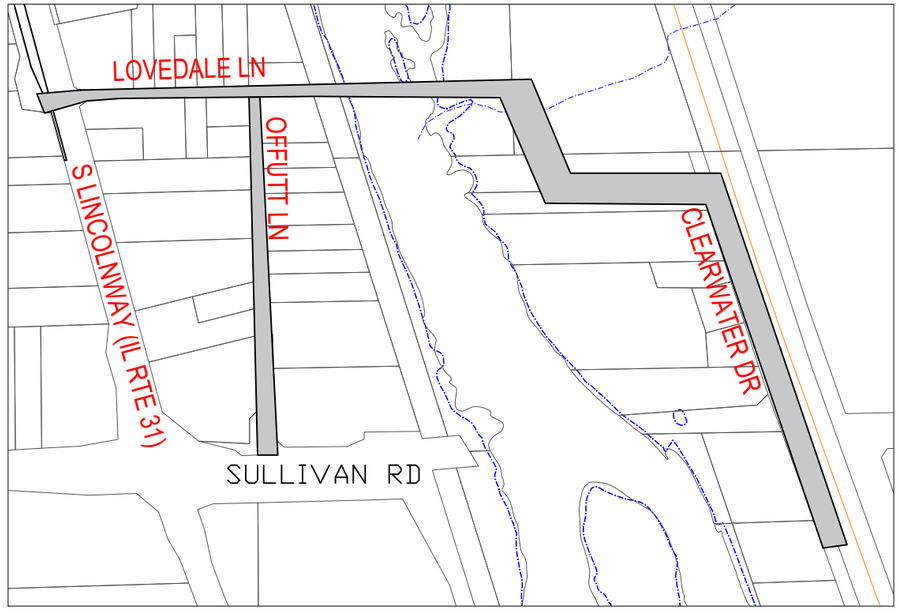
ENGINEERING PLANS FOR:

LOVEDALE LANE, OFFUTT LANE, CLEARWATER DRIVE, & FOX RIVER CROSSING WATER MAIN IMPROVEMENT PROJECT

NORTH AURORA, ILLINOIS

INDEX OF SHEETS



LOCATION MAP
SCALE: NONE

IMPROVEMENT LENGTH
4,245 LF (0.80 MI.)

VILLAGE OF NORTH AURORA
Crossroads on the Fox

BRANDON TONARELLI
ILLINOIS REGISTERED PROFESSIONAL ENGINEER
NO. 062-065443 EXPIRES 11-30-2025

BRANDON TONARELLI 62-065443 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

J.U.L.I.E. Joint Utility Locating Information for Excavators CALL 811

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THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AS WELL AS SUPERVISION/DIRECTION AND MEANS/METHODS OF CONSTRUCTION

REV. 0 01-31-2024

GENERAL NOTES AND CONSTRUCTION SPECIFICATIONS

ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS STANDARD SPECIFICATION: THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," ADOPTED JANUARY 1, 2022 (REFERRED TO AS THE "STANDARD SPECIFICATIONS");THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, LATEST EDITION; THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS, LATEST EDITION; THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS," LATEST EDITION; THE "STANDARD SPECIFICATION FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS," LATEST EDITION; AND THE DETAILS IN THE PLANS ND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENT.

THE CONTRACTOR SHALL OBTAIN, ERECT, MAINTAIN AND REMOVE ALL SIGNS, BARRICADES, FLAGMEN AND OTHER CONTROL DEVICES AS MAY BE NECESSARY FOR THE PURPOSE OF REGULATING WARNING OR GUIDING TRAFFIC. PLACEMENT AND MAINTENANCE OF ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE APPLICABLE PARTS OF ARTICLE 107.14 OF THE STANDARD SPECIFICATIONS AND THE "STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS."

IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE VILLAGE IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.

THE CONTRACTOR SHALL NOTIFY J.U.L.I.E. (1-800-892-0123/811) AT LEAST 72 HOURS PRIOR TO CONSTRUCTION SO THAT EACH UTILITY COMPANY CAN STAKE OUT ANY UNDERGROUND IMPROVEMENTS THAT MAY INTERFERE WITH THE PROPOSED CONSTRUCTION.

THE CONTRACTOR SHALL BE REQUIRED TO MAKE ARRANGEMENTS FOR THE PROPER BRACING, SHORING AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS, STRUCTURES, POLES, CABLES AND PIPE LINES BEFORE CONSTRUCTION BEGINS. THEY SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OR ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE REPAIRS AS NECESSARY TO THE SATISFACTION OF THE ENGINEER AND VILLAGE AT THEIR OWN EXPENSE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL PRIVATE AND PUBLIC UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER AND VILLAGE BY THE CONTRACTOR AT THEIR OWN EXPENSE.

THE CONTRACTOR SHALL EXAMINE THE PLANS AND SPECIFICATIONS, VISIT THE SITE OF THE WORK AND INFORM THEMSELVES FULLY WITH THE WORK INVOLVED, GENERAL AND LOCAL CONDITIONS, ALL FEDERAL, STATE AND LOCAL LAWS, ORDINANCES, RULES AND REGULATIONS AND ALL OTHER PERTINENT ITEMS WHICH MAY AFFECT THE COST AND TIME OF COMPLETION OF THIS PROJECT BEFORE SUBMITTING A BID.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN EXISTING FIELD CONDITIONS PRIOR TO BIDDING ON THIS PROJECT. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR FAILURE TO VERIFY EXISTING DIMENSIONS OR CONDITIONS.

ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CODE REQUIREMENTS.

PRIOR TO SUBMITTING THEIR BID, THE CONTRACTOR SHALL CALL TO ATTENTION OF THE ENGINEER ANY MATERIAL OR EQUIPMENT THEY DEEM INADEQUATE AND TO ANY ITEM OF WORK OMITTED.

THE PAY ITEMS SHALL BE AS NOTED IN THE SUMMARY OF QUANTITIES/PROPOSAL. ANY ITEM OF WORK THAT IS SHOWN ON THE PLANS TO BE PERFORMED BY THE CONTRACTOR, FOR WHICH THERE IS NO PAY ITEM, SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE PROJECT.

THE CONTRACTOR SHALL RESTORE ANY AREA DISTURBED TO A CONDITION OF EQUAL TO OR BETTER THAN ITS ORIGINAL CONDITION. THIS SHALL INCLUDE FINISH GRADING, ESTABLISHMENT OF VEGETATIVE COVER, GENERAL CLEANUP AND PAVEMENT REPLACEMENT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE AND HEALTHFUL WORKING CONDITIONS THROUGHOUT THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.

ALL LOT IRONS DAMAGED OR REMOVED DURING THE CONSTRUCTION OF THIS PROJECT SHALL BE REPLACED BY THE ENGINEER AND SAID COST OF REPLACEMENT SHALL BE PAID BY THE CONTRACTOR. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS, PROPERTY CORNERS.

BEFORE ACCEPTANCE BY THE VILLAGE AND FINAL PAYMENT, ALL WORK SHALL BE INSPECTED AND APPROVED BY THE VILLAGE. FINAL PAYMENT SHALL BE MADE AFTER ALL OF THE CONTRACTOR'S WORK HAS BEEN APPROVED AND ACCEPTED.

THE CONTRACTOR WILL HAVE IN THEIR POSSESSION ON THE JOB SITE A COPY OF THE PLANS AND SPECIFICATIONS DURING CONSTRUCTION.

NO SUBSTITUTIONS OR VARIANCES WILL BE PERMITTED TO ANY STANDARD NOTE OR ORDINANCE UNLESS APPROVED OTHERWISE IN WRITING PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES.

IF ANY APPROVED EQUAL ITEMS ARE REQUIRED, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR APPROVAL.

ALL MAILBOXES, ROAD SIGNS, STREET SIGNS AND TRAFFIC SIGNS WHICH NEED TO BE RELOCATED OR MOVED DUE TO CONSTRUCTION SHALL BE TAKEN DOWN AND STORED BY THE CONTRACTOR AT THEIR OWN EXPENSE, EXCEPT THOSE WHICH ARE NECESSARY FOR PROPER TRAFFIC CONTROL WHICH SHALL BE TEMPORARILY RESET UNTIL COMPLETION OF CONSTRUCTION OPERATIONS. AFTER COMPLETION OF THE WORK, THE CONTRACTOR SHALL RESET, AT THEIR OWN EXPENSE, ALL SAID SIGNS AND MAILBOXES.

NO EXCAVATIONS WILL BE PERMITTED TO REMAIN OPEN OVER ANY WEEKEND OR HOLIDAY.

THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ANY REQUIRED INSPECTIONS WITH THE ENGINEER AND VILLAGE. THE ENGINEER SHALL BE GIVEN A MINIMUM OF 48 HOURS NOTICE PRIOR TO ANY WORK BEING SCHEDULED OR CANCELED.

SPECIAL ATTENTION IS DRAWN TO THE FACT THAT ARTICLE 105.06 OF THE STANDARD SPECIFICATIONS REQUIRES THE CONTRACTOR TO HAVE A COMPETENT SUPERINTENDENT ON THE PROJECT SITE AT ALL TIMES, IRRESPECTIVE OF THE AMOUNT OF WORK SUBLET. THE SUPERINTENDENT SHALL BE CAPABLE OF READING AND UNDERSTANDING THE PLANS AND SPECIFICATIONS, SHALL HAVE FULL AUTHORITY TO EXECUTE ORDER TO EXPEDITE THE PROJECT, SHALL BE RESPONSIBLE FOR SCHEDULING AND HAVE CONTROL OF ALL WORK AS THE AGENT OF THE CONTRACTOR. FAILURE TO COMPLY WITH THIS PROVISION WILL RESULT IN A SUSPENSION OF WORK AS PROVIDED IN ARTICLE 108.07.

THE ENGINEER AND VILLAGE ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, TIME OF PERFORMANCE, PROGRAMS OR FOR ANY SAFETY PRECAUTIONS USED BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE EXECUTION OF THEIR WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS.

IF GROUNDWATER IS ENCOUNTERED, THE DEWATERING SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT WHEN NECESSARY, PRIOR TO COMMENCING ANY DEWATERING, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL A DEWATERING PLAN INDICATING PUMP LOCATIONS, SIZES, AND CAPACITIES AND ALL DISCHARGE POINTS.

ALL DRIVEWAY REMOVAL SHALL BE 2 FEET BEHIND THE BACK OF THE CURB UNLESS DIRECTED OTHERWISE BY THE ENGINEER OR SHOWN ON THE PLANS.

THE CONTINGENCY ITEMS SCHEDULED ARE PROVIDED TO GENERALLY ACCOUNT FOR ADDITIONAL WORK REQUIRED AS CONSTRUCTION COMMENCES.

THE CONTRACTOR SHALL KEEP THE CONSTRUCTION AREA FREE OF DEBRIS AND/OR OBJECTIONABLE MATERIALS DURING CONSTRUCTION.

EXISTING PAVEMENT THICKNESS SHOWN ON THE PLANS ARE APPROXIMATE, BASED ON AVAILABLE INFORMATION AT THE TIME OF DESIGN.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING FRESH CONCRETE FROM DAMAGE AND VANDALISM. ANY DAMAGED OR VANDALIZED CONCRETE SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

PATCHING, SIDEWALK REMOVAL AND REPLACEMENT, AND COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT LOCATIONS SHALL BE VERIFIED BY THE ENGINEER AND MARKED OUT BY THE ENGINEER IN THE FIELD.

SIDEWALK REMOVAL AND PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH. SIDEWALKS SHALL HAVE A MINIMUM THICKNESS OF 5 INCHES (6 INCHES AT DRIVEWAY WITH WIRE MESH OR FIBER MESH CONCRETE).

CONTRACTOR SHALL MAKE ALL FULL DEPTH SAW CUTS AT THE EDGE OF PAVEMENT ADJACENT TO THE REMOVAL OF ALL COMBINATION CONCRETE CURB AND GUTTER. THE CONTRACTOR SHALL MAKE ALL FULL DEPTH SAW CUTS REQUIRED FOR THE REMOVAL OF THE HMA PAVEMENT, CONCRETE CURB AND GUTTERS, SIDEWALKS, AND DRIVEWAYS AS SPECIFIED OR AS DIRECTED BY THE ENGINEER. THE COST SHALL BE CONSIDERED INCLUDED IN THE CONTRACT.

CONTRACTOR SHALL PROVIDE AND INSTALL TWO WEIGHTED SAND BAGS ON EACH TYPE I OR TYPE II BARRICADE USED.

THE CONTRACTOR SHALL DISPOSE OF ALL EXCESS EXCAVATION, UNSUITABLE AND UNUSABLE MATERIAL OFFSITE AND AT AN APPROVED LOCATION IN A MANNER THAT PUBLIC OR PRIVATE PROPERTY WILL NOT BE DAMAGED OR ENDANGERED.

THE CONTRACTOR SHALL MAINTAIN THE SITE IN A CLEAN AND ORDERLY MANNER. DEBRIS AND ANY SURPLUS MATERIAL SHALL BE REMOVED AND RESTORATION SHALL PROCEED AS THE WORK PROCEEDS. IF THE ENGINEER SO DIRECTS, THE CONTRACTOR SHALL STOP ALL OTHER WORK AND CONCENTRATE ON CLEAN-UP AND RESTORATION. DEBRIS AND SURPLUS MATERIALS SHALL BE DISPOSED OF BY THE CONTRACTOR OFF SITE.

WHEN NO SPECIAL PROVISION IS AVAILABLE TO DICTATE CONSTRUCTION OF VARIOUS PAY ITEMS, THE APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS SHALL GOVERN.

ANY DRAIN AND/OR FIELD TILE ENCOUNTERED BY THE CONTRACTOR DURING THE INSTALLATION OF THE IMPROVEMENTS SHALL BE RETURNED TO ORIGINAL CONDITION. THE ENGINEER SHALL BE NOTIFIED OF THE FIELD TILE TO WITNESS THE REPAIR AND DOCUMENT IT'S LOCATION.

MANHOLES AND VALVE VAULTS SHALL BE ADJUSTED WITH PRECAST CONCRETE OR RUBBER ADJUSTING RINGS TO A MAXIMUM OF 8 INCHES. NO MORE THAN TWO ADJUSTING RINGS ARE ALLOWED. ANY REQUIRED ADJUSTMENT GREATER THAN 8 INCHES WILL NECESSITATE THE ADDITION OF A BARREL SECTION.

THE CONTRACTOR SHALL BE RESPONSIBLE TO PLACE ON GRADE AND COORDINATE WITH OTHER CONTRACTORS ALL UNDERGROUND STRUCTURE FRAMES SUCH AS CATCH BASINS, INLETS, MANHOLES, HYDRANTS, BUFFALO BOXES, VALVES, ETC. NO ADDITIONAL COMPENSATION SHALL BE PAID AND SAID ADJUSTMENTS SHALL BE CONSIDERED INCIDENTAL TO OTHER ITEMS OF CONSTRUCTION.

ALL MANHOLE LIDS, BUFFALO BOXES, ETC. SHALL BE COVERED WITH CARDBOARD OR ANY OTHER SUITABLE MATERIAL PRIOR TO ANY PRIMING OR SEALING OPERATION. AFTER COMPLETING THE OPERATION THE CONTRACTOR SHALL REMOVE THE TEMPORARY COVERS AND CLEAN ANY COVERS THAT THEY FAILED TO PROPERLY COVER. THE COST OF THE WORK SHALL BE INCLUDED IN THE COST OF THE CONTRACT AND WILL NOT BE PAID FOR SEPARATELY.

THE CONTRACTOR SHALL KEEP EXISTING ADJACENT STREET PAVEMENT CLEAN OF DIRT AND DEBRIS AND, WHEN NECESSARY, CLEAN PAVEMENTS ON A DAILY BASIS.

TEMPORARY RAMPS AT ALL DRIVEWAYS AND INTERSECTIONS MUST BE PLACED AND MAINTAINED STARTING AT THE SAME DAY AS PAVEMENT REMOVAL. RAMPS SHALL BE CA-6 OR GRINDINGS. BARRICADES SHALL ALSO BE PLACED AS DEEMED NECESSARY. RESIDENTS SHALL BE NOTIFIED BY THE CONTRACTOR AT ANY TIME THE RAMPS WILL BE REMOVED. ACCESS MUST BE PROVIDED AT ALL TIMES AND THE CONTRACTOR WILL ASSIST RESIDENTS. COST IS INCLUDED IN THE PRICE OF THE CONTRACT.

THE CONTRACTOR SHALL GUARANTEE THE PAVEMENT FOR ONE YEAR AFTER FINAL ACCEPTANCE AGAINST SETTLEMENT, LOW SPOTS, AND/OR RAVELING. THE CONTRACTOR SHALL MAKE ANY REPAIRS NECESSARY DURING THE GUARANTEE PERIOD TO MAINTAIN THE FINISHED PAVEMENT IN SATISFACTORILY CONDITION. REPAIR SHALL INCLUDE BUT NOT BE LIMITED TO REMOVING DEFECTIVE PAVEMENT AND REPLACING WITH NEW PAVEMENT.

ANY DRAIN AND/OR FIELD TILE ENCOUNTERED BY THE CONTRACTOR DURING THE INSTALLATION OF THE IMPROVEMENTS SHALL BE RETURNED TO ORIGINAL CONDITION. THIS WORK TO BE CONSIDERED INCIDENTAL TO THE CONTRACT.

AS-BUILT DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS THE SITE IMPROVEMENTS ARE COMPLETED. ANY CHANGE IN LENGTH, LOCATION, OR ALIGNMENT SHALL BE SHOWN IN RED.

THE CONTRACTOR SHALL CONSTRUCT THE WATER MAIN TO AVOID CONFLICTS WITH THE EXISTING WATER AND SANITARY SERVICES.

THE CONTRACTOR SHALL CONFIRM THE DEPTHS AND LOCATIONS OF EXISTING UTILITIES AND SERVICES PRIOR TO THE START OF CONSTRUCTION (INCIDENTAL). WHEN ANY CONFLICT OCCURS IN PAVEMENT. THE UTILITY VERIFICATION SHALL BE COORDINATED TO LIMIT THE LENGTH OF TIME NEEDED FOR LANE CLOSURES. ALL UTILITY CROSSINGS SHALL BE WITNESSED BY THE ENGINEER AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE WATER MAIN PROTECTION REQUIREMENTS OF THE IEPA.

THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE EXISTING B-BOXES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL MAKE ADJUSTMENTS TO THE WATER MAIN ALIGNMENT TO AVOID CONFLICTS WITH THE EXISTING B-BOXES. THE LOCATION OF THE NEW B-BOXES AND ANY ADJUSTMENTS SHALL BE APPROVED BY THE VILLAGE PRIOR TO CONSTRUCTION. THE VERIFICATION AND ADJUSTMENTS OF THE B-BOXES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

THE CONTRACTOR SHALL MAKE REASONABLE EFFORTS TO PROTECT SIDEWALK, CURB AND GUTTER, AND DRIVEWAYS THAT ARE NOT DIRECTLY IMPACTED BY THE WATER MAIN TRENCH. SIDEWALK, CURB AND GUTTER, AND DRIVEWAYS DAMAGED DURING CONSTRUCTION WILL BE REMOVED AND REPLACED AS DEEMED NECESSARY BY THE ENGINEER. ANY UNNECESSARILY DAMAGED ITEMS WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

BITUMINOUS PAVEMENT OVER THE UTILITY TRENCHES SHALL BE SAWCUT PRIOR TO EXCAVATION (INCIDENTAL).

ALL CA-6 TRENCH BACKFILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR IN MAXIMUM 12" LIFTS USING MANUAL EQUIPMENT. ALL NON-STRUCTURAL BACKFILL SHALL BE COMPACTED TO 85% STANDARD PROCTOR USING MANUAL EQUIPMENT. NO SETTLING WILL BE ALLOWED.

BEDDING PER "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" SHALL BE PROVIDED FOR ALL WATER MAIN REGARDLESS OF LOCATION OF THE TRENCH.

ALL BEDDING AND BACKFILL IS INCIDENTAL TO THE COST OF THE ITEM BEING INSTALLED. BEDDING AND BACKFILL MATERIAL WILL NOT BE MEASURED FOR PAYMENT.

ALL RESIDENTS SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO SHUTTING DOWN THEIR WATER SERVICE AND PRIOR TO REMOVAL OF DRIVEWAY ACCESS.

PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL INVENTORY THE LOCATION, SIZE, TYPE AND CONDITION OF ALL EXISTING SIGNS. ANY SIGN DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

SAWING OF REMOVAL ITEMS AS NOTED ON THE PLANS, SPECIFIED IN THE STANDARD SPECIFICATIONS, OR AS REQUIRED BY THE ENGINEER SHALL BE INCLUDED IN THE COST OF THE ITEM BEING REMOVED.

WHERE NEW WORK MEETS EXISTING FEATURES TO REMAIN, THE CONTRACTOR SHALL FIELD CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE PROCEEDING WITH CONSTRUCTION. IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

ALL DISTURBED AREAS WITHIN THE PROJECT THAT ARE NOT OTHERWISE SURFACED SHALL BE CLEANED, LAYERED WITH TOPSOIL, SEEDED AND BLANKETED. ADDITIONAL AREAS DAMAGED BY MACHINERY, CONSTRUCTION EQUIPMENT, CONTRACTOR NEGLIGENCE OR OVER-EXCAVATION SHALL BE RESTORED TO A CONDITION EQUAL TO PRIOR TO THE DAMAGED INCURRED AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL DISPOSE OF ALL SIDEWALK, CURB AND GUTTER, PAVEMENT AND ALL OTHER EXCAVATED MATERIAL NOT FOR SALVAGE AT HIS EXPENSE. ALL EXCESS MATERIAL SHALL BE RELOCATED THROUGHOUT THE PROJECT AS REQUIRED. NO PAYMENT WILL BE MADE FOR HAULING OR TRUCKING TO DISPOSAL LOCATIONS.

VILLAGE OF NORTH AURORA
25 EAST STATE STREET
NORTH AURORA, IL 60542

NO.	DATE	REVISIONS

LOVEDALE LANE, OFFUTT LANE, CLEARWATER DRIVE, & FOX RIVER CROSSING WATER MAIN IMPROVEMENT

GENERAL NOTES AND CONSTRUCTION SPECIFICATIONS

DATE: JANUARY 2024

SHEET 2 OF 23

GENERAL NOTES AND CONSTRUCTION SPECIFICATIONS

AWWA C651-14 SECTION 4.11: DISINFECTION PROCEDURES WHEN CUTTING INTO OR REPAIRING EXISTING MAINS

4.11.1 GENERAL

THE PLANNED, UNPLANNED, OR EMERGENCY REPAIR OF A WATER MAIN OR APPURTENANCES (E.G., VALVE) IS TIME SENSITIVE–AN IMPORTANT GOAL IS TO MINIMIZE THE DISRUPTION OF WATER SERVICE TO CUSTOMERS. NONETHELESS, THE REPAIR WORK NEEDS TO BE ACCOMPLISHED USING SANITARY AND SAFE PROCEDURES BY WELL–TRAINED CREWS WITH PROPER SUPERVISION AND GUIDANCE. REFER TO PREVENTIVE AND CORRECTIVE MEASURES DESCRIBED PREVIOUSLY IN SEC. 4.8.2, 4.8.4, AND 4.8.5. FOLLOW ALL PERSONAL PROTECTION PRECAUTIONS WHEN WORKING WITH CHLORINE SOLUTIONS.

4.11.2 BASIC DISINFECTION

WORK SHOULD FOLLOW BASIC DISINFECTION AND CONTAMINATION PREVENTION PROCEDURES:

1. PREVENTING CONTAMINANTS FROM ENTERING THE EXISTING PIPE DURING THE REPAIR SUCH AS BY MAINTAINING POSITIVE PRESSURE IN THE LEAKING PIPE UNTIL THE REPAIR SITE ON THE PIPE IS FULLY EXPOSED, BY MAINTAINING A DEWATERED TRENCH, AND BY KEEPING ALL PIPE MATERIALS BEING USED IN THE REPAIR IN A CLEAN AND SANITARY CONDITION.
2. INSPECTING AND CLEANING, FOLLOWED BY DISINFECTION OF SPRAYING OR SWABBING WITH A MINIMUM 1 PERCENT CHLORINE SOLUTION:
   a. EXPOSED PORTIONS OF EXISTING PIPE INTERIOR SURFACES
   b. PIPE MATERIALS USED IN THE REPAIR
   c. HANDHELD MATERIALS AND TOOLS USED TO MAKE THE REPAIR
3. AS APPROPRIATE, ADVISING AFFECTED CUSTOMERS TO ADEQUATELY FLUSH THEIR SERVICE LINES UPON RETURN TO SERVICE.

