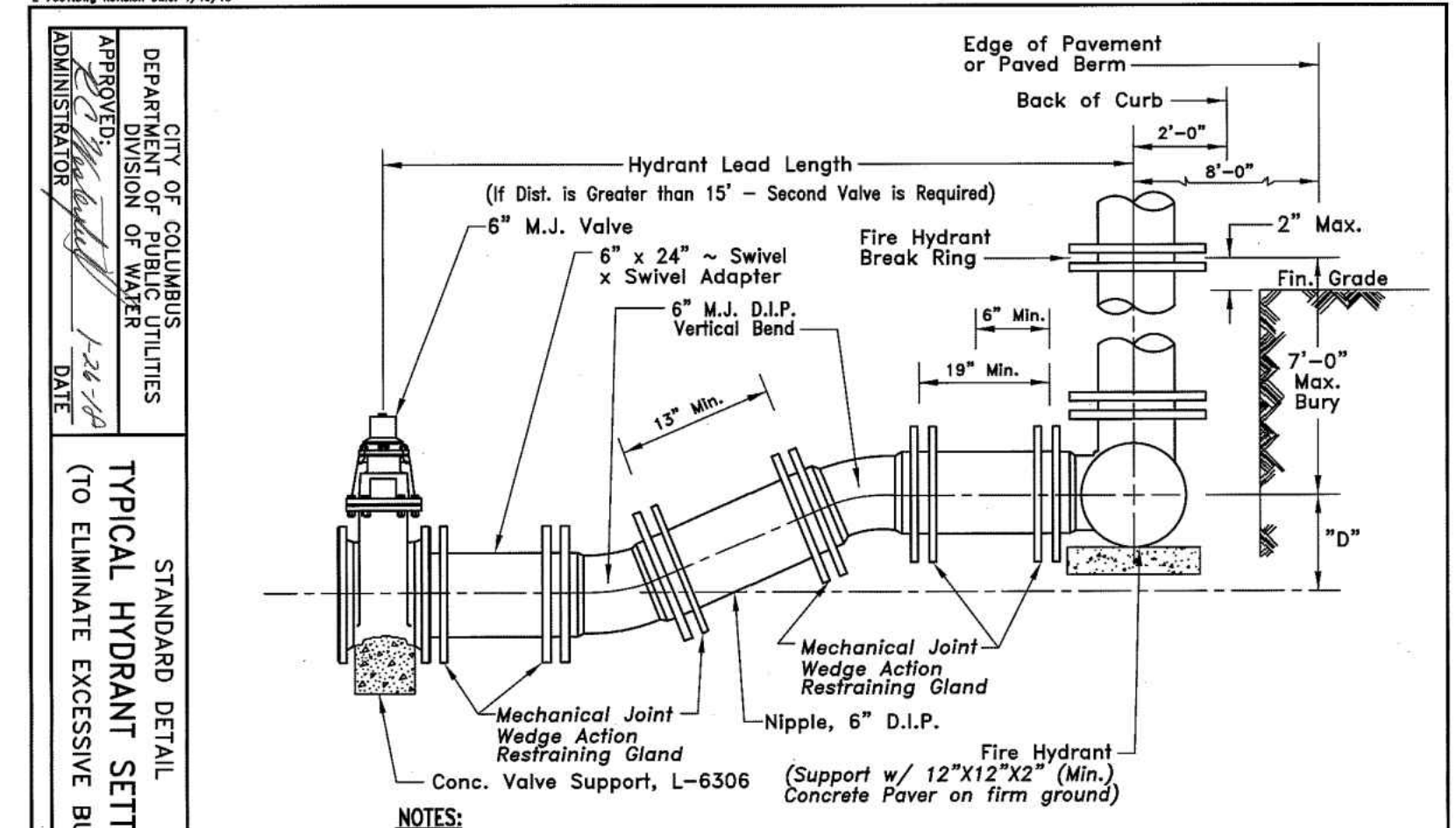
- All water main installation, as well as the scheduling of any water shut downs, shall be as per item 801 of the current CCMS. Time and duration of all shut downs shall be determined by Division of Water. The Contractor shall notify all water customers effected by the proposed work at least 24 hours in advance of the scheduled shut down.
- Existing Water Mains 20" and greater must have prior approval of DOW to lower under a proposed utility. Approval will only be given under special circumstances and contingent upon the Contractor submitting a designed drawing, stamped by a Professional Engineer, detailing how the lowered main will be restrained to the existing water main.
- All bends shall be secured by restraining glands, rodding or other methods as approved by the Engineer to restore the water main to service as soon as possible. For water mains 16" and under, concrete backing shall then be provided in accordance with Standard Detail L-6310 for over bends and L-6311 for sag bends. For water mains 20" and larger, refer to the design plans for any specific information regarding restraint methods and concrete backing.
- All water main lowerings shall be less than or equal to 20 feet in length (cut to cut). If more than 20 feet is required, a water main relocation shall occur and will require pressure testing and chlorination.
- All water mains shall be disinfected by swabbing with a 5% Hypochlorite Solution in accordance with the applicable sections of A.W.W.A. C-651.
- 16" mains and smaller - for a depth of cover less than ten (10) feet, provide a flat bottom trench.
 16" mains and smaller - for a depth of cover greater than ten (10) feet, provide 6-inches of CCS No. 57 for bedding.
 20" mains and larger - provide 6-inches of CCS No. 57 for bedding for all situations.
- If an existing water tap is within the limits of the water main lowering, Contractor shall expose the customer's water service line at the curb stop to determine the existing material prior to cutting the existing pipe. If the customer's water service line is found to be lead, DO NOT proceed with the lowering, and contact the Division of Water Distribution Engineering Group immediately at 614-645-7677. If after hours, DO NOT perform the lowering and contact the Division of Distribution Engineering Group immediately the following business day.

CITY OF COLUMBUS
 DEPARTMENT OF PUBLIC UTILITIES
 DIVISION OF WATER

STANDARD DETAIL
 TYPICAL WATER MAIN
 LOWERING

APPROVED: *[Signature]* 11-14-18
 ADMINISTRATOR DATE

L-7401



NOTES:

