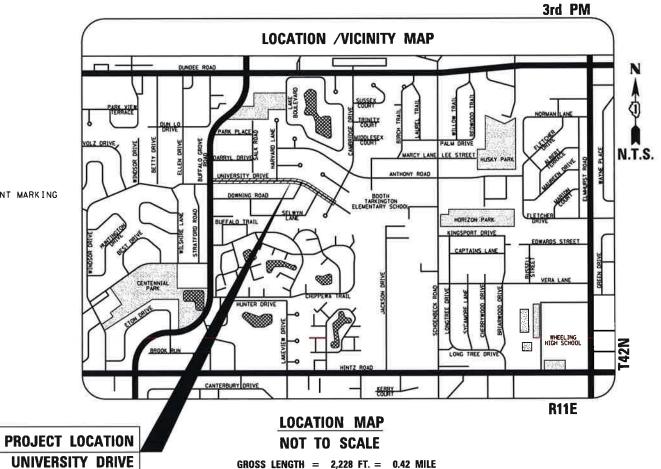
2019 UNIVERSITY DRIVE STREET AND UTILITY IMPROVEMENT

VILLAGE OF BUFFALO GROVE BUFFALO GROVE, ILLINOIS

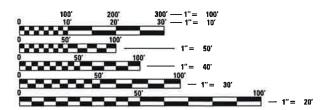
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NET LENGTH = 2,228 FT. = 0.42 MILE





VILLAGE DETAILS

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811



EXISTING UTILITIES:

WHEN THE PLANS OR SPECIAL PROVISIONS INCLUDE INFORMATION PERTAINING TO THE LOCATION OF UNDERGROUND UTILITY FACILITIES, SUCH INFORMATION REPRESENTS ONLY THE OPINION OF THE ENGINEER AS TO THE LOCATION OF SUCH UTILITIES AND IS ONLY INCLUDED FOR THE CONVENIENCE OF THE BIDDER. THE ENGINEER AND OWNER ASSUME NO RESPONSIBILTLY WHATEVER IN RESPECT TO THE SUFFICIENCY OR ACCURACY OF THE INFORMATION SHOWN ON THE PLANS RELATIVE TO THE LOCATION OF UNDERGROUND UTILITY FACILITIES OR THE MANNER IN WHICH THEY ARE TO BE REMOVED OR ADJUSTED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILTY TO OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES, DETAILED INFORMATION RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULES OF THE UTILITY COMPANIES FOR REMOVING OR ADJUSTING THE FACILITIES.

CONTRACTOR IS RESPONSIBLE FOR CONTACTING JULIE AT 1-800-892-0123 AND MUST ACQUIRE A DIG NUMBER A MINIMUM OF 72 HOURS PRIOR TO WORKIN BEING DONE.

PERMITTING /COORDINATING AGENCIES:					
VILLAGE OF BUFFALO GROVE (ENGINEERING DEPARTMENT)	847-459-2523				
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA) – WATER	217-782-3397				
METROPOLITAIN WATER RECLAIMATION DISTRICT (MWRD)	312-751-3255				
COOK COUNTY DEPT OF TRANSPORTATION & HIGHWAY	312_603_1670				



NOTE:

CONSTRUCTION MEANS, METHODS AND JOB SITE SAFETY IS THE SOLE AND EXCLUSIVE RESPONSIBILITY OF THE CONTRACTOR

GENERAL NOTES

- 1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED APRIL 1, 2016 (HEREIN AFTER REFERRED TO AS THE STANDARD SPECIFICATIONS; THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY I, 2019; THE LATEST EDITION OF THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS; THE STANDARD SPECIFICATIONS FOR WATER & SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION; THE DETAILS IN THE PLANS; AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.
- 2. EASEMENT FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE AND UTILITIES WITHIN PUBLIC RIGHT-OF-WAYS ARE SHOWN ON THE PLANS ACCORDING TO AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION IN THE FIELD OF THESE UTILITY LINES AND THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
- 3. WHENEVER, DURING CONSTRUCTION OPERATIONS, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, DITCHES, ETC. SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THE LOOSE MATERIAL WILL BE REMOVED AT THE CLOSE OF EACH WORKING DAY, AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE CONTRACT. THE CONTRACTOR'S FAILURE TO PROVIDE THE ABOVE WILL PRECLUDE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF.
- 4. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE PRIOR TO ORDERING MATERIALS. IN ADDITION, THE CONTRACTOR MUST VERIFY THE LINE AND GRADES. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, STANDARD SPECIFICATIONS AND / OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSION OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT THEIR OWN RISK AND EXPENSE AND NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR COSTS INCURRED.
- 5. ALL PAVEMENT DIMENSIONS ARE SHOWN TO EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
- 6. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS, PROPERTY CORNERS AND REFERENCE MARKERS UNTIL THE OWNER, OWNER'S REPRESENTATIVE, OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.
- 7. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 72 HOURS PRIOR TO BEGINNING WORK.
- 8. IF DURING CONSTRUCTION THE CONTRACTOR ENCOUNTERS OR OTHERWISE BECOMES AWARE OF ANY SEWERS OR UNDERDRAINS OTHER THAN THOSE SHOWN ON THE PLANS, THEY SHALL INFORM THE ENGINEER, WHO SHALL DIRECT THE WORK NECESSARY TO MAINTAIN OR REPLACE THE FACILITIES IN SERVICE AND TO PROTECT THEM FROM DAMAGE DURING CONSTRUCTION IF MAINTAINED. EXISTING FACILITIES TO BE MAINTAINED THAT ARE DAMAGED BECAUSE OF NON-COMPLIANCE WITH THIS PROVISION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 9. THE CONTRACTOR SHALL PROVIDE TEMPORARY TOILET FACILITIES AND HAND SANITIZING STATIONS FOR THE USE OF ALL THE CONTRACTORS PERSONNEL EMPLOYED ON THE WORK SITE. THE FACILITIES SHALL BE MAINTAINED IN PROPER SANITARY CONDITION THROUGHOUT THE PROJECT. THE LOCATIONS OF THE TEMPORARY FACILITIES SHALL BE APPROVED BY THE ENGINEER.
- 10.THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE NPDES PERMIT AND SWPPP MANUAL. IF NO NPDES PERMIT OR SWPPP MANUAL IS NECESSARY FOR THE PROJECT THE CONTRACTOR SHALL PERFORM SOIL AND EROSION SEDIMENT CONTROL BEST PRACTICES OR AS DIRECTED BY THE RESIDENT ENGINEER TO PREVENT ILLICIT DISCHARGES FROM THE SITE.
- 11.TREE ROOT PRUNING SHALL BE USED WHERE NECESSARY IN AREAS OF PROPOSED SIDEWALK, CURB AND GUTTER, UTILITIES AND NEW CONSTRUCTION AS DIRECTED BY THE ENGINEER.
- 12. THE LOCATION OF EXISTING DRAINAGE STRUCTURES, STORM SEWERS, WATER MAINS, SANITARY SEWERS, AND ANY OTHER PUBLIC OR PRIVATE UTILITIES AS SHOWN ON THE PLANS IS APPROXIMATE, AND THEIR EXACT LOCATION IS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR.
- 13.THE CONTRACTOR SHALL NOT SET UP A YARD OR FIELD OFFICE ON VILLAGE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE VILLAGE.
- 14.THE CONTRACTOR SHALL MAINTAIN EXISTING SIDE STREET ACCESS, EXISTING DRIVEWAY ACCESS AND PEDESTRIAN ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING CONSTRUCTION OF THE PROJECT UNLESS OTHERWISE NOTED IN THE PLANS OR AS DIRECTED BY THE ENGINEER.
- 15.DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 16.THE CONTRACTOR WILL BE REQUIRED TO COMPLY WITH ALL STATE REGULATIONS REGARDING AIR, WATER, AND NOISE POLLUTION. THE CONTRACTOR IS PROHIBITED FROM BURNING ANY MATERIAL WITHIN OR ADJACENT TO THE IMPROVEMENT.
- 17.THE CONTRACTOR SHALL TAKE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THEIR EXPENSE.
- 18.NO WORK SHALL COMMENCE UNTIL TRAFFIC CONTROL REQUIREMENTS ARE MET.