4.11.3 SELECTION OF DISINFECTION PROCEDURE

THE DISINFECTION PROCEDURE SELECTED SHOULD BE DETERMINED BY THE CONDITIONS AND SEVERITY OF THE MAIN BREAK. MANY LEAKS OR BREAKS CAN BE REPAIRED UNDER CONTROLLED CONDITIONS WITHOUT DEPRESSURIZING THE WATER MAIN, SUCH AS WHEN APPLYING A CLAMP TO A SMALL CRACK OR HOLE, THUS PREVENTING CONTAMINANTS FROM ENTERING THE WATER SYSTEM. IN MOST OTHER SITUATIONS, THE WATER MAIN CAN BE MAINTAINED PRESSURIZED UNTIL THE BREAK SITE IS SECURED AND THE PIPE IS FULLY EXPOSED. SOME CIRCUMSTANCES (E.G., SEVERE EROSION OF THE LOCAL ENVIRONMENT OR ICING OF THE ROADWAY) THAT IMPACT PUBLIC SAFETY MAY REQUIRE THAT WATER PRESSURE BE SUBSTANTIALLY REDUCED PRIOR TO EXPOSING THE PIPE IN THE AREA OF THE LEAK. IN SOME CASES, SITUATIONS BECOME CATASTROPHIC WHERE THERE IS A PIPE BLOWOUT AND A LOSS OF WATER PRESSURE PRIOR TO SHUTDOWN, REQUIRING DISINFECTION PROCEDURES EQUIVALENT TO THOSE OF A NEW MAIN INSTALLATION. THE PROCEDURES DESCRIBED IN SEC. 4.11.3.1 THROUGH 4.11.3.3 DESCRIBED THE CONTAMINATION RISKS AND THE ASSOCIATED DISINFECTION AND SAMPLING REQUIREMENTS FOR DIFFERENT SCENARIOS OF PIPELINE REPAIR. SPECIFIC SITUATIONS NOT CAPTURED BELOW NEED TO NE EVALUATED AND THE APPROPRIATE DISINFECTION AND SAMPLING METHODS FOLLOWED.

NOTE THAT THE PROCEDURES EXPLAINED IN SEC. 4.11.3.1, 4.11.3.2, AND 4.11.3.3 FOR DISTRIBUTION MAINS MAY NEED TO BE MODIFIED FOR LARGE TRANSMISSION MAINS. LARGE MAINS MAY NEED ADDITIONAL WORK (SUCH AS HAVING A VALVE REPLACED OR REQUIRING A SPECIAL ORDER ON A CONNECTION), MAY BE OUT OF SERVICE FOR MORE THAN A DAY, OR MAY NOT BE ABLE TO ACCOMMODATE A SCOUR FLUSH. THESE MODIFICATIONS NEED TO BE MADE ON A CASE–BY–CASE BASIS BUT SHOULD STILL TAKE INTO ACCOUNT THE PROCEDURES OUTLINED IN ANSI/AWWA C651.

4.11.3.1

CONTROLLED PIPE REPAIR WITHOUT DEPRESSURIZATION. IN THIS SITUATION, ACTIVITIES ARE WELL CONTROLLED AND A FULL SHUTDOWN IS NOT NEEDED, THUS MAINTAINING POSITIVE PRESSURE TO THE AREA OF SHUTDOWN AND AROUND THE BREAK SITE AT ALL TIMES. THE REPAIR SITE IS EXPOSED AD THE TRENCH S ADEQUATELY DEWATERED SO THAT THE REPAIR SITE CAN BE CLEANED AND DISINFECTED BY SPRAYING OR SWABBING WITH A MINIMUM 1 PERCENT CHLORINE SOLUTION. THE WATER MAIN IS THEN RETURNED TO SERVICE WITH FLUSHING TO OBTAIN THREE VOLUMES OF WATER TURNOVERS, MAKING SURE THAT THE FLUSHED WATER IS VISUALLY CLEAR. NO BACTERIOLOGICAL TESTING IS NECESSARY. IT IS ADVISABLE TO CHECK FOR A TYPICAL SYSTEM CHLORIDE RESIDUAL, AND IF NOT FOUND, TO CONTINUE FLUSHING UNTIL RESIDUALS ARE RESTORED TO LEVELS MAINTAINED IN THE DISTRIBUTION SYSTEM BY THE WATER UTILITY–IF THE SYSTEM OPERATES WITH A DISINFECTANT RESIDUAL.

4.11.3.2

CONTROLLED PIPE REPAIR WITH DEPRESSURIZATION AFTER SHUTDOWN. IN THIS SITUATION, AFTER THE REPAIR SITE HAS BEEN EXPOSED AND SECURED FROM TRENCH SOIL/WATER CONTAMINATION, THE WATER MAIN IS DEPRESSURIZED BY A SHUTDOWN TO COMPLETE THE REPAIR. THE REPAIR SITE SHOULD BE CLEANED AND DISINFECTED BY SPRAYING OR SWABBING WITH A MINIMUM 1 PERCENT CHLORINE SOLUTIONS. THE WATER MAIN IS THEN RETURNED TO SERVICE WITH FLUSHING TO SCOUR THE PIPE AND OBTAIN THREE VOLUMES OF WATER TURNOVER, MAKING SURE THAT THE FLUSHED WATER IS VISUALLY CLEAR. IT IS ADVISABLE TO CHECK FOR A TYPICAL SYSTEM CHLORIDE RESIDUAL, AND IF NOT FOUND, TO CONTINUE FLUSHING UNTIL RESIDUALS ARE RESTORED TO LEVELS MAINTAINED IN THE DISTRIBUTION SYSTEM BY THE WATER UTILITY–IF THE SYSTEM OPERATES WITH A DISINFECTANT RESIDUAL.

AWWA C651-14 SECTION 4.11: DISINFECTION PROCEDURES WHEN CUTTING INTO OR REPAIRING EXISTING MAINS (CONTINUED)

WHEN THE EXISTING PIPE HAS TO BE OPENED AND THE INTERIOR SURFACES OF THE WATER SYSTEM EXPOSED TO THE ENVIRONMENT, ADDITIONAL PROCEDURES NEED TO BE FOLLOWED. THE EXISTING PIPE SHOULD BE INSPECTED AND CLEANED WITH THE HELP OF FLUSHING WATER INTO THE TRENCH, WHERE POSSIBLE, UNTIL THE FLUSH WATER RUNS VISUALLY CLEAR. THE REPAIR SITE SHOULD BE ACCESSIBLE AND THE TRENCH ADEQUATELY DEWATERED SO THAT THE REPAIR SITE CAN BE CLEANED AND DISINFECTED BY SPRAYING OR SWABBING WITH A MINIMUM 1 PERCENT CHLORINE SOLUTION. ADDITIONALLY, ANY ACCESSIBLE UPSTREAM AND DOWNSTREAM INTERIOR OF THE EXISTING PIPE SHOULD BE DISINFECTED BY SWABBING OR SPRAYING WITH A MINIMUM OF 1 PERCENT CHLORIDE SOLUTION. IF THE REPAIR REQUIRES A FULL PIPE SECTION REPLACEMENT, THE NEW PIPE SHOULD BE INSPECTED, CLEANED AND DISINFECTED FROM BOTH ENDS BY SWABBING WITH A MINIMUM 1 PERCENT CHLORINE SOLUTION. THE WATER MAIN MAY THEN BE RETURNED TO SERVICE AFTER FLUSHING TO SCOUR THE PIPE AND OBTAIN THREE VOLUMES OF WATER TURNOVER. THE FLUSHED WATER SHOULD RUN VISUALLY CLEAR, HAVE A MEASURABLE CHLORIDE RESIDUAL IF THE SYSTEM OPERATES WITH A RESIDUAL, AND BE CHECKED WITH BACTERIOLOGICAL TESTING. THE PIPELINE MAY BE RETURNED TO SERVICE PRIOR TO OBTAINING BACTERIOLOGICAL RESULTS.

4.11.3.3

UNCONTROLLED PIPE BREAK WITH A LIKELIHOOD OF WATER CONTAMINATION OR LOSS OF SANITARY CONDITIONS DURING REPAIR. IN SITUATIONS IN WHICH THE EXISTING MAIN TO BE REPAIRED COULD NOT BE PROTECTED AND KEPT FREE OF CONTAMINATION AND THERE ARE OBVIOUS SIGNS OF CONTAMINATION (E.G., MUDDY TRENCH WATER FLOWING INTO THE BROKEN PIPE AND A LEAKING SEWER PIPE IN THE TRENCH, OR CATASTROPHIC PIPE FAILURE WHERE PIPE IS OPEN AND THERE IS A LIKELIHOOD THAT CONTAMINATION WAS DRAWN INTO THE ACTIVE SYSTEM) OR WHEN A CONTROLLED REPAIR SITUATION TURNS INTO A SITUATION IN WHICH THE INTERNAL PIPE AND WATER HAVE BECOME CONTAMINATED, THE PROCEDURES OUTLINES IN SEC. 4.3, 4.4, 4.5, OR 4.6 SHOULD BE FOLLOWED WHERE PRACTICAL. THE METHODS SPECIFY CHLORINE DOSES OF 25–300 MG/L; HOWEVER, SUCH LEVELS MAY PRESENT GREATER HARM IF THE LINE OR SERVICE CANNOT BE RELIABLY ISOLATED OR SHUT DOWN EXPOSURE OF CUSTOMERS TO HIGH CONCENTRATIONS OF CHLORINE CANNOT BE CONTROLLED. FREE CHLORINE RESIDUALS UP TO 4 MG/L (BASED ON ANNUAL AVERAGES) ARE ALLOWED BY FEDERAL DRINKING WATER REGULATIONS; THEREFORE THIS LEVEL IS SUGGESTED AS A MINIMUM TO BE MAINTAINED FOR AT LEAST 16 HR IN CONJUNCTION WITH FLUSHING, COLIFORM SAMPLING, AND ASSOCIATED CUSTOMER EDUCATION. SUCH SITUATIONS REQUIRE CAREFUL REVIEW AND NEED TO BALANCE THE PUBLIC HEALTH RISKS OF THE PIPELINE FAILURE AS WELL AS THE REPAIR PROCESS.

WHERE PRACTICAL AND APPROPRIATE CONSIDERING THE RISKS OF PUBLIC EXPOSURE TO HIGH CONCENTRATIONS OF CHLORINE, IN ADDITION TO THE PROCEDURES PREVIOUSLY DESCRIBED IN THIS STANDARD, THE SECTION OF PIPE IN WHICH THE BREAK IS LOCATED SHALL BE ISOLATED, ALL SERVICE CONNECTIONS SHUT OFF, AND THE SECTION FLUSHED AND DISINFECTED. IF THE SLUG CHLORINATION METHOD IS EMPLOYED, THE DOSE MAY BE INCREASED TO AS MUCH AS 300 MG/L AND THE CONTACT TIME REDUCED TO AS LITTLE AS 15 MIN. AFTER CHLORINATION AND REPAIR, PERFORM SCOUR FLUSHING AS 3.0 FT/SEC (0.91 M/SEC) OR GREATER FOR A MINIMUM OF THREE PIPE VOLUMES AND CONTINUE UNTIL DISCOLORED WATER IS NOT OBSERVED AND THE CHLORINE RESIDUA IS RESTORED TO THE LEVELS MAINTAINED IN THE DISTRIBUTION SYSTEM BY THE WATER UTILITY.

FOR LARGER–DIAMETER PIPE (12 IN. AND GREATER), IF A WATER VELOCITY OF 3.0 FT/SEC (0.91 M/SEC) CANNOT BE ACHIEVED, IT IS A DESIRABLE TO FLUSH AT THE MAXIMUM FLOW FOR THE MAIN UNTIL THREE PIPE VOLUMES HAVE BEEN DISPLACED BEFORE RETURNING THE MAIN TO SERVICE. THE FLUSHED WATER SHOULD RUN VISUALLY CLEAR, AND HAVE TYPICAL SYSTEM CHLORINE RESIDUAL (IF THE SYSTEM OPERATES WITH A DISINFECTANT RESIDUAL).

FOR VERY–LARGE–DIAMETER PIPE (WHERE PERSONNEL MAY SAFELY ENTER THE PIPE), IN LIEU OF FLUSHING FOLLOWING DISINFECTION, THE INTERIOR OF THE PIPE AT THE REPAIR SITE MAY BE CLEARED BY SWEEPING OR HIGH PRESSURE WASH USING POTABLE WATER BEFORE DISINFECTION. STANDING WATER AND DEBRIS FROM THE CLEANING MUST BE REMOVED FROM THE PIPE PRIOR TO DISINFECTION. THE AFFECTED PIPE SHALL BE DISINFECTED BY SWABBING OR SPRAYING WITH A MINIMUM 1 PERCENT CHLORINE SOLUTION.

AFTER FOLLOWING THE APPROPRIATE METHODS ABOVE, PRIOR TO RETURNING THE PIPE TO SERVICE, THE EFFICACY OF THE DISINFECTION PROCEDURE SHALL BE VERIFIED BY TESTING FOR THE ABSENCE OF COLIFORM BACTERIA. IF ALLOWED BY LOCAL REGULATIONS, THE PIPELINE MAY BE RETURNED TO LIMITED SERVICE PRIOR TO OBTAINING BACTERIOLOGICAL RESULTS WITH PROPER NOTIFICATION OF THE AFFECTED CUSTOMERS.

4.11.4 TEMPORARY SERVICE LINES

TEMPORARY WATER SERVICE LINES TO CUSTOMERS DURING MAIN REPAIR ACTIVITIES SHALL BE DISINFECTED PRIOR TO USE. MATERIALS SHALL MEET THE NSF/ANSI 61 CERTIFICATION FOR POTABLE WATER USE. DISINFECTION SHOULD BE ACCOMPLISHED BY THE PROCEDURES IN SEC. 4.4 OR 4.5 FOLLOWED BY SCOUR FLUSHING AT 3.0 FT/SEC (0.91 M/SEC) OR GREATER FOR A MINIMUM OF THREE PIPE VOLUMES (SEE TABLE 3), OR UNTIL THE WATER RUNS VISUALLY CLEAR AND PREFERABLY A MEASURABLE CHLORINE RESIDUAL IS RESTORED.

1. ALL WATER MAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 'STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS', LATEST EDITION, AND REVISIONS THERETO, THE NOTES ON THE PLANS, AND IN ACCORDANCE WITH CODES AND ORDINANCES OF THE VILLAGE OF NORTH AURORA, ILLINOIS.
2. ALL WATER MAIN SHALL BE DUCTILE IRON PIPE CLASS 52 WITH MECHANICAL OR PUSH-ON JOINTS AND SHALL CONFORM TO ANSI A21.51 (AWWA C151), ANSI A21.50 (AWWA C150) AND ANSI A21.11 (AWWA C111). PIPE SHALL BE MANUFACTURED IN THE UNITED STATES.
3. ALL FITTINGS SHALL BE DUCTILE IRON AND SHALL CONFORM TO ANSI A21.10 (AWWA C110). FITTINGS SHALL BE MANUFACTURED IN THE UNITED STATES.
4. ALL PIPE AND FITTINGS SHALL BE CEMENT LINED IN ACCORDANCE WITH ANSI A21.4 (AWWA C104).
5. ALL FITTINGS SHALL BE MECHANICAL JOINT AND INSTALLED WITH RETAINER GLANDS UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
6. ALL MECHANICAL JOINT FITTINGS, VALVES, AND HYDRANTS SHALL BE RESTRAINED WITH RETAINER GLANDS. RETAINER GLANDS SHALL BE EBAA IRON MEGALUG SERIES 1100 OR APPROVED EQUAL.
7. ALL WATER MAIN AND FITTINGS SHALL BE WRAPPED WITH POLYETHYLENE. POLYETHYLENE SHALL HAVE A THICKNESS OF 8-MIL IN ACCORDANCE WITH ANSI A21.5 (AWWA C105).
8. ALL T-HEAD BOLTS, NUTS, AND THREADED ROD SHALL BE STAINLESS STEEL.
9. LONG RADIUS CURVES, EITHER HORIZONTAL OR VERTICAL, MAY BE LAID WITH STANDARD PIPE BY DEFLECTIONS AT THE JOINTS. MAXIMUM DEFLECTIONS AT PIPE JOINTS AND LAYING RADIUS FOR THE VARIOUS PIPE LENGTHS SHALL BE IN ACCORDANCE WITH AWWA C600. WHEN RUBBER GASKET PIPE IS LAID ON A CURVE, THE PIPE SHALL BE JOINTED IN A STRAIGHT ALIGNMENT AND THEN DEFLECTED TO THE CURVED ALIGNMENT. TRENCHES SHALL BE MADE WIDER ON CURVES FOR THIS PURPOSE.
10. ALL GATE VALVES SHALL BE RESILIENT WEDGE TYPE CONFORMING TO AWWA C515-20 DUCTILE IRON AND HAVE NON-RISING STEM, WITH A STANDARD OPERATING NUT AND SHALL OPEN IN A COUNTER-CLOCKWISE DIRECTION. GATE VALVES 10-INCHES OR LARGER SHALL BE LOCATED IN A VALVE VAULT WITH A MINIMUM OF FIVE FEE INSIDE DIAMETER. GATES VALVES UNDER 10-INCHES SHALL BE LOCATED IN A VALVE VAULT WITH A MINIMUM OF FOUR FEET INSIDE DIAMETER.
11. ALL VALVES 16-INCHES OR LARGER SHALL BE BUTTERFLY VALVES WITH A NON-RISING STEM, SHALL HAVE A STANDARD OPERATING NUT AND SHALL OPEN IN A COUNTER-CLOCKWISE DIRECTION. BUTTERFLY VALVES SHALL BE CLOW OR AMERICAN FLOW CONTROL (WATEROUS) BUTTERFLY VALVES IN ACCORDANCE WITH AWWA C-504-00. BUTTERFLY VALVES SHALL BE IN VALVE VAULTS.
12. ALL VALVE BOXES SHALL BE CAST IRON, TWO PIECE 5-1/4" SHAFTS, SCREW-TYPE TYLER MODEL 664-S OR APPROVED EQUAL WITH A VALVE BOX STABILIZER. LIDS ARE TO BE MARKED 'WATER' (VALVE BOX EXTENSIONS, IF REQUIRED, ARE CONSIDERED INCIDENTAL).
13. ALL HYDRANTS SHALL BE IN ACCORDANCE WITH AWWA C502. FIRE HYDRANTS ON WATER MAIN 12-INCH DIAMETER AND LARGER SHALL BE CLOW F-2545 (MEDALLION). FIRE HYDRANTS ON WATER MAIN 6-INCH TO 10-INCH DIAMETER SHALL BE AN AMERICAN FLOW CONTROL – WATEROUS WB-67-25. FIRE HYDRANTS REQUIRE ONE 4" STORTZ NOZZLE AND TWO 2-1/2" HOSE NOZZLES, WITH NATIONAL STANDARD TREADS, A NATIONAL STANDARD OPERATING NUT, AND ABOVE GROUND BREAK FLANGE. ALL HYDRANTS SHALL HAVE AN AUXILIARY GATE VALVE WITH A CAST IRON VALVE BOX.
14. REPAIR COUPLINGS SHALL BE SMITH BLAIR (ROCKWELL) D.I. COUPLING TYPE 441 OR EQUAL. COUPLINGS SHALL BE PROVIDED AT LOCATIONS SHOWN ON THE PLANS OR AS REQUIRED TO MAKE PIPE CONNECTIONS.
15. ALL TEES, BENDS, FIRE HYDRANTS, AND VALVES SHALL BE ADEQUATELY SUPPORTED WITH A CONCRETE BASE, AND SUPPORTED LATERALLY WITH POURED IN PLACE THRUST BLOCKING AGAINST UNDISTURBED EARTH.
16. ALL WATER MAINS SHALL HAVE A MINIMUM DEPTH OF COVER OF 5'-6".
17. ALL PRESSURE TAPS TO AN EXISTING VILLAGE MAIN SHALL BE MADE WITH A CLOW OR AMERICAN FLOW CONTROL (WATEROUS) DUCTILE IRON MECHANICAL JOINT TAPPING SLEEVE FOR SAME SIZE TAPS WITH THE MAIN. DISSIMILAR SIZE TAPS AND MAINS SHALL BE MADE WITH STAINLESS STEEL TAPPING SLEEVES AND SHALL BE MUELLER H-304, SMITH BLAIR (ROCKWELL) 662-663 OR 664-665 OR ROMAC SST. A CLOW OR AMERICAN FLOW CONTROL (WATEROUS) RESILIENT TAPPING VALVE SHALL BE INSTALLED WITH THE TAPPING SLEEVE. THE TAPPING SLEEVE AND VALVE SHALL BE CONSTRUCTED IN A VALVE VAULT WITH ECCENTRIC CONE.
18. NO WATER SERVICE TAPS SHALL BE MADE PRIOR TO THE VILLAGE RECEIVING THE IEPA OPERATING PERMIT.
19. WATER MAINS AND WATER SERVICE LINES SHALL BE PROTECTED FROM SANITARY SEWERS, STORM SEWERS, COMBINED SEWERS, HOUSE SEWER SERVICE CONNECTIONS AND DRAINS IN ACCORDANCE WITH TITLE 35: ENVIRONMENTAL PROTECTION SUBTITLE F: PUBLIC WATER SUPPLIES, CHAPTER I: POLLUTION CONTROL BOARD, PART 604 DESIGN, OPERATION, AND MAINTENANCE CRITERIA, SECTION 604.1440 SANITARY SEPARATION FOR FINISHED WATER MAIN.
20. WHENEVER POSSIBLE, A WATER MAIN MUST BE LAID TEN FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED DRAIN OR SEWER LINE. SHOULD LOCAL CONDITIONS EXIST WHICH WOULD PREVENT A LATERAL SEPARATION OF TEN FEET, A WATER MAIN MY BE LAID CLOSER THAN TEN TO A STORM OR SANITARY SEWER PROVIDED THAT THE WATER MAIN INVERT IS AT LEAST EIGHTEEN INCHES ABOVE THE CROWN OF THE SEWER, AND IS EITHER IN A SEPARATE TRENCH OR IN THE SAME TRENCH ON AN UNDISTURBED EARTH SHELF LOCATED TO ONE SIDE OF THE SEWER. IF IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL OR VERTICAL SEPARATION AS DESCRIBED ABOVE, THE THE SEWER MUST ALSO BE CONSTRUCTED PER SECTION 604.1440 AND PRESSURE TESTED TO THE MAXIMUM EXPECTED SURCHARGE HEAD TO ASSURE WATER TIGHTNESS BEFORE BACKFILLING.
21. WHENEVER WATER MAINS MUST CROSS SANITARY SERVICES, STORM SEWERS, OR SANITARY SEWERS THE WATER MAIN SHALL BE LAID AT SUCH AN ELEVATION THAT THE INVERT OF THE WATER MAIN IS EIGHTEEN INCHES ABOVE THE CROWN OF THE DRAIN OR SEWER. THIS VERTICAL SEPARATION MUST BE MAINTAINED FOR THAT PORTION OF THE WATER MAIN LOCATED WITH IN TEN FEET HORIZONTALLY OF ANY SEWER OR DRAIN CROSSED. THIS MUST BE MEASURED AS THE NORMAL DISTANCE FROM THE WATER MAIN TO THE DRAIN OR SEWER. IF IT IS IMPOSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION AS DESCRIBED ABOVE OR IF IT IS NECESSARY FOR THE WATER MAIN TO PASS UNDER A SEWER OR DRAIN, THE THE SEWER MUST BE CONSTRUCTED OF WATER MAIN TYPE MATERIAL (AS NOTED IN ITEM 2). THIS CONSTRUCTION MUST EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE NORMAL DISTANCE FROM THE WATER MAIN TO THE SEWER OR DRAIN LINE IS AT LEAST TEN FEET. IN MAKING SUCH CROSSINGS, CENTER A LENGTH OF WATER MAIN PIPE OVER/UNDER THE SEWER TO BE CROSSED SO THAT THE JOINTS WILL BE EQUIDISTANT FROM THE SEWER AND AS REMOTE THEREFROM AS POSSIBLE. WHERE A WATER MAIN MUST CROSS UNDER A SEWER, A VERTICAL SEPARATION OF EIGHTEEN INCHES BETWEEN THE INVERT OF THE SEWER AND THE CROWN OF THE WATER MAIN SHALL BE MAINTAINED, ALONG WITH MEANS TO SUPPORT THE SEWER LINE TO PREVENT THEIR SETTLING AND BREAKING THE WATER MAIN.
22. VALVE VAULTS SHALL BE ADJUSTED WITH PRECAST CONCRETE ADJUSTING RINGS TO A MAXIMUM OF 0'-8".
23. HYDROSTATIC TESTS – THE CONTRACTOR SHALL PERFORM HYDROSTATIC TESTS IN ACCORDANCE WITH DIVISION IV, SECTION 41 OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION, AND APPLICABLE PROVISIONS OF AWWA C-600 AND C-605. THE WATER MAINS SHALL MAINTAIN A PRESSURE OF 150 PSI FOR 2 HOURS. THE TEST PRESSURE SHALL NOT DROP MORE THAN 5 PSI FOR THE DURATION OF THE TEST. ALLOWABLE LEAKAGE SHALL BE AS SET FOURTH IN STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION. THE VILLAGE WATER OPERATOR IN CHARGE OR PERSON AUTHORIZED BY THE VILLAGE WATER OPERATOR IN CHARGE SHALL BE PRESENT DURING ALL TESTING.
24. DISINFECTION OF THE WATER MAIN – UPON COMPLETION OF THE NEWLY LAID WATER MAINS, THE WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH THE AMERICAN WATER WORKS ASSOCIATION, PROCEDURE DESIGNATION, AWWA C-651, LATEST EDITION. WATER SHALL BE TESTED TO ASSURE THAT 50 MG/L OF CL2 IS IN DISINFECTED WATER. THE VILLAGE OPERATOR IN CHARGE OR PERSON AUTHORIZED BY THE VILLAGE SHALL WITNESS THE WATER SAMPLING. THE VILLAGE WILL DELIVER THE WATER SAMPLES TO THE LAB TO BE TESTED. THE COST OF THE WATER SAMPLING AND TESTING SHALL BE BORNE BY THE VILLAGE. WATER MUST PASS TWO CONSECUTIVE DAYS OF SAMPLING TESTS BY A STATE APPROVED LAB.
25. WATER VALVES AND FIRE HYDRANTS SHALL ONLY BE OPERATED BY VILLAGE OF NORTH AURORA WATER DEPARTMENT PERSONNEL. PLEASE CONTACT THE WATER DEPARTMENT AT 630-897-2662.