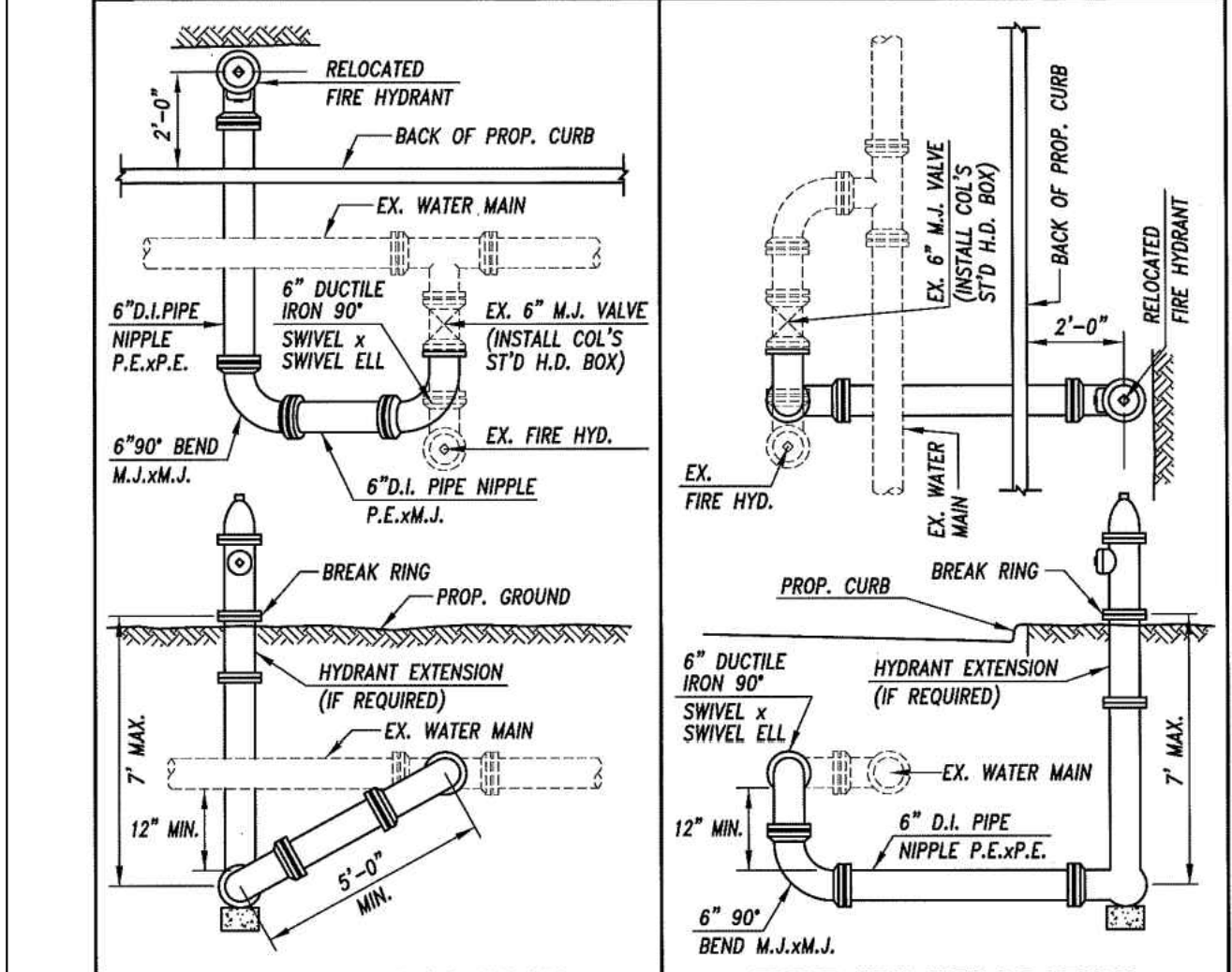
- Vertical Bends Shall Be 11 1/4", 22 1/2" or 45"
- Where "D" is 18" or Less, a Mechanical Joint Ductile Iron Offset may be used in lieu of the two Vertical Bends and the Inclined Nipple, as Approved by the Engineer.
- Fire Hydrants shall be set a minimum of 6' from all Driveway Radius Returns.
- All Bends are to be Included in the Cost of Item 801.
- No Hydrant Extensions Will be Permitted without Prior Approval from DOW.

CITY OF COLUMBUS
 DEPARTMENT OF PUBLIC UTILITIES
 DIVISION OF WATER

STANDARD DETAIL
 TYPICAL HYDRANT SETTING
 (TO ELIMINATE EXCESSIVE BURY)

APPROVED: *[Signature]* 1-26-18
 ADMINISTRATOR DATE

L-7601



NOTES:

- ALL FIRE HYDRANTS SHALL BE ADJUSTED TO FINAL GRADE.
- FIRE HYDRANT RELOCATIONS SHALL CONFORM TO APPLICABLE SECTIONS OF C.M.S.C. ITEM 808. WORK SHALL CONSIST OF REMOVING HYDRANT, INSTALLING NEW 6" PIPE & FITTINGS AS REQUIRED TO SET HYDRANT 2' BACK OF CURB OR 8' OFF THE EDGE OF PAVEMENT, RESETTING HYDRANT AND CONCRETE BLOCKING AS REQUIRED. HYDRANT & FITTINGS SHALL BE RESTRAINED, ACCORDING TO STANDARD HYDRANT DETAILS.
- THE DIVISION OF WATER SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO CONSTRUCTION INVOLVING WATER FACILITIES.
- ALL EX. VALVES SHALL BE OPERATED BY DIVISION OF WATER PERSONNEL ONLY, AS STATED IN CHAPTER 1113 OF THE COLUMBUS CITY CODES & ITEM 801.16.
- BACKFILLING OF ALL WATER LINE TRENCHES AND EXCAVATIONS SHALL BE IN ACCORDANCE WITH ITEM 801 OF THE C.M.S.C. NO GRITS WILL BE PERMITTED IN WATER LINE TRENCH BACKFILL.
- SHOULD THE RELOCATED HYD. BE MORE THAN 15' FROM THE EXIST. HYD. VALVE THEN AN ADDITIONAL 6" M.J. VALVE SHALL BE INSTALLED, AND RESTRAINED, WITHIN 2' OF THE RELOCATED HYDRANT, IF IN CURB AREA USE CONFIGURATION PER L-6637C.