UTILITY NOTES

- 1. UNDERGROUND WORK SHALL INCLUDE TRENCHING, DISPOSAL OF EXCESS MATERIAL, DEWATERING, INSTALLATION OF PIPE, CASTINGS, STRUCTURES, BACKFILLING OF TRENCHES AND COMPACTION, AND TESTING AS SHOWN ON THE CONSTRUCTION PLANS. FITTINGS AND ACCESSORIES NECESSARY TO COMPLETE THE WORK MAY NOT SPECIFIED BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE CONTRACT. ALL SEWER SHALL BE INSTALLED USING A LASER AND BEGIN AT THE DOWNSTREAM END.
- 2. MACHINE CORE ALL CONNECTIONS TO EXISTING STRUCTURES USING A CORE DRILL. HAMMERING OR SAWING OF STRUCTURES WILL NOT BE ALLOWED.
- 3. SANITARY SERVICE CONNECTIONS TO NEW SEWERS SHLL BE MADE WITH WYE BRANCHES. WYE BRANCES SHALL BE FACTORY MANUFACTURED PERMANENTLY AFFIXED TO THE MAIN SEWER. TEE BRANCHES ARE NOT ALLOWED.
- 1. ALL CONNECTION TO EXISTING SANITARY MANHOLES SHALL BE INSTALLED WITH A NEOPRENE BOOT SECURED WITH DOUBLE STAINLESS STEEL STRAPS MEETING THE REQUIREMENTS OF ASTM C-923
- 5. ALL CONNECTIONS TO EXISTING OR DISSIMILAR STORM OR SANITARY LINES SHALL BE DONE WITH STAINLESS STEEL NON-SHEAR COUPLINGS.
- 6. STONE BEDDING AND BACKFILL SHALL BE OMITTED FOR A DISTANCE OF 15 FEET UP AND DOWNSTREAM OF SEWERS DRAINING TO OR FROM PONDS OR STREAMS. THE REPLACED BEDDING SHALL BE SILTY CLAY SOIL MECHANICALLY COMPACTED TO 90% MODIFIED PROCTOR DENSITY. THE USE OF PERMEABLE SOILS WILL NOT BE PERMITTED.
- 7. ALL WATER MAIN SHALL HAVE MECHANICAL RESTRAINED TYPE JOINTS AT ALL CONNECTIONS AND FITTINGS. IN ADDITION, ALL HARDWARE SHALL BE STAINLESS STEEL.
- 8. THRUST BLOCKING SHALL BE PROVIDED ON WATER MAIN AT ALL BENDS, TEES, ELBOWS, ETC. INDIVIDUAL INSPECTION FOR ALL THRUST BLOCKING IS REQUIRED. THRUST BLOCKING SHALL BE POURED IN PLACE CONCRETE. PRECAST BLOCKS MAY BE USED AS APPROVED BY THE RESIDENT ENGINEER.
- 9. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER. ALL DOWNSPOUTS, SIDE YARD DRAINS, AND OUTSIDE DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM. FOOTING DRAINS SHALL FIRST DRAIN TO A SUMP PIT.
- 10.BUILDING STORM SEWER SERVICE PIPE SHALL NOT BE LESS THAN THE DIAMETER OF THE PLUMBING PIPE FROM THE BUILDING, BUT NOT LESS THAN 6 INCHES. THE PIPE SHALL HAVE A MINIMUM SLOPE OF 1/8-INCH PER FOOT, BUT NOT MORE THAN 1/2 -INCH PER FOOT, CHANGES OF DIRECTION OF SERVICE PIPE SHALL BE MADE WITH COMBINATIONS OF 22-1/2 DEGREE BENDS WHEREVER PRACTICABLE, WITH NOT LESS THAN 2 FEET OF STRAIGHT PIPE BETWEEN SUCH BENDS. RICHT ANGLE (90 DEGREE) BENDS WILL NOT BE ALLOWED. WHEN A SERVICE LING-EXCEDS 100 FEET IN LENGTH, A CLEANOUT SHALL BE PROVIDED AT A LOCATION DESIGNATED BY THE ENGINEER. THE CLEANOUT SHALL BE PROPERLY SEALED, WITH THE TOP OF THE PLUGGED RISER FLUSH WITH FINISHED GRADE.