VILLAGE OF NORTH AURORA
25 EAST STATE STREET
NORTH AURORA, IL 60542

NO.	DATE	REVISIONS

LOVEDALE LANE, OFFUTT LANE, CLEARWATER DRIVE, & FOX RIVER CROSSING WATER MAIN IMPROVEMENT

GENERAL NOTES AND CONSTRUCTION SPECIFICATIONS

DATE: JANUARY 2024

SHEET 3 OF 23

SUMMARY OF QUANTITIES

#	DESCRIPTION	UNIT	QUANTITY	Lovedale Lane	Offutt Lane	Clearwater Drive	River Crossing (End of Lovedale to Special Valve Vault)	Woods (Special Valve Vault to Clearwater)	Overall Project / Contingency
WATER MAIN									
1	PRELIMINARY CCTV WATER MAIN INSPECTION, 6-INCH	FOOT	1,860	0	0	1,145	0	700	15
2	PRELIMINARY CCTV WATER MAIN INSPECTION, 8-INCH	FOOT	1,050	0	1,040	0	0	0	10
3	PRELIMINARY CCTV WATER MAIN INSPECTION, 12-INCH	FOOT	1,340	573	0	0	750	0	17
4	CIPP LINING, 6-INCH	FOOT	1,860	0	0	1,145	0	700	15
5	CIPP LINING, 8-INCH	FOOT	1,050	0	1,040	0	0	0	10
6	CIPP LINING, 12-INCH	FOOT	1,340	573	0	0	750	0	17
7	WATER SERVICE REINSTATEMENT	EA	20	10	4	4	0	0	2
8	WATER SERVICE REINSTATEMENT (LARGE DIAMETER)	EA	2	0	2	0	0	0	0
9	WATER MAIN, ZINC COATED D.I.P., CLASS 52 WITH V-BIO POLY WRAP, 12-INCH	FOOT	60	55	0	0	0	0	5
10	CONNECTION TO EXISTING WATER MAIN	EA	2	2	0	0	0	0	0
11	DISCONNECT AND ABANDON EXISTING WATER MAIN	EA	2	2	0	0	0	0	0
12	VALVE VAULT REMOVAL AND REPLACEMENT, 6-INCH	EA	2	0	1	1	0	0	0
13	VALVE VAULT REMOVAL AND REPLACEMENT, 8-INCH	EA	3	0	3	0	0	0	0
14	VALVE VAULT REMOVAL AND REPLACEMENT, 12-INCH	EA	2	2	0	0	0	0	0
15	VALVE BOX REMOVAL AND REPLACEMENT WITH VALVE VAULT, 8-INCH	EA	1	0	1	0	0	0	0
16	VALVE BOX REMOVAL AND REPLACEMENT, 8-INCH	EA	1	1	0	0	0	0	0
17	VALVE VAULT, 6-INCH	EA	2	0	0	1	0	1	0
18	VALVE VAULT, 12-INCH	EA	1	0	0	0	1	0	0
19	VALVE REMOVAL, 6" SPECIAL	EA	1	0	0	0	0	1	0
20	VALVE REMOVAL, 12" SPECIAL	EA	1	0	0	0	1	0	0
21	INSERTION VALVE AND VALVE VAULT, 6-INCH	EA	1	0	0	0	0	0	1
22	INSERTION VALVE AND VALVE VAULT, 8-INCH	EA	1	1	0	0	0	0	0
23	INSERTION VALVE AND VALVE BOX, 6-INCH	EA	1	0	0	0	0	0	1
24	INSERTION VALVE AND VALVE BOX, 8-INCH	EA	1	0	0	0	0	0	1
25	TRACER WIRE ACCESS POINT	EA	1	0	0	0	0	1	0
26	FIRE HYDRANT ASSEMBLY	EA	2	1	0	0	0	1	0
27	REMOVAL AND REPLACEMENT OF FIRE HYDRANT ASSEMBLY	EA	9	1	3	4	1	0	0
28	ABANDON FIRE HYDRANT & PLUG TEE AT WATER MAIN	EA	1	1	0	0	0	0	0
29	NON-SPECIAL, NON-HAZARDOUS SOIL WASTE DISPOSAL - TYPE 1	TON	20	0	0	0	0	0	20
30	NON-SPECIAL, NON-HAZARDOUS SOIL WASTE DISPOSAL - TYPE 2	TON	20	0	0	0	0	0	20
31	FOUNDATION MATERIAL	CU YD	10	0	0	0	0	0	10
32	EXPLORATORY EXCAVATION	EA	28	18	3	4	0	1	2
33	WATER SERVICE CONNECTION, 1 INCH	EA	3	1	0	0	0	0	2
34	WATER SERVICE PIPE, TYPE "K" COPPER, 1-INCH	FOOT	65	25	0	0	0	0	40
35	VALVE BOX TO BE ABANDONED	EA	1	0	0	1	0	0	0
36	WATER MAIN TESTING - PRESSURE AND DISINFECTION	LS	1	0	0	0	0	0	1
SEWER MAIN									
37	SANITARY SEWER SERVICE REPLACEMENT, PVC SDR 26, 6-INCH	FOOT	160	120	0	0	0	0	40
38	CLEAN OUT	EA	8	8	0	0	0	0	0
PAVEMENT RESTORATIONS									
39	HOT-MIX ASPHALT ROADWAY RESTORATION	SQ YD	30	20	0	0	0	0	10
CONCRETE RESTORATIONS									
40	COMBINATION CONCRETE CURB AND GUTTER RESTORATION	FOOT	60	40	0	0	0	0	20
41	PORTLAND CEMENT CONCRETE SIDEWALK RESTORATION	SQ FT	25	0	0	0	0	0	25
42	DETECTABLE WARNING RESTORATION	SQ FT	8	0	0	0	0	0	8
DRIVEWAY RESTORATIONS									
43	HOT-MIX ASPHALT DRIVEWAY RESTORATION	SQ YD	60	40	0	0	0	0	20
44	PORTLAND CEMENT CONCRETE DRIVEWAY RESTORATION	SQ YD	10		0	0	0	0	10
MISC.									
45	RESTORATION	LS	1	0	0	0	0	0	1
46	LANDSCAPE RESTORATION	SQ YD	130	90	0	0	0	0	40
47	DETECTOR LOOP REPLACEMENT	FOOT	74	74	0	0	0	0	0
48	TREE REMOVAL	UNIT	50	0	0	0	0	0	50
49	DUST CONTROL - MECHANICAL SWEEPING	CAL DAY	5	0	0	0	0	0	5

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Checked	BWT	01/24

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LOVEDALE, OFFUTT, CLEARWATER, RIVER CROSSING
WATER MAIN IMPROVEMENT PROJECT
NORTH AURORA, ILLINOIS

WATER MAIN PLAN AND PROFILES

VILLAGE OF NORTH AURORA
Crossroads on the Fox

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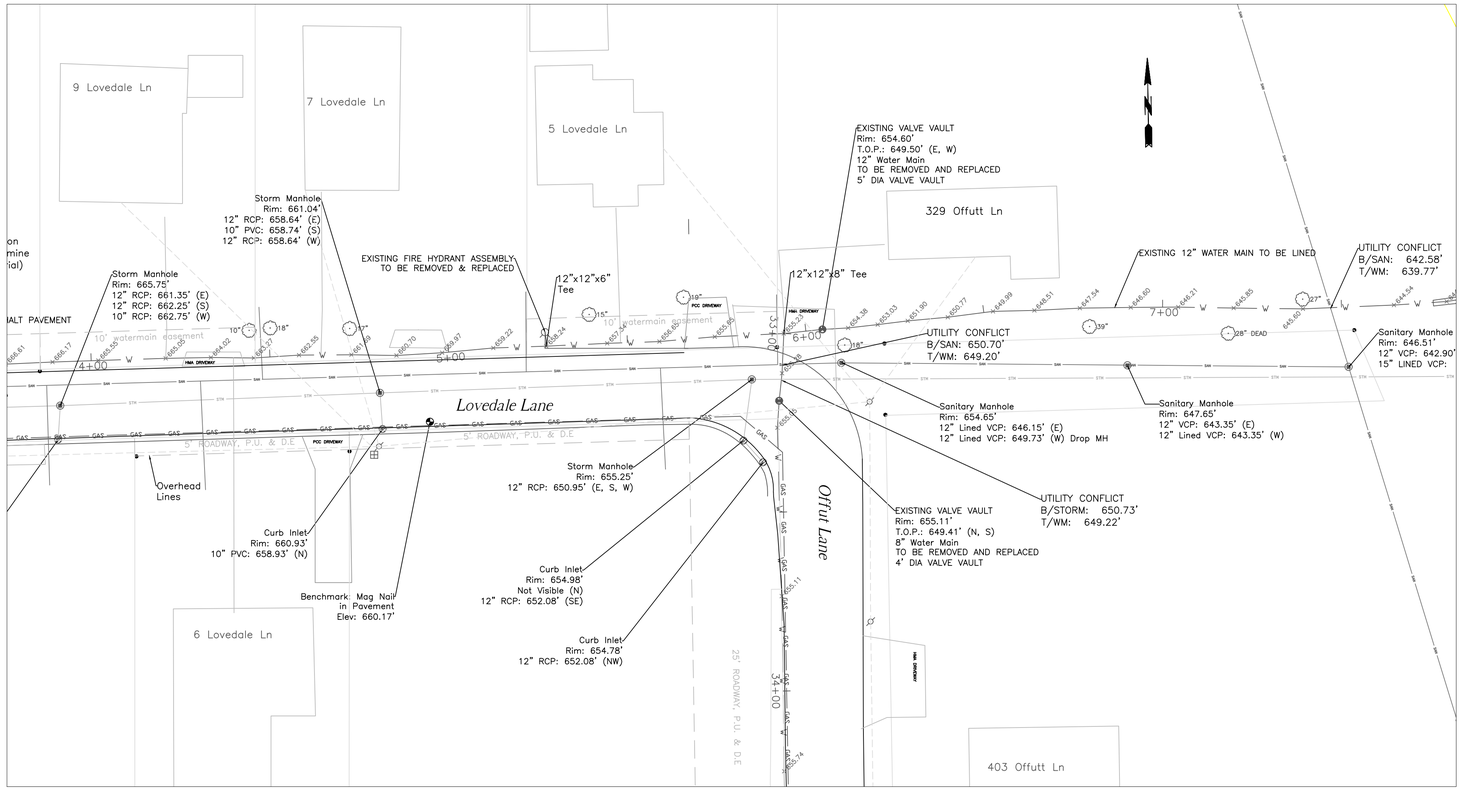

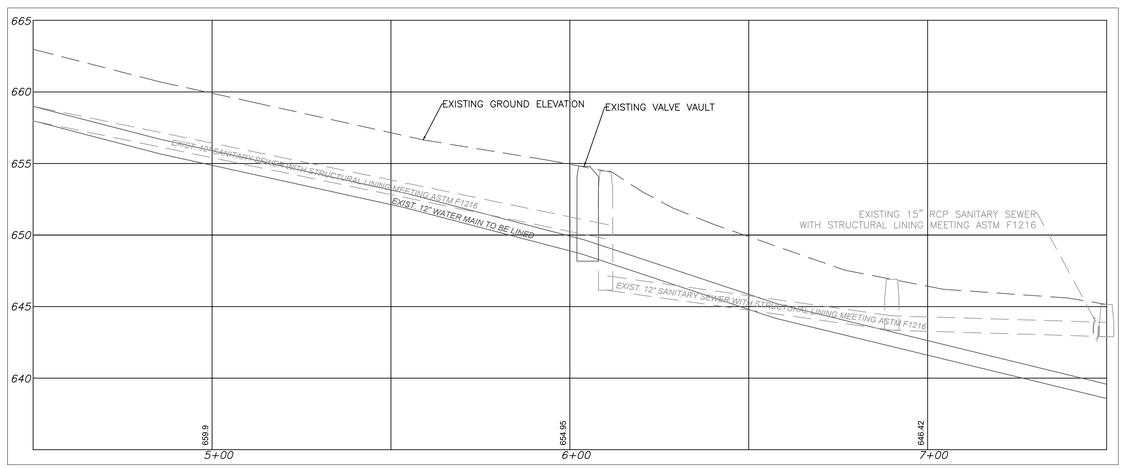

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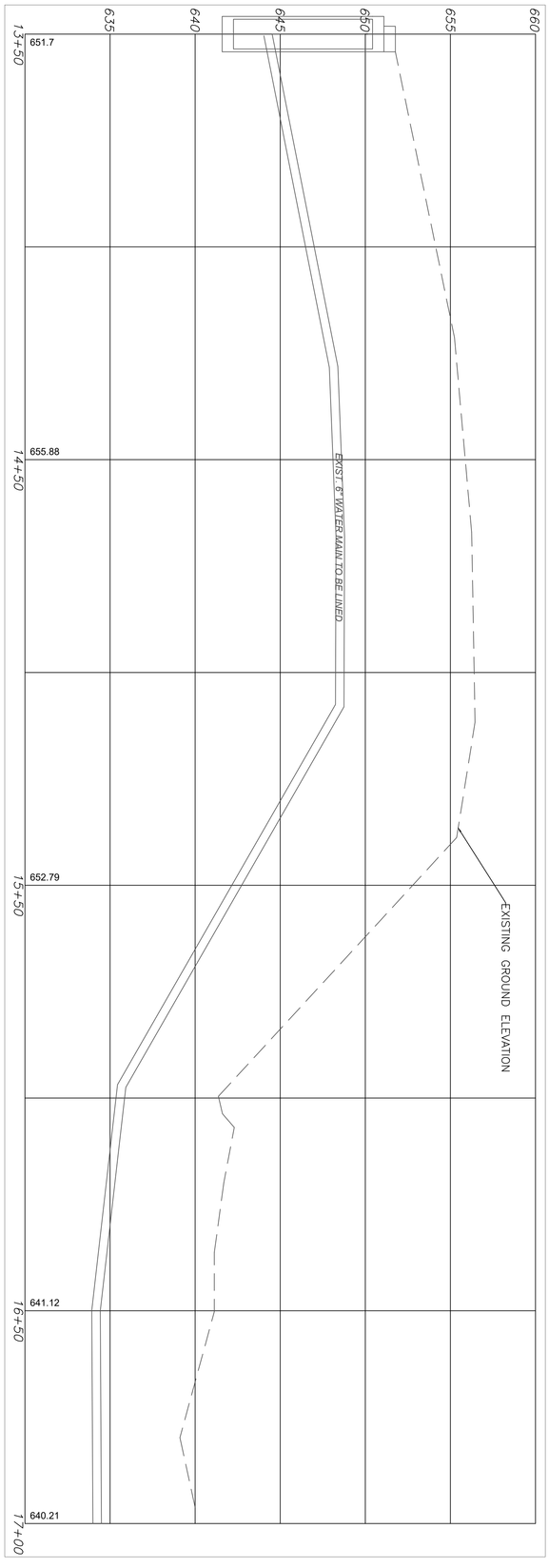

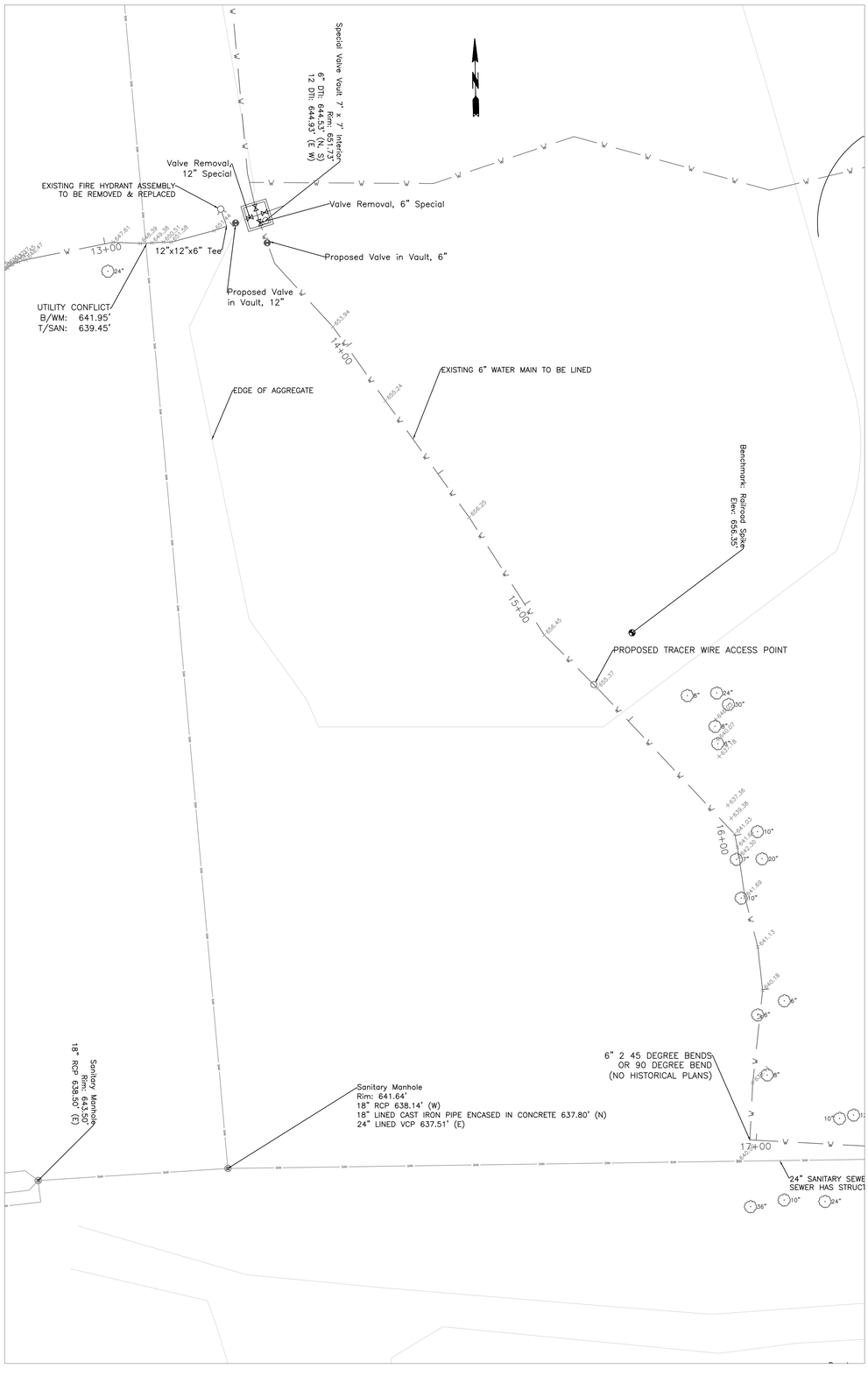

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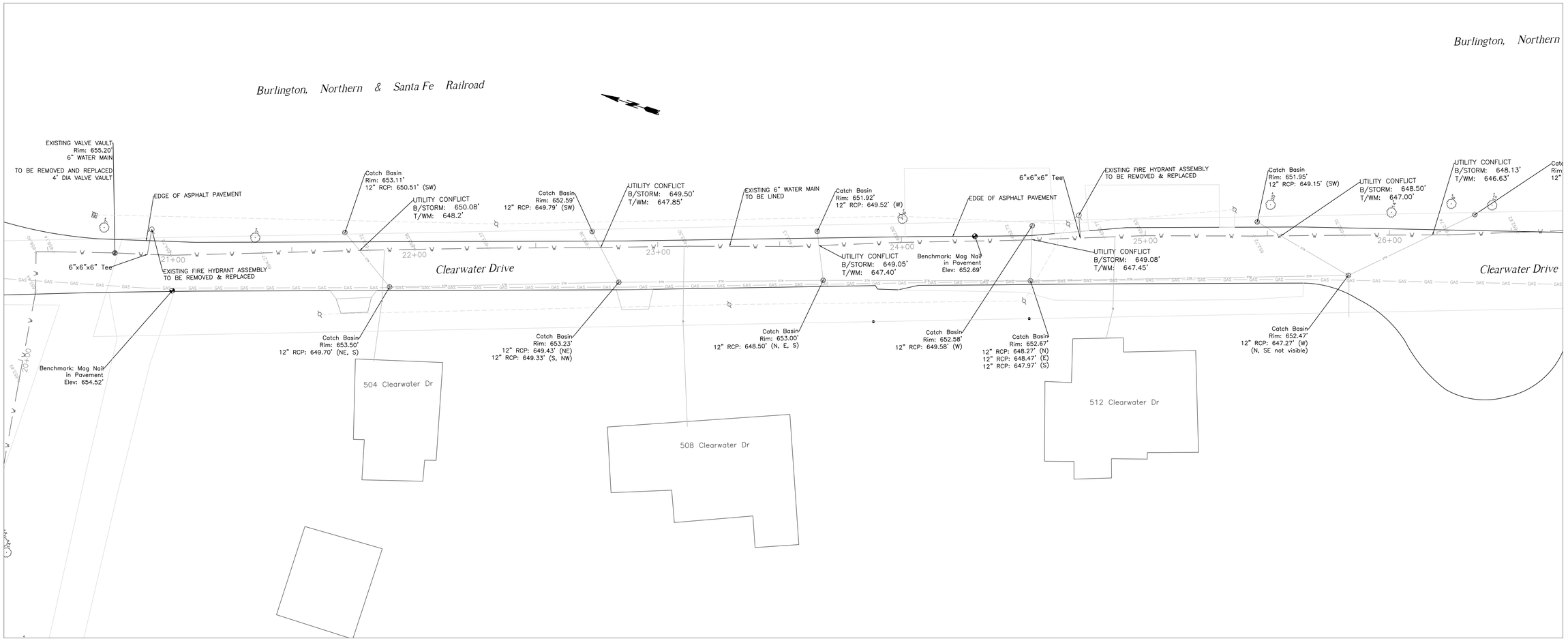