CITY OF COLUMBUS
 DEPARTMENT OF PUBLIC UTILITIES
 DIVISION OF WATER

STANDARD DETAIL
 TYPICAL
 HYDRANT RELOCATION

APPROVED: *[Signature]* 1-26-18
 ADMINISTRATOR DATE

L-8502

**POGGEMEYER
 DESIGN GROUP**
 A KLEINFELDER COMPANY
 1168 NORTH MAIN STREET
 BOWLING GREEN, OH 43402
 PH: (419) 352-7537



**DHL SUPPLY CHAIN
 ASHVILLE LOGISTICS PARK
 ASHVILLE, OHIO**

**WATERLINE
 DETAIL
 SHEET**

DRAWN BY: **MEK**
 CHECKED BY: **KAM**

8
 DATE
 09/13/2022

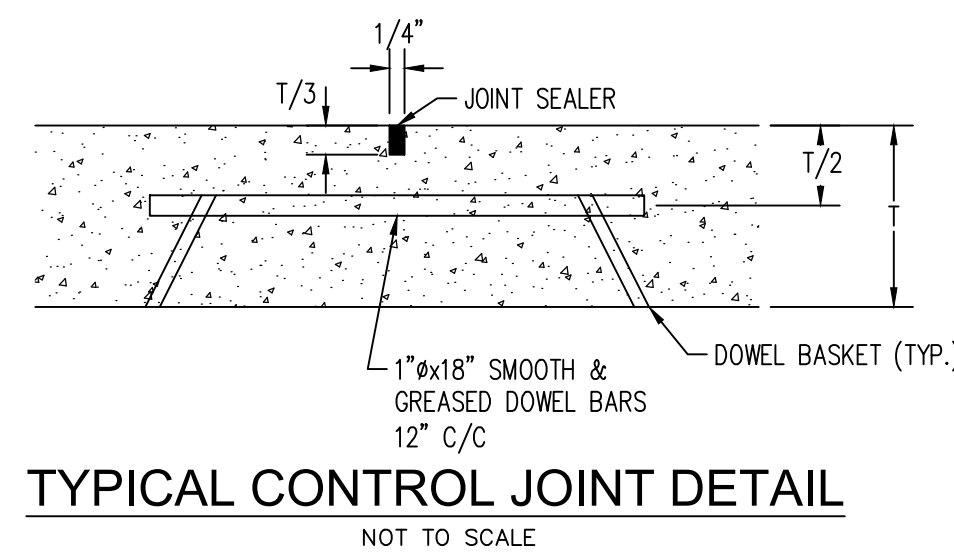
PROJECT NUMBER
20224880.001A

OHIO811.org
 Before You Dig
 1-800-362-2764

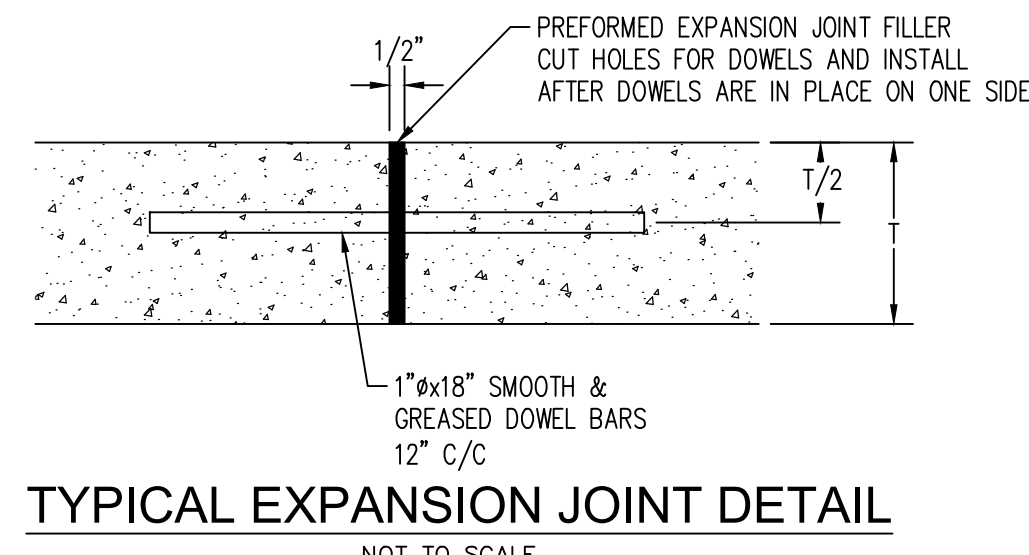
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|------|------|-------------------|
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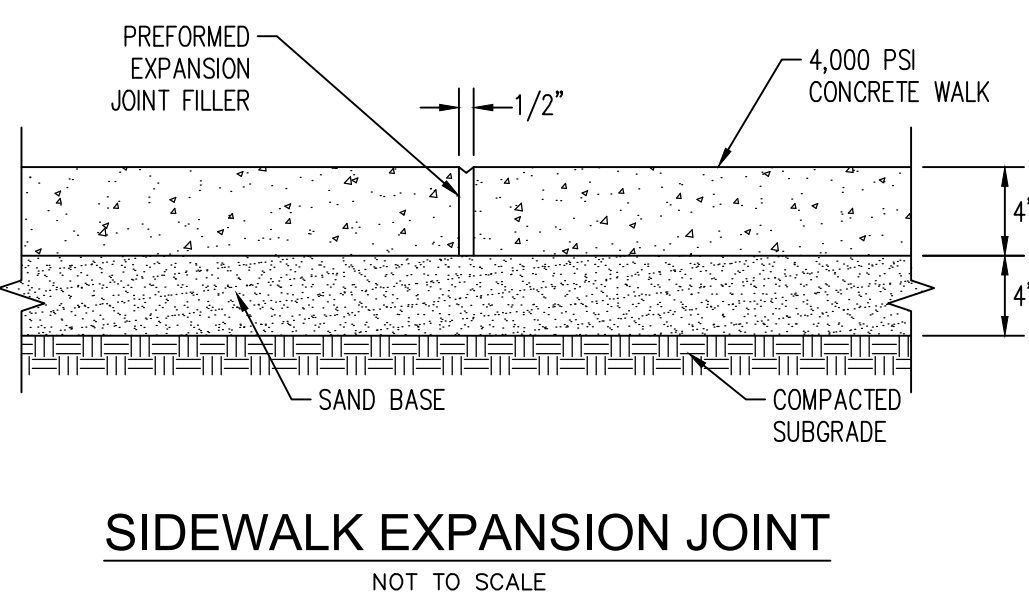
FILE No. 1, Kleinfelder Projects 2022\OH- Ashville-Leatherwood - 20224880.001A.dwg 02/02/23 10:35-klkenn



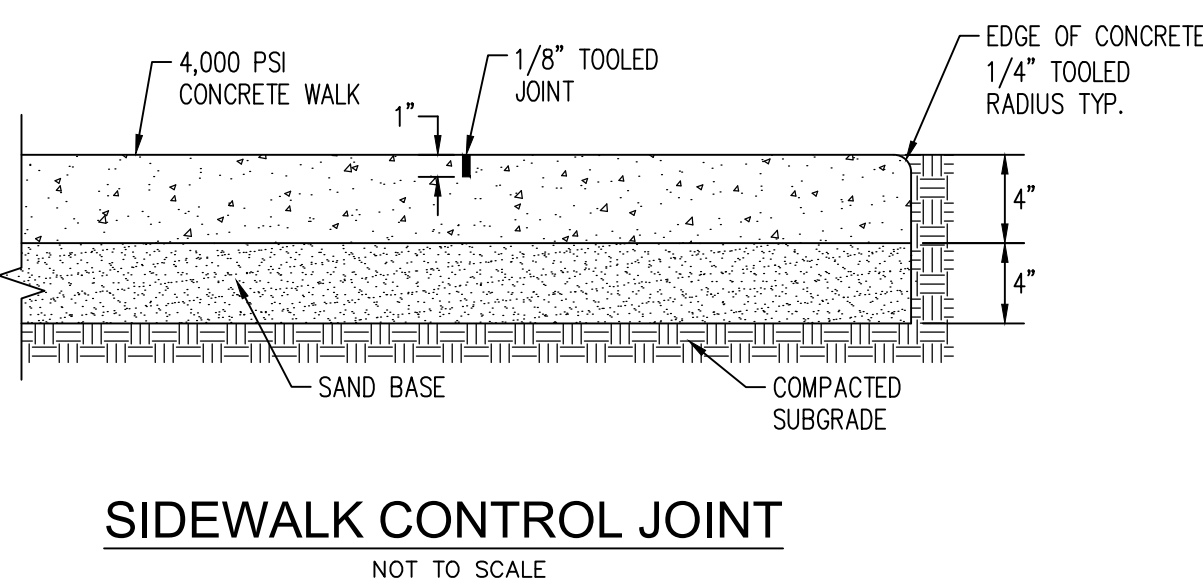
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NOT TO SCALE