VILLAGE OF BUFFALO GROVE GENERAL NOTES

- 1. FRAMES, LIDS, GRATES, VALVES, FIRE HYDRANTS, ETC. WHICH ARE ABANDONED OR R EPLACED IN THIS PROJECT SHALL BE SALVAGED AND REMAIN THE PROPERTY OF THE VILLAGE OF BUFFALO GROVE. THE CONTRACTOR SHALL COORDINATE DELIVERY TO 51 RAUPP BOULEVARD WITH THE ENGINEER. ANY DAMAGE TO THE SALVAGED ITEMS DUE TO THE CONTRACTORS NEGLIGENCE SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.
- 2. THE CONTRACTOR SHALL GIVE NOTICES AND COMPLY WITH APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ALL PUBLIC AUTHORITIES BEARING ON SAFETY OF PERSONS OR PROPERTY OR THEIR PROTECTION FROM DAMAGE, INJURY OR LOSS.
- 3. ANY EARTH EXCAVATION DONE WITH REMOVAL OR FRAMING OF DRIVEWAY, SIDEWALK OR CURB AND GUTTER IS INCIDENTAL TO THAT ITEM OF WORK.
- 4. ANY STREET LIGHT POLE BRACING REQUIRED SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT.
- 5. NO SIGNAGE IS TO BE REMOVED. IF SIGNS ARE TAKEN DOWN FOR CONSTRUCTION PURPOSES THEY MUST BE RE-ERECTED ON THE SAME DAY TO THE SATISFACTION OF THE ENGINEER.
- 6. ANY BRANCHES THAT REQUIRE TRIMMING FOR EQUIPMENT CLEARANCES / CONSTRUCTION OPERATIONS SHALL BE DONE IN ACCORDANCE WITH THE IDOT DISTRICT ONE DETAIL "PRUNING FOR SAFETY AND EQUIPMENT CLEARANCES" AND SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT. ALL ADDITIONAL TREE TRIMMING MUST BE APPROVED BY THE ENGINEER.
- 7. ALL HOOKS AND LIFTING RINGS SHALL BE REMOVED AND CUT FLUSH ONCE THE STRUCTURE IS IN ITS FINAL LOCATION AND HAVE MORTAR INSTALLED TO COVER THE REBAR.

VILLAGE OF BUFFALO GROVE WATER MAIN NOTES

- 1. SIZES OF EXISTING MAINS WERE DETERMINED FROM THE VILLAGE OF BUFFALO GROVE UTILITY ATLASES AND MAY NOT REPRESENT ACTUAL WATER MAIN SIZES. THE CONTRACTOR SHALL HAVE AN ADEQUATE NUMBER OF FITTINGS, SLEEVES, ETC TO COMPLETE THE WORK WITHOUT DELAYS DUE TO DIFFERING WATER MAIN PIPE SIZES.
- 2. COVER ALL NEW FIRE HYDRANTS AND ABANDONED FIRE HYDRANTS WITH BLACK PLASTIC BAGS AFTER INSTALLATION OR UNTIL REMOVAL AND UNTIL NEW WATER MAIN IS IN SERVICE. THE PLASTIC BAG SHALL BE SECURELY TAPED TO THE FIRE HYDRANT.
- 3. ADJUSTMENT OF VALVE VAULT RIM ELEVATIONS TO FINAL GRADE AT THE TIME OF PAVING OR LANDSCAPING SHALL BE INCLUDED IN THE COST OF THE VALVE VAULT, VALVE VAULTS SHALL HAVE RUBBER BOOTS MEETING THE REQUIREMENTS OF ASTM C-923 FOR ALL WATER MAIN CONNECTIONS. ALL VALVE VAULTS SHALL BE WATER TIGHT PER ASTM C-1244