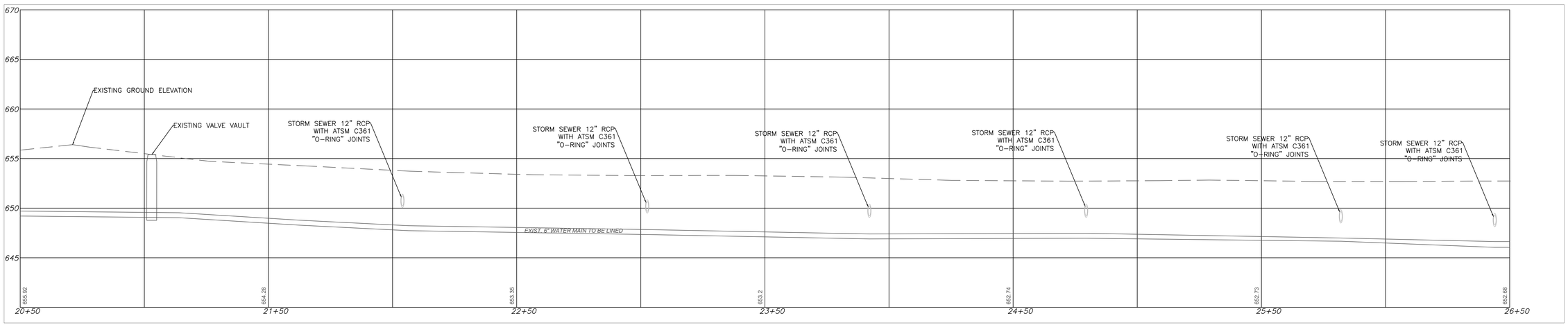

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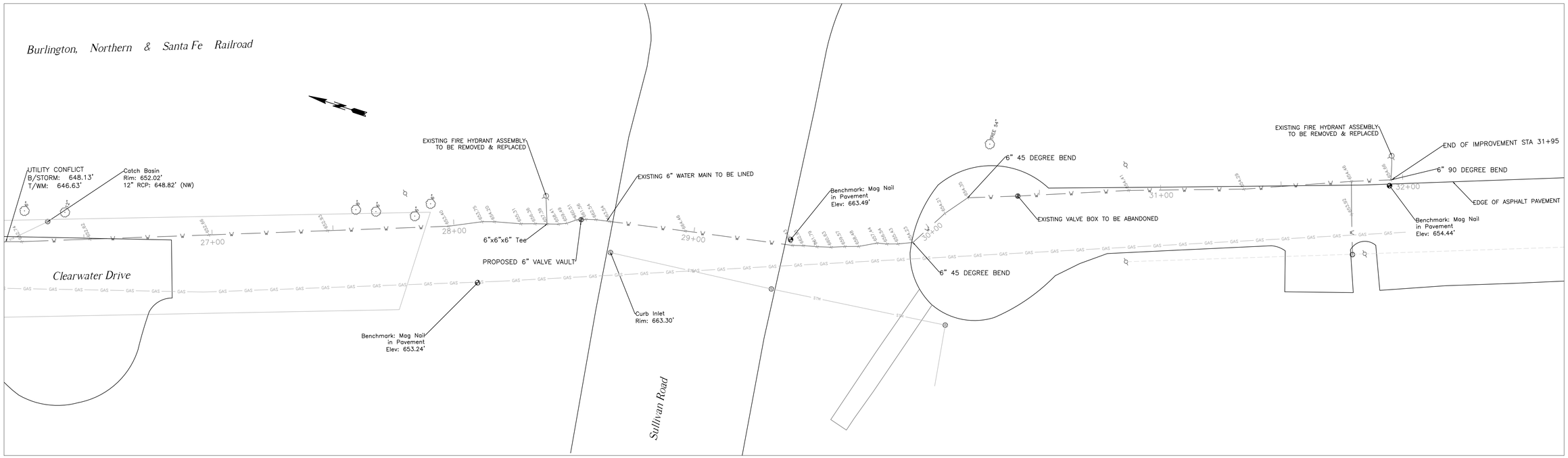

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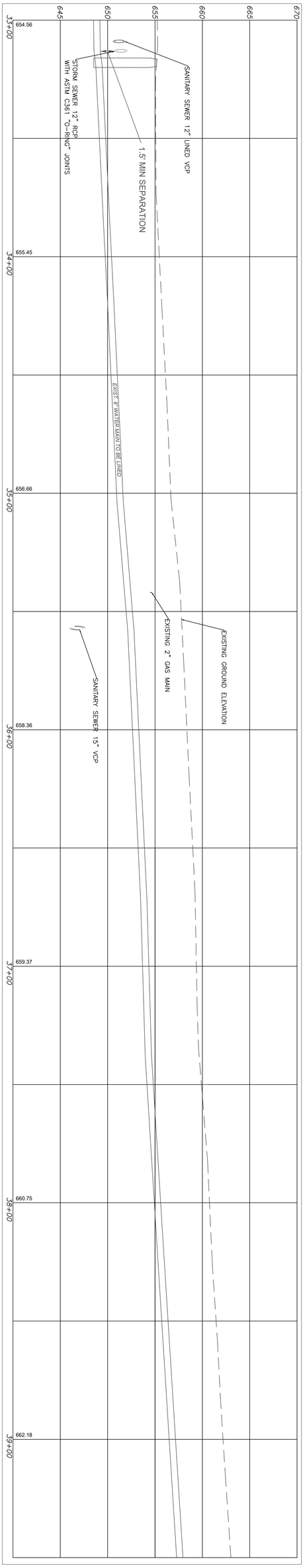
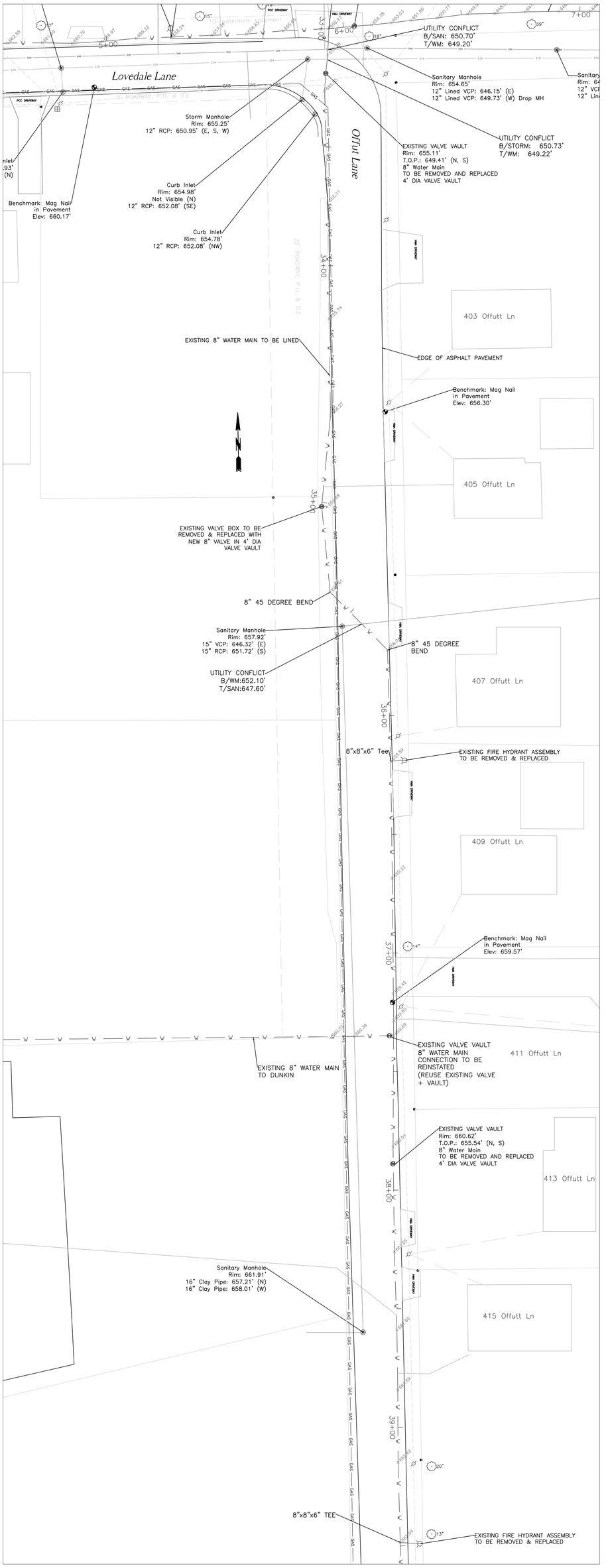




Sheet 12 of 23

File No.

REVISIONS		
Date	Description	Approved

VILLAGE OF NORTH AURORA
Crossroads on the Fox

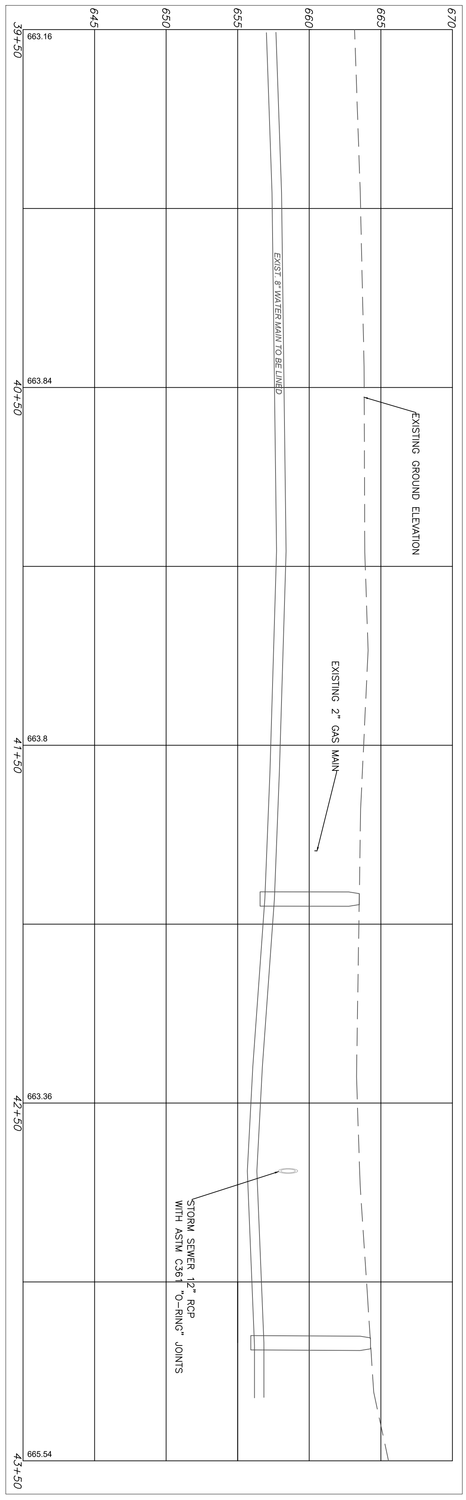
LOVEDALE, OFFUTT, CLEARWATER, RIVER CROSSING
WATER MAIN IMPROVEMENT PROJECT
NORTH AURORA, ILLINOIS

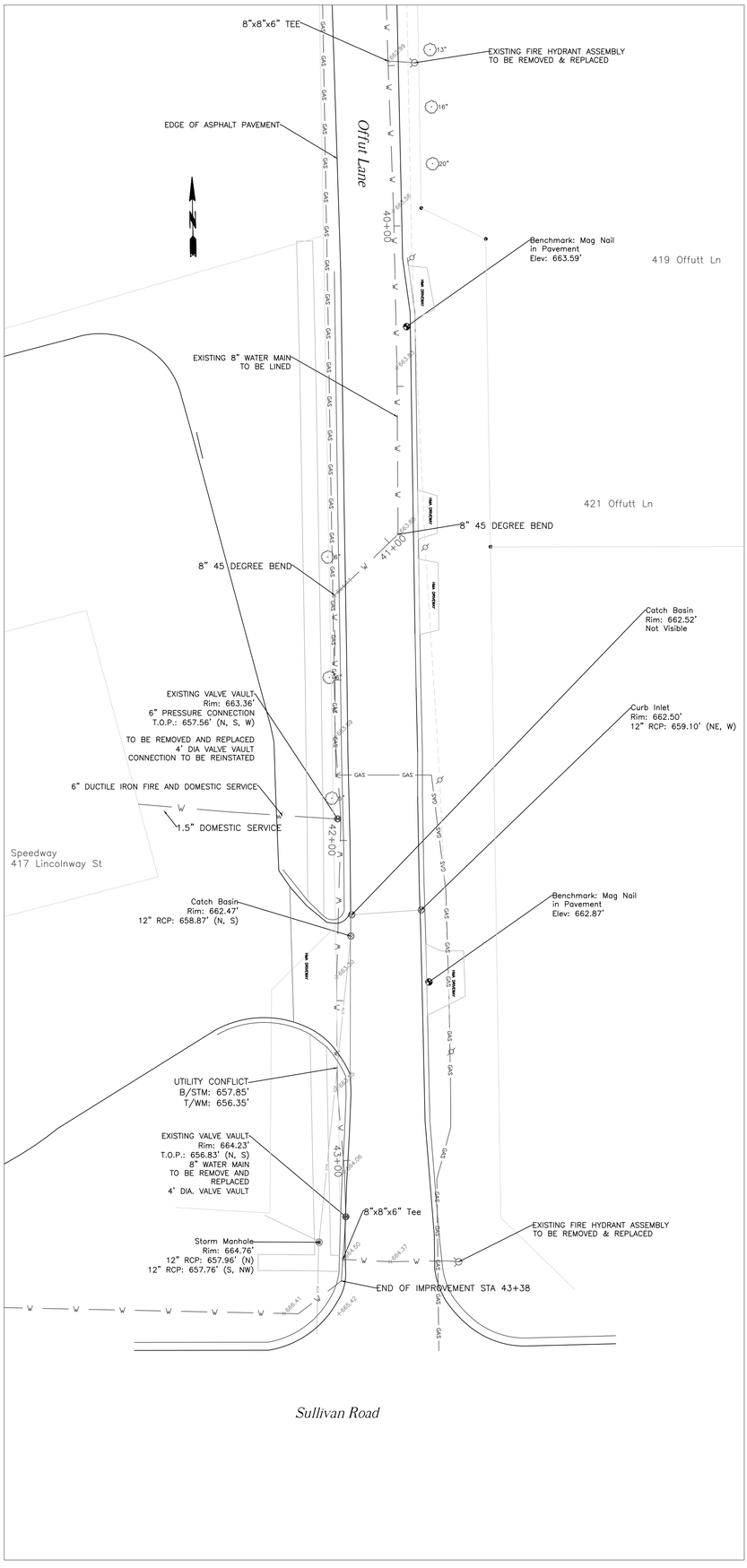
WATER MAIN PLAN AND PROFILES

Designed	BWT	01/24
Drawn	BWT	01/24
Checked	BWT	01/24

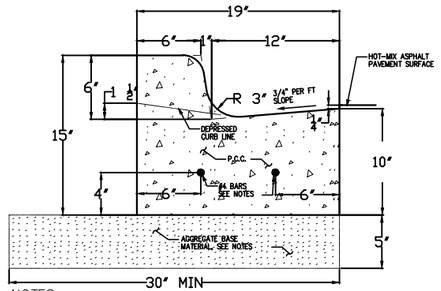
Approved _____ Date ____

Title _____ Job Class JC





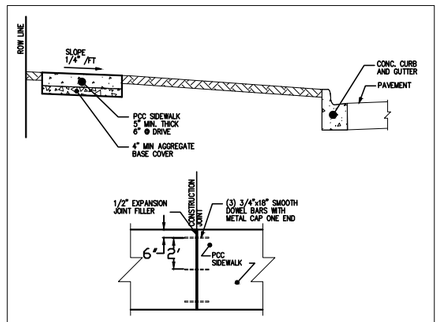
Sheet 13 of 23	File No.	REVISIONS			VILLAGE OF NORTH AURORA Crossroads on the Fox	LOVEDALE, OFFUTT, CLEARWATER, RIVER CROSSING WATER MAIN IMPROVEMENT PROJECT NORTH AURORA, ILLINOIS	Designed BWT 01/24
		Date	Description	Approved			Drawn BWT 01/24
							Checked BWT 01/24
						WATER MAIN PLAN AND PROFILES	Approved _____ Date ____
							Title _____ Job Class JC



NOTES:

1. CURB AND GUTTER TO BE CONSTRUCTED USING PORTLAND CEMENT CONCRETE, CLASS "S" 6 BAG MIX, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI AFTER 14 DAYS. PROVIDE CYLINDERS FOR COLLECTIONS BY ENGINEER.
2. THE MINIMUM GUTTER FLAG THICKNESS SHALL BE 10 INCHES.
3. TWO CONTINUOUS No. 4 REINFORCING BARS BETWEEN EXPANSIONS JOINTS ARE TO BE CONSTRUCTED IN THE CURB AND GUTTER SECTION.
4. STEEL TIE BARS AT 2'-6" CENTER TO BE PLACED IN THE CURB AND GUTTER SECTION CONSTRUCTED ADJACENT TO PCC PAVEMENT.
5. A 1/4" THICK PREFORMED EXPANSION JOINT FILLER CONFORMING TO THE EXACT CROSS SECTION OF THE CONCRETE CURB AND GUTTER SHALL BE PLACED AT 60 FOOT INTERVALS, AT THE P.C. AND P.T. AND AT THE END OF EACH POUR AND 4" ON EACH SIDE OF CURBLINE INLET FRAMES AND 3' FROM THE END OF TAPERED CURB ENDS. TWO 3/4" DIA. DOWEL BARS 18" IN LENGTH, AND PROPERLY GREASED, SHALL BE PLACED AT EACH END EXPANSION JOINT. WHERE NEW CURB ABUTS EXISTING CURB, 3/4" SMOOTH DOWEL BARS SHALL BE DRILLED INTO THE EXISTING CURB AND GUTTER.
6. CONTRACTION JOINTS TO BE PROVIDED AT 10 FOOT INTERVALS SHALL BE CUT OR FORMED BY A METHOD TO BE APPROVED BY THE ENGINEER. SAW CUT CONTRACTION JOINTS SHALL BE SAWED TO A MINIMUM DEPTH OF 2 1/2" ON THE ENTIRE EXPOSED SURFACE OF THE CONCRETE CURB AND GUTTER.
7. AGGREGATE BASE MATERIAL, CA-6 IS TO BE PLACED UNDER THE CURB AND GUTTER SECTION A MINIMUM OF 5 INCHES OR TO THE ADJACENT PAVEMENT'S SUBGRADE ELEVATION WHICHEVER IS THE GREATER.
8. ALL SURFACES, FRONT, TOP AND BACK SHALL BE SPRAYED WITH CURING COMPOUND PER STATE SPECIFICATIONS.

STANDARD B6.12 CURB & GUTTER

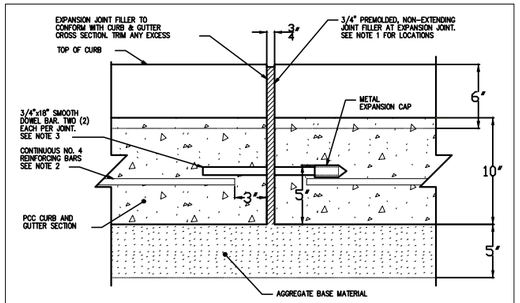


CONSTRUCTION JOINT DETAIL

NOTES:

1. PARKWAY SLOPE SHALL BE A MINIMUM OF 2% AND MAXIMUM OF SLOPE TO BE 6%.
2. SIDEWALK SHALL BE A MINIMUM OF 5" THICK, 6" AT DRIVE WITH WWF.
3. CONTRACTION JOINTS, "V" TYPE, SHALL BE TOOLED IN THE SURFACE OF THE SIDEWALK AT 5 FOOT INTERVALS.
4. EXPANSION JOINTS 1/2" SHALL BE PROVIDED EVERY 50 FEET, AND AT ALL LOCATIONS WHERE SIDEWALK ABUTS CONCRETE CURBS.
5. THE FINISHED SIDEWALK SURFACE SHALL HAVE A BROOM TEXTURE.
6. CONSTRUCTION JOINTS, AS SHOWN, SHALL BE CONSTRUCTED AT ALL TERMINUS ENDS WHERE THE SIDEWALK IS NOT CONSTRUCTED CONTINUOUS.
7. SIDEWALK SURFACE SHALL BE SPRAY CURED WHEN TEMPERATURE IS EXPECTED TO EXCEED 85° THAT DAY.

SIDEWALK DETAIL



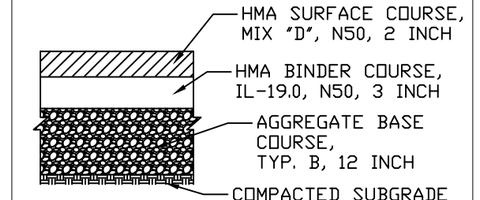
NOTES:

1 EXPANSION JOINTS ARE TO BE CONSTRUCTED AT 60' MAXIMUM SPACING ALL PC'S AND PT'S OF INTERSECTION RETURNS AND ALL OTHER SHORT RADIUS SECTIONS, AND THREE FEET FROM DRAINAGE FRAMES TO BOX OUT THE STRUCTURES.

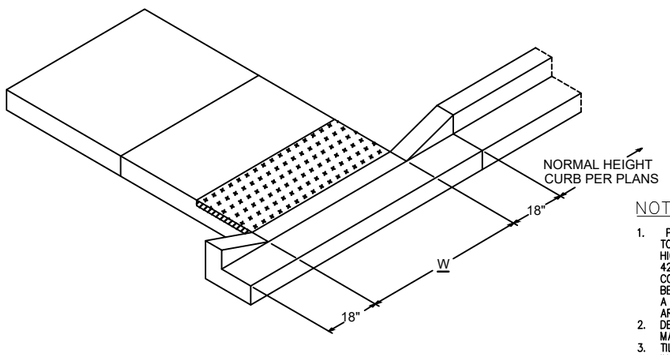
2 CURB AND GUTTER CONTINUOUS REINFORCING BARS ARE NOT TO RUN THROUGH THE EXPANSION JOINT.

3 DOWEL BARS SHALL BE PARALLEL TO CURB AND GUTTER AND GREASED AT TIME OF CONSTRUCTION.

TYPICAL SECTION CURB & GUTTER EXPANSION JOINT



HMA PAVEMENT LOCAL STREET CROSS SECTION DETAIL



NOTES:

1. PLACEMENT OF DETECTABLE WARNING TILES SHALL ADHERE TO LOCATIONS AND SETBACKS AS SHOWN IN APPLICABLE IDOT HIGHWAY STANDARDS INCLUDING 424001, 424006, 424011, 424016, 424021, AND 424026 FOR VARIOUS FIELD CONDITIONS. SIDEWALK RAMP WIDTH (W) AND LAYOUT SHALL BE ACCORDING TO THESE IDOT HIGHWAY STANDARDS, EXCEPT A SIDE CURB SHALL NOT BE CONSTRUCTED IN LANDSCAPED AREAS.
2. DETECTABLE WARNING TILES SHALL BE BRICK RED AND MANUFACTURED BY ADA SOLUTIONS, INC.
3. TILES SHALL BE INSTALLED PER MANUFACTURER INSTRUCTIONS.
4. THE COLORING AND STAMPING OF CONCRETE WILL NOT BE ALLOWED.

CURB HEAD TAPER AT PEDESTRIAN RAMPS FOR SIDEWALK IN LANDSCAPED AREAS

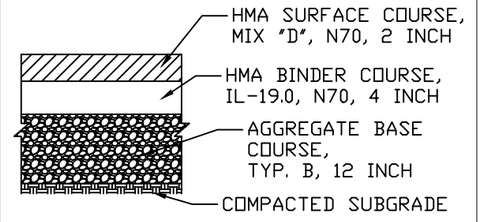
HOT-MIX ASPHALT MIXTURE REQUIREMENTS:

OPERATION	MIXTURE TYPE	AIR VOIDS @Ndes
IL 31 PATCHING	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5mm), 2.0"	4% @ 70 Gyr.
	HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N70, 4.0"	4% @ 70 Gyr.
LOCAL ROAD PATCHING	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5mm), 2.0"	4% @ 50 Gyr.
	HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N50, 3.0"	4% @ 50 Gyr.
DRIVEWAYS	HOT-MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT, 2" (HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5mm) 2")	4% @ 50 Gyr.

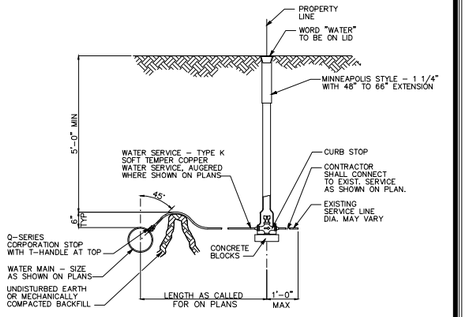
THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76 -22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64 -22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS



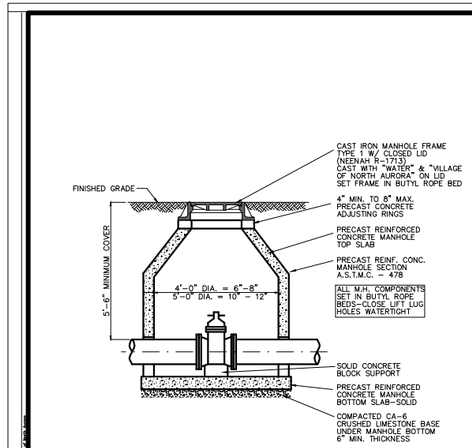
HMA PAVEMENT IL 31 CROSS SECTION DETAIL



NOTE:
THE CONTRACTOR SHALL INQUIRE FROM WATER SUPERINTENDENT OR OWNER AS TO THE EXACT STYLE, TYPE & MANUFACTURE OF CORPORATION STOPS, CURB STOPS & CURB BOXES.

WATER SERVICE INSTALLATION DETAIL

REVISIONS	DATE: APRIL 1996	VILLAGE OF NORTH AURORA SUBDIVISION CONTROL ORDINANCE STANDARD DRAWINGS	
SEPTEMBER 2006	SCALE: NONE		
FEBRUARY 2007	DRAWN BY: G. RIOS	WATER SERVICE INSTALLATION DETAIL	NO.



WATERMAIN VALVE VAULT TYPE – A

NOTE: ALL BOLTS SHALL BE STAINLESS STEEL.