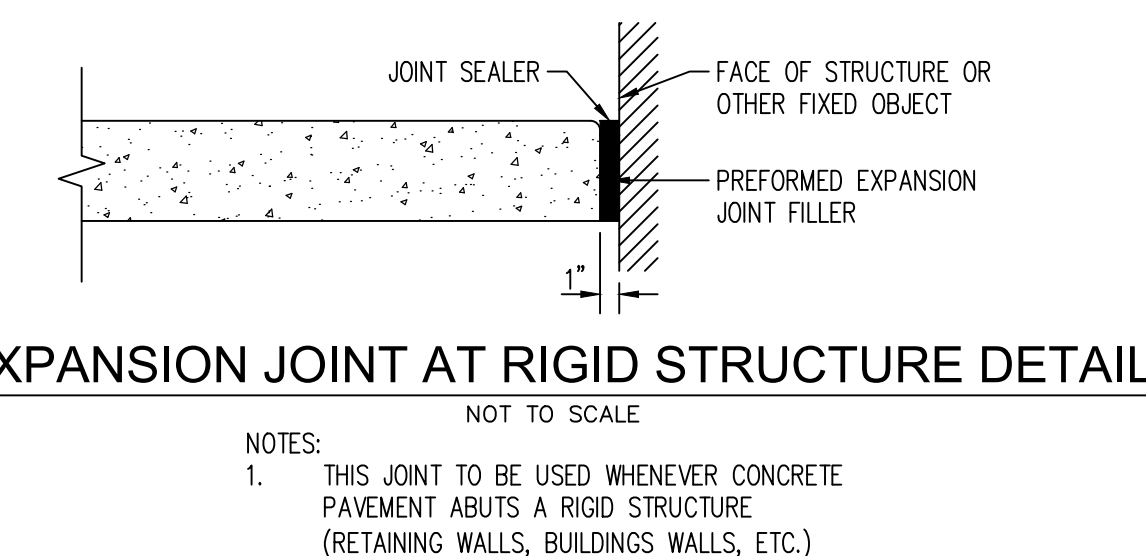
TYPICAL EXPANSION JOINT DETAIL
NOT TO SCALE



SIDEWALK EXPANSION JOINT
NOT TO SCALE

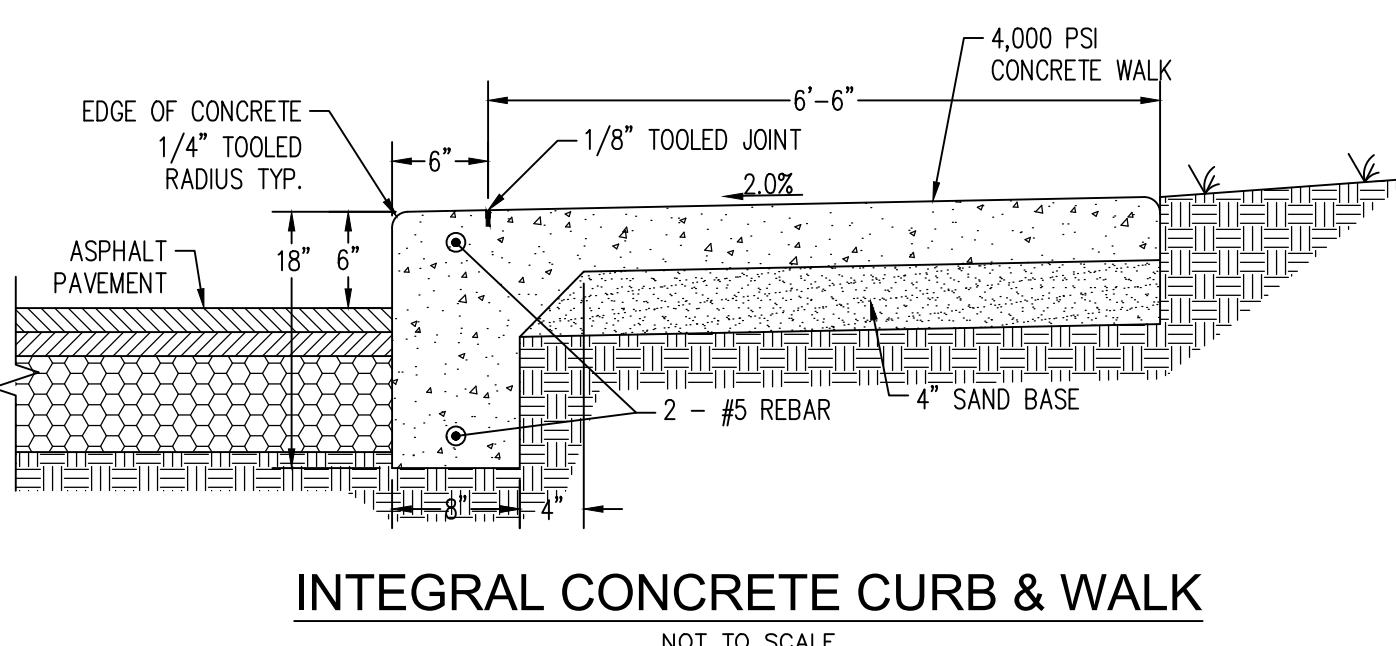


SIDEWALK CONTROL JOINT
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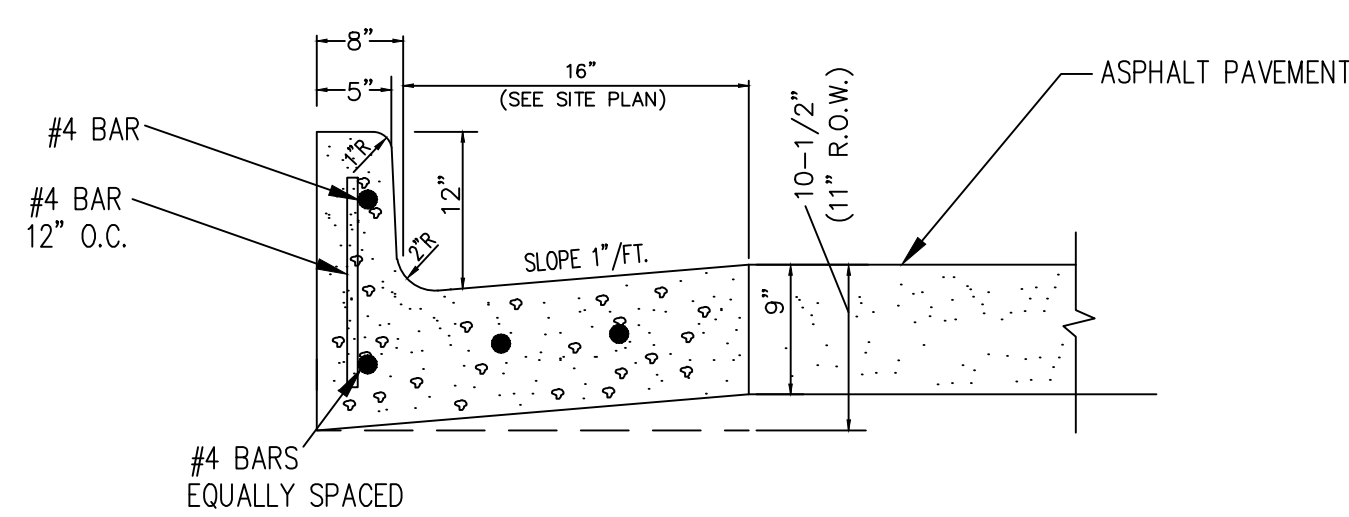


EXPANSION JOINT AT RIGID STRUCTURE DETAIL
NOT TO SCALE

NOTES:
1. THIS JOINT TO BE USED WHENEVER CONCRETE PAVEMENT ABUTS A RIGID STRUCTURE (RETAINING WALLS, BUILDINGS WALLS, ETC.)