- 4. ALL MAIN INSTALLED NOT SUBJECT TO PRESSURE TEST AND CHLORINATION TESTING REQUIREMENTS SHALL BE INSTALLED PER THE SPECIFICATIONS AND BROUGHT UP TO SYSTEM PRESSURE UNDER WITNESS OF THE ENGINEER. THE PIPE SHALL NOT BE BACKFILLED UNTIL DIRECTED BY THE ENGINEER. THE SECTION OF PIPE WILL BE INSPECTED FOR A PERIOD OF TIME DETERMINED BY THE ENGINEER TO VERIFY THERE ARE NO LEAKS IN THE LINE. ALL COSTS ASSOCIATED WITH COMPLYING WITH THIS REQUIREMENT ARE INCLUDED IN THE COST OF THE CONTRACT.
- 5. ALL MISHANDLED OR DAMAGED MATERIALS AS INSPECTED BY THE ENGINEER WILL BE MARKED WITH SPRAY PAINT. THE MARKED MATERIALS REMAIN THE PROPERTY OF THE CONTRACTOR. ALL MATERIALS MARKED ARE DEEMED UNSUITABLE FOR CONSTRUCTION BY THE ENGINEER AND MUST BE REMOVED FROM THE PROJECT SITE ON A WEEKLY BASIS AT NO COST TO THE VILLAGE.
- 6. BACKFILL IN TURF AREAS MAY UTILIZE THE EXISTING SUBGRADE. ANY SETTLEMENT WITHIN THE WARRANTY PERIOD AS DESCRIBED IN THE SPECIFICATIONS SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER. AT THE CONTRACTORS OPTION SAND MAY BE UTILIZED AS BACKFILL IN TURF AREAS TO PREVENT SETTLEMENT. THE SAND MUST BE KEPT 6" BELOW FINISHED GRADE FOR ACCEPTANCE OF TOPSOIL. ALL SAND UTILIZED FOR BACKFILLING IN THE PARKWAY AND ADDITIONAL TOPSOIL NEEDED SHALL NOT BE PAID FOR SEPARATELY BUT INCLUDED IN THE CONTRACT.