REVISIONS	DATE: APRIL 1996	VILLAGE OF NORTH AURORA SUBDIVISION CONTROL ORDINANCE STANDARD DRAWINGS	
SEPTEMBER 2006	SCALE: NONE		
FEBRUARY 2007	DRAWN BY: G. RIOS	WATERMAIN VALVE VAULT TYPE – A	NO.
AUGUST 2007			

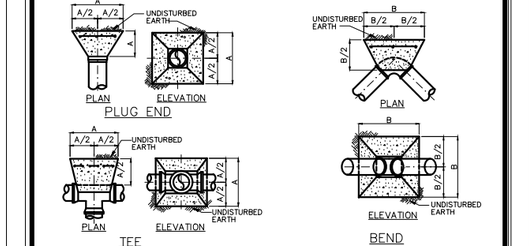


TABLE OF "A" DIMENSION (IN FEET)

TEST PRESSURE (PSI)	PIPE SIZE (NOMINAL DIA. IN INCHES) 4	6	8	10	12	16	20
100	1'–2"	1'–7"	2'–1"	2'–7"	3'–1"	4'–0"	5'–0"
115	1'–3"	1'–9"	2'–3"	2'–9"	3'–3"	4'–4"	5'–4"
130	1'–3"	1'–10"	2'–5"	2'–11"	3'–6"	4'–7"	5'–8"
150	1'–4"	2'–0"	2'–7"	3'–2"	3'–9"	4'–11"	6'–1"

TABLE OF "B" DIMENSION (IN FEET)

TEST PRESSURE (PSI)	BEND DEGREES	PIPE SIZE (NOMINAL DIA. IN INCHES) 4	6	8	10	12	16	20
100	90°	1'–4"	1'–11"	2'–6"	3'–1"	3'–8"	4'–9"	5'–11"
	45°	1'–0"	1'–5"	1'–10"	2'–3"	2'–8"	3'–5"	4'–4"
	22–1/2°	0'–9"	1'–0"	1'–4"	1'–7"	1'–11"	2'–5"	3'–2"
	11–1/4°	0'–6"	0'–8"	1'–0"	1'–2"	1'–4"	1'–10"	2'–3"
115	90°	1'–5"	2'–1"	2'–8"	3'–3"	3'–11"	5'–1"	6'–4"
	45°	1'–1"	1'–6"	2'–0"	2'–5"	2'–10"	3'–9"	4'–8"
	22–1/2°	0'–9"	1'–1"	1'–5"	1'–9"	2'–1"	2'–8"	3'–4"
	11–1/4°	0'–7"	0'–9"	1'–0"	1'–3"	1'–6"	1'–11"	2'–5"
130	90°	1'–6"	2'–2"	2'–10"	3'–6"	4'–2"	5'–5"	6'–9"
	45°	1'–2"	1'–7"	2'–1"	2'–7"	3'–1"	4'–0"	5'–0"
	22–1/2°	0'–10"	1'–2"	1'–6"	1'–10"	2'–2"	2'–10"	3'–7"
	11–1/4°	0'–7"	0'–10"	1'–1"	1'–4"	1'–7"	2'–0"	2'–6"
150	90°	1'–8"	2'–4"	3'–1"	3'–9"	4'–5"	5'–10"	7'–3"
	45°	1'–3"	1'–9"	2'–3"	2'–9"	3'–3"	4'–4"	5'–4"
	22–1/2°	1'–0"	1'–3"	1'–8"	2'–0"	2'–4"	3'–1"	3'–10"
	11–1/4°	0'–8"	0'–11"	1'–2"	1'–5"	1'–8"	2'–2"	2'–9"

NOTES:
1. THRUST BLOCKS SHALL BE CONSTRUCTED OF CLASS "X" CONCRETE
2. REINFORCING STEEL SHALL BE: FOR TEST PRESSURES OF 100 PSI=#4 @ 12" E.W.
   115 PSI=#4 @ 12" E.W.
   130 PSI=#5 @ 12" E.W.
   150 PSI=#5 @ 12" E.W.
3. THRUST BLOCK SIZE FOR TEE DETERMINED BY SMALLEST DIAMETER OF TEE AND TEST PRESSURE OF LINE. ALL THRUST BLOCK SIZES SHOWN ARE BASED ON A MINIMUM SOIL BEARING PRESSURE OF 1500 PSI (STANDARD PROCTOR). SEE PLAN SHEETS FOR SPECIFIC REQUIREMENTS IN SPECIAL SOILS AND ROCK AREAS.

THRUST BLOCK DETAILS

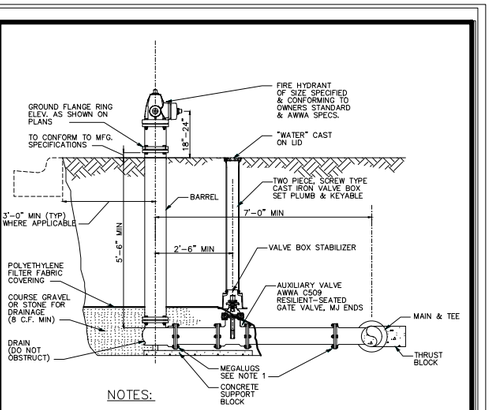
REVISIONS	DATE: APRIL 1996	VILLAGE OF NORTH AURORA SUBDIVISION CONTROL ORDINANCE STANDARD DRAWINGS	
SEPTEMBER 2006	SCALE: NONE		
FEBRUARY 2007	DRAWN BY: G. RIOS	THRUST BLOCK DETAILS	NO.

RESTRAINED JOINTS
(EACH DIRECTION FROM M.J. FITTING)

TABLE OF "B" DIMENSION (IN FEET)	WATERMAIN SIZE 8"	10"	12"
90 53/64	2	3	3
45 53/64	1	1	2
22 1/2 53/64	1	1	1
TEE (ALL LEGS)	1	2	3
DEAD END PLUG	4	5	6
8" REDUCER x –	—	= 2	3
10" REDUCER x –	—	—	= 3

NOTE:
ALL 16" WATERMAIN RESTRAINT AS DIRECTED BY VILLAGE ENGINEER

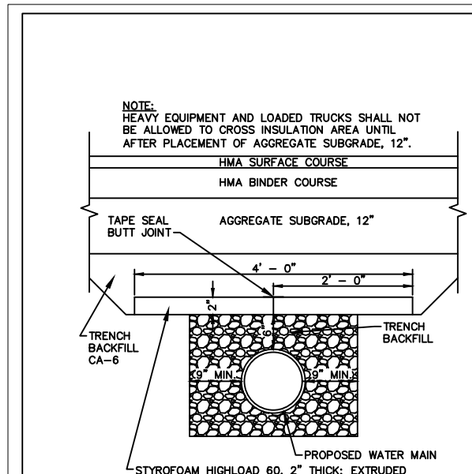
REVISIONS	DATE: APRIL 1996	VILLAGE OF NORTH AURORA SUBDIVISION CONTROL ORDINANCE STANDARD DRAWINGS	
SEPTEMBER 2006	SCALE: NONE		
FEBRUARY 2007	DRAWN BY: G. RIOS	WATER MAIN RESTRAINED JOINTS TABLE	NO.



NOTES:
1. WATERMAIN TEE, AUXILIARY VALVE, AND HYDRANT TO BE ASSEMBLED USING MEGALUG TYPE RESTRAINED JOINTS.
2. FIRE HYDRANT TO BE SET PLUMB AND AT THE ELEVATION SHOWN ON THE PLANS OR AS SPECIFIED BY THE ENGINEER.
3. FIRE HYDRANTS ON WATERMAIN 12" DIA. AND LARGER SHALL BE CLOW MEDALLION HYDRANTS. FIRE HYDRANTS ON 6" TO 10" DIA. SHALL BE WATEROUS PACER, WB67-250 HYDRANTS.
4. FIRE HYDRANTS REQUIRE 4" "STORTZ" NOZZLE AT STREAMER PORT, COMMERCIAL FIRE HYDRANTS (DOUBLE PUMPER) 1 – 4" " STORTZ" AND 1 – 4 1/2" STANDARD THREAD.
5. PROVIDE FIRE HYDRANTS ADJUSTMENTS IF NEEDED TO MATCH EXISTING GROUND OR PROPOSED ELEVATIONS
6. ALL BOLTS SHALL BE STAINLESS STEEL
7. HYDRANT VALVE STEM SHALL BE STAINLESS STEEL.

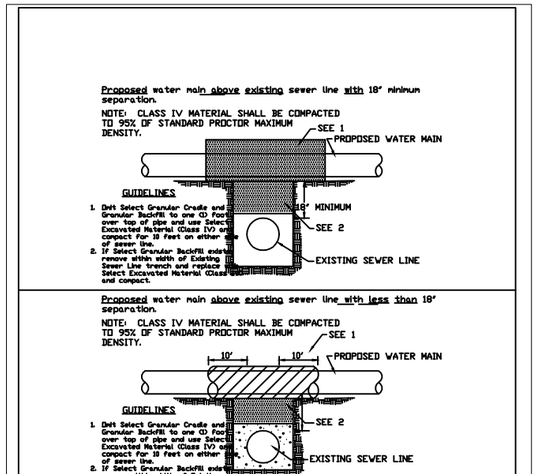
FIRE HYDRANT ASSEMBLY DETAIL

REVISIONS	DATE: APRIL 1996	VILLAGE OF NORTH AURORA SUBDIVISION CONTROL ORDINANCE STANDARD DRAWINGS	
SEPTEMBER 2006	SCALE: NONE		
FEBRUARY 2007	DRAWN BY: G. RIOS	FIRE HYDRANT ASSEMBLY DETAIL	NO.
OCTOBER 2022			



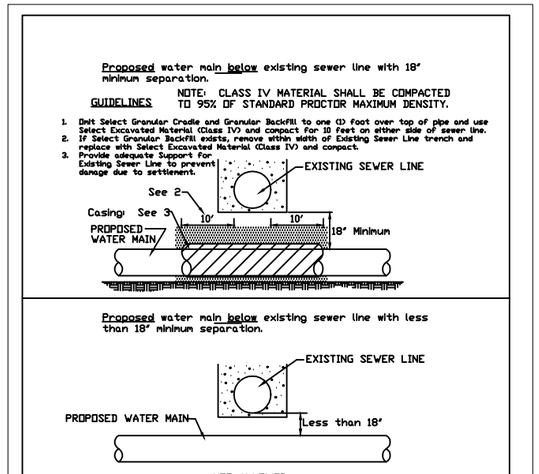
WATER MAIN INSULATION DETAIL

VILLAGE OF NORTH AURORA	SCALE: N.T.S.		DRAWING NUMBER:	DRAWN BY: BWT
	DATE: 6/24/2022			REVISED:



WATER & SEWER SEPARATION REQUIREMENTS (VERTICAL)

VILLAGE OF NORTH AURORA	SCALE: N.T.S.		DRAWING NUMBER:	DRAWN BY: BWT
	DATE: 6/24/2022			REVISED:



WATER & SEWER SEPARATION REQUIREMENTS (VERTICAL)

VILLAGE OF NORTH AURORA	SCALE: N.T.S.		DRAWING NUMBER:	DRAWN BY: BWT
	DATE: 6/24/2022			REVISED:

VILLAGE OF NORTH AURORA
25 EAST STATE STREET
NORTH AURORA, IL 60542

NO.	DATE	REVISIONS

LOVEDALE LANE, OFFUTT LANE, CLEARWATER DRIVE, & FOX RIVER CROSSING WATER MAIN IMPROVEMENT

CONSTRUCTION DETAILS

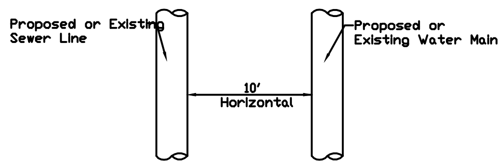
DATE: JANUARY 2024

SHEET 15 OF 23

Plotted: February 6, 2024 @ 9:39 AM By: Brandon Tonarelli – Tab: CONSTRUCTION DETAILS (2)

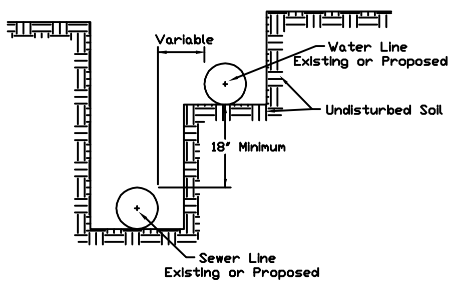
Path: S:\8 WATER\ DISTRIBUTION SYSTEM\RIVER CROSSING\CAD DESIGN FILES\LOVEDALE, OFFUTT, CLEARWATER, RIVER CROSSING WM CONSTRUCTION DETAILS FOR BID

Proposedsewer (or water) is located 10 feet or more from existing water (or sewer).



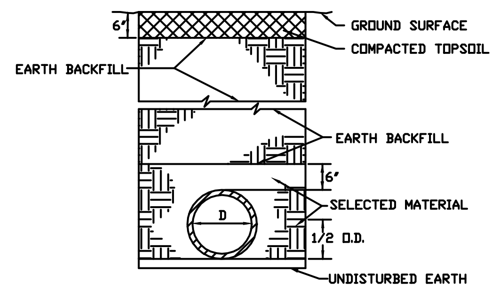
PLAN VIEW

Proposed sewer (or water) is located less than 10 feet from existing water (or sewer).



WATER & SEWER SEPARATION REQUIREMENTS (HORIZONTAL)

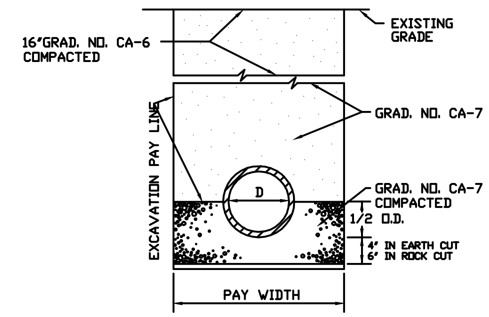
VILLAGE OF NORTH AURORA	SCALE: N.T.S.		DRAWING NUMBER:	DRAWN BY: BWT
	DATE: 6/24/2022			REVISED:



PAY WIDTH:
4.17' FOR 12"
3.97' FOR 10"
3.78' FOR 8"
3.58' FOR 6"

WATER MAIN TRENCH SECTION IN GRASSED AREAS

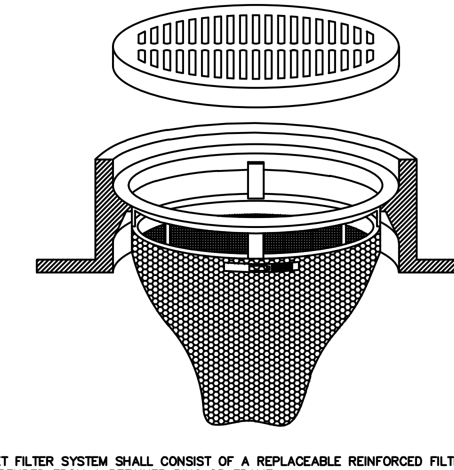
VILLAGE OF NORTH AURORA	SCALE: N.T.S.		DRAWING NUMBER:	DRAWN BY: BWT
	DATE: 6/24/2022			REVISED:



PAY WIDTH:
3.1' FOR SERVICE
3.4' FOR 4"
3.6' FOR 6"
3.8' FOR 8"
4.0' FOR 10"
4.2' FOR 12"

WATER MAIN TRENCH SECTION FOR PAVED AREAS & DRIVEWAYS

VILLAGE OF NORTH AURORA	SCALE: N.T.S.		DRAWING NUMBER:	DRAWN BY: BWT
	DATE: 6/24/2022			REVISED:



NOTES:

1. INLET FILTER SYSTEM SHALL CONSIST OF A REPLACEABLE REINFORCED FILTER BAG SUSPENDED FROM A RETAINER RING OR FRAME.
2. INLET FILTER APPROVED MANUFACTURERS:
   MARATHON MATERIALS – CATCH-ALL FILTERS,
   LANG INDUSTRIES – DRAIN FILTERS,
   IPP – INLET FILTERS,
   OR ENGINEER APPROVED EQUAL.
3. THE FILTER BAG SHALL BE CONSTRUCTED OF A NON-WOVEN POLYPROPYLENE FILTER GEOTEXTILE FABRIC WITH A MINIMUM WEIGHT OF 4 OZ./SQ.YD., A MINIMUM FLOW RATE OF 145 GAL./MIN./SQ.FT., AND DESIGNED FOR A MINIMUM SILT AND DEBRIS CAPACITY OF 2 CU. FT. THE FILTER BAG SHALL BE REINFORCED WITH A POLYESTER MESH FABRIC WITH A MINIMUM WEIGHT OF 4 OZ./SQ.YD.
4. THE FILTER BAG SHALL BE SUSPENDED FROM A GALVANIZED STEEL RING OR FRAME, CONFORMING TO ASTM-A36, UTILIZING A STAINLESS STEEL BAND AND LOCKING CLAMP. THE FRAME SHALL BE DESIGNED WITH AN OVERFLOW FEATURE TO PREVENT ANY PONDING DURING HEAVY RAINFALL.

INLET FILTER

VILLAGE OF NORTH AURORA	SCALE: N.T.S.		DRAWING NUMBER:	DRAWN BY: BWT
	DATE: 6/24/2022			REVISED:

R.O.W. & REMAINING GRASSED AREA: CLASS 1 SEEDING MIXTURE
PERMANENT SEEDING MIXTURE – 50 LBS./AC. KENTUCKY BLUEGRASS
30 LBS./AC. PERENNIAL RYEGRASS
20 LBS./AC. CREEPING RED FESCUE
TEMPORARY SEEDING MIXTURE – 150 LBS./AC. RYE OR WHEAT
100 LBS./AC. OATS

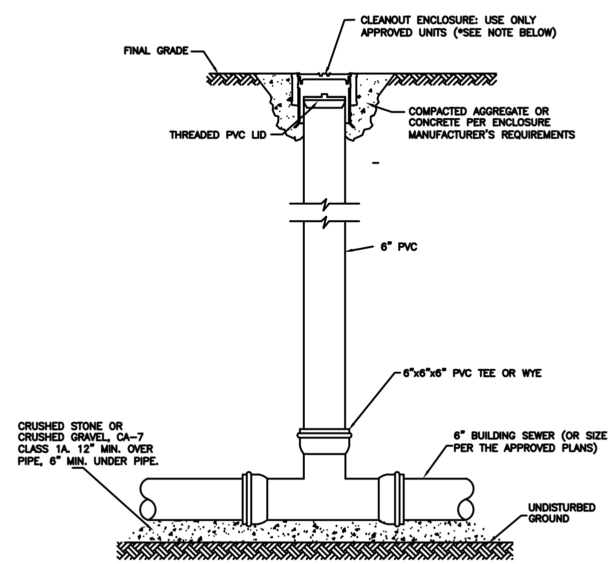
GRASSED WATERWAY AREA: CLASS 5 SEEDING MIXTURE
PERMANENT SEEDING MIXTURE – 15 LBS./AC. KENTUCKY BLUEGRASS
15 LBS./AC. SMOOTH BROMEGRASS
TEMPORARY SEEDING MIXTURE – 150 LBS./AC. RYE OR WHEAT
100 LBS./AC. OATS

SEEDING SCHEDULE	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
PERMANENT SEEDING MIXTURE												
NON IRRIGATED			■ (½)	■	■			■	■			
IRRIGATED			■ (½)	■	■	■	■	■	■			
DORMANT (DOUBLE RATE)	■	■	■ (½)								■	■
TEMPORARY SEEDING MIXTURE												
RYE OR WHEAT							■	■	■			
OATS			■ (½)	■	■	■						

FERTILIZER MIXTURE FOR PROPOSED SEEDING AREAS
NITROGEN (N) 120 LBS./AC.
PHOSPHORUS (P) 52 LBS./AC. OR 120 LBS./AC. P_2O_5
POTASSIUM (K) 100 LBS./AC. OR 120 LBS./AC. K_2O

SEEDING INFORMATION & SCHEDULE

VILLAGE OF NORTH AURORA	SCALE: N.T.S.		DRAWING NUMBER:	DRAWN BY: BWT
	DATE: 6/24/2022			REVISED:

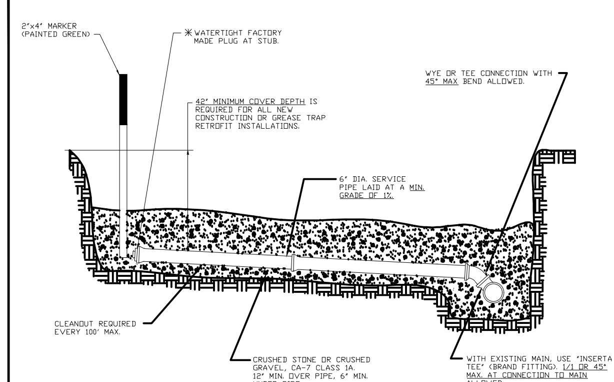


NOTE

* AN APPROVED ENCLOSURE IS REQUIRED WHERE ANY CLEANOUT IS INSTALLED WITHIN OR NEAR ANY PAVED SURFACE. IN NON-PAVED AREAS WHERE DAMAGE TO A CLEANOUT MAY OCCUR, ENCLOSURE(S) MAY BE REQUIRED AT THE DISCRETION OF THE DISTRICT.

SANITARY SERVICE CLEAN OUT

Fox Metro Water Reclamation District	DESIGNED F.K./F.G.	REVISION	2023
	DRAWN STAFF	A NEW DETAIL	4/13/2021
	APPROVED F.K.		
	DATE 4/4/2021		
	SCALE N.T.S.		
	SHEET 1	CAD DWG.	REVISION A
	OF 1	JOB NO.	



✳ ALL BUILDING CONNECTIONS ARE REQUIRED TO BE OVERHEAD. STUBS AT THE RIGHT OF WAY SHALL BE CONSTRUCTED TO NO DEEPER THAN 6'-7'. WHERE CONFLICTS EXIST BETWEEN THE WATERMAIN (OR WATER SERVICES) AND SANITARY SERVICES, INSTALL SANITARY TO MAXIMUM DEPTH TO AVOID CONFLICT. IN THE EVENT OF CONFLICTS, REFER TO "77 ILL. ADMIN. CODE PART 890, ILLINOIS PLUMBING CODE", LATEST EDITION.

NOTE

SELECT GRANULAR BACKFILL, REQUIRED UNDER PAVED AREAS, TO BE APPROVED BY APPROPRIATE CITY OR VILLAGE.

GREATER THAN 45 ° CONNECTION AT MAIN NOT ALLOWED

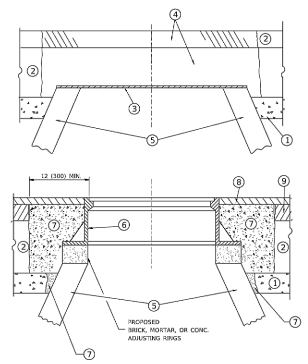
SANITARY SERVICE CONNECTION

Fox Metro Water Reclamation District	DESIGNED FMWRD	REVISION	2023
	DRAWN KZ	F Note Revisions	04/29/08
	APPROVED KZ, MF	G Note Revisions	08/10/12
	DATE 05-12-00	H Overhead & Misc. Note Revisions	02/24/17
	SCALE NTS	I Depth of stub at R.O.W. note rev.	07/23/2020
	SHEET 1	CAD DWG.	REVISION I
	OF 1	JOB NO.	