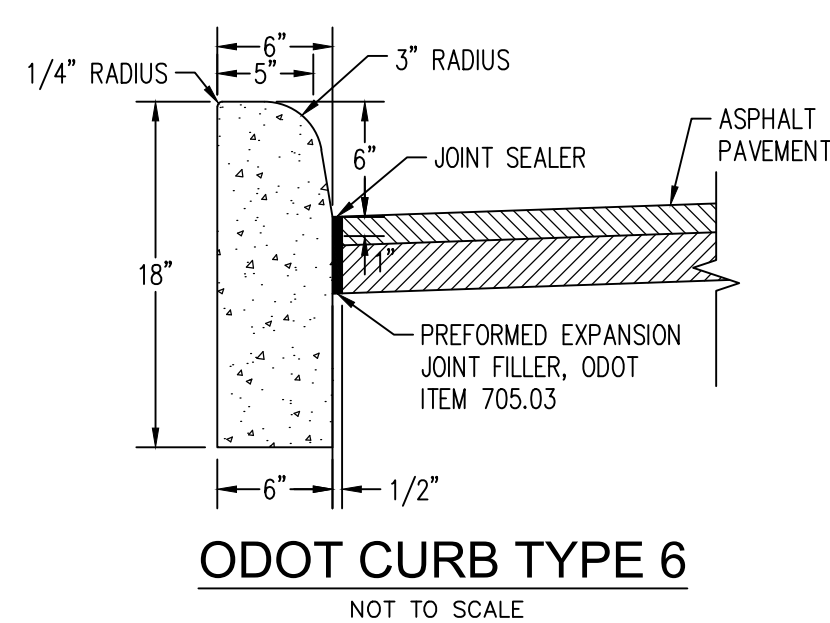
INTEGRAL CONCRETE CURB & WALK
NOT TO SCALE



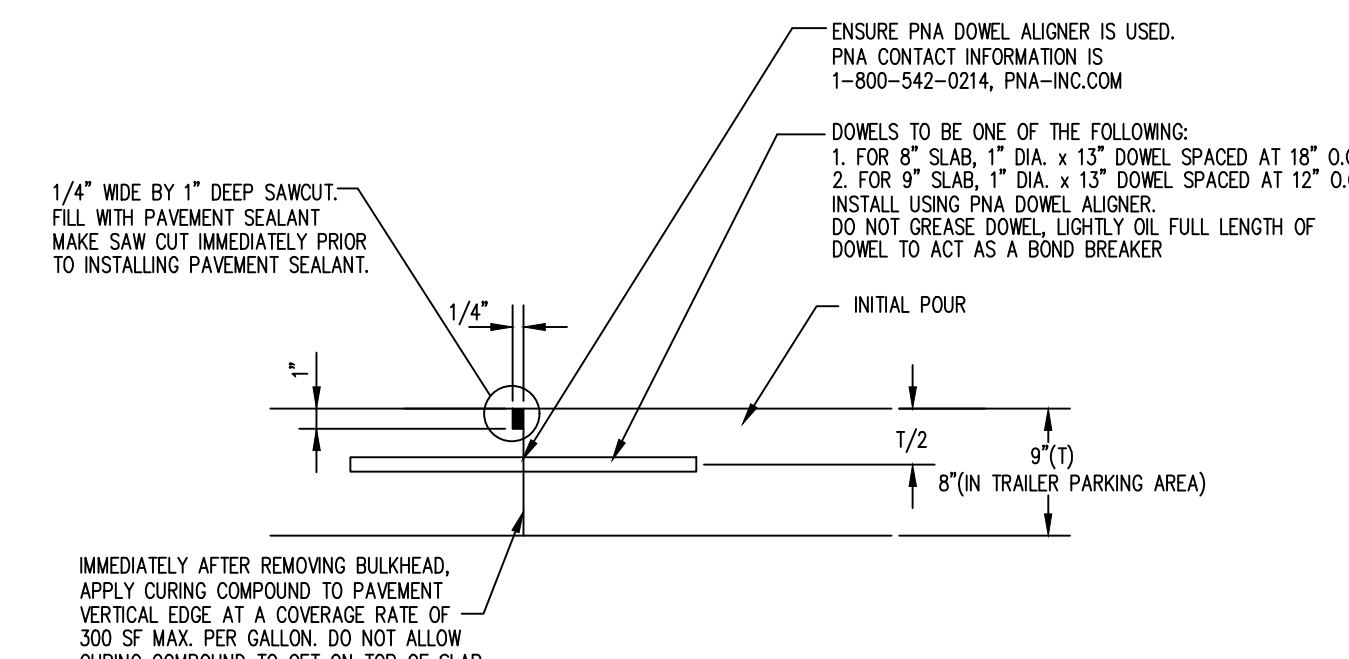
TYPE 1 CURB & GUTTER
NOT TO SCALE

EXPANSION JOINTS REQUIRED AT ALL STRUCTURES AND CURB RETURNS. MAXIMUM DISTANCE BETWEEN EXPANSION JOINTS = 40.0'. CONCRETE TO BE 3,000 PSI AT 28 DAYS.

NOTE:
WHEN PAVEMENT SLOPE AWAY FROM CURB & GUTTER, MAKE GUTTER PAN FLAT (0%)



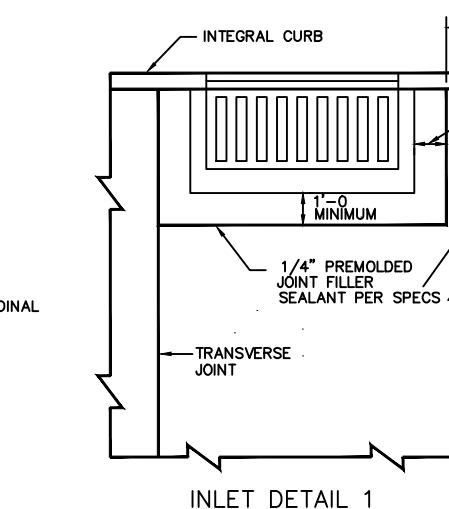
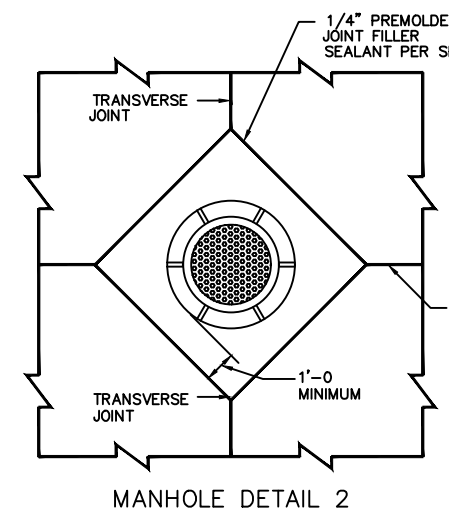
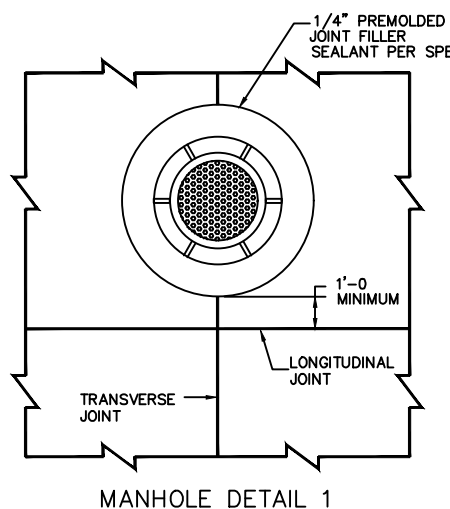
ODOT CURB TYPE 6
NOT TO SCALE



