ENGINEERING PLANS FOR:

CHESTNUT STREET, LOCUST STREET, & SPRUCE STREET WATER MAIN & STREET IMPROVEMENT PROJECT

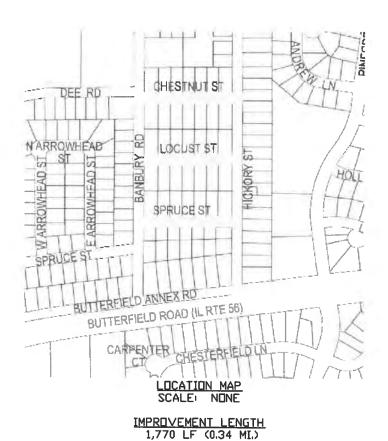
INDEX OF SHEETS

SHEET DESCRIPTION

TITLE SHEET GENERAL NOTES AND CONSTRUCTION SPECIFICATIONS 2-3 SUMMARY OF QUANTITIES EXISTING & PROPOSED TYPICAL SECTIONS CHESTNUT STREET UTILITY PLAN & PROFILE LOCUST STREET UTILITY PLAN & PROFILE SPRUCE STREET UTILITY PLAN & PROFILE CHESTNUT STREET ROAD PLAN & PROFILE 10 LOCUST STREET ROAD PLAN & PROFILE SPRUCE STREET ROAD PLAN & PROFILE CHESTNUT STREET CROSS SECTIONS LOCUST STREET CROSS SECTIONS SPRUCE STREET CROSS SECTIONS CONSTRUCTION DETAILS
IDOT DISTRICT 1 DETAILS

IDOT HIGHWAY STANDARDS

NORTH AURORA, ILLINOIS













THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AS WELL AS SUPERVISION/DIRECTION AND MEANS/METHODS OF CONSTRUCTION ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS STANDARD SPECIFICATION: THE 'STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE COINSTRUCTION,' ADDPTED 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 UNIFICIAM 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 DBTAIN, ERECT, MAINTAIN AND REMOVE ALL SIGNS, BARRICADES, FLAGMEN AND OTHER CONTROL DEVICES AS MAY BE NECESSARY FOR THE PURPOSE OF REGULATING WARNING DR 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 PRIDR TO CONSTRUCTION SO THAT EACH UTILITY COMPANY CAN STAKE OUT ANY UNDERGROUND IMPROVEMENTS THAT MAY INTERFERE WITH THE PROPOSED CONSTRUCTION.

THE CINTRACTUR SHALL BE REQUIRED TO MAKE ARRANGEMENTS FOR THE PROPER BRACING, SHORING AND OTHER REQUIRED PROTECTION OF ALL ROLDWAYS, STRUCTURES, POLES, CABLES AND PIPE LINES BEFORE CONSTRUCTION BEGINS. THEY SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OR ROLDWAYS 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, DRDINANCES, 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 OMITTEN.

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

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 DWN EXPENSE, EXCEPT THOSE WHICH ARE NECESSARY FOR PROPER TRAFFIC CONTROL WHICH SHALL BE TEMPORARILY RESET UNTIL COMPLETION OF CONSTRUCTION DPERATIONS. AFTER COMPLETION OF THE WORK, THE CONTRACTOR SHALL RESET, AT THEIR DWN 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, PRIDE 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 DBJECTIONABLE 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 DUT BY THE ENGINEER IN THE FIELD.

PORTLAND CEMENT CONCRETE SIDEWALK REMOVAL AND REPLACEMENT CALLOUTS SHALL BE PAID AS TWO SEPARATE PAY ITEMS: 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 COST FOR THE REMOVAL OF THE SPECIFIED ITEM IN THE CONTRACT.

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

THE CONTRACTOR SHALL DISPOSE OF ALL EXCESS EXCAVATION, UNSUITABLE AND UNUSABLE MATERIAL DEFSITE AND AT AN APPROVED LOCATION IN A MANNER THAT PUBLIC OR PRIVATE PROPERTY VII AND BE DAMAGED ON FUNDANCEPED.

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 MAXIMM 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 PRIDE TO ANY PRIMING OR SEALING DPERATION. 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.

TEMPURARY 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 NECESSARILY 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
95% STANDARD ROBOGOTOR USING MANUAL COURDMENT AND SETTING VIII. BE ALL DIVED.

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

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 BETING REMOVED.

WHERE NEW WORK MEETS EXISTING FEATURES TO REMAIN, THE CONTRACTOR SHALL FIELD CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE PROCEDUING 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

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

ND. DATE REVISIONS

CHESTNUT STREET, LOCUST STREET, & SPRUCE STREET WATER MAIN & STREET IMPROVEMENT PROJECT

GENERAL NOTES AND CONSTRUCTION SPECIFICATIONS

DATE:

SHEET

AUGUST 2022

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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

4.11.2 BASIC DISINFECTION

WORK SHOULD FOLLOW BASIC DISINFECTION AND CONTAMINATION PREVENTION

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.-HANDHEID MATERIALS AND TOOLS USED TO MAKE THE REPAIR

5.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 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 DEPRESSURING 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 PRESSURED WITHOUT HE 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 PECULIFE THAT WATER PERSSURE RE SUBSTANTIALLY REPOLICED PRIOR TO EXPOSING THE REQUIRE THAT WATER PRESSURE BE SUBSTANTIALLY REDUCED PRIOR TO EXPOSING THE WHERE THERE IS A PIPE BLOWOUT AND A LOSS OF WATER PRESSURE PI 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 CONTAINATION 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 NOTE THAT THE PROCEDURES EAPTENINED IN SEC. \$1.13.7, \$1.13.2, AND \$1.13.3 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

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 UNITL RESIDUALS ARE RESTORED TO LEVELS MAINTAINED IN THE DISTRIBUTION SYSTEM BY THE WATER UTILITY—IF THE SYSTEM OPERATES WITH A DISINFECTANT RESIDUAL.

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 TINKER VOLUMES OF WATER TORMOVER, MARING SURE THAT THE FLUSHED WATER IS WISUALLY 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 SPACEWIG OR SWARDING WITH A MINIMILIAL PROPERTY CHI ORDIN SOLUTION. 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
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 THEE VOLUMES OF WATER THOROVER. 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.

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 CONTAMINATEL, THE PROCEDURES OF LINES IN SEC. 4.3, 4.4, 4.5, 0.4 5. SHOULD 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 CHIORINE CANNOT BE CONTROLLED. FREE CHLORINE RESIDUALS UP TO 4 MG/L (BASED ON ANNUAL AVERAGES) ARE ALLOWED BY FEDERAL DRINKING WATER REQUILATIONS; 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

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

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 MSUALLY CLEAR, AND HAVE TYPICAL SYSTEM CHLORINE RESIDUAL (IF THE SYSTEM OPERATES WITH

FOR VERY-LARGE-DIAMETER PIPE (WHERE PERSONNEL MAY SAFELY ENTER THE PIPE). IN FOR VENT-LANGE-DIAMETER PIPE (WHERE PERSONNEL MAY SAFELY ENTER THE PIPE), IN LIEU OF FLUSHING FOLLOWING DISINETCHION, 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

AFTER FOLLOWING THE APPROPRIATE METHODS ABOVE, PRIOR TO RETURNING THE PIPE TO SERVICE, THE EFFICACY OF THE DISTRICTION 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 REVISIONS THERETO, THE NOTES ON THE PLANS, AND IN ACCORDANCE WITH CODES AND ORDINANCES OF THE VILLAGE OF NORTH AURORA, ILLINDIS.

 2. ALL WATER MAIN SHALL BE DUCTILE IRON PIPE CLASS 52 WITH MECHANICAL OR PUSH-ON JOINTS AND SHALL CONFORM TO ANSI A21.51 (AVWA C151), ANSI A21.50 (AWWA C150) AND ANSI A21.11 (AVWA 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).

- C1U4),

 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
- 7. ALL WATER MAIN AND FITTINGS SHALL BE WRAPPED WITH POLYETHYLENE. POLYETHYLENE
- 7. ALL WATER MAIN AND FITTINGS SHALL BE WRAPPED WITH POLYETHYLENE. POLYETHYLENE SHALL HAVE A THICKNESS DE 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 DR 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 C509 AND HAVE NON-RISING STEM, WITH A STANDARD OPERATING NUT AND SHALL DEN 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.

- UNDER UP-INCHES SHALL BE LICATED IN A VALVE VAULT WITH A MINIMOM IF 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.

 12. ALL VALVE BOXES 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 ROUTE DIME 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) DI. COUPLING TYPE 441 DR EQUAL. COUPLINGS SHALL BE PROVIDED AT LOCATIONS SHOWN ON THE PLANS OR AS REQUIRED TO
- 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' ALL WATER MAINS SHALL HAVE A MINIMUM DEPTH OF COVER OF 5'-5'.

 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
- 19. WATER MAINS AND WATER SERVICE LINES SHALL BE PROTECTED FROM SANITARY SEWERS. STIRM SEVERS, 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 PROPDSED DRAIN OR SEVER 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 SEVER PROVIDED THAT THE WATER MAIN INVERT IS AT LEAST EIGHTEEN INCHES ABOVE THE CROWN OF THE SEVER, AND IS EITHER IN A SEPARATE TRENCH OR IN THE SAME TRENCH ON AN UNDISTURBED EARTH SHELF LOCATED TO DUE SIDE OF THE SEVER. IF IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL OR VERTICAL SEPARATION AS DESCRIBED ABOVE, THE THE EXEVER 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 THE DRAIN OR SEWER. IF IT IS NECESSARY FOR THE WATER MAIN TO THE DRAIN OR SEWER. IF IT IS NECESSARY FOR THE WATER MAIN TO THE DRAIN OR DRAIN, THE THE SEWER MUST BE CONSTRUCTED OF WATER MAIN TYPE MATERIAL (AS NOTED IN THE THE SEWER MUST BE CONSTRUCTED OF WATER MAIN TYPE MATERIAL (AS NOTED IN THE NORMAL DISTANCE FROM THE WATER MAIN TO THE DRAIN OR DRAIN, THE THE SEWER OR DRAIN, THE NORMAL DISTANCE FROM THE WATER MAIN TO THE SEVER OR DRAIN, THE NORMAL DISTANCE FROM THE WATER MAIN TO THE SEVER OR DRAIN LINE IS AT LEAST THE FEET. IN MAKING SUCH CROSSINGS, CENTER A LENGTH OF WATER MAIN PIPE OVER JUDGE THE SEVER OR DRAIN L 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 DF 0'-8".
- MAXIMUM OF 0'-8'.

 23. HYDRDISTATIC TESTS THE CONTRACTOR SHALL PERFORM HYDROSTATIC TESTS IN ACCORDANCE WITH DIVISION IV, SECTION 41 OF THE STANDARD SPECIFICATIONS FOR WATER AND SEVER MAIN CONSTRUCTION IN ILLINDIS, 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 SEVER MAIN CONSTRUCTION IN ILLINDIS, LATEST EDITION. THE VILLAGE WATER OPERATOR IN CHARGE OR PERSON AUTHORIZED BY THE VILLAGE WATER PERSON OF THE VILLAGE WATER OF THE VILLAGE WATER OF THE WATER MAIN SHALL BE DISINFECTED IN ACCORDANCE WITH THE AMERICAN WATER WORKS ASSOCIATION. PROCEDURE DESIGNATION. AWWA C-651. LATEST EDITION.
- 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 DINLY BE DPERATED BY VILLAGE. DEPORTMENT AT
- AURDRA WATER DEPARTMENT PERSONNEL. PLEASE CONTACT THE WATER DEPARTMENT AT

DATE: AUGUST

GENERAL NOTES AND CONSTRUCTION SPECIFICATIONS

2022

			Chestnut Street	Locust Street	Spruce Street	Contingency				Chestnut Street	Locust Street	Spruce Street
LEN	IGTH (FT)	1,770	590	590		_	LE	NGTH (FT)	1,770	-	590	
	AREA (SY)	4,859	1,622	1,607	1,630			AREA (SY)	4,859	1,622	1,607	1,630
DESCRIPTION	UNIT	QUANTITY		1			# DESCRIPTION	UNIT C	QUANTITY			
ATTO MAIN			П				DAVEMENT DEMOVALS					
ATER MAIN	lea I	2	1	1	1		PAVEMENT REMOVALS	Ico vn	70	26	26	26
1 CONNECTION TO EXISTING WATER MAIN, 8-INCH 2 WATER MAIN, D.I.P., CLASS 52 WITH POLYETHYLENE WRAP, 6-INCH	FOOT	56	14	26	- 1	10	36 HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT 37 PAVEMENT REMOVAL, 10 INCH	SQ YD SQ YD	78 4,859		26	
3 WATER MAIN, D.I.P., CLASS 52 WITH POLYETHYLENE WRAP, 8-INCH	FOOT	1,806	584	598		-	38 EARTH EXCAVATION	CUYD	570			216
WATER MAIN, D.I.F., CLASS 52 WITH FOLIETH LENE WRAF, SINCH	SQYD	50	0	330	3/4	50	39 CLASS D PATCH, 4 INCH	SQ YD	169		45	
5 PRESSURE CONNECTION AND GATE VALVE IN VAULT, 8-INCH	EA	30	1	1	1	0	PAVING	30 10	103	03	43	OI
6 FIRE HYDRANT ASSEMBLY, WITH AUXILIARY VALVE, 6-INCH	EA	6	2	2	2	0	40 BITUMINOUS MATERIALS (PRIME COAT)	POUND	10,934	3 651	3 616	3 667
DUCTILE IRON FITTINGS	POUND	3,323	901	1,111	1 111	200	41 BITUMINOUS MATERIALS (TACK COAT)	POUND	1,095			367
NON-SPECIAL, NON-HAZARDOUS SOIL WASTE DISPOSAL - TYPE 1	TON	50	0	0	0	50	42 HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	1,242			400
NON-SPECIAL, NON-HAZARDOUS SOIL WASTE DISPOSAL - TYPE 2	TON	50	0	0	0	50	43 HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	517		_	165
FOUNDATION MATERIAL	CUYD	25	0	0	0	25	CONCRETE					
EXPLORATORY EXCVATION (ROW)	EA	10	3	3	4	0	44 COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	3,591	1,252	1,096	1,213
WATER SERVICE CONNECTION, 1 INCH	EA	39	13	14	12	0	45 SIDEWALK REMOVAL	SQ FT		3,803	_	
WATER SERVICE PIPE, TYPE "K" COPPER, 1-INCH (OPEN CUT)	FOOT	1,285	453	420	372	40	46 PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT		3,738		
WATER SERVICE PIPE, TYPE "K" COPPER, 1-INCH (TRENCHLESS)	FOOT	70	0	0	0	70	47 DETECTABLE WARNINGS	SQ FT	132			
DISCONNECT AND ABANDON EXISTING WATER MAIN	EA	6	2	2	2	0	SEWER STRUCTURES					
VALVE BOX TO BE ABANDONED	EA	6	2	2	2	0	48 INLETS TO BE ADJUSTED	EACH	6	3	2	1
FIRE HYDRANT REMOVAL	EA	3	1	1	1	0	49 INLETS TO BE RECONSTRUCTED	EACH	1	0	0	0
WATER MAIN TESTING - PRESSURE AND DISINFECTION	LS	3	1	1	1	0	50 TYPE 1 FRAME AND GRATE, CLOSED LID	EACH	2	1	0	0
							51 DRAINAGE STRUCTURE TO BE REMOVED	EACH	9	4	2	3
							52 MANHOLES, TY. A, 5' DIA. W/ TYPE 1 FRAME, CLOSED LID	EACH	1	1	0	0
WER MAIN							53 CATCH BASINS, TYPE A, 4' DIA W/ TYPE 11 FRAME & GRATE	EACH	4	2	1	1
SANITARY SEWER SERVICE REPAIR, PVC SDR 26, 6-INCH	EA	19	7	6	6	0	54 INLETS, TYPE A, 2' DIA W/ TYPE 11 FRAME & GRATE	EACH	4	1	1	2
STORM SEWER REMOVAL, 12-INCH	FOOT	124	-	-		-	55 SANITARY MANHOLES TO BE ADJUSTED	EACH	7	2	2	3
STORM SEWER REMOVAL, 15-INCH	FOOT	23	_	0	0	0	DRIVEWAYS	D terr			-	
STORM SEWER REMOVAL, 18-INCH	FOOT	25	_	25	0	0	56 HOT-MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT	SQ YD	207	40	48	99
STORM SEWER REMOVAL, 21-INCH	FOOT	4	4	0	0	0	57 PORTLAND CEMENT CONCRETE DRIVEWAY REMOVAL AND REPLACEMENT	SQ YD	211	97	0	54
STORM SEWER REMOVAL, 24-INCH	FOOT	28	0	0	28	0	MISC.					
STORM SEWER REMOVAL, 36-INCH	FOOT	44	0	22	22	0	58 LANDSCAPE RESTORATION	SQ YD	4,186	1637	839	1610
STORM SEWERS, WATER MAIN QUALITY PIPE, CONCRETE PRESSURE PIPE, 15-INCH	FOOT	23	23	0	0	0	59 TREE ROOT PRUNING	EA	10		0	4
STORM SEWERS, WATER MAIN QUALITY PIPE, CONCRETE PRESSURE PIPE, 18-INCH	FOOT	25	0	25	0	0	60 TREE REMOVAL	UNIT	130	110	0	0
STORM SEWERS, WATER MAIN QUALITY PIPE, CONCRETE PRESSURE PIPE, 36-INCH	FOOT	44	0	22	22	0	61 TREE REPLACEMENT, SPECIAL	EA	5	4	0	0
STORM SEWERS, CLASS IV, RCP, 12-INCH	FOOT	124	58	32	34	0	62 TRAFFIC CONTROL AND PROTECTION STANDARD 701501	LSUM	1	0	0	0
STORM SEWERS, CLASS IV, RCP, 21-INCH	FOOT	4	4	0	0	0	63 TRAFFIC CONTROL AND PROTECTION STANDARD 701901	LSUM	1	0	0	0
STORM SEWERS, CLASS IV, RCP, 24-INCH	FOOT	28	0	0	28	0	64 CONSTRUCTION LAYOUT	LSUM	1	0	0	0
SE IMPROVEMENTS AND REPAIRS							65 DUST CONTROL - MECHANICAL SWEEPING	CAL DAY	5	0	0	0
GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQYD	745	240	246	250	0	S DOST CONTINUE - MILENIAMICAE SWEETING	CALDAI	3	U	U	0
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIALS	CUYD	259				-	ALTERNATE BID ITEMS					
4 AGGREGATE SUBGRADE IMPROVEMENT	CUYD	259	_			-	66 WATER MAIN, ZINC COATED D.I.P., CLASS 52 WITH V-BIO POLY WRAP, 6-INCH	FOOT	56	14	26	6
AGGREGATE BASE COURSE, TYPE B, 7 INCH	SQYD	4,859	_			_	The state of the s	FOOT	_		_	574

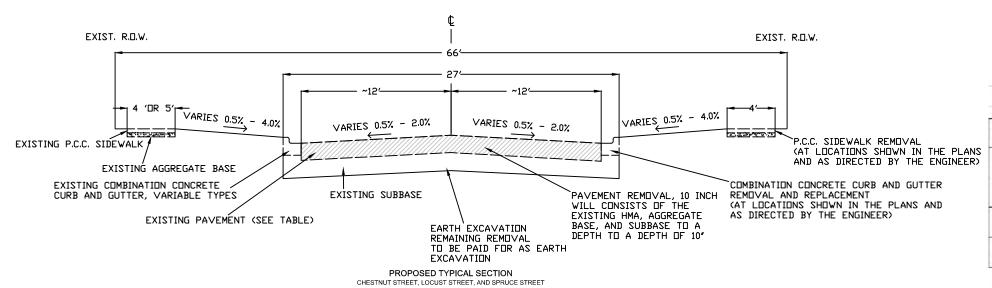
CHESTNUT STREET, LOCUST STREET, & SPRUCE STREET WATER MAIN & STREET IMPROVEMENT PROJECT **SUMMARY OF QUANTITIES**

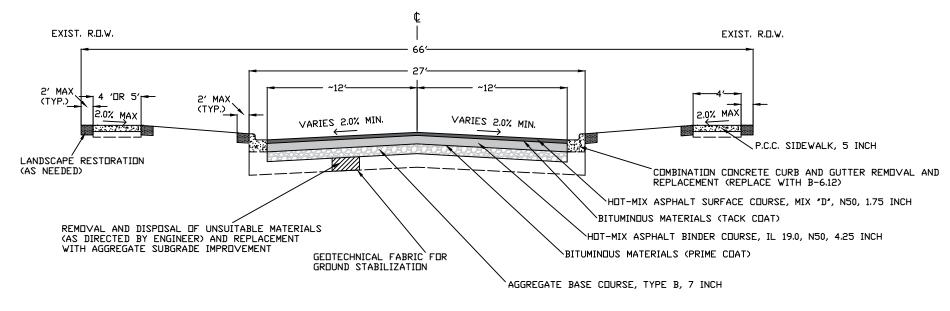
AUGUST 2022

SHEET 4 OF 21

ROADWAY	START CROSS STREET	END CROSS STREET	PAVEMENT REMOVAL THICKNESS	AVERAGE EARTH EXCAVATION DEPTH	EXIST. HMA THICKNESS PAVEMENT CORE	EXIST. AGGREGATE THICKNESS PAVEMENT CORE	B-B	LENGTH	CURB TYPE
CHESTNUT STREET	BANBURY ROAD	HICKORY STREET	10 INCH	3.5 INCH	4.6 INCH	5 INCH	27 FT.	590 FT.	B-6.12
LOCUST STREET	BANBURY ROAD	HICKORY STREET	10 INCH	4.5 INCH	3.0 INCH	6.5 INCH	27 FT.	590 FT.	B-6.12
SPRUCE STREET	BANBURY ROAD	HICKORY STREET	10 INCH	4.9 INCH	3.0 INCH	2.5 INCH	27 FT.	590 FT.	B-6.12

EXISTING TYPICAL SECTION
CHESTNUT STREET, LOCUST STREET, AND SPRUCE STREET





HOT-MIX ASPHALT MIXTURE REQUIREMENTS:

OPERATION	MIXTURE TYPE	AIR VOIDS @Ndes		
RESURFACING	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5mm), 1.75"	4% @ 50 Gyr.		
RESURFACING	HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N50, 4.25"	4% @ 50 Gyr.		
PATCHING	CLASS D PATCHES, 4" (HOT-MIXASPHALT SURFACE COURSE, MIX "D", N50, 1.75", HOT-MIXASPHALT BINDER COURSE, IL 19.0, N50, 2.25")	4% @ 50 Gyr.		
DRIVEWAYS	HOT-MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT (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 HMAMIXES SHALL BE "SBS/SBR PG 76 -22" AND FOR NON-POLYMERIZED HMATHE "AC TYPE" SHALL BE "PG 64 -22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS

CROSS SECTIONS ARE NOT TO SCALE

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

ND. DATE REVISIONS

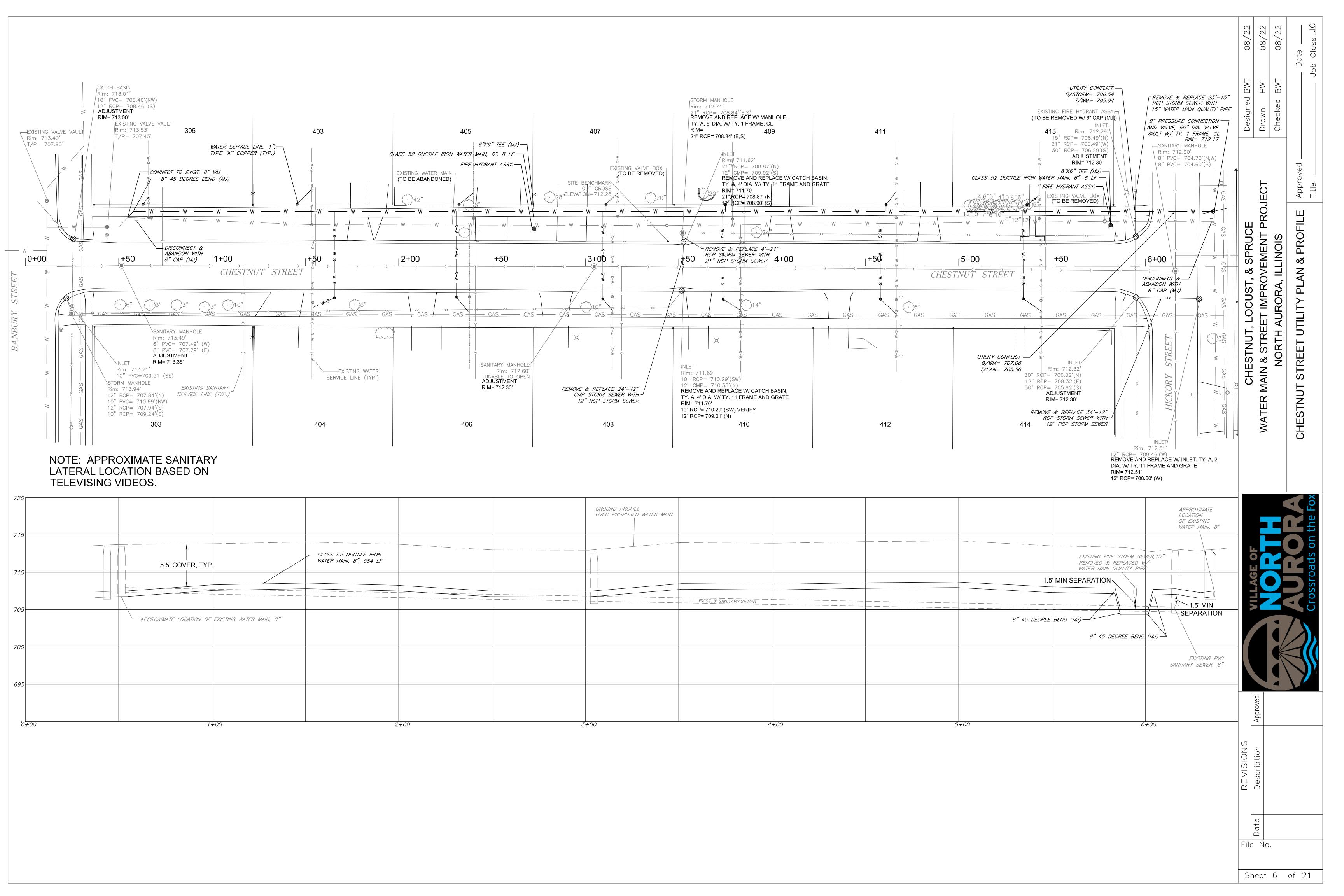
CHESTNUT STREET, LOCUST STREET, & SPRUCE STREET WATER MAIN & STREET IMPROVEMENT PROJECT

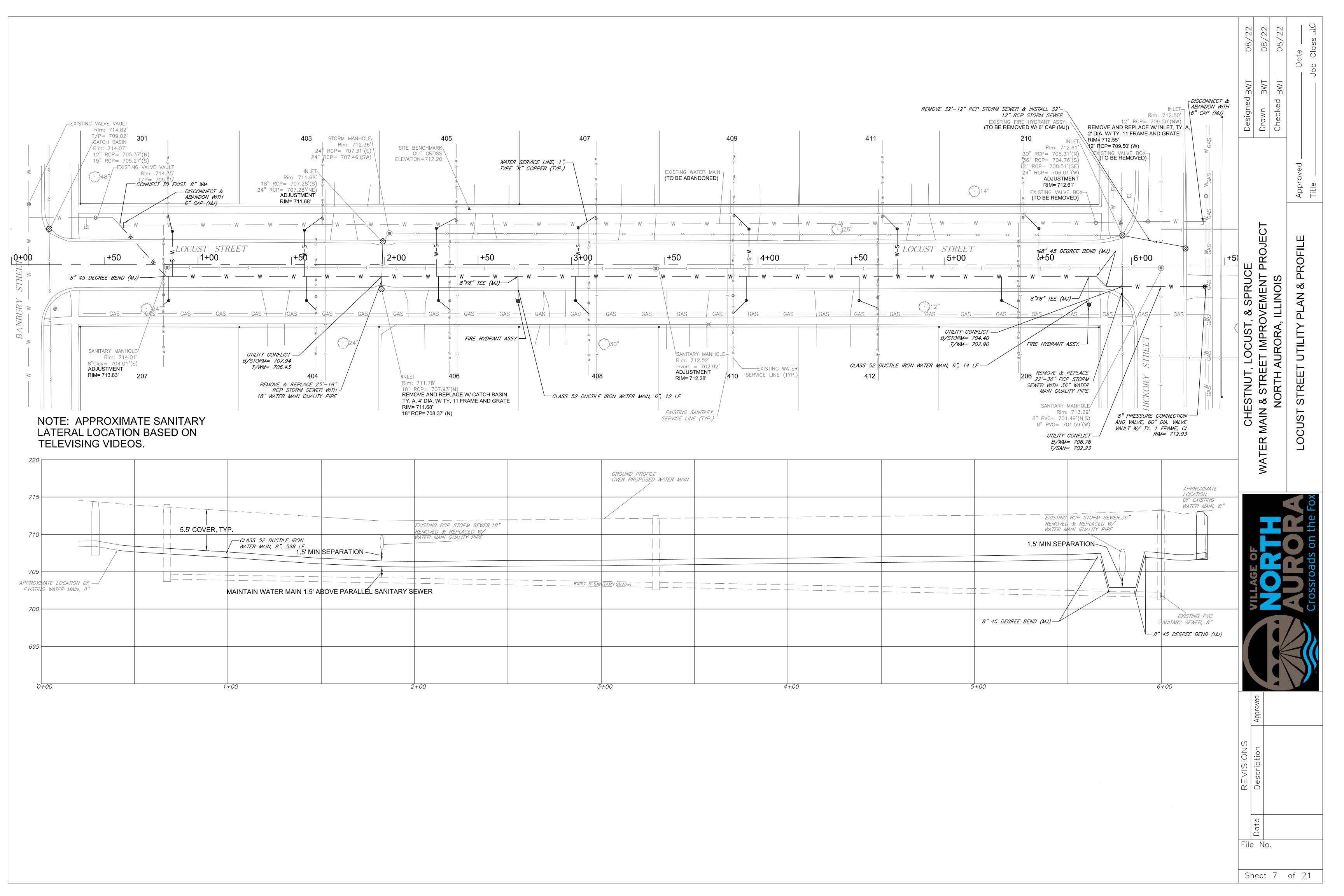
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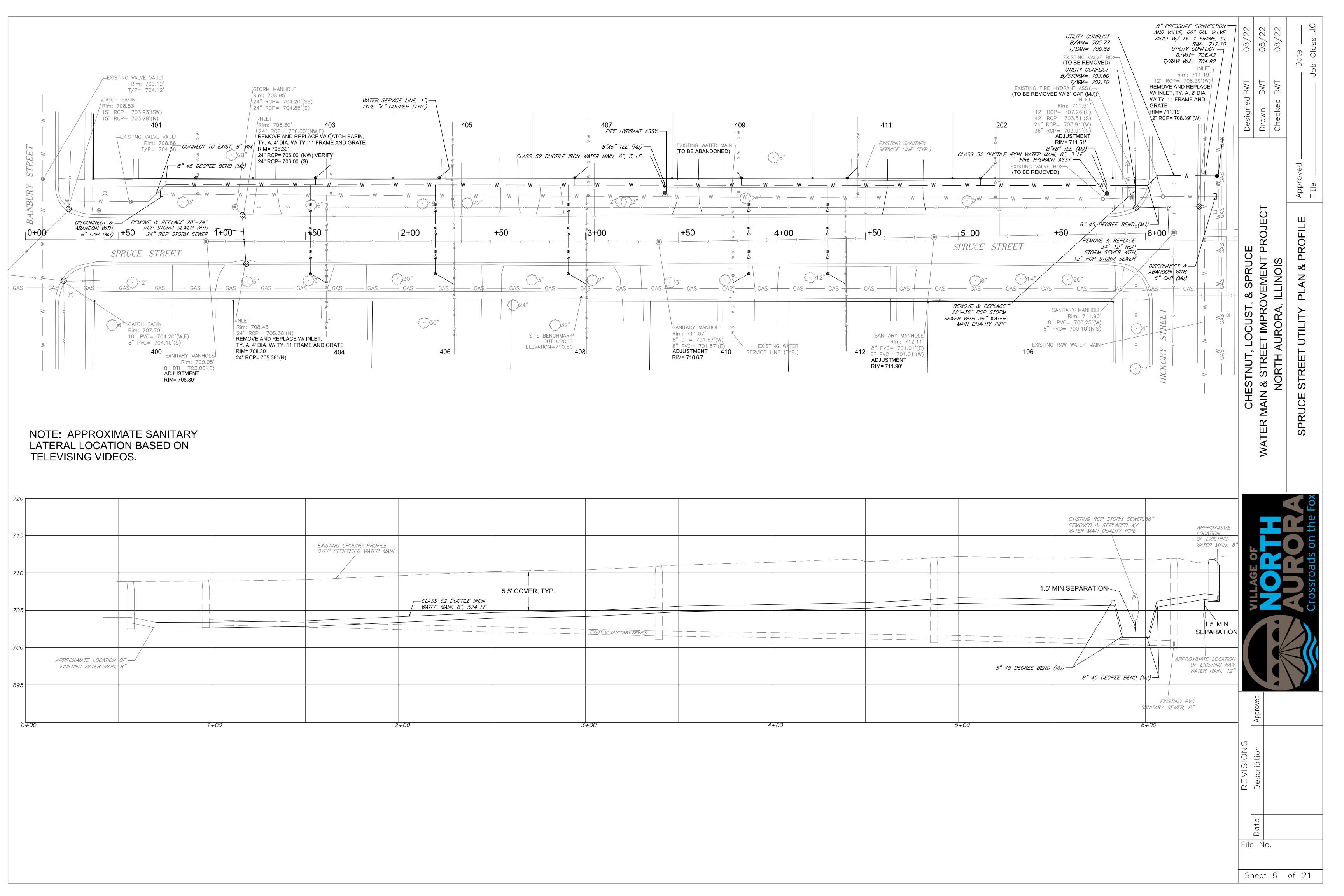
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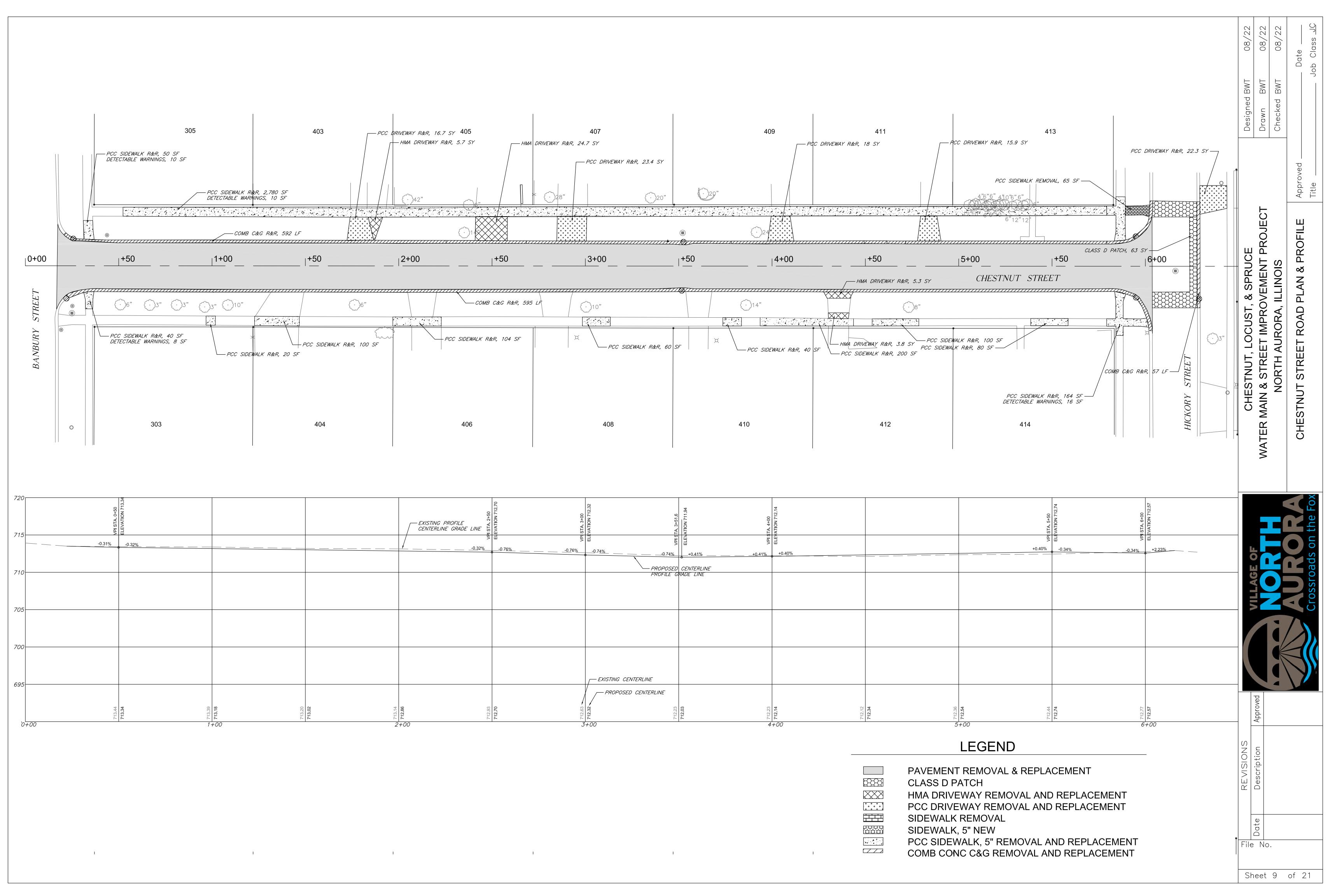
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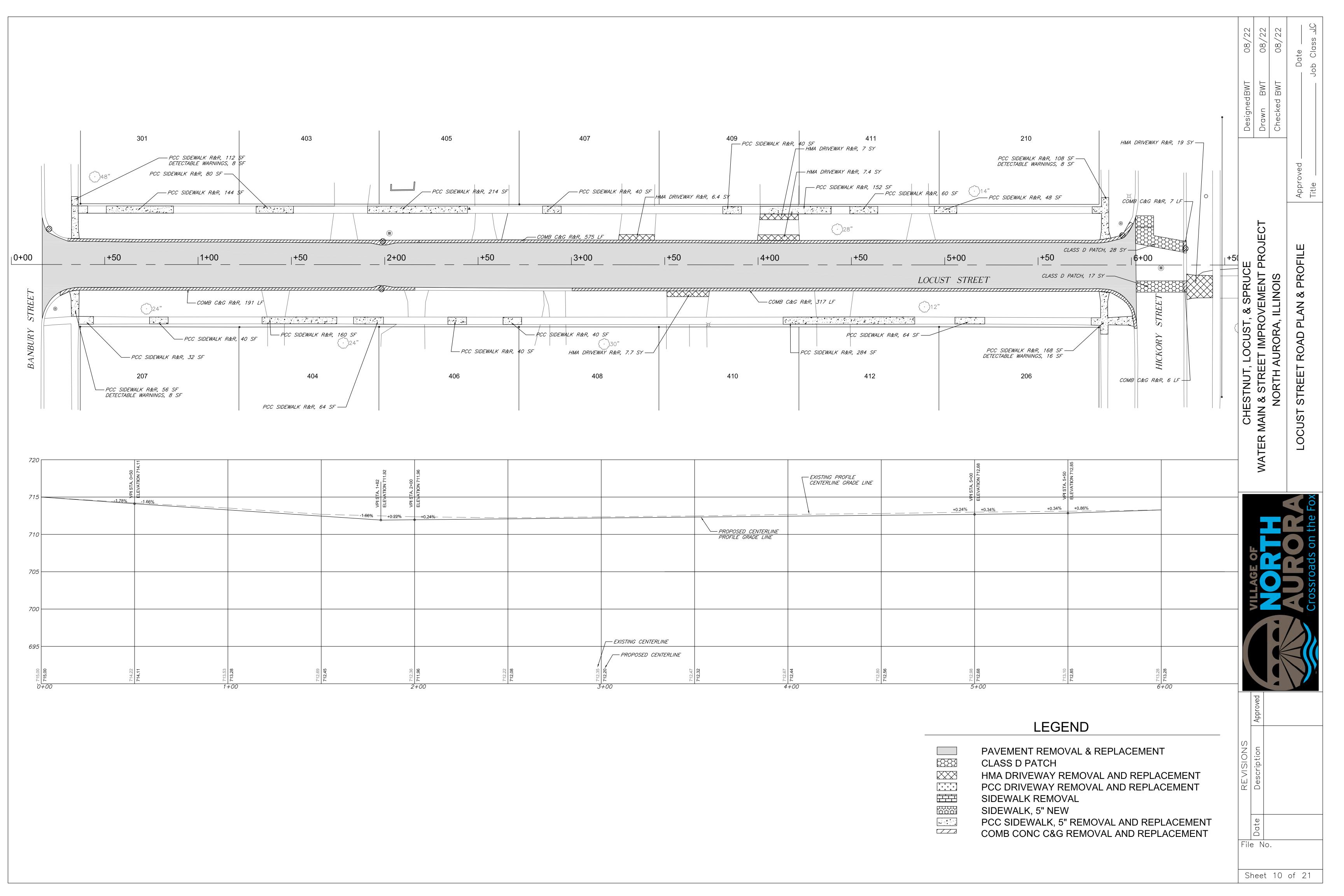
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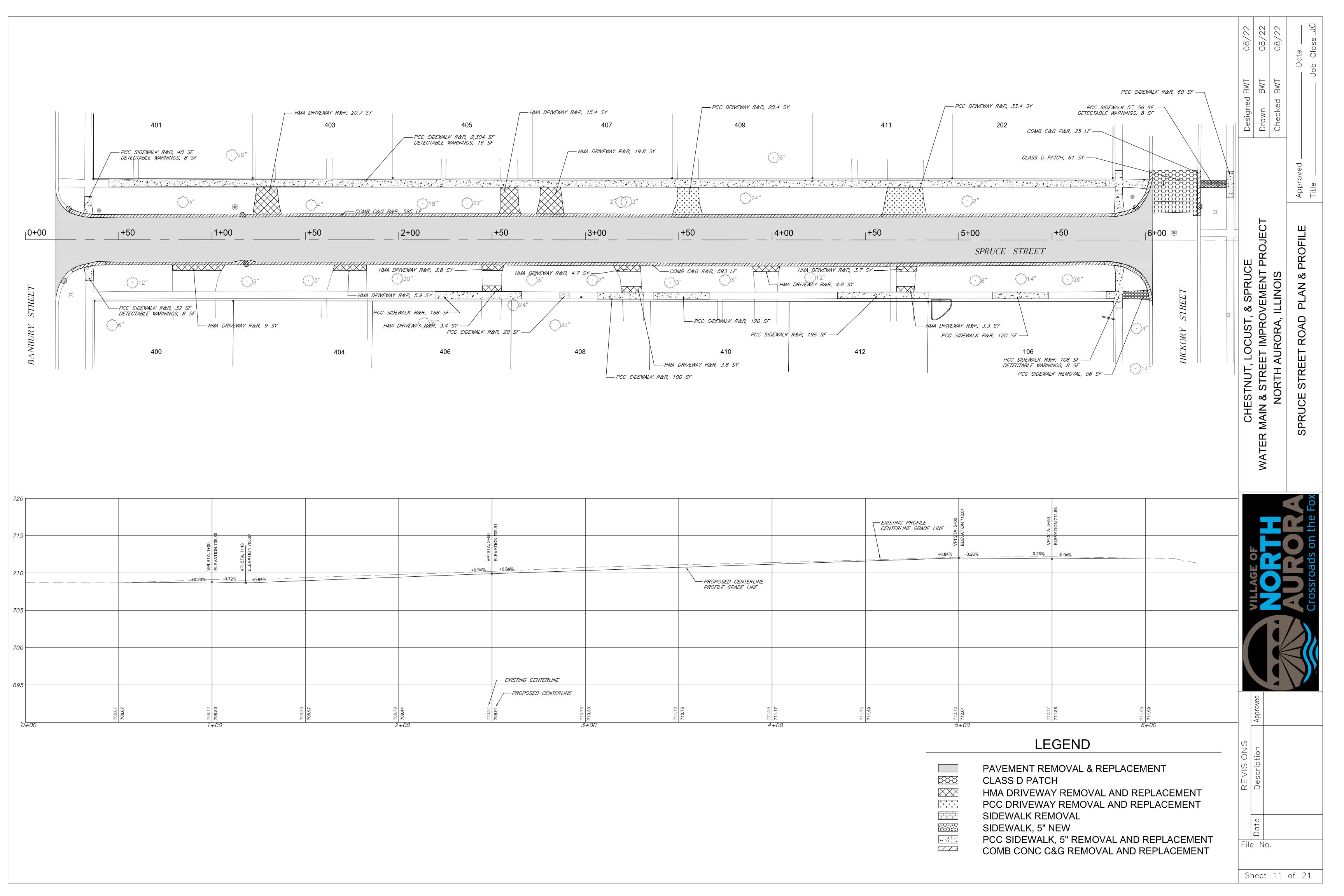


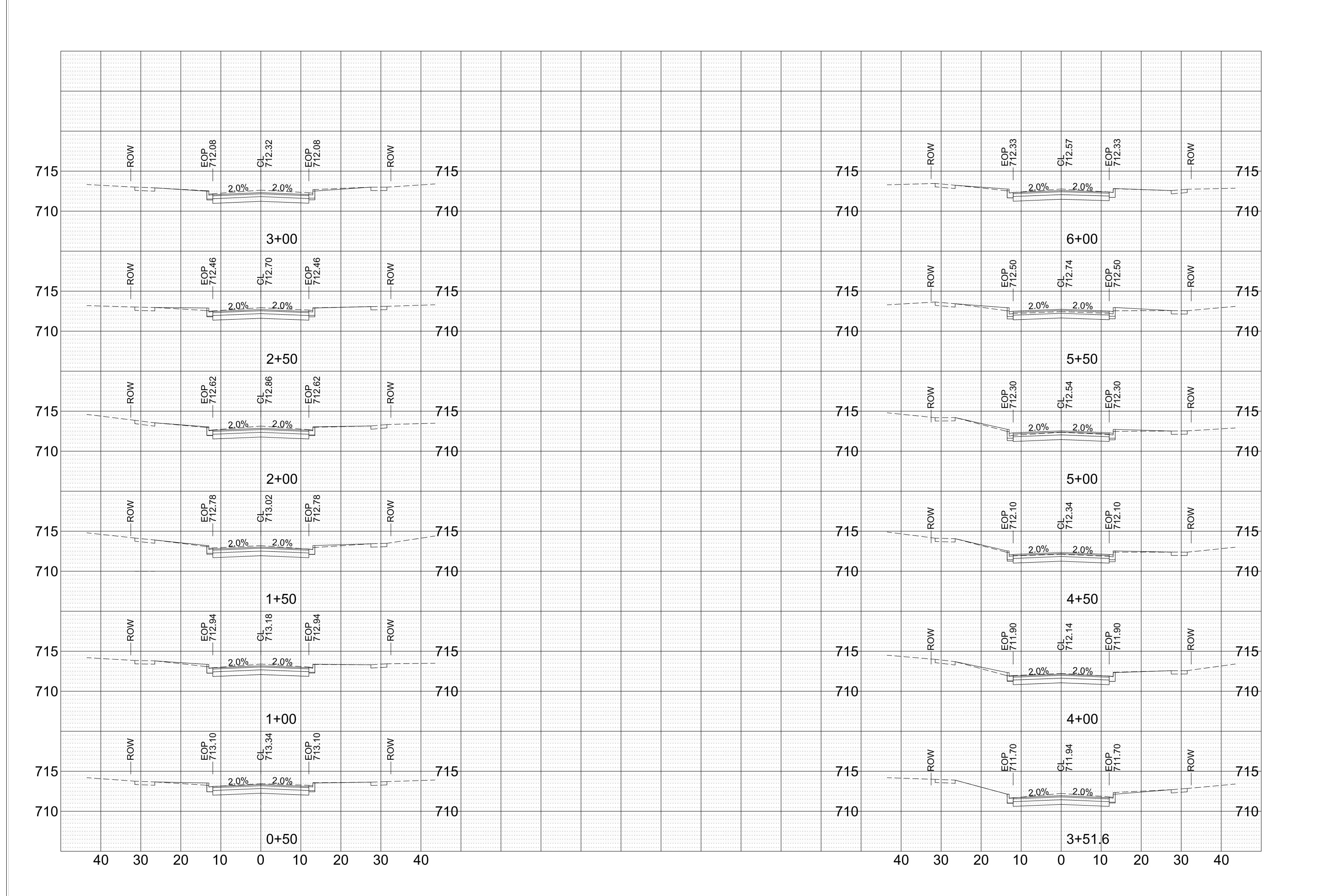








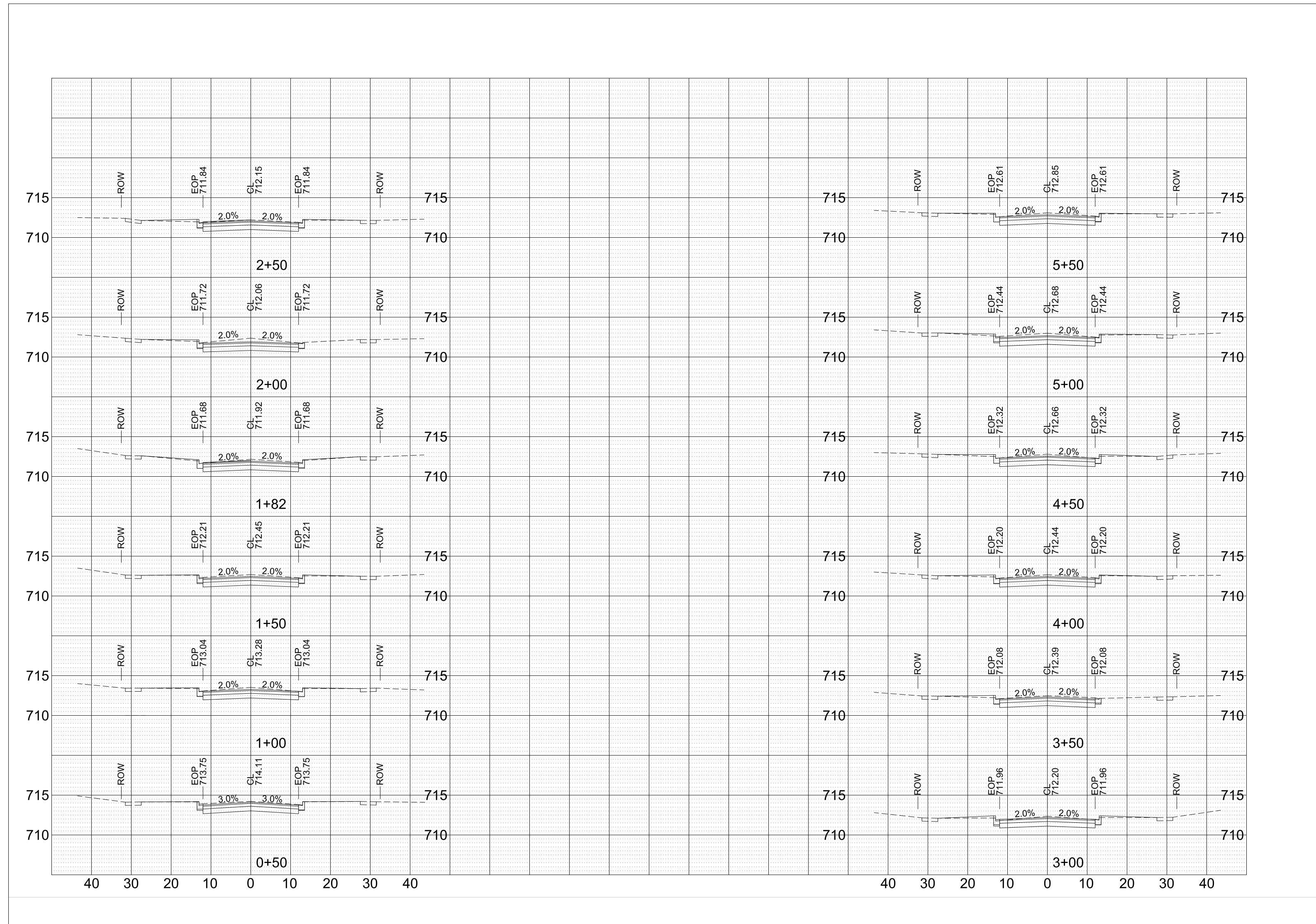


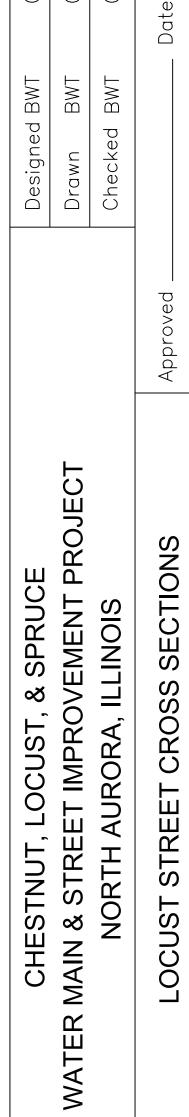


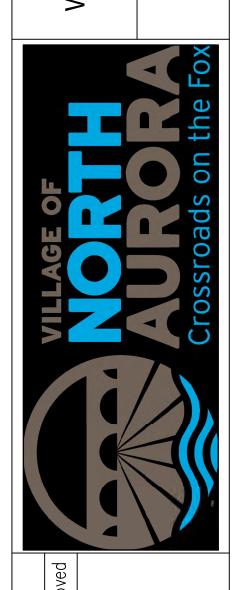
CHESTNUT, LOCUST, & SPRUCE
MAIN & STREET IMPROVEMENT PROJECT
NORTH AURORA, ILLINOIS CHESTNUT STREET CROSS SECTIONS

File No.

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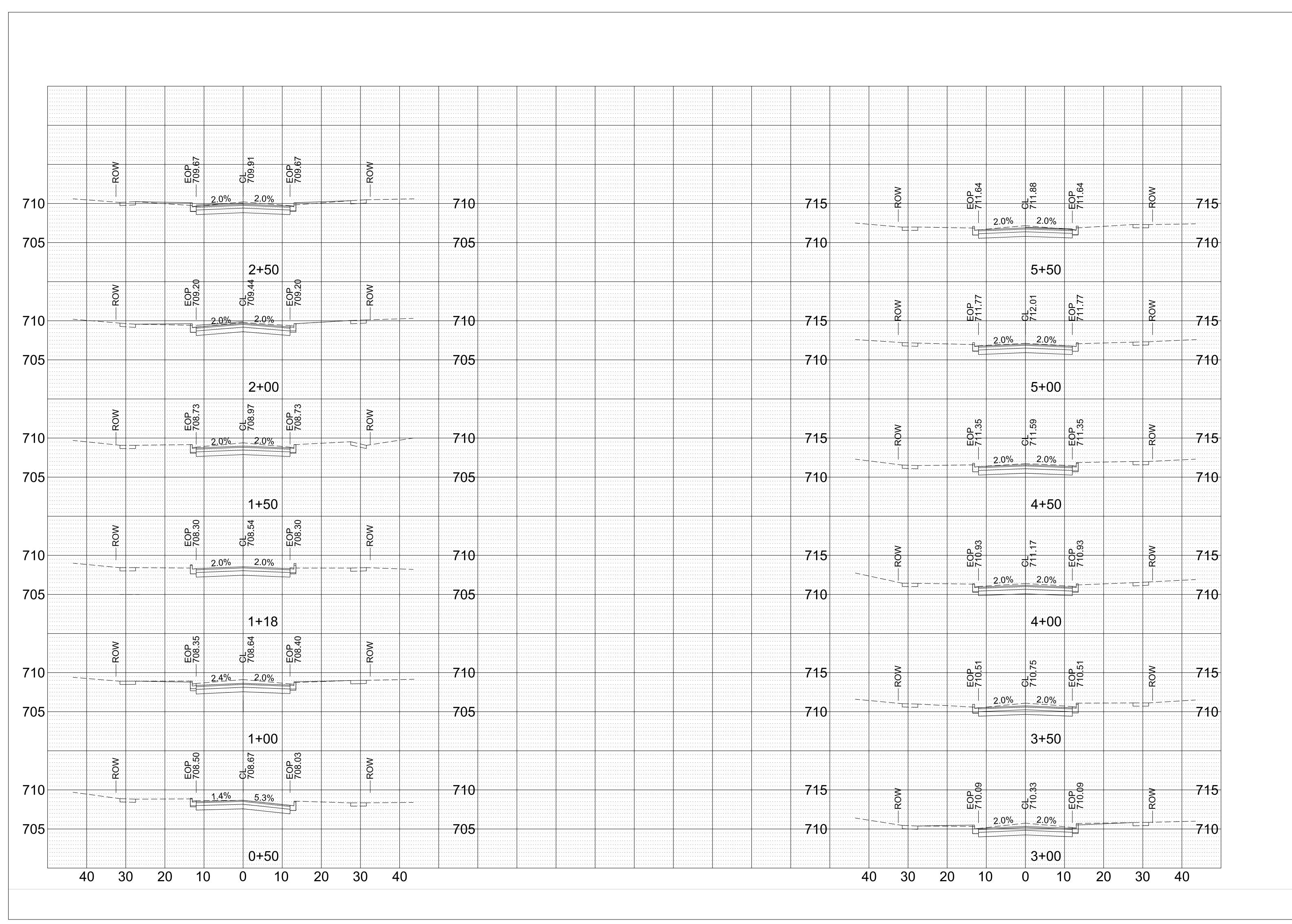






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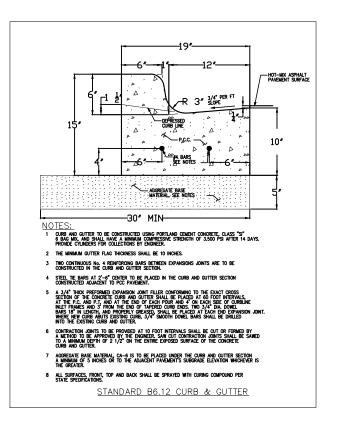


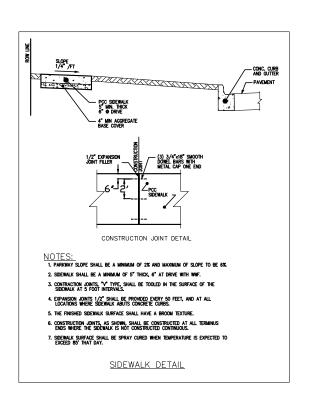


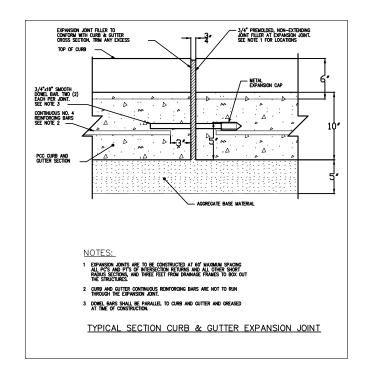


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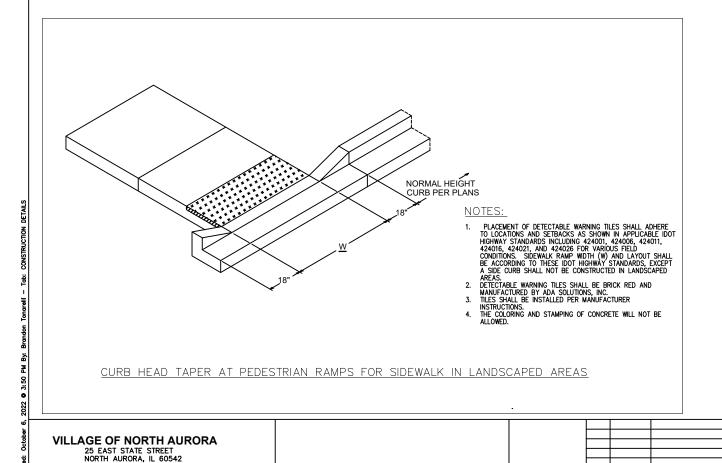




CHESTNUT STREET, LOCUST STREET, & SPRUCE STREET

WATER MAIN & STREET IMPROVEMENT PROJECT

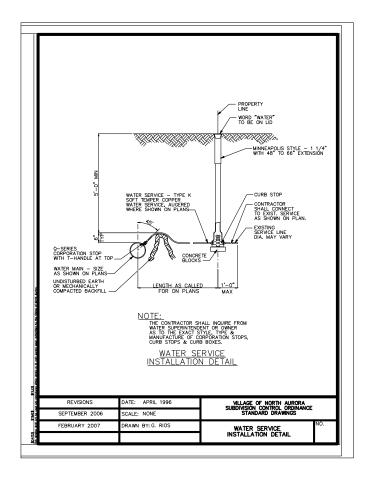
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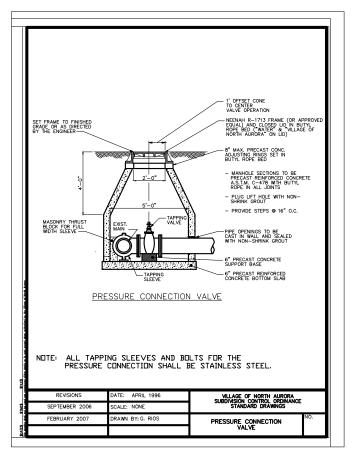


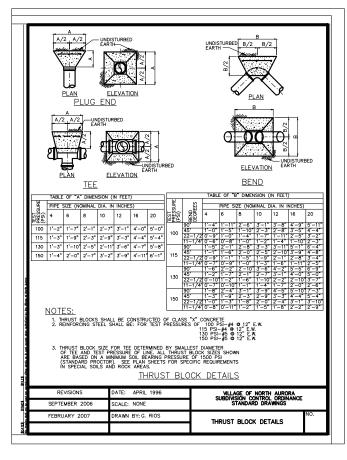
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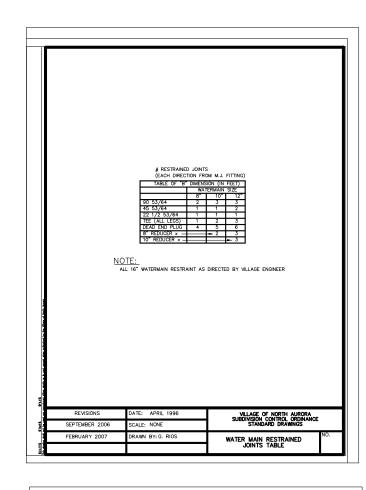
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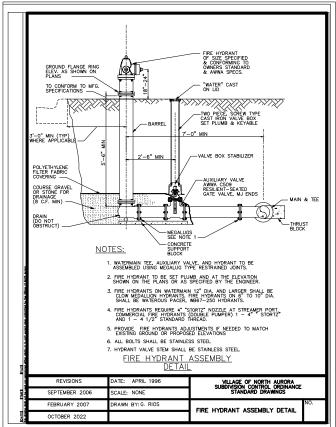
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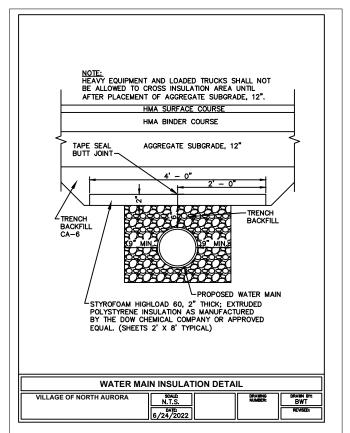


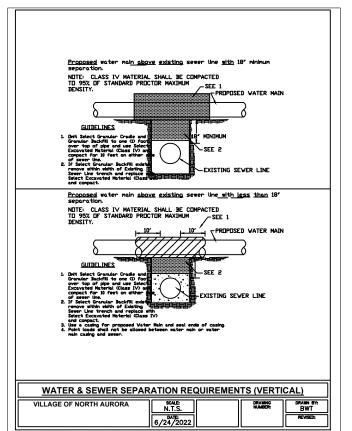


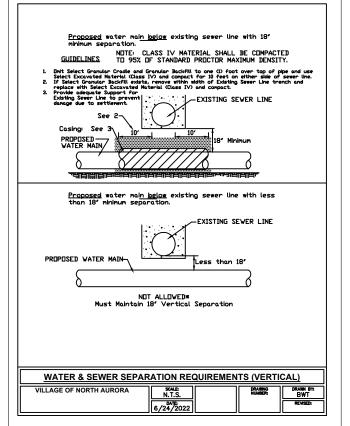












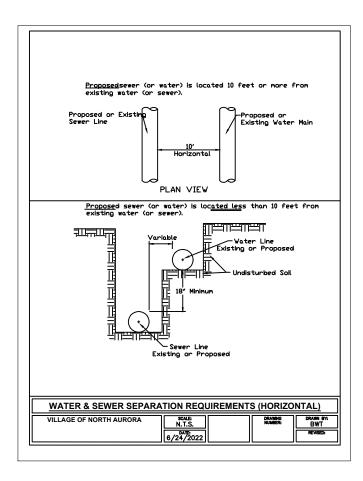
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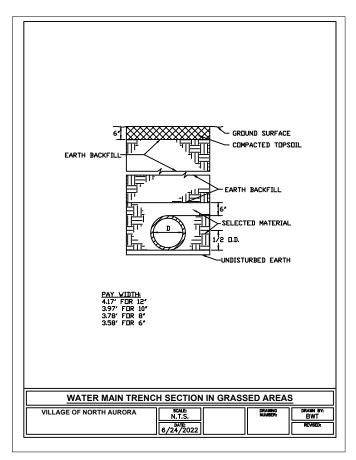
CHESTNUT STREET, LOCUST STREET, & SPRUCE STREET WATER MAIN & STREET IMPROVEMENT PROJECT

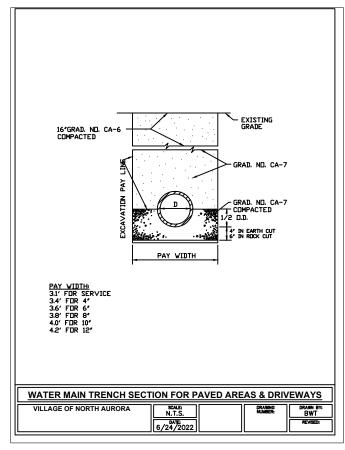
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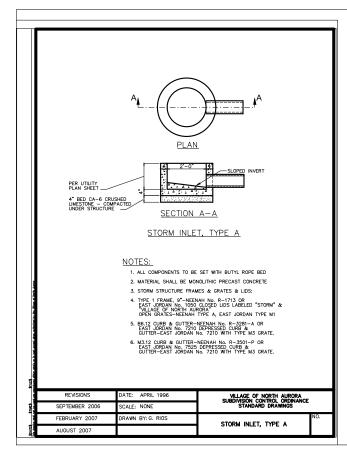
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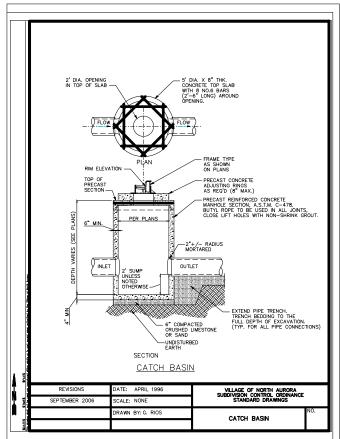
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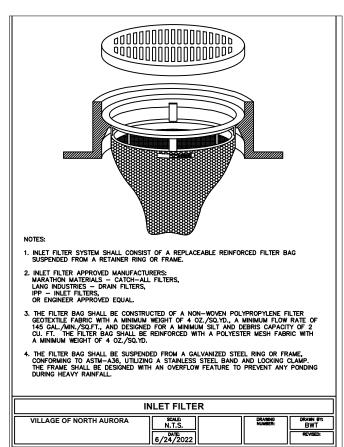


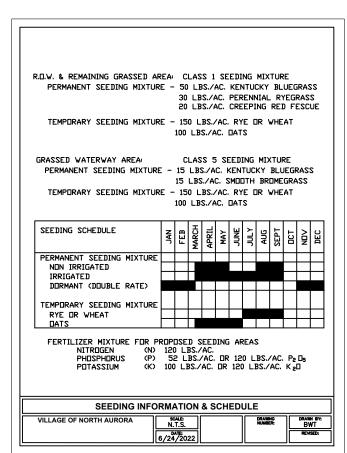


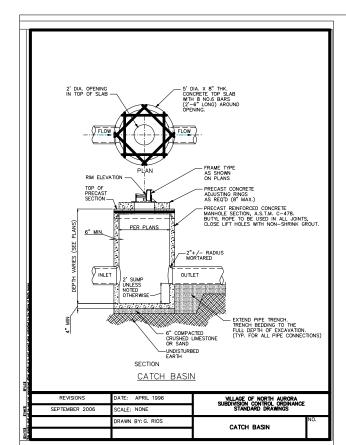












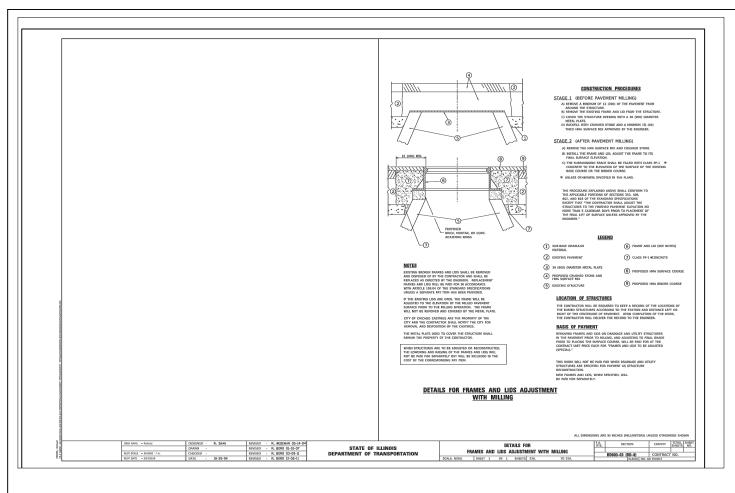
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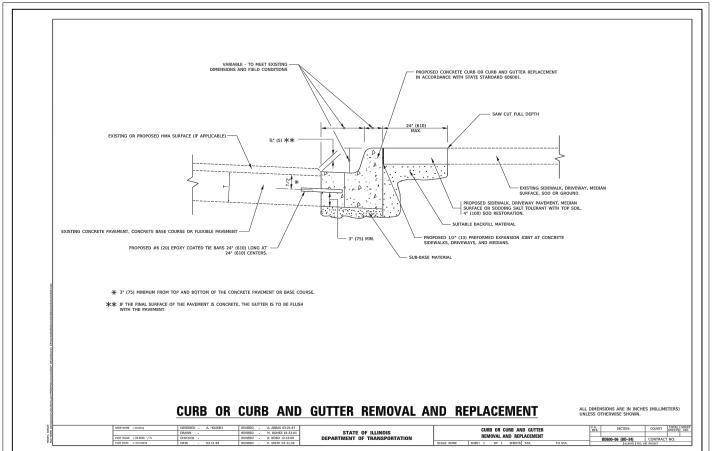
CHESTNUT STREET, LOCUST STREET, & SPRUCE STREET
WATER MAIN & STREET IMPROVEMENT PROJECT

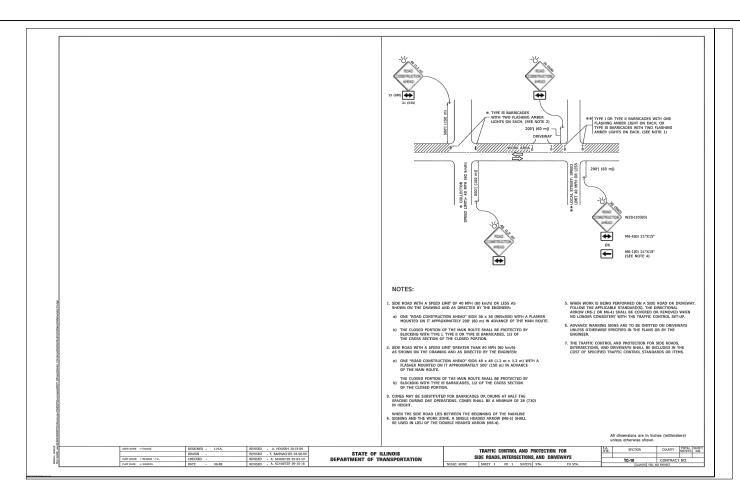
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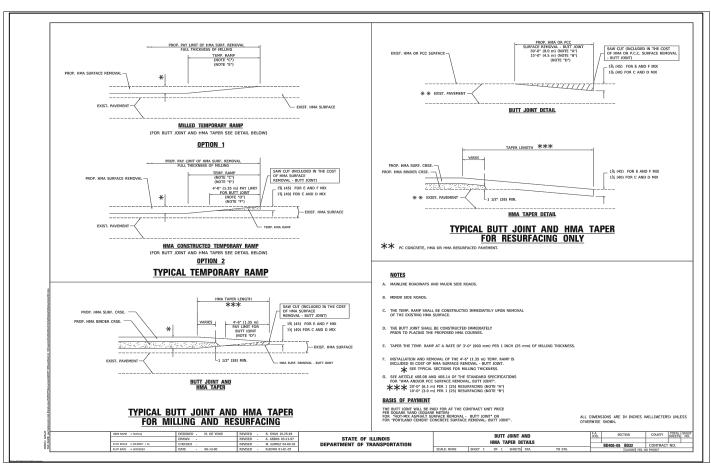
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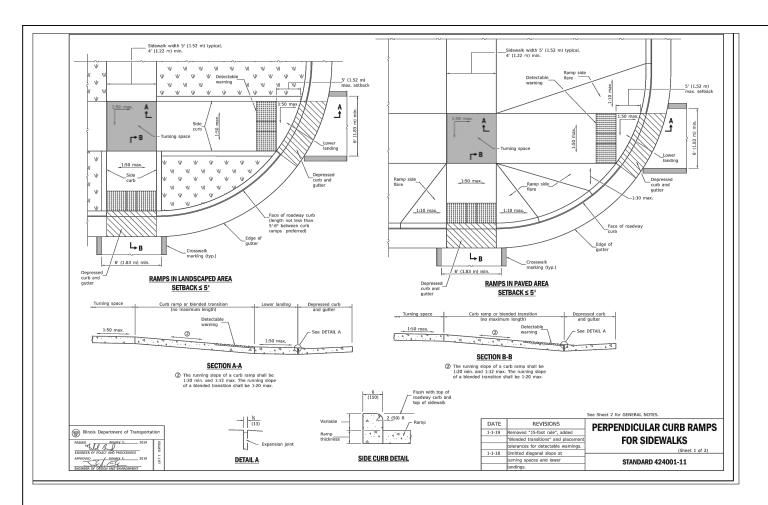
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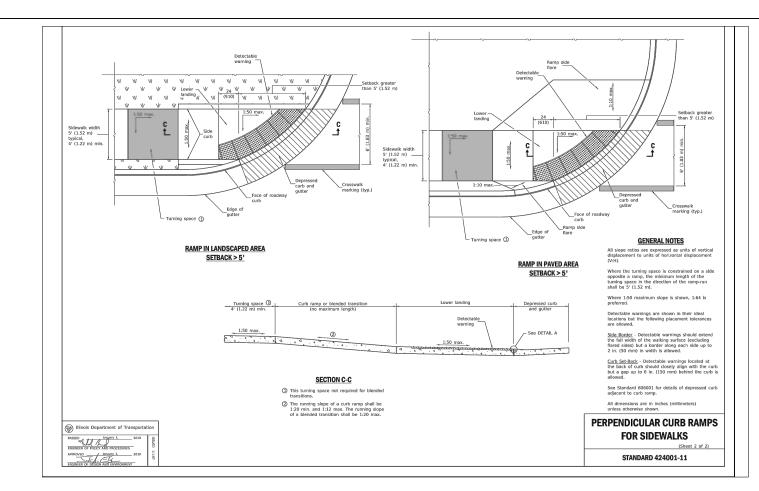
CHESTNUT STREET, LOCUST STREET, & SPRUCE STREET
WATER MAIN & STREET IMPROVEMENT PROJECT

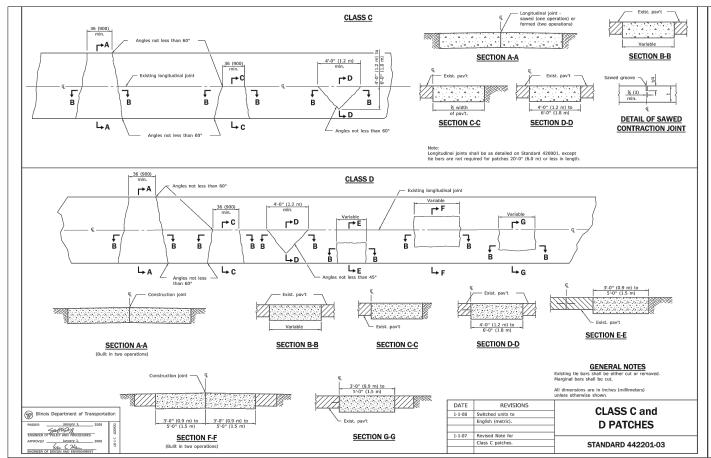
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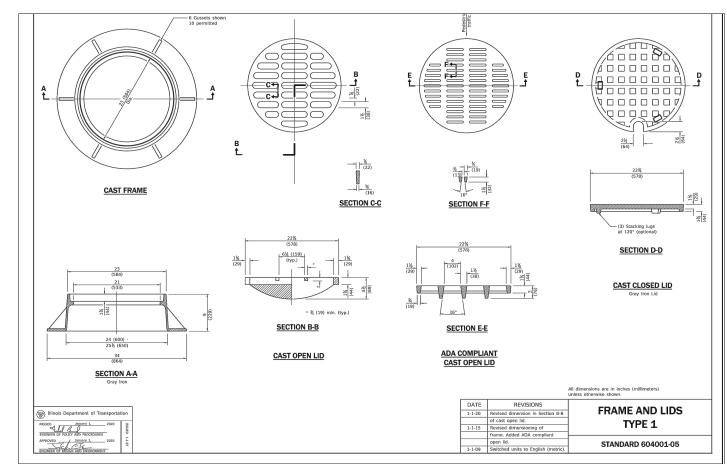
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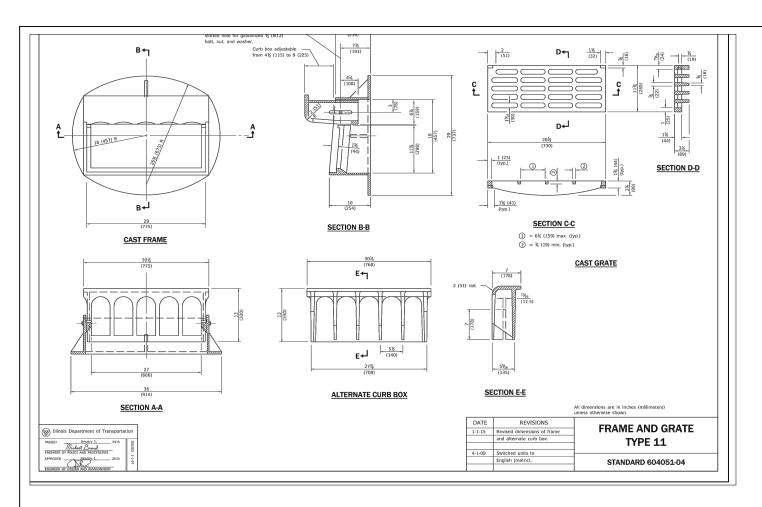
ND. DATE REVISIONS

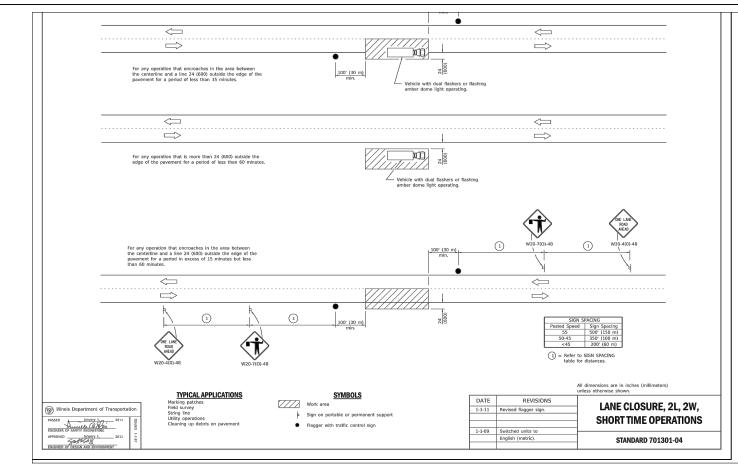
CHESTNUT STREET, LOCUST STREET, & SPRUCE STREET WATER MAIN & STREET IMPROVEMENT PROJECT

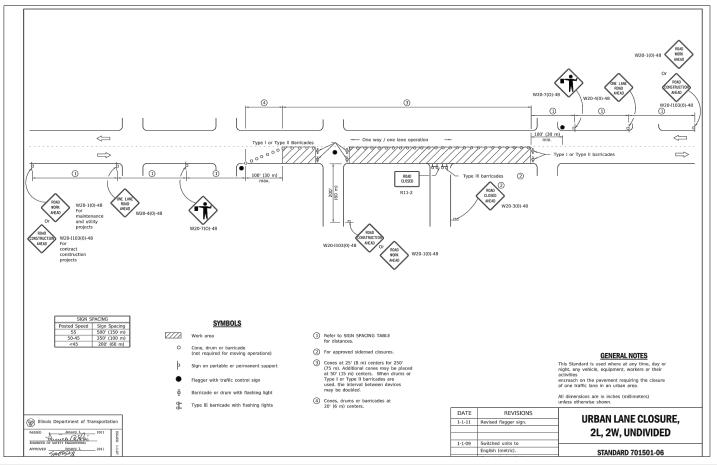
HIGHWAY STANDARDS

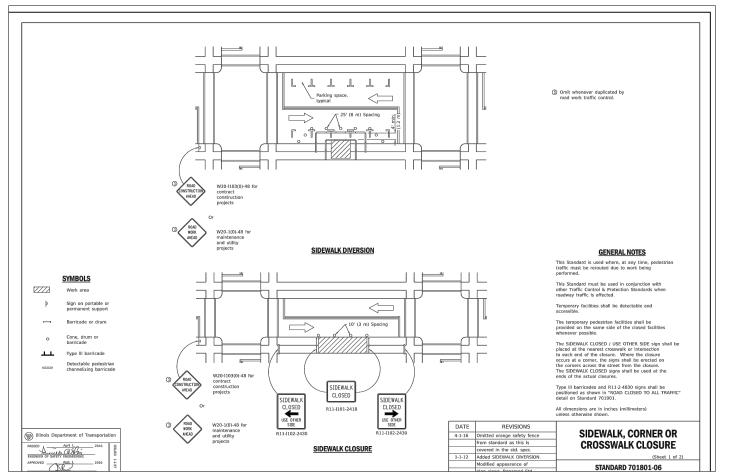
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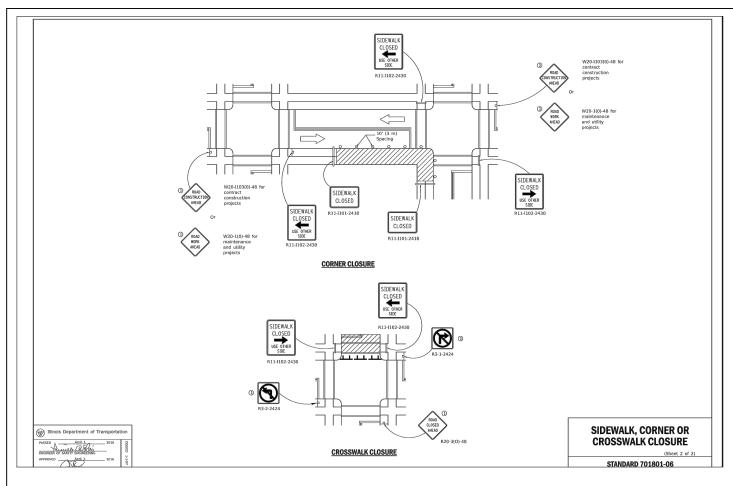
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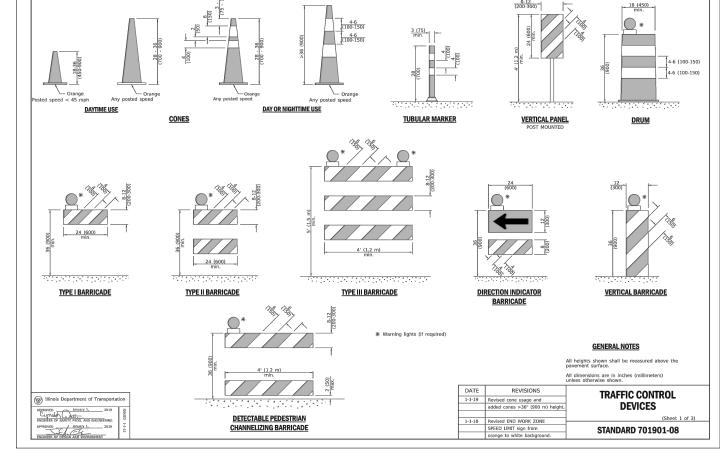
CHESTNUT STREET, LOCUST STREET, & SPRUCE STREET WATER MAIN & STREET IMPROVEMENT PROJECT

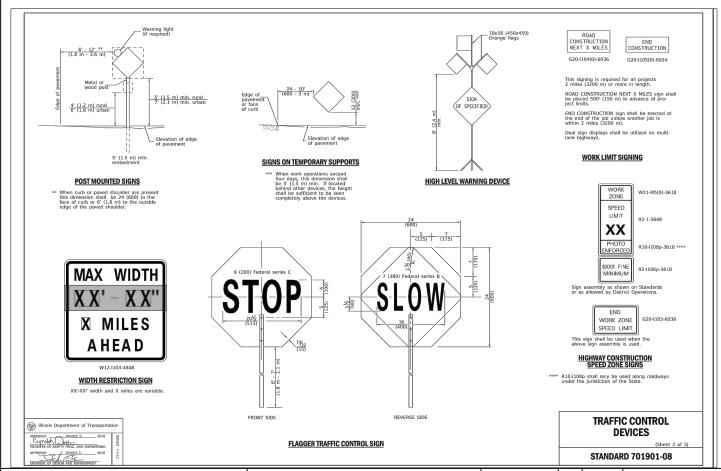
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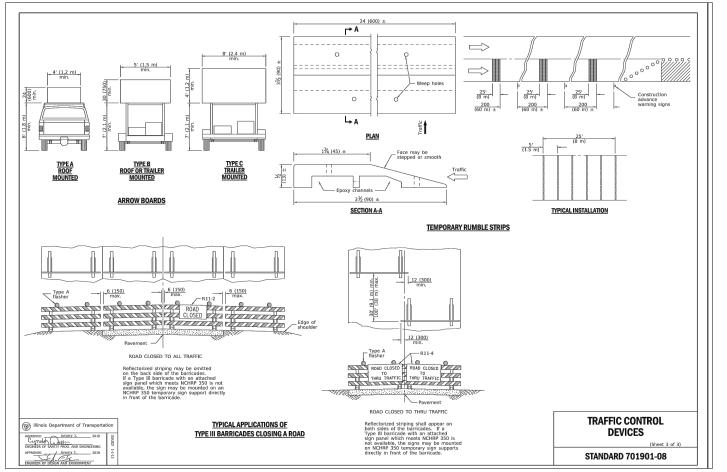
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