VILLAGE OF NORTH AURORA 25 EAST STATE STREET NORTH AURORA, IL 60542	NO. / DATE / REVISIONS	LOVEDALE LANE, OFFUTT LANE, CLEARWATER DRIVE, & FOX RIVER CROSSING WATER MAIN IMPROVEMENT	CONSTRUCTION DETAILS	DATE: JANUARY 2024 SHEET 16 OF 23

Plotted: February 6, 2024 @ 9:40 AM By: Brandon Tonarelli – Tab: CONSTRUCTION DETAILS (3)

Path: S:\B WATER\1 DISTRIBUTION SYSTEM\RIVER CROSSING\CAD DESIGN FILES\LOVEDALE, OFFUTT, CLEARWATER, RIVER CROSSING WM CONSTRUCTION DETAILS FOR BID



NOTES

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1½ (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1 * CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

LEGEND

1. SUB-BASE GRANULAR MATERIAL
2. EXISTING PAVEMENT
3. 36 (900) DIAMETER METAL PLATE
4. PROPOSED CRUSHED STONE AND HMA SURFACE MIX
5. EXISTING STRUCTURE
6. FRAME AND LID (SEE NOTES)
7. CLASS PP-1 *CONCRETE
8. PROPOSED HMA SURFACE COURSE
9. PROPOSED HMA BINDER COURSE

LOCATION OF STRUCTURES

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

BASIS OF PAYMENT

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

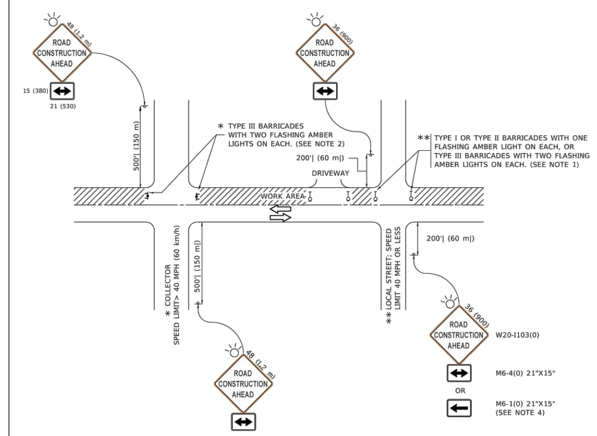
THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION — DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING — BD600-03 (BD-8) — SCALE: NONE — SHEET 1 OF 1 SHEETS

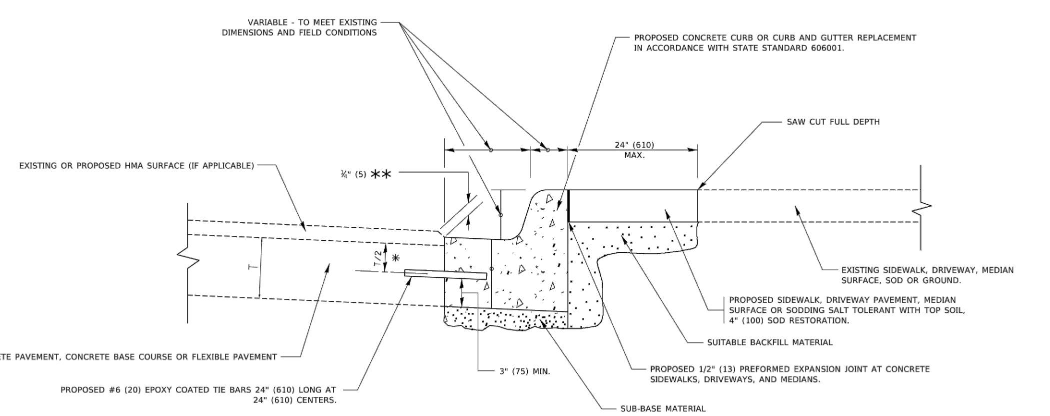


NOTES:

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
   a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
   a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in inches (millimeters) unless otherwise shown.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION — TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS — TC-10 — SCALE: NONE — SHEET 1 OF 1 SHEETS



* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

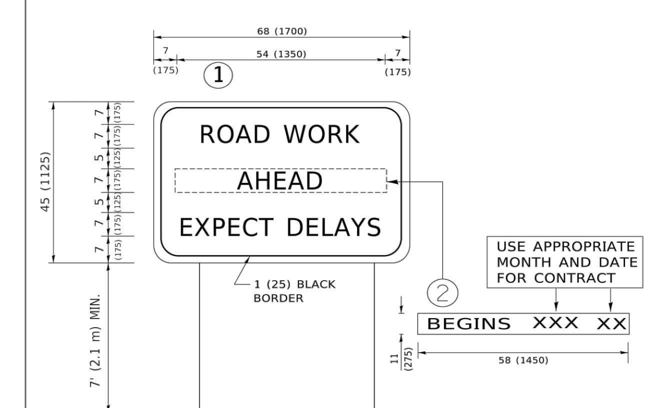
** IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

DESIGNED - A. HOUSEH; DATE - 03-11-94; REVISED - A. ABBAS 03-21-97; REVISED - M. GOMEZ 01-22-01; REVISED - R. BORO 12-15-09; REVISED - K. SMITH 07-11-19

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION — CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT — BD600-06 (BD-24) — SCALE: NONE — SHEET 1 OF 1 SHEETS



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN (1) WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL (2) SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION — ARTERIAL ROAD INFORMATION SIGN — TC-22 — SCALE: NONE — SHEET 1 OF 1 SHEETS

VILLAGE OF NORTH AURORA
25 EAST STATE STREET
NORTH AURORA, IL 60542

NO.	DATE	REVISIONS

LOVEDALE LANE, OFFUTT LANE, CLEARWATER DRIVE, & FOX RIVER CROSSING WATER MAIN IMPROVEMENT

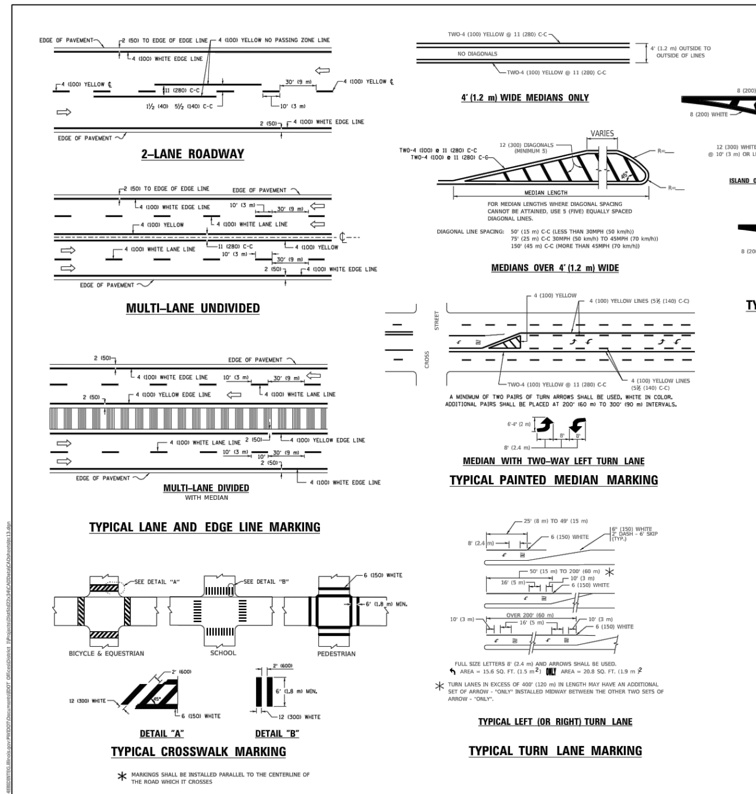
IDOT DISTRICT 1 DETAILS

DATE: JANUARY 2024

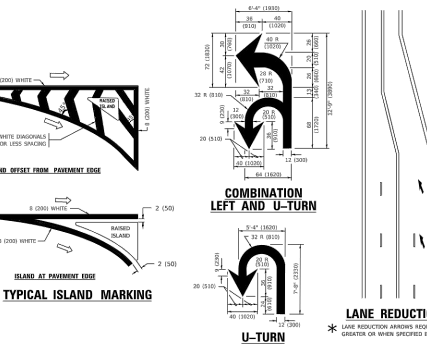
SHEET 17 OF 23

Plotted: February 6, 2024 @ 9:40 AM By: Brandon Tonarelli — Tab: D1 DETAILS

Path: S:\8_WATER\1_DISTRIBUTION SYSTEM\RIVER CROSSING\CAD DESIGN FILES\LOVEDALE, OFFUTT, CLEARWATER, RIVER CROSSING WM CONSTRUCTION DETAILS FOR BID



* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

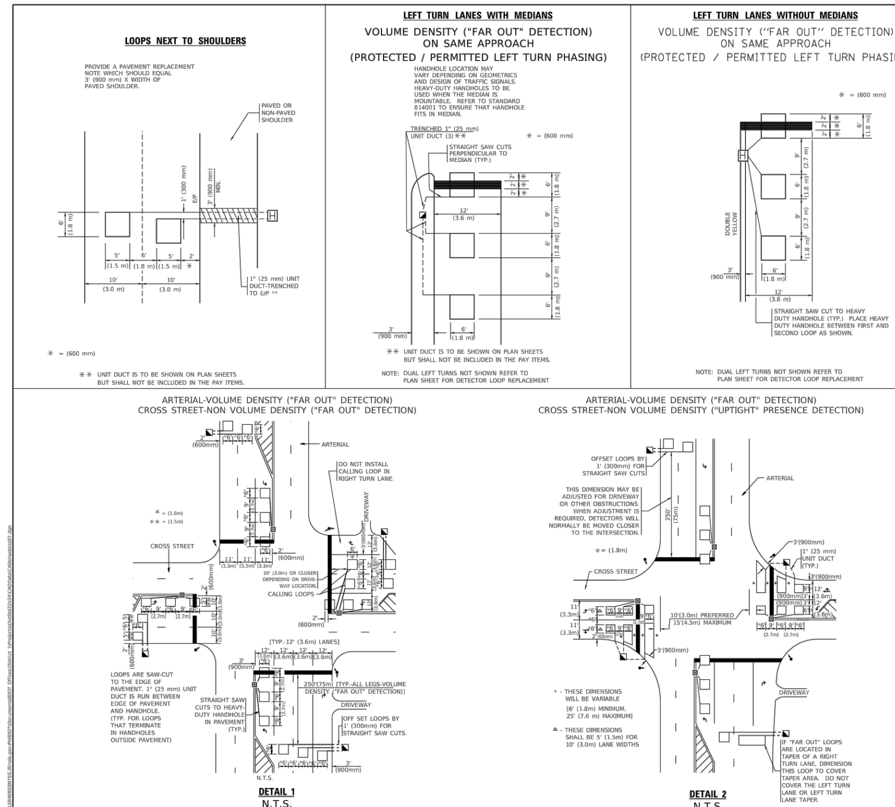
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

USER NAME = footemj	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED - C. JUCIUS 07-01-13	
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - C. JUCIUS 12-21-15	
PLOT DATE = 3/4/2019	DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16	

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS
SCALE: NONE | SHEET 1 OF 2 SHEETS | STA. TO STA.
F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO.
TC-13 | CONTRACT NO.
ILLINOIS | FED. AID PROJECT



NOTES:

VEHICLES LOOP DETECTORS

- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- * ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- * EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- * WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- * WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DIMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

USER NAME = footemj	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 50.0000 ' / in.	CHECKED - R.K.F.	REVISED -	
PLOT DATE = 3/4/2019	DATE -	REVISED -	

DISTRICT 1 – DETECTOR LOOP INSTALLATION
DETAILS FOR ROADWAY RESURFACING
SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. TO STA.
F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO.
TS-07 | CONTRACT NO.
ILLINOIS | FED. AID PROJECT

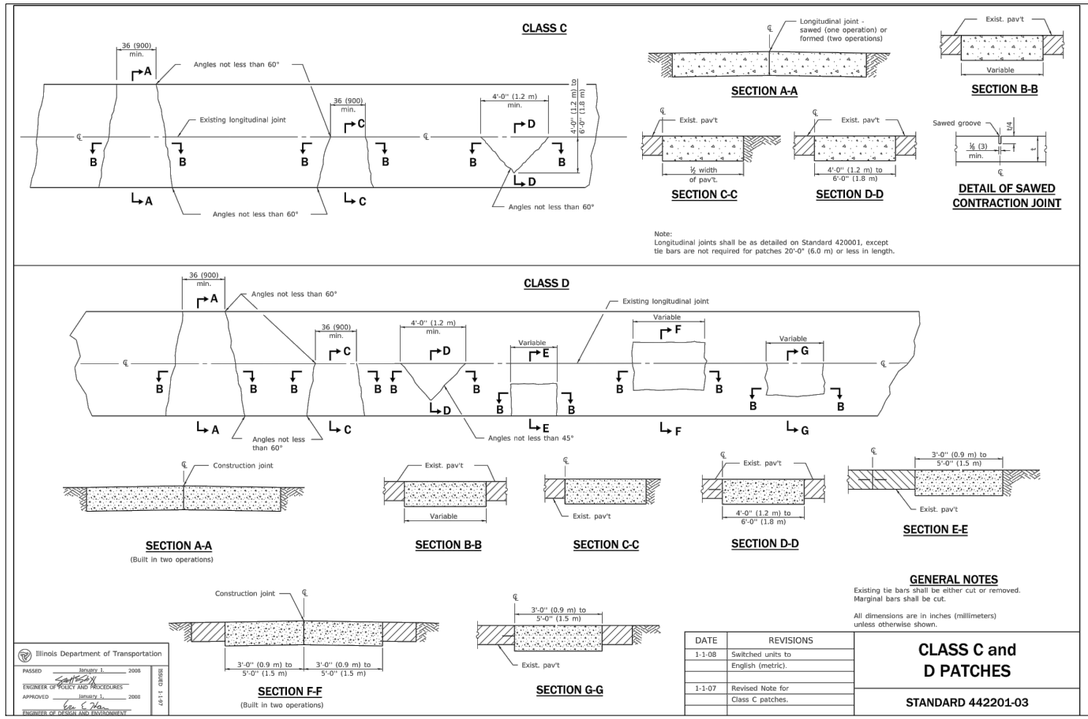
VILLAGE OF NORTH AURORA
25 EAST STATE STREET
NORTH AURORA, IL 60542

NO.	DATE	REVISIONS

LOVEDALE LANE, OFFUTT LANE, CLEARWATER DRIVE, & FOX RIVER CROSSING WATER MAIN IMPROVEMENT

IDOT DISTRICT 1 DETAILS

DATE: JANUARY 2024

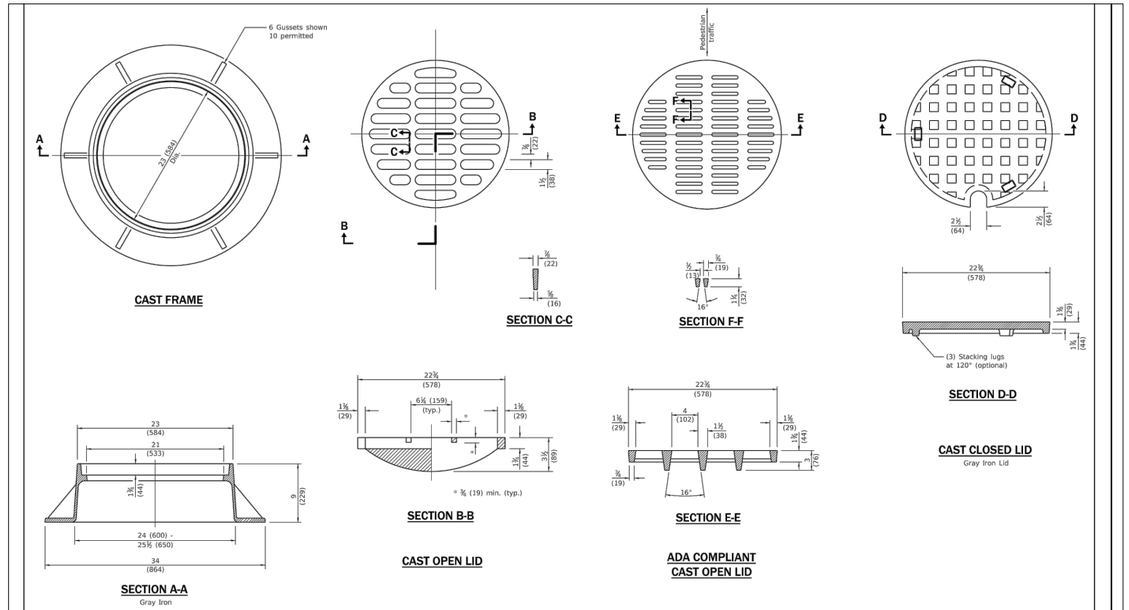


Illinois Department of Transportation
PASSED January 1, 2008 — ENGINEER OF POLICY AND PROCEDURES
APPROVED January 1, 2008 — ENGINEER OF DESIGN AND ENVIRONMENT
BDE 1-1-07

DATE	REVISIONS
1-1-08	Switched units to English (metric).
1-1-07	Revised Note for Class C patches.

CLASS C and D PATCHES

STANDARD 442201-03



All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation
PASSED January 1, 2020 — ENGINEER OF POLICY AND PROCEDURES
APPROVED January 1, 2020 — ENGINEER OF DESIGN AND ENVIRONMENT
BDE 1-1-07

DATE	REVISIONS
1-1-20	Revised dimension in Section B-B of cast open lid.
1-1-15	Revised dimensioning of frame. Added ADA compliant open lid.
1-1-09	Switched units to English (metric).

FRAME AND LIDS TYPE 1

STANDARD 604001-05

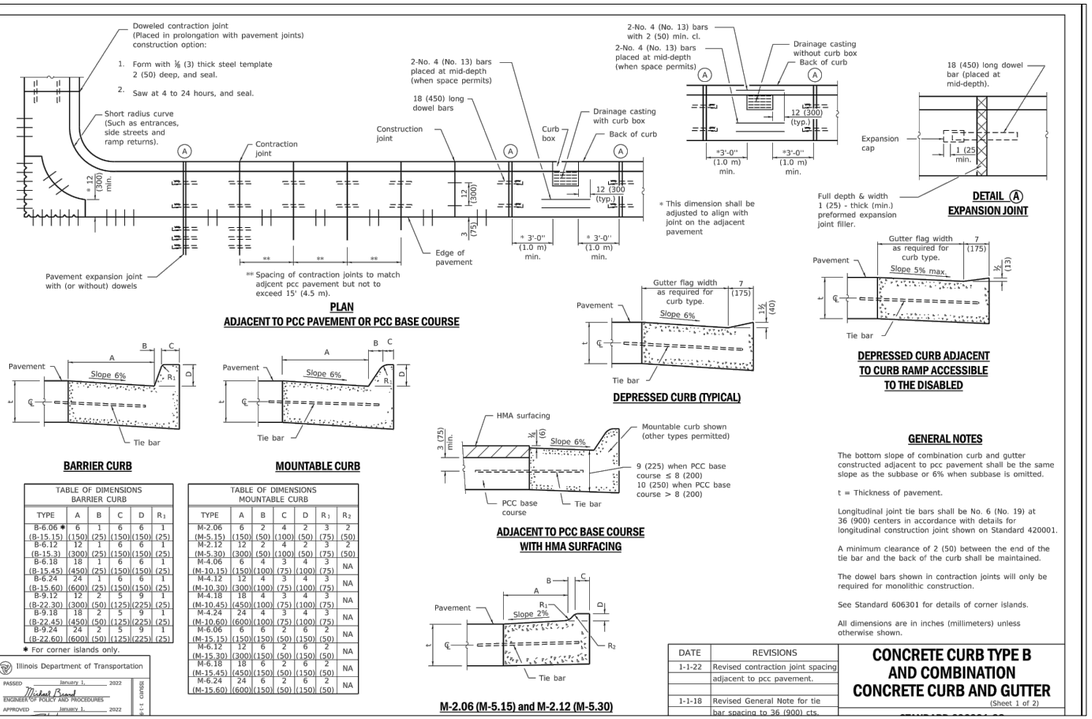


TABLE OF DIMENSIONS — BARRIER CURB

TYPE	A	B	C	D	R_1
B-6.06 * (B-15.15)	6 (150)	1 (25)	6 (150)	6 (150)	1 (25)
B-6.12 (B-15.3)	12 (300)	2 (50)	6 (150)	6 (150)	2 (50)
B-6.18 (B-15.45)	18 (450)	1 (25)	6 (150)	6 (150)	1 (25)
B-6.24 (B-15.60)	24 (600)	1 (25)	6 (150)	6 (150)	1 (25)
B-9.12 (B-22.30)	12 (300)	2 (50)	5 (125)	9 (225)	1 (25)
B-9.18 (B-22.45)	18 (450)	2 (50)	5 (125)	9 (225)	1 (25)
B-9.24 (B-22.60)	24 (600)	2 (50)	5 (125)	9 (225)	1 (25)

* For corner islands only.

TABLE OF DIMENSIONS — MOUNTABLE CURB

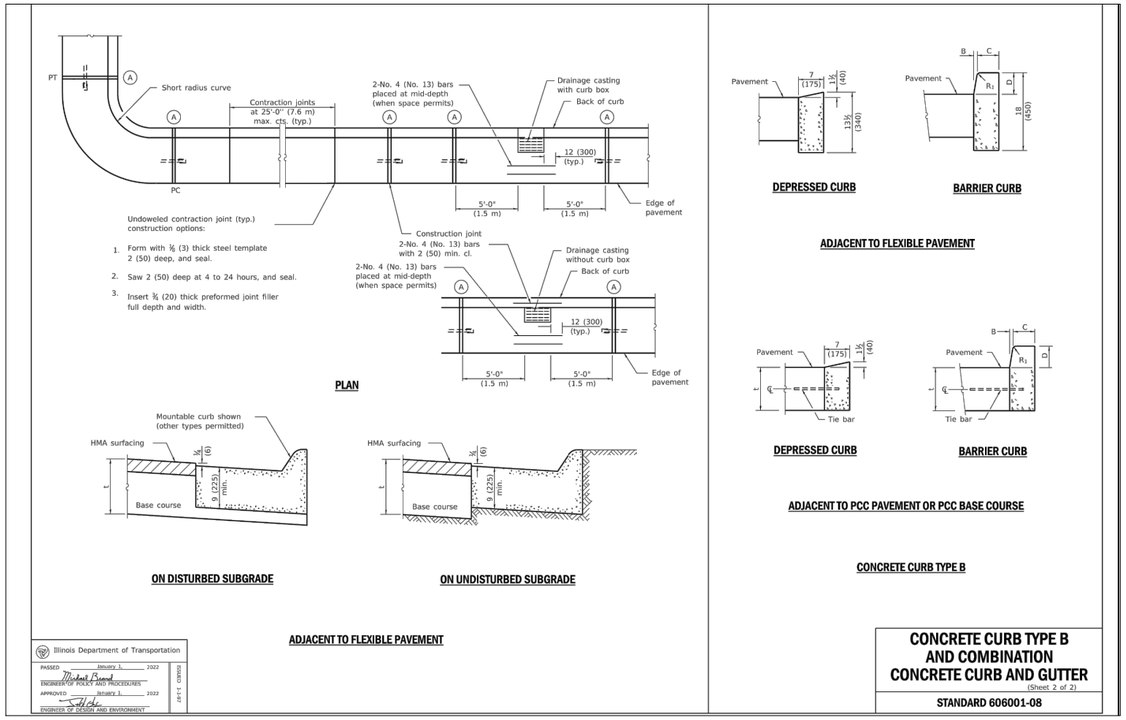
TYPE	A	B	C	D	R_1	R_2
M-2.06 (M-5.15)	6 (150)	2 (50)	4 (100)	2 (50)	3 (75)	2 (50)
M-2.12 (M-5.30)	12 (300)	2 (50)	4 (100)	2 (50)	3 (75)	2 (50)
M-4.06 (M-10.15)	6 (150)	4 (100)	3 (75)	4 (100)	3 (75)	NA
M-4.12 (M-10.30)	12 (300)	4 (100)	3 (75)	4 (100)	3 (75)	NA
M-4.18 (M-10.45)	18 (450)	4 (100)	3 (75)	4 (100)	3 (75)	NA
M-4.24 (M-10.60)	24 (600)	4 (100)	3 (75)	4 (100)	3 (75)	NA
M-6.06 (M-15.15)	6 (150)	6 (150)	2 (50)	6 (150)	2 (50)	NA
M-6.12 (M-15.30)	12 (300)	6 (150)	2 (50)	6 (150)	2 (50)	NA
M-6.18 (M-15.45)	18 (450)	6 (150)	2 (50)	6 (150)	2 (50)	NA
M-6.24 (M-15.60)	24 (600)	6 (150)	2 (50)	6 (150)	2 (50)	NA

Illinois Department of Transportation
PASSED January 1, 2022 — ENGINEER OF POLICY AND PROCEDURES
APPROVED January 1, 2022 — ENGINEER OF DESIGN AND ENVIRONMENT
BDE 1-1-22

DATE	REVISIONS
1-1-22	Revised contraction joint spacing adjacent to pcc pavement.
1-1-18	Revised General Note for tie bar spacing to 36 (900) cts.

CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
(Sheet 1 of 2)

STANDARD 606001-05



Illinois Department of Transportation
PASSED January 1, 2022 — ENGINEER OF POLICY AND PROCEDURES
APPROVED January 1, 2022 — ENGINEER OF DESIGN AND ENVIRONMENT
BDE 1-1-22

CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
(Sheet 2 of 2)

STANDARD 606001-08

VILLAGE OF NORTH AURORA
25 EAST STATE STREET
NORTH AURORA, IL 60542

NO.	DATE	REVISIONS

LOVEDALE LANE, OFFUTT LANE, CLEARWATER DRIVE, & FOX RIVER CROSSING WATER MAIN IMPROVEMENT

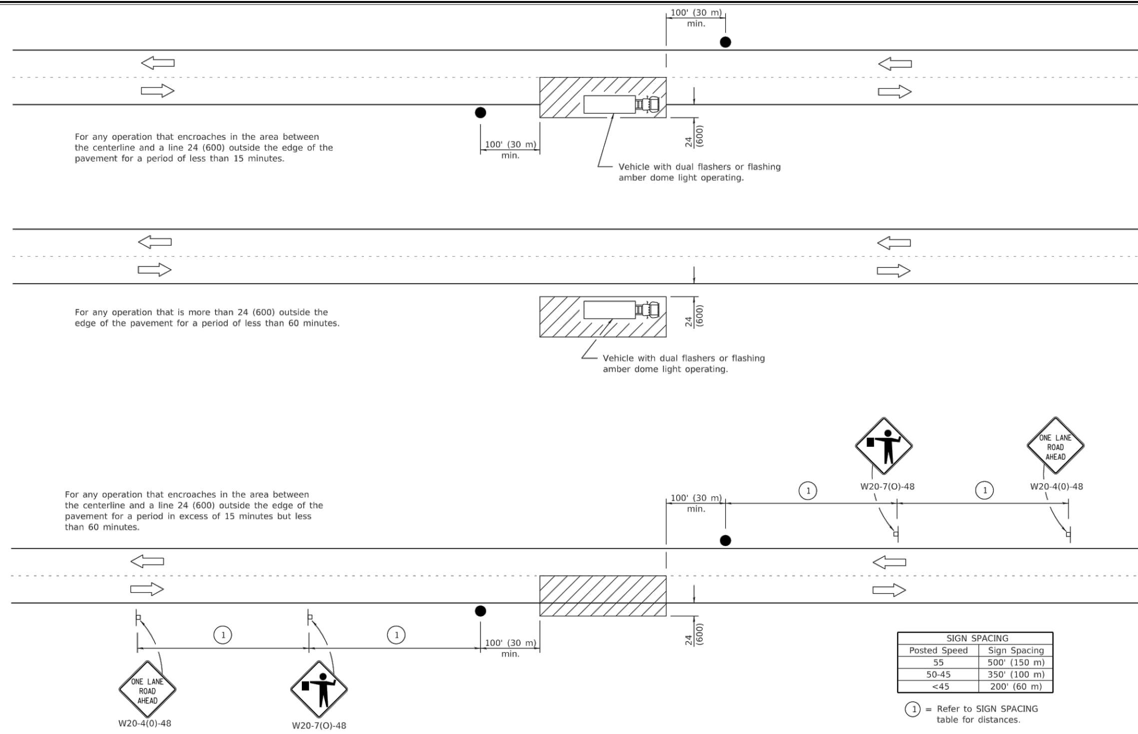
HIGHWAY STANDARDS

DATE: JANUARY 2024

SHEET 19 OF 23

Plotted: February 6, 2024 @ 8:41 AM By: Brandon Tonarelli — Tdx: HWY STDS 1

Path: S:\8 WATER\ DISTRIBUTION SYSTEM\RIVER CROSSING\CAD DESIGN FILES\LOVEDALE, OFFUTT, CLEARWATER, RIVER CROSSING WM CONSTRUCTION DETAILS FOR BID



SIGN SPACING	
Posted Speed	Sign Spacing
55	500' (150 m)
50-45	350' (100 m)
<45	200' (60 m)

(1) = Refer to SIGN SPACING table for distances.

All dimensions are in inches (millimeters) unless otherwise shown.

TYPICAL APPLICATIONS

Marking patches
Field survey
String line
Utility operations
Cleaning up debris on pavement

SYMBOLS

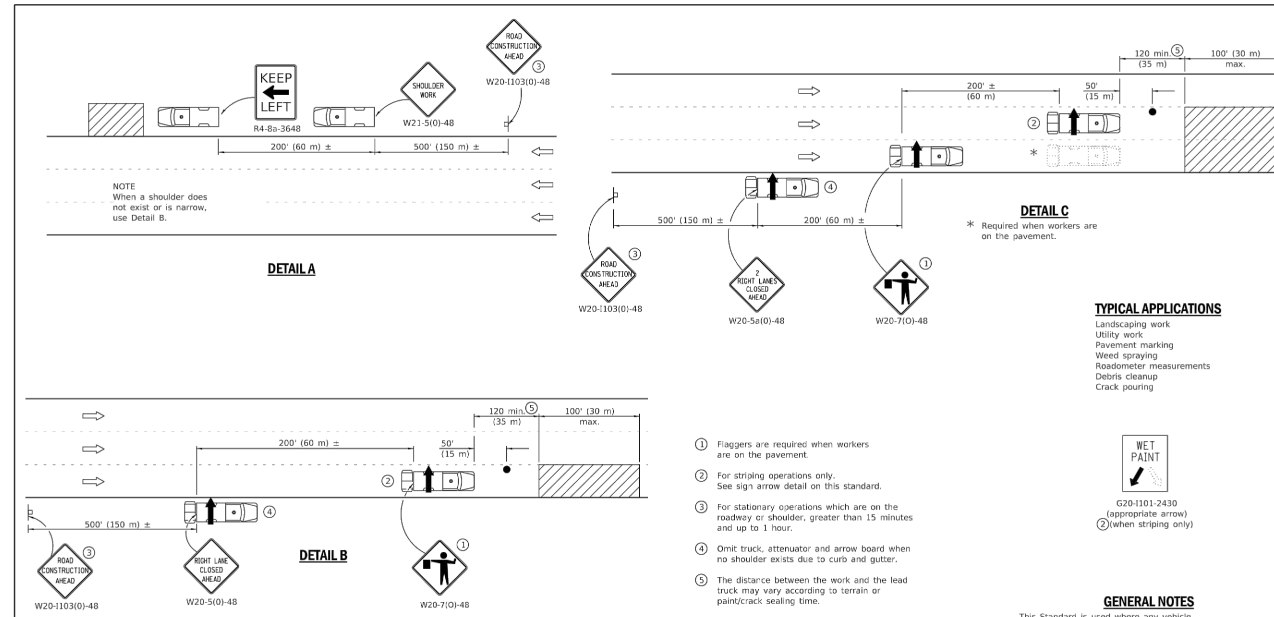
- Work area
- Sign on portable or permanent support
- Flagger with traffic control sign

Illinois Department of Transportation
PASSED January 1, 2011 — ENGINEER OF SAFETY ENGINEERING
APPROVED January 1, 2011 — ENGINEER OF DESIGN AND ENVIRONMENT
ISSUED 1-1-97

DATE	REVISIONS
1-1-11	Revised flagger sign.
1-1-09	Switched units to
	English (metric).

LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS

STANDARD 701301-04



TYPICAL APPLICATIONS

Landscaping work
Utility work
Pavement marking
Weed spraying
Roadometer measurements
Debris cleanup
Crack pouring

(1) Flaggers are required when workers are on the pavement.

(2) For striping operations only. See sign arrow detail on this standard.

(3) For stationary operations which are on the roadway or shoulder, greater than 15 minutes and up to 1 hour.

(4) Omit truck, attenuator and arrow board when no shoulder exists due to curb and gutter.

(5) The distance between the work and the lead truck may vary according to terrain or paint/crack sealing time.

WET PAINT
G20-I101-2430
(appropriate arrow)
(2)(when striping only)

SYMBOLS

- Arrow board
- Work area
- Truck with flashing amber light
- Truck/Trailer mounted attenuator
- Flagger with traffic control sign
- Sign

GENERAL NOTES

This Standard is used where any vehicle, equipment, workers or their activities will require: 1) stationary operations up to 1 hour, or 2) a continuous or intermittent moving operation where the average speed of movement is greater than 1 mph (2 km/h).

This Standard is also applicable when work is being performed in the left lane(s) or on the median shoulder. Under these conditions, KEEP RIGHT signs shall be substituted for KEEP LEFT signs and arrow board indications shall be directed to the right.

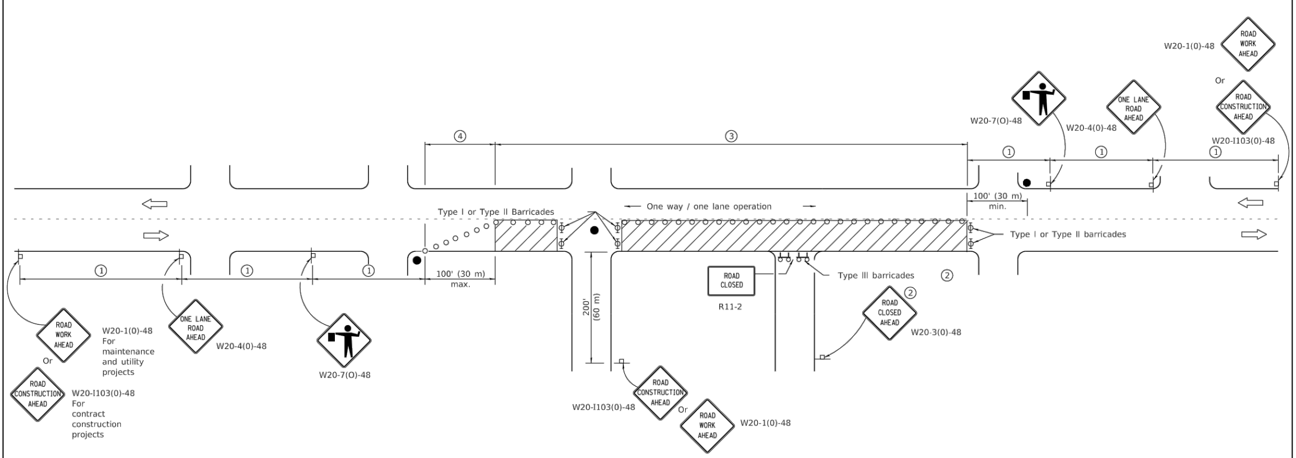
All dimensions are in inches (millimeter) unless otherwise shown.

Illinois Department of Transportation
PASSED January 1, 2017 — ENGINEER OF SAFETY PROG. AND ENGINEERING
APPROVED January 1, 2017

DATE	REVISIONS
1-1-17	Revised 'NOTE' on DETAIL A
	to use DETAIL B in lieu of
	DETAIL C.
4-1-16	Rev. gen. notes. Added
	note (5). Rev. dist. between
	work and lead truck

LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≤ 40 MPH

STANDARD 701427-05



SIGN SPACING	
Posted Speed	Sign Spacing
55	500' (150 m)
50-45	350' (100 m)
<45	200' (60 m)

SYMBOLS

- Work area
- Cone, drum or barricade (not required for moving operations)
- Sign on portable or permanent support
- Flagger with traffic control sign
- Barricade or drum with flashing light
- Type III barricade with flashing lights

(1) Refer to SIGN SPACING TABLE for distances.

(2) For approved sideroad closures.

(3) Cones at 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 50' (15 m) centers. When drums or Type I or Type II barricades are used. the interval between devices may be doubled.

(4) Cones, drums or barricades at 20' (6 m) centers.

GENERAL NOTES

This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement requiring the closure of one traffic lane in an urban area.

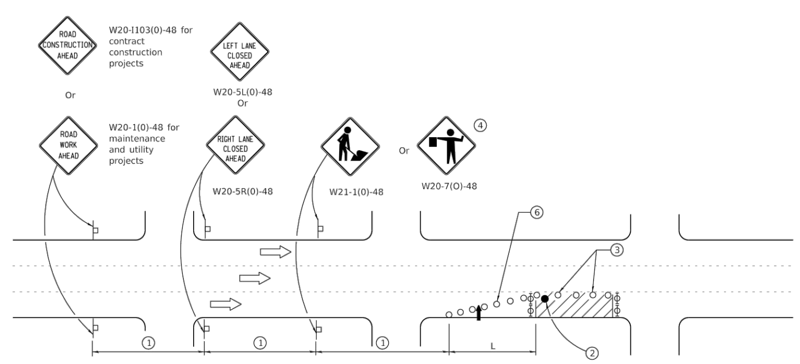
All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation
PASSED January 1, 2011 — ENGINEER OF SAFETY ENGINEERING
APPROVED January 1, 2011 — ENGINEER OF DESIGN AND ENVIRONMENT

DATE	REVISIONS
1-1-11	Revised flagger sign.
1-1-09	Switched units to
	English (metric).
	Corrected sign No.'s.

URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED

STANDARD 701501-06



SIGN SPACING	
Posted Speed	Sign Spacing
55	500' (150 m)
50-45	350' (100 m)
<45	200' (60 m)

SYMBOLS

- Arrow board
- Cone, drum or barricade
- Sign on portable or permanent support
- Work area
- Barricade or drum with flashing light
- Type III barricade with flashing lights
- Flagger with traffic control sign.

(1) Refer to SIGN SPACING TABLE for distances.

(2) Required for speeds > 40 MPH

(3) Cones at 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 50' (15 m) centers. When drums or Type I or Type II barricades are used, the interval between devices may be doubled.

(4) Use flagger sign only when flagger is present.

(5) For approved sideroad closures.

(6) Cones, drums or barricades at 20' (6 m) in taper.

GENERAL NOTES

This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement during shoulder operations or where construction requires lane closures in urban areas.

Calculate L as follows:

SPEED LIMIT	FORMULAS English	FORMULAS (Metric)
40 mph (70 km/h) or less:	$L=\frac{WS^2}{60}$	$L=\frac{WS^2}{150}$
45 mph (80 km/h) or greater:	L=(W)(S)	L=0.65(W)(S)

W = Width of offset in feet (meters).

S = Normal posted speed mph (km/h).

All dimensions are in inches (millimeters) unless otherwise shown.

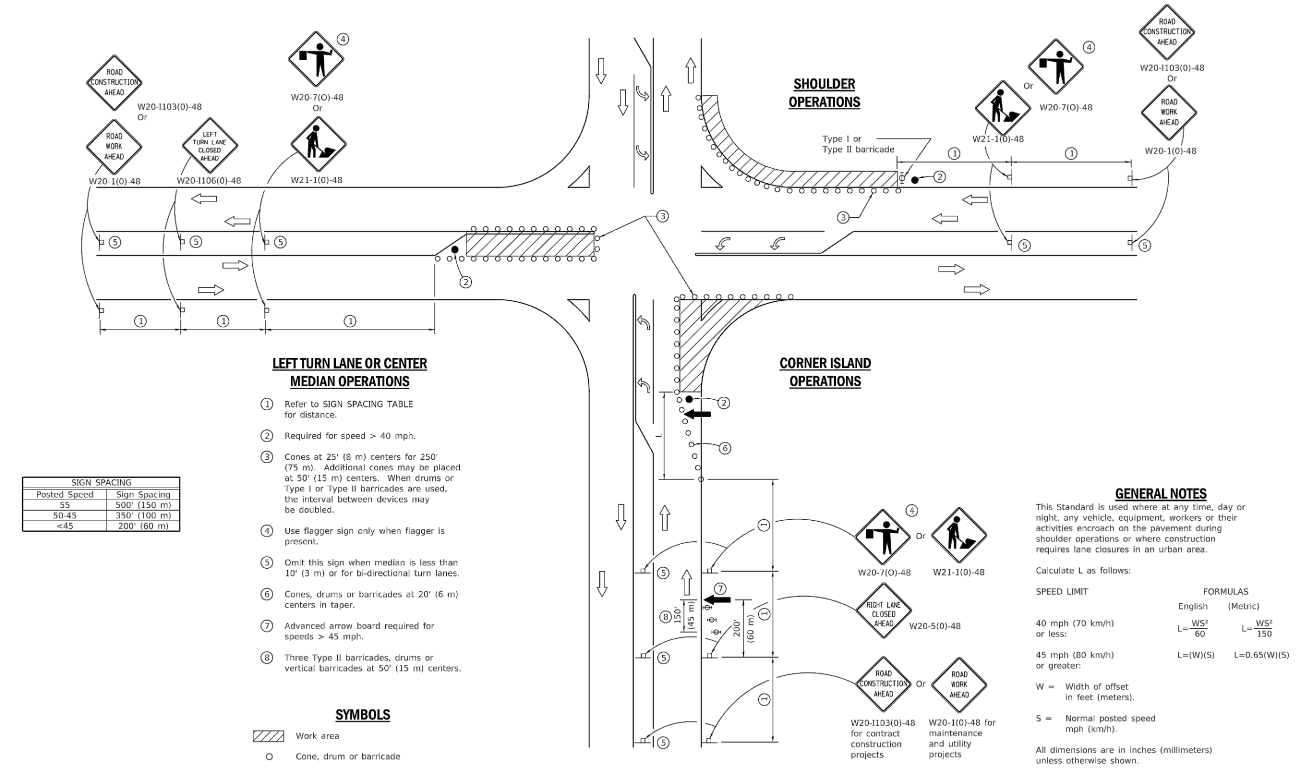
Illinois Department of Transportation
PASSED January 1, 2014 — ENGINEER OF SAFETY ENGINEERING
APPROVED January 1, 2014 — ENGINEER OF DESIGN AND ENVIRONMENT

DATE	REVISIONS
1-1-14	Revised workers sign
	number to agree with
	current MUTCD.
1-1-13	Omitted text 'WORKERS'
	sign.

URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN

(Sheet 1 of 2)

STANDARD 701601-09



LEFT TURN LANE OR CENTER MEDIAN OPERATIONS

1. Refer to SIGN SPACING TABLE for distance.
2. Required for speed > 40 mph.
3. Cones at 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 50' (15 m) centers. When drums or Type I or Type II barricades are used, the interval between devices may be doubled.
4. Use flagger sign only when flagger is present.
5. Omit this sign when median is less than 10' (3 m) or for bi-directional turn lanes.
6. Cones, drums or barricades at 20' (6 m) centers in taper.
7. Advanced arrow board required for speeds > 45 mph.
8. Three Type II barricades, drums or vertical barricades at 50' (15 m) centers.

SIGN SPACING	
Posted Speed	Sign Spacing
55	500' (150 m)
50-45	350' (100 m)
<45	200' (60 m)

SYMBOLS

- Work area
- Cone, drum or barricade
- Sign on portable or permanent support
- Arrow board
- Barricade or drum with flashing light
- Flagger with traffic control sign

W20-I103(0)-48 for contract construction projects
W20-1(0)-48 for maintenance and utility projects

GENERAL NOTES

This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement during shoulder operations or where construction requires lane closures in an urban area.

Calculate L as follows:

SPEED LIMIT	FORMULAS English	(Metric)
40 mph (70 km/h) or less:	$L=\frac{WS^2}{60}$	$L=\frac{WS^2}{150}$
45 mph (80 km/h) or greater:	L=(W)(S)	L=0.65(W)(S)

W = Width of offset in feet (meters).

S = Normal posted speed mph (km/h).

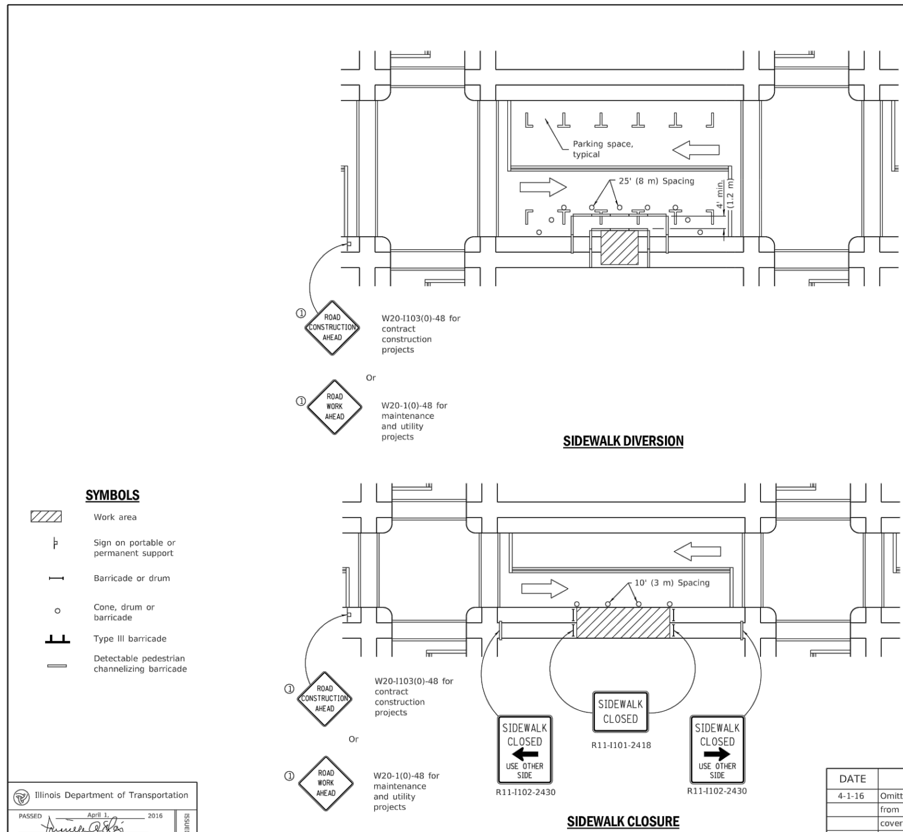
All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation
PASSED April 1, 2016 ENGINEER OF SAFETY ENGINEERING
APPROVED April 1, 2016 ENGINEER OF DESIGN AND ENVIRONMENT
ISSUED 1-1-97

DATE	REVISIONS
4-1-16	Corrected sign number for
	LEFT TURN LANE CLOSED
	AHEAD.
1-1-14	Added devices at arrow
	board upstream from taper.
	Rev. workers sign number.

URBAN LANE CLOSURE, MULTILANE INTERSECTION

STANDARD 701701-10



SIDEWALK DIVERSION

SIDEWALK CLOSURE

① Omit whenever duplicated by road work traffic control.

SYMBOLS

- Work area
- Sign on portable or permanent support
- Barricade or drum
- Cone, drum or barricade
- Type III barricade
- Detectable pedestrian channelizing barricade

GENERAL NOTES

This Standard is used where, at any time, pedestrian traffic must be rerouted due to work being performed.

This Standard must be used in conjunction with other Traffic Control & Protection Standards when roadway traffic is affected.

Temporary facilities shall be detectable and accessible.

The temporary pedestrian facilities shall be provided on the same side of the closed facilities whenever possible.

The SIDEWALK CLOSED / USE OTHER SIDE sign shall be placed at the nearest crosswalk or intersection to each end of the closure. Where the closure occurs at a corner, the signs shall be erected on the corners across the street from the closure. The SIDEWALK CLOSED signs shall be used at the ends of the actual closures.

Type III barricades and R11-2-4830 signs shall be positioned as shown in "ROAD CLOSED TO ALL TRAFFIC" detail on Standard 701901.

All dimensions are in inches (millimeters) unless otherwise shown.

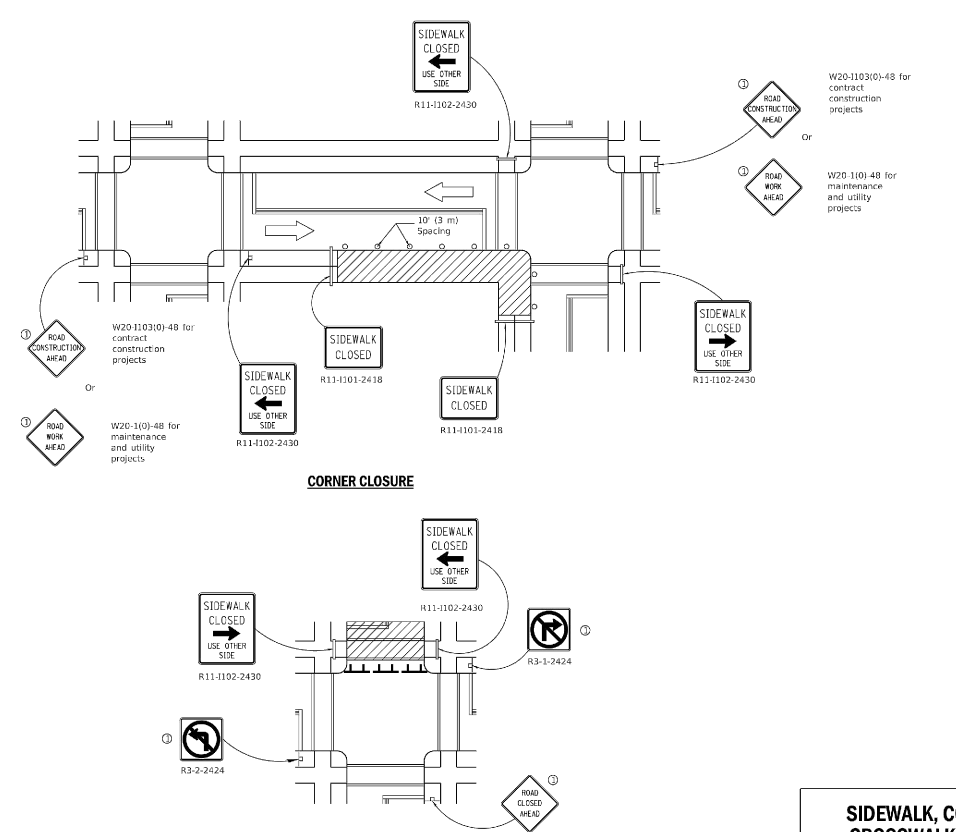
Illinois Department of Transportation
PASSED April 1, 2016 ENGINEER OF SAFETY ENGINEERING
APPROVED April 1, 2016 ENGINEER OF DESIGN AND ENVIRONMENT
ISSUED 1-1-97

DATE	REVISIONS
4-1-16	Omitted orange safety fence
	from standard as this is
	covered in the std. spec.
1-1-12	Added SIDEWALK DIVERSION.
	Modified appearance of
	plan views. Renamed Std.

SIDEWALK, CORNER OR CROSSWALK CLOSURE

(Sheet 1 of 2)

STANDARD 701801-06



CORNER CLOSURE

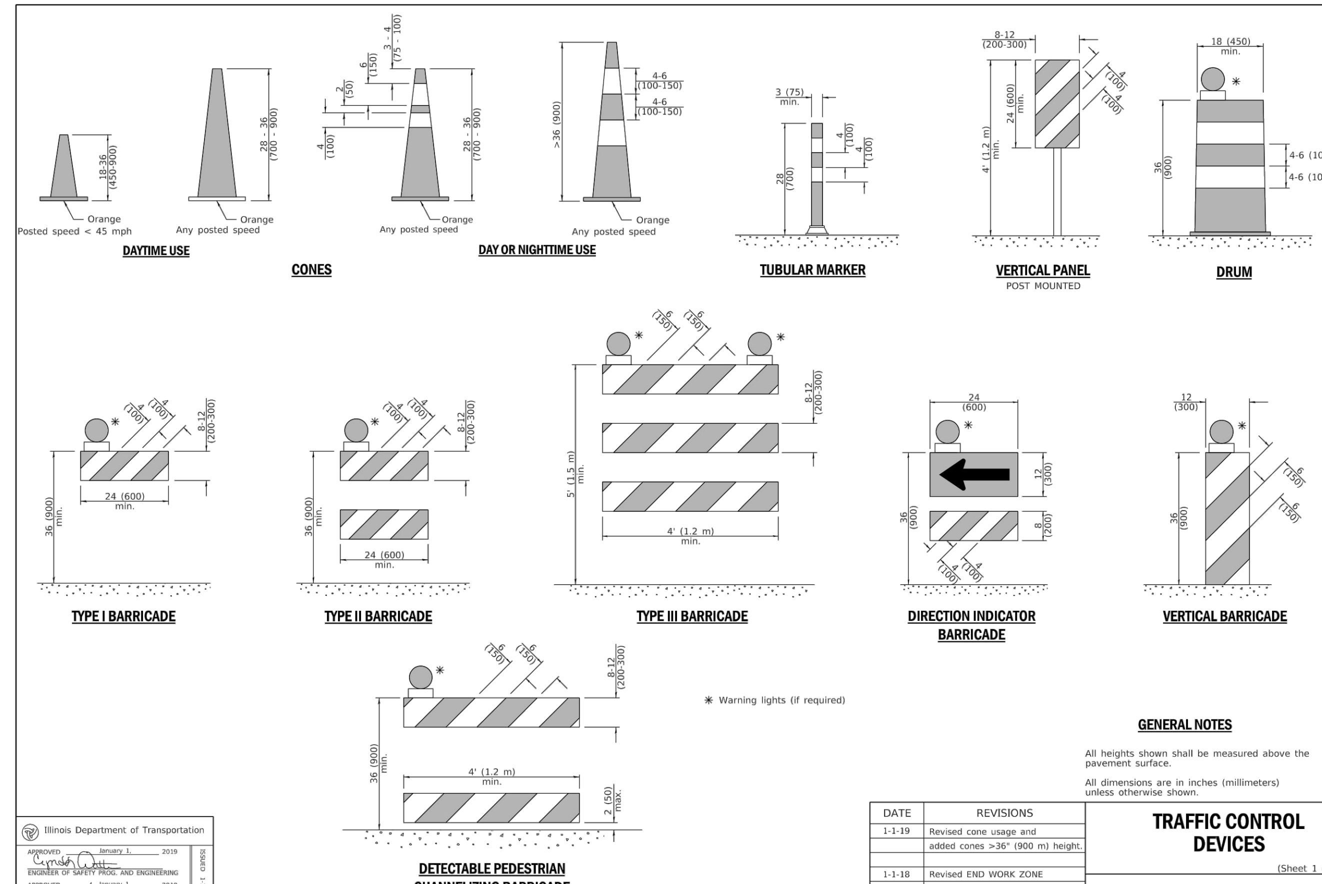
CROSSWALK CLOSURE

Illinois Department of Transportation
PASSED April 1, 2016 ENGINEER OF SAFETY ENGINEERING
APPROVED April 1, 2016 ENGINEER OF DESIGN AND ENVIRONMENT
ISSUED 1-1-97

SIDEWALK, CORNER OR CROSSWALK CLOSURE

(Sheet 2 of 2)

STANDARD 701801-06



✱ Warning lights (if required)

GENERAL NOTES

All heights shown shall be measured above the pavement surface.

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation
APPROVED January 1, 2019 ENGINEER OF SAFETY PROG. AND ENGINEERING
APPROVED January 1, 2019 ENGINEER OF DESIGN AND ENVIRONMENT
ISSUED 1-1-97

DATE	REVISIONS
1-1-19	Revised cone usage and
	added cones >36" (900 m) height.
1-1-18	Revised END WORK ZONE
	SPEED LIMIT sign from
	orange to white background.

TRAFFIC CONTROL DEVICES

(Sheet 1 of 3)

STANDARD 701901-08

VILLAGE OF NORTH AURORA
25 EAST STATE STREET
NORTH AURORA, IL 60542

NO.	DATE	REVISIONS

LOVEDALE LANE, OFFUTT LANE, CLEARWATER DRIVE, & FOX RIVER CROSSING WATER MAIN IMPROVEMENT

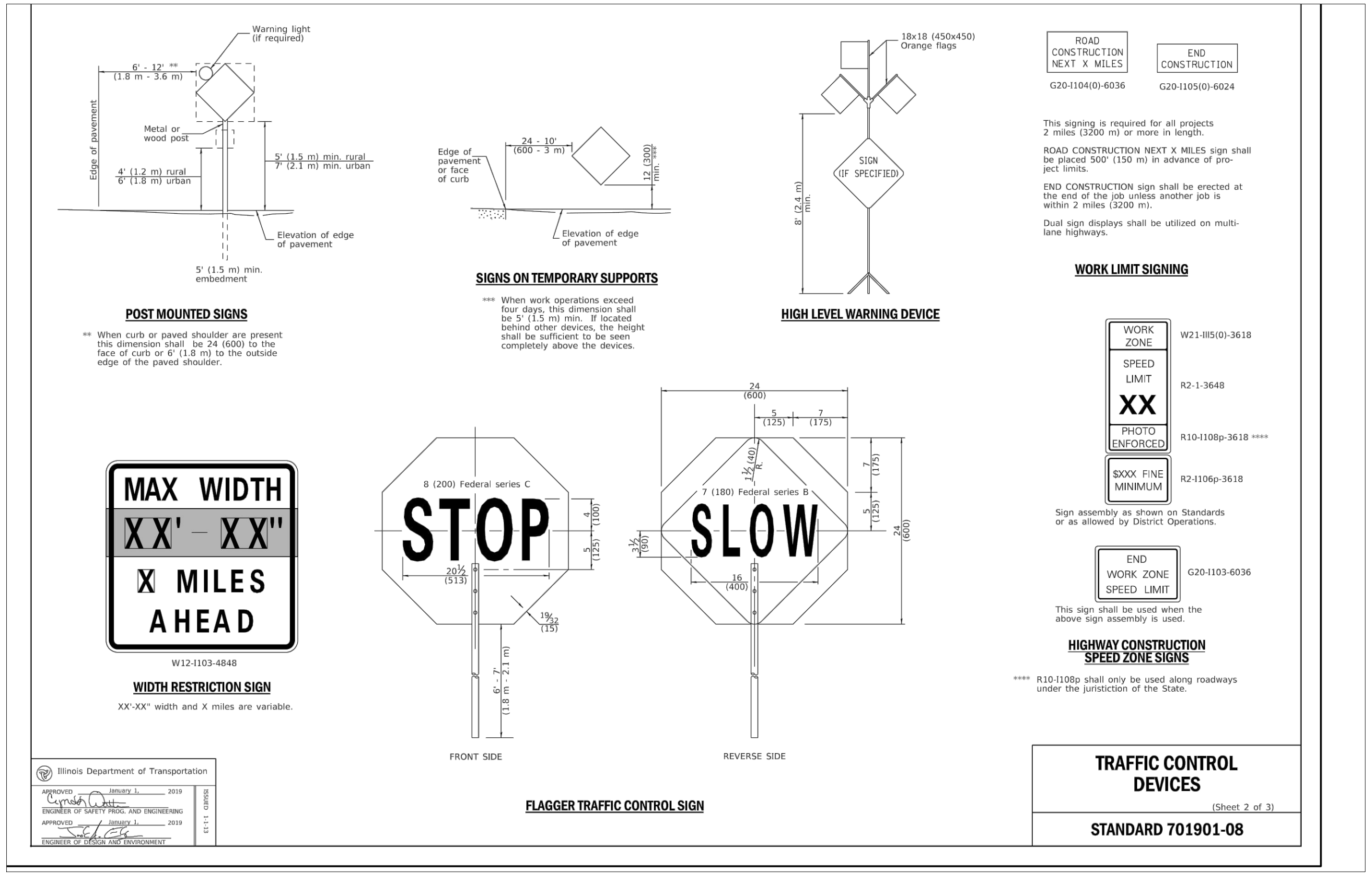
HIGHWAY STANDARDS

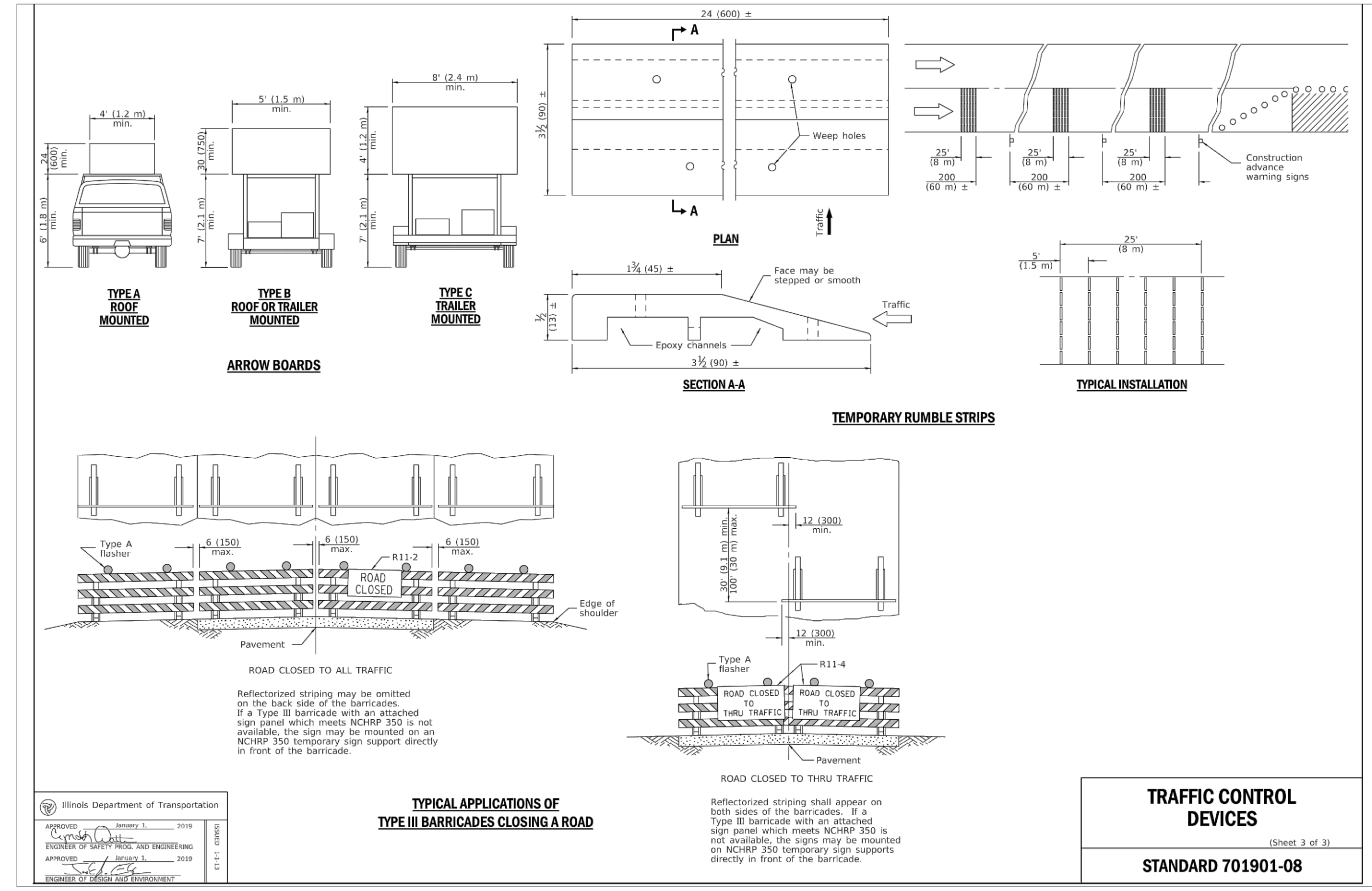
DATE: JANUARY 2024

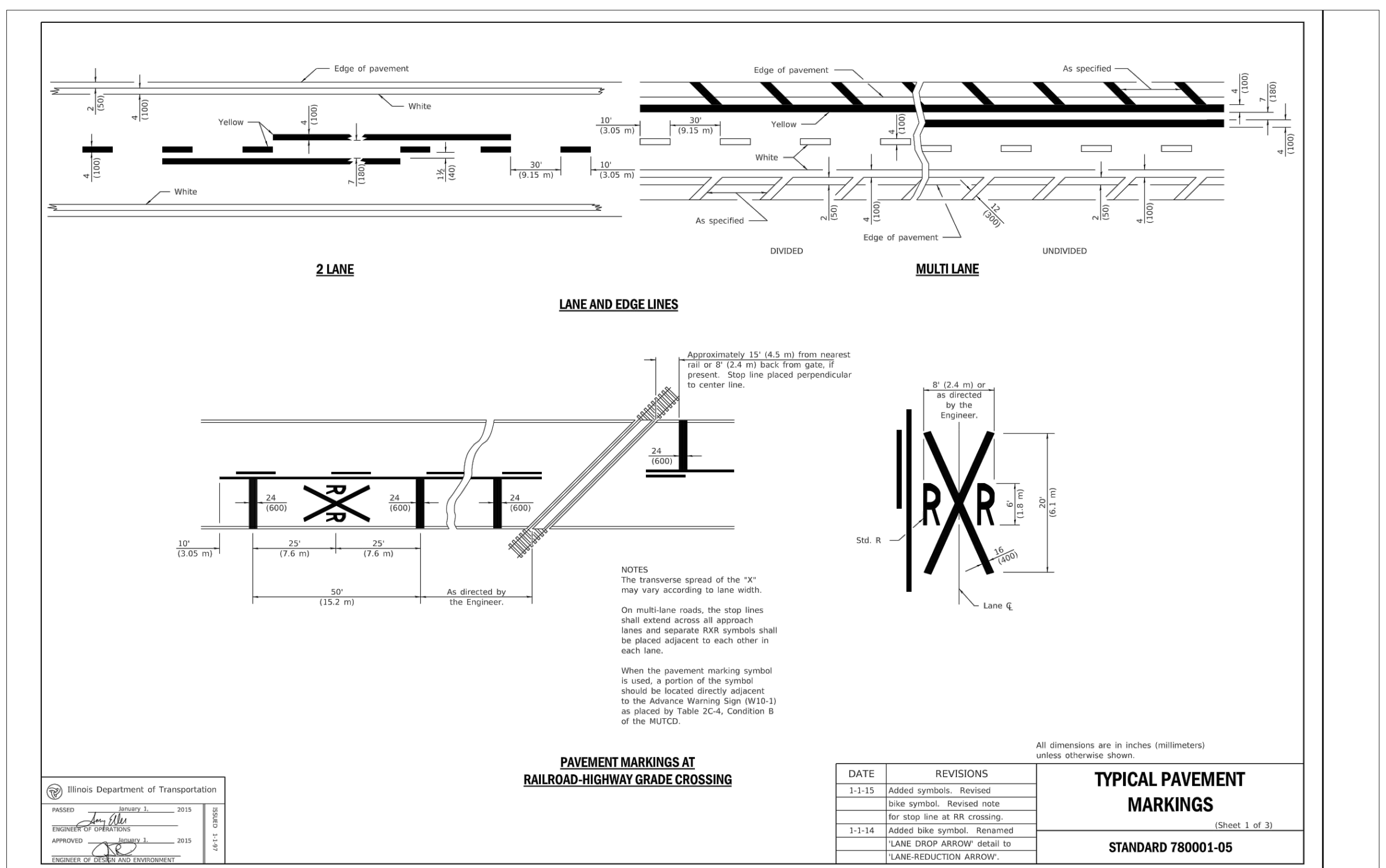
SHEET 21 OF 23

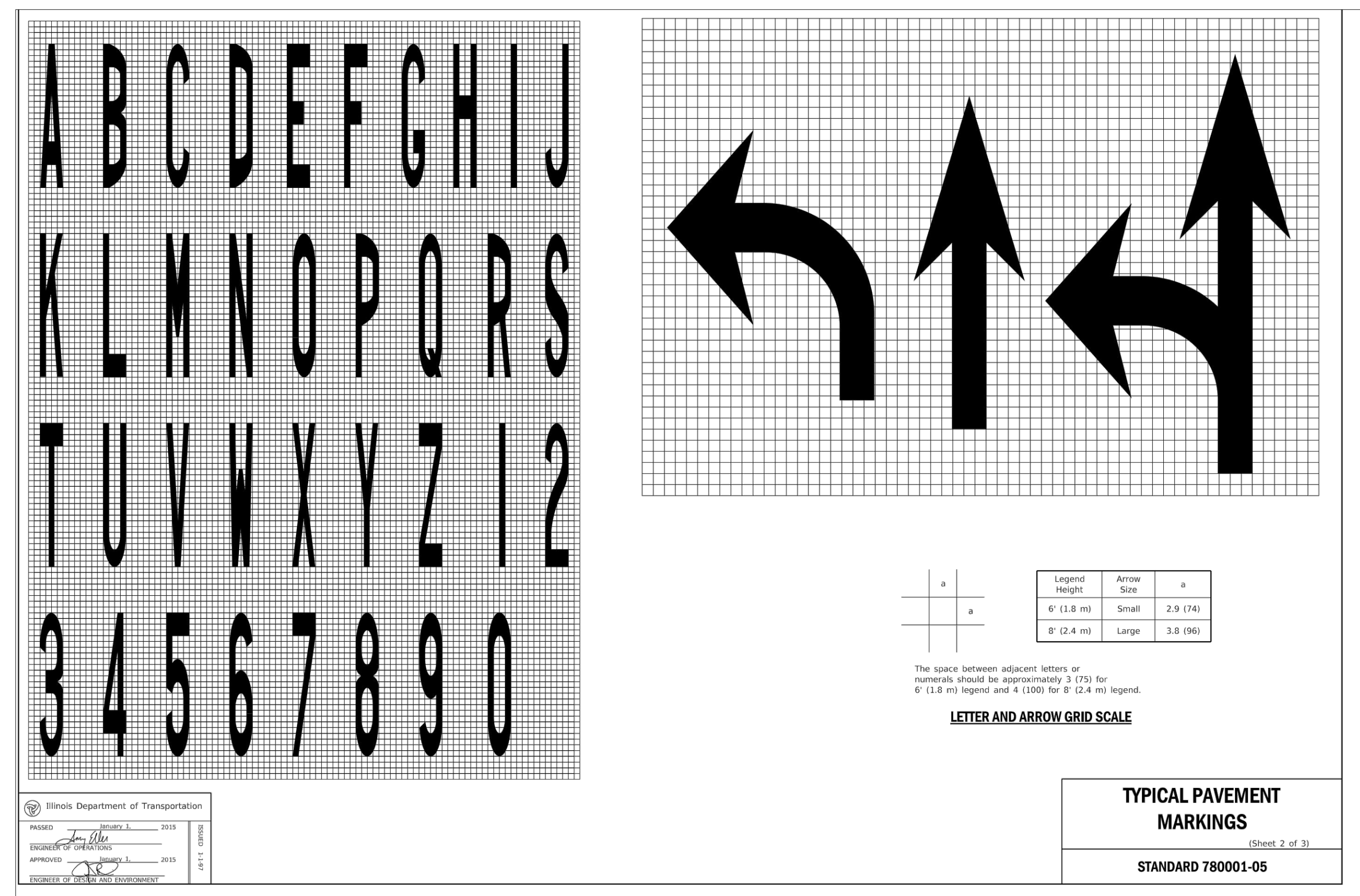
Plotted: February 6, 2024 @ 9:42 AM By: Brandon Tonarelli -- Tab: HWY STDS 3

Path:S:\8 WATER\1 DISTRIBUTION SYSTEM\RIVER CROSSING\CAD DESIGN FILES\LOVEDALE, OFFUTT, CLEARWATER, RIVER CROSSING WM CONSTRUCTION DETAILS FOR BID





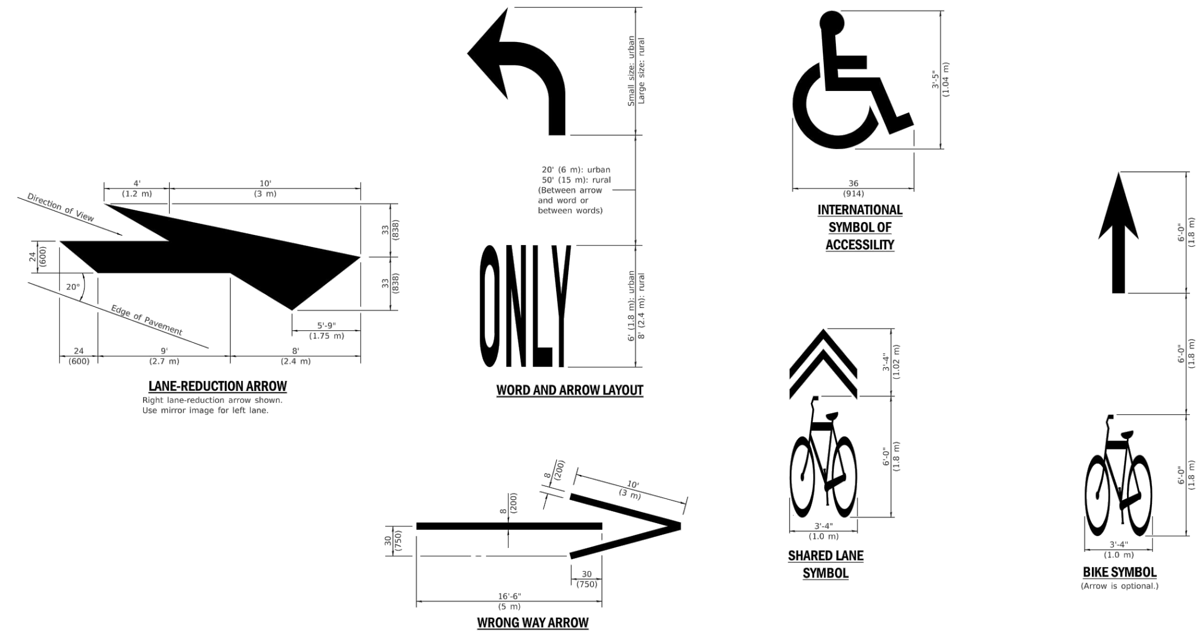




VILLAGE OF NORTH AURORA 25 EAST STATE STREET NORTH AURORA, IL 60542	NO. DATE REVISIONS	LOVEDALE LANE, OFFUTT LANE, CLEARWATER DRIVE, & FOX RIVER CROSSING WATER MAIN IMPROVEMENT	HIGHWAY STANDARDS	DATE: JANUARY 2024 SHEET 22 OF 23

Plotted: February 6, 2024 @ 9:42 AM By: Brandon Tonarelli — Tab: HWY STDS 4

Path:S:\8 WATER\1 DISTRIBUTION SYSTEM\RIVER CROSSING\CAD DESIGN FILES\LOVEDALE, OFFUTT, CLEARWATER, RIVER CROSSING WM CONSTRUCTION DETAILS FOR BID



Illinois Department of Transportation

PASSED January 1, 2015 — ENGINEER OF OPERATIONS

APPROVED January 1, 2015 — ENGINEER OF DESIGN AND ENVIRONMENT

TYPICAL PAVEMENT MARKINGS

(Sheet 3 of 3)

STANDARD 780001-05

Plotted: February 6, 2024 @ 9:43 AM By: Brandon Tonarelli — Tab: HWY STDS 5

VILLAGE OF NORTH AURORA 25 EAST STATE STREET NORTH AURORA, IL 60542	NO.	DATE	REVISIONS	LOVEDALE LANE, OFFUTT LANE, CLEARWATER DRIVE, & FOX RIVER CROSSING WATER MAIN IMPROVEMENT	HIGHWAY STANDARDS	DATE: JANUARY 2024 SHEET 23 OF 23

Path: S:\8 WATER\1 DISTRIBUTION SYSTEM\RIVER CROSSING\CAD DESIGN FILES\LOVEDALE, OFFUTT, CLEARWATER, RIVER CROSSING WM CONSTRUCTION DETAILS FOR BID