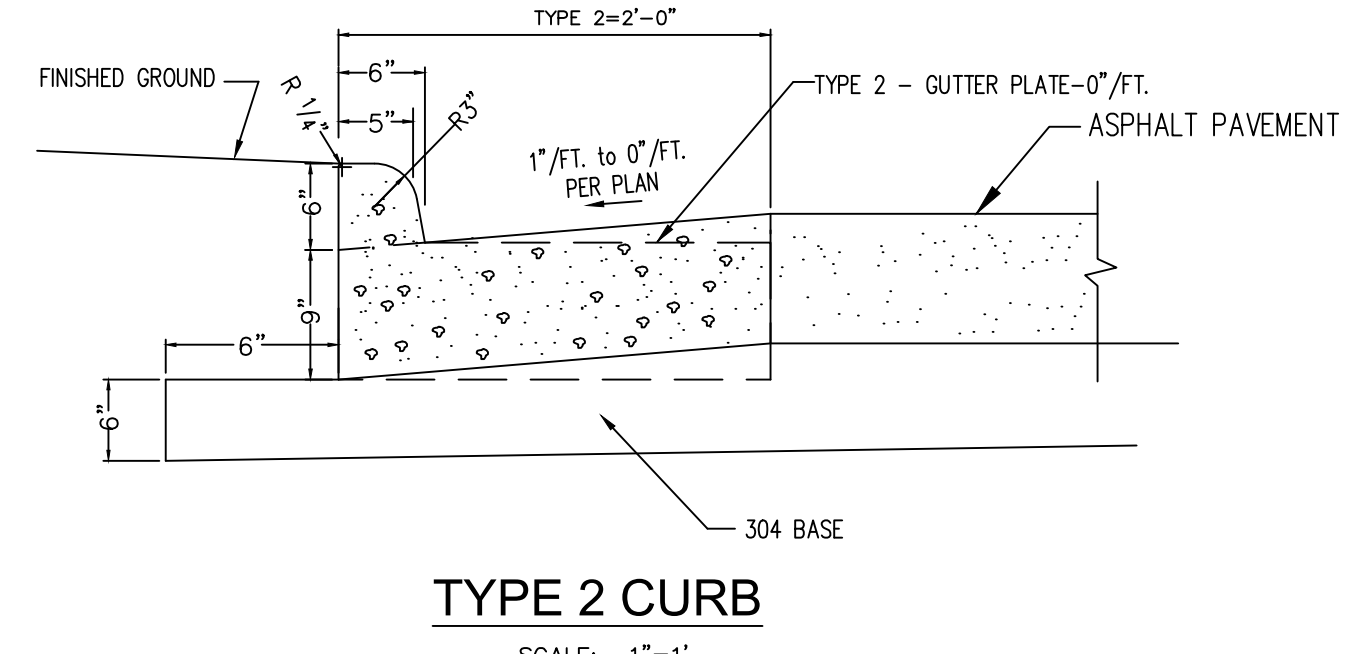
CONSTRUCTION JOINT
NO SCALE

REFERENCE ODOT STANDARD DRAWING BP-2.2

NOTES:
1. ENSURE TESTING AGENCY VERIFIES AGGREGATE BASE AND SUBGRADE IS ACCEPTABLE TO THE GEOTECHNICAL ENGINEER. ENSURE TESTING AGENCY VERIFIES AGGREGATE BASE IS COMPACTED TO THE SPECIFIED MAXIMUM DRY DENSITY AS DETERMINED BY THE GEOTECHNICAL ENGINEER JUST PRIOR TO PLACING PAVEMENT. ENSURE BASE SURFACE IS SMOOTH AND PLANNED IMMEDIATELY PRIOR TO PLACING CONCRETE.
2. COATING TO BE STATE DOT APPROVED COATING AND INSTALLATION PROCEDURES.