PROJECT SPECIFIC NOTES

- 1. THE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS THAT INCLUDE RIM AND INVERT ELEVATIONS OF ALL SEWERS, RIM AND TOP OF PIPE ELEVATIONS OF ALL FORCE MAIN, RIM AND TOP OF PIPE ELEVATIONS OF ALL WATERMAIN, LOCATIONS OF ALL INSTALLED UNDERGROUND UTILITIES, LOCATIONS OF ALL BURIED BENDS AND FITTINGS AND ALL FIEND CHANGES FROM THE APPROVED ENGINEERING DRAWINGS.
- 2. ALL CONSTRUCTION WILL BE INSPECTED BY THE OWNERS REPRESENTATIVE. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE MUNICIPALITY AS WELL AS THE STANDARD SPECIFICATIONS.
- 3. THE SEWER AND WATER CONTRACTOR SHALL BE REQUIRED TO BE LICENSED AND BONDED WITH THE VILLAGE OF BUFFALO GROVE BEFORE WORK BEGINS.
- 4. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, ENGINEER, THE MUNICIPALITY AND THEIR AGENTS, FROM ALL LIABILITY INVOLVED IN CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.
- 5. THE CONTRACTOR MUST CARRY INSURANCE IN ACCORDANCE WITH THE VILLAGE OF BUFFALO GROVE INSURANCE REQUIREMENTS. ALL OFFICIALS, EMPLOYEES AND AGENTS OF BLA, INC. MUST BE LISTED AS ADDITIONAL INSURED.
- 6. ALL ELEVATIONS ARE ON NAVD 88 VERTICAL DATUM.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL TRAFFIC CONTROL TO ADEQUATELY INFORM AND PROTECT THE PUBLIC OF ALL CONSTRUCTION OPERATIONS
- 8. ALL STONE USED ON THE PROJECT SHALL BE CRUSHED UNLESS SPECIFICALLY NOTED OTHERWISE.
- ALL CONCRETE SHALL HAVE A LIGHT BROOM FINISH APPLIED WITHIN 1 HOUR OF FINAL STRIKING.
- 10.ALL CONCRETE SHALL HAVE A WHITE, IDOT TYPE 3 CURING COMPOUND APPLIED TO THE SURFACE WITHIN 1 HOUR OF FINAL STRIKING AT THE MANUFACTURER RECOMMENDED APPLICATION RATE.
- 11.PRIOR TO PLACEMENT OF FABRIC AND STONE, THE SUBGRADE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER. PROOF-ROLLING SHALL BE DONE USING A THREE-AXLE DUMP TRUCK TOGETHER WITH LOAD WEIGHING AT LEAST TWENTY-FIVE (25) TONS. THE LOAD SHALL BE UNIFORMLY PLACED IN THE DUMP BODY. ALL DEFICIENCIES SHALL BE REPAIRED AND RE-PROOF-ROLLED UNTIL FOUND ACCEPTABLE TO THE ENGINEER.
- 12.3/4" THICK PRE-MOLDED FIBER EXPANSION JOINTS WITH TWO (2) 3/4" X 18" PLAIN ROUND STEEL DOWEL BARS SHALL BE INSTALLED IN ALL CURBS AT FORTY-FIVE (45) FOOT INTERVALS AND AT ALL PC'S, PT'S AND CURB RETURNS. ALTERNATE ENDS OF THE DOWEL BARS SHALL BE GREASED AND FITTED WITH METAL EXPANSION TUBES. ALL EXPANSION JOINTS MUST BE FREE OF CONCRETE FOR FULL DEPTH. CONTRACTION JOINTS SHALL BE TOOLED AT FIFTEEN (15) FEET INTERVALS.
- 13.UNLESS OTHERWISE NOTED ON THE PLANS WHENEVER NEW CONCRETE ABUTS EXISTING / OR NEW CONCRETE SET A 1/2" THICK PRE-MOLDED FIBER EXPANSION JOINT AND DOWEL WITH SMOOTH 12" #4 BARS AT 24" O.C. THIS INCLUDES CONCRETE POURED ADJACENT TO EXISTING SIDEWALKS, CURBS AND GUTTERS, AND BUILDINGS. THE DOWEL BARS SHOULD BE 4" INTO EXISTING CONCRETE WITH 8" EXTENDING INTO NEW CONCRETE.
- 14.ALL DOWEL BARS AND TIE BARS SHALL BE EPOXY COATED UNLESS OTHERWISE NOTED.
- 15.ALL PAVEMENT SUBGRADE SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY. ALL SUBGRADE IN LAWN AREAS SHALL BE COMPACTED TO 90% MODIFIED PROCTOR DENSITY.
- 16.SPREAD SCREENED TOPSOIL ON ALL DISTURBED AREAS AND PROPOSED GREEN AREAS. TOPSOIL SHALL COMPLY WITH REQUIREMENTS OF ARTICLE 1081.05
- 17.ALL REFERENCES TO "ENGINEER" SHALL BE INTERPRETED TO MEAN THE VILLAGE ENGINEER OR AUTHORIZED VILLAGE REPRESENTATIVE.
- 18.THE CONTRACTOR SHALL BE AWARE THAT SIMULTANEOUSLY WITH THIS PROJECT, THE EXISTING SANITARY SEWER IS TO