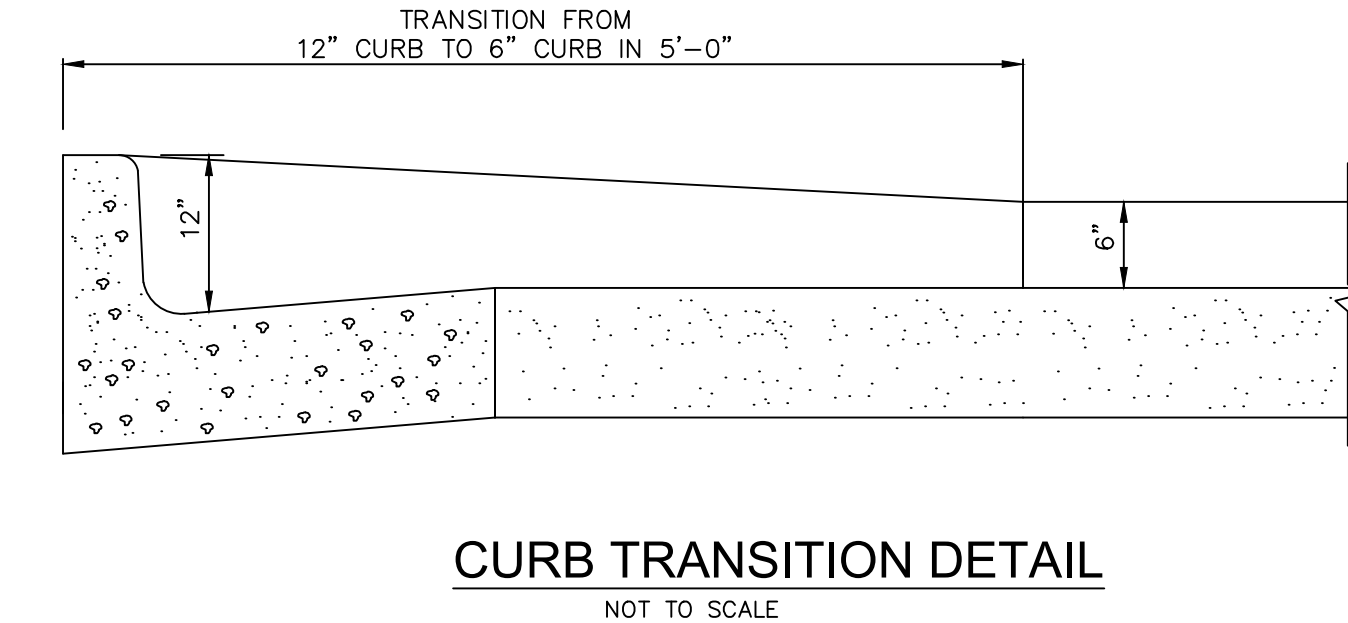


MANHOLE DETAIL 1
MANHOLE DETAIL 2
INLET DETAIL 1

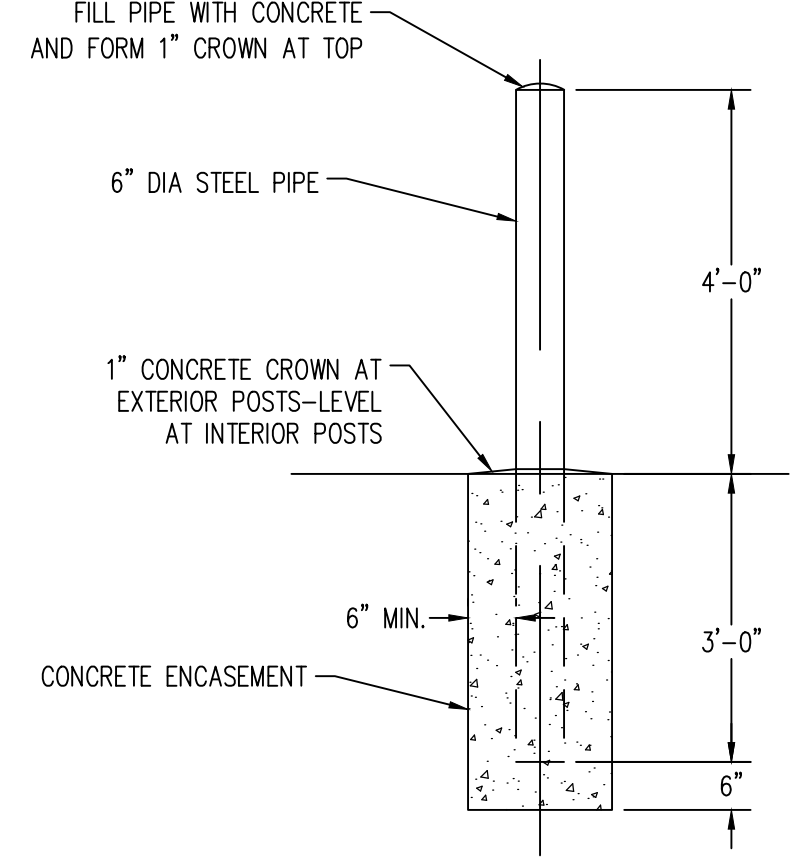


TYPE 2 CURB
SCALE: 1"=1'

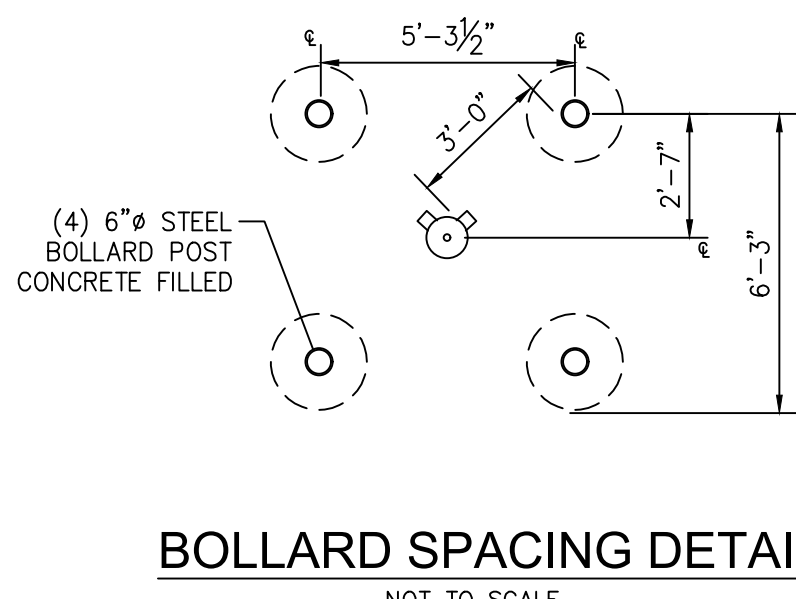
NOTE:
WHEN PAVEMENT SLOPE AWAY FROM CURB & GUTTER, MAKE GUTTER PAN FLAT (0%)



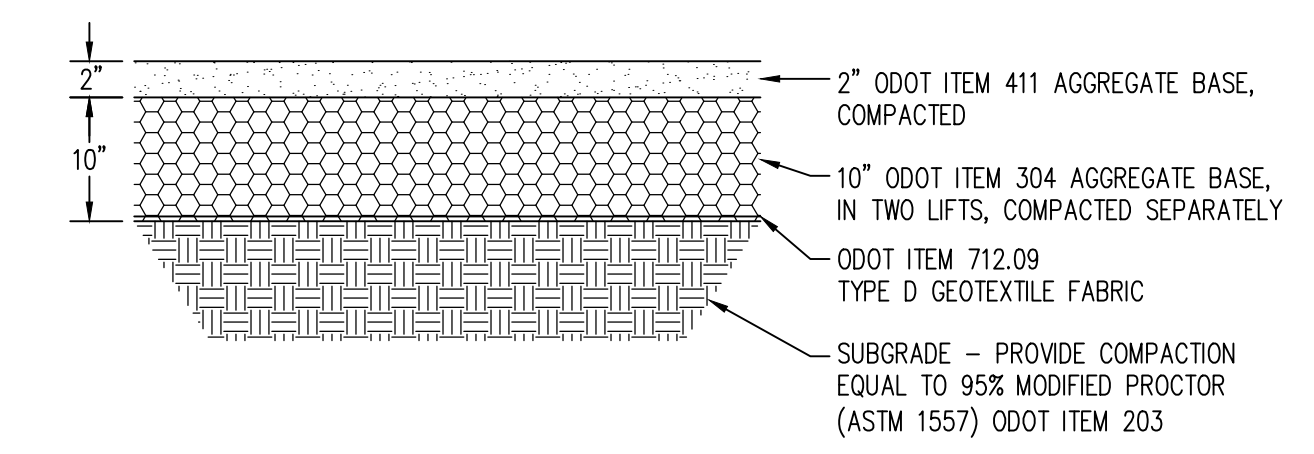
CURB TRANSITION DETAIL
NOT TO SCALE



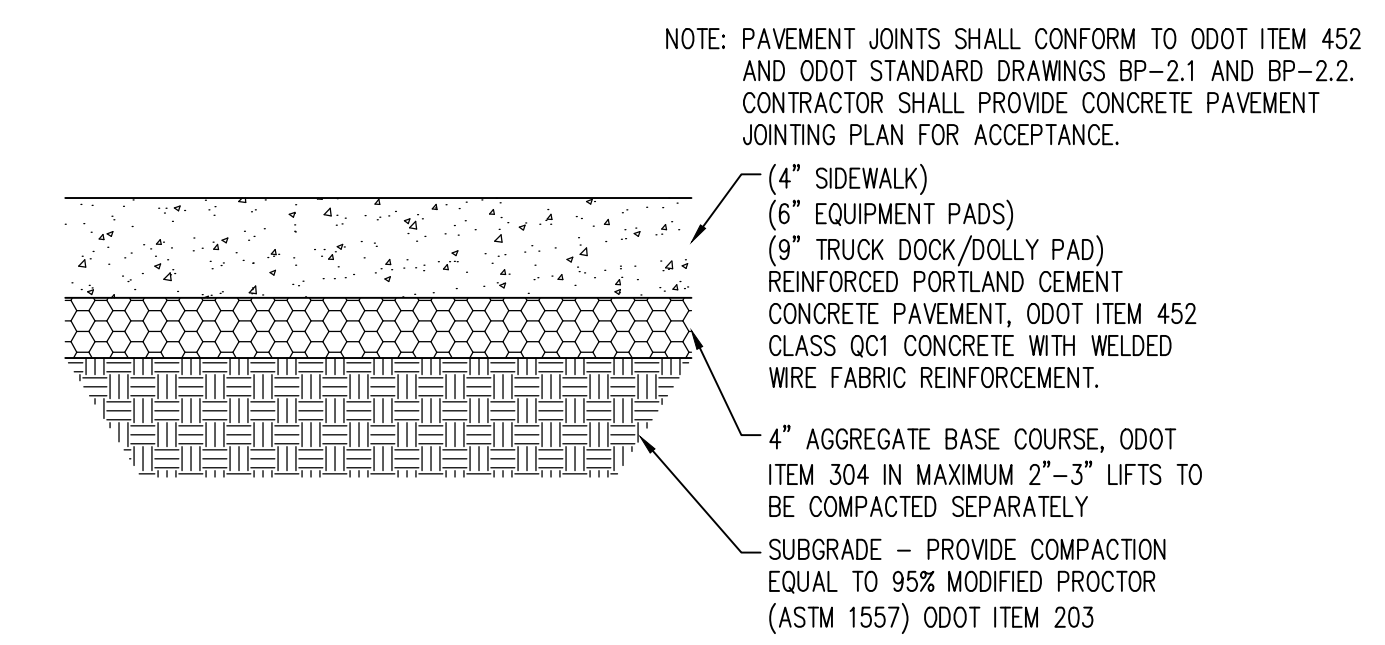
BOLLARD DETAIL
NOT TO SCALE



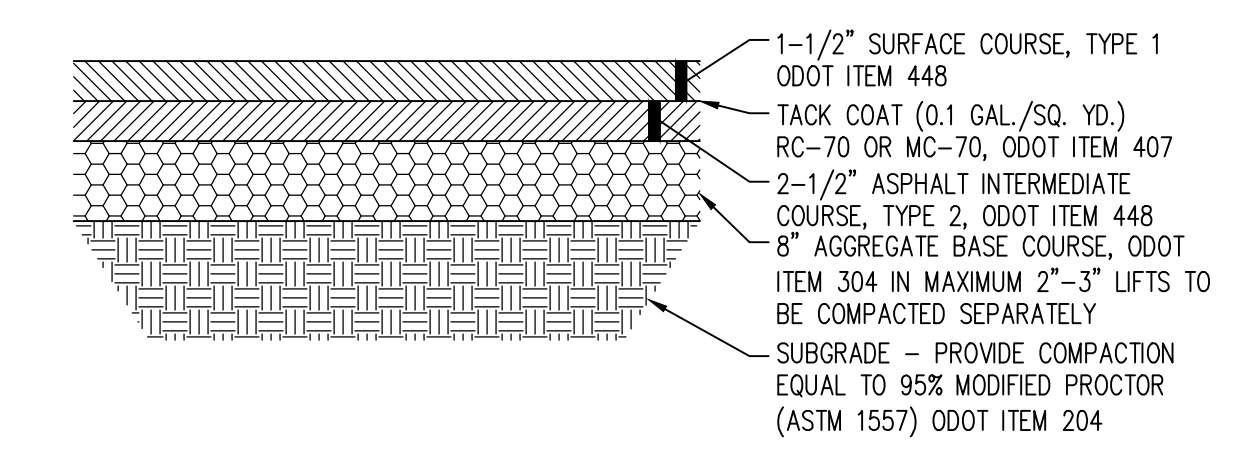
BOLLARD SPACING DETAIL
NOT TO SCALE



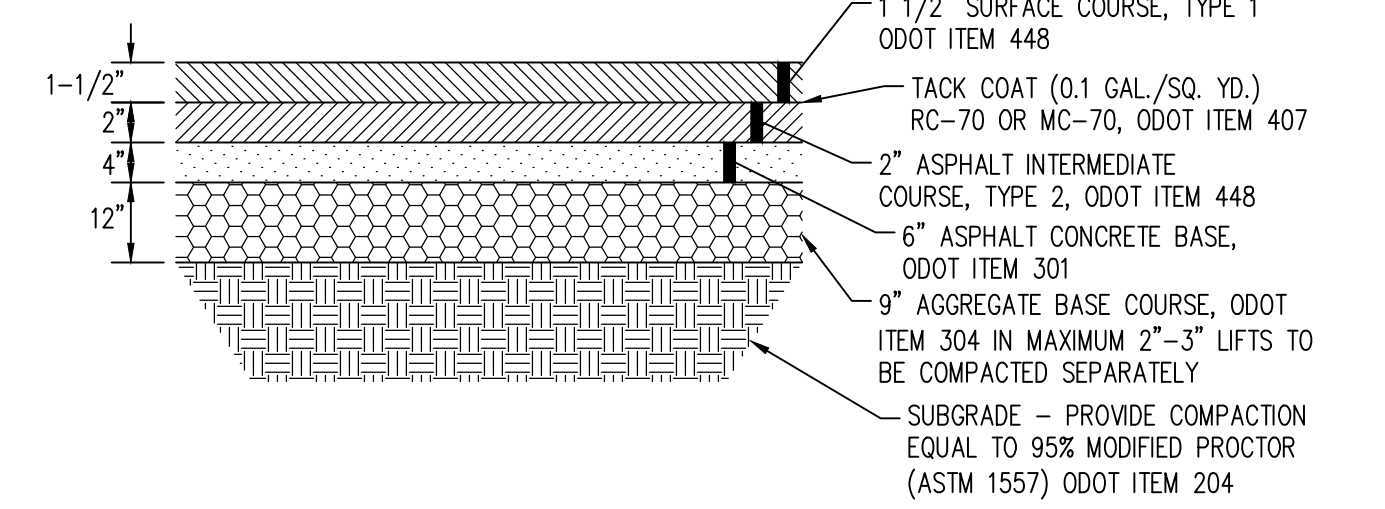
TYPICAL AGGREGATE PAVEMENT SECTION
NOT TO SCALE



TYPICAL CONCRETE PAVEMENT SECTION
NOT TO SCALE



TYPICAL LIGHT DUTY ASPHALT PAVEMENT SECTION
NOT TO SCALE



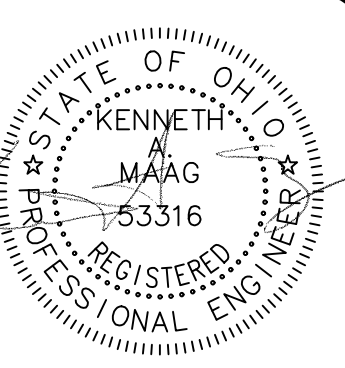
TYPICAL HEAVY DUTY ASPHALT PAVEMENT SECTION
NOT TO SCALE



DHL SUPPLY CHAIN
ASHVILLE LOGISTICS PARK
ASHVILLE, OHIO

DETAIL SHEET

DRAWN BY: MEK
CHECKED BY: KAM



10
DATE: 09/13/2022
PROJECT NUMBER: 20224880.001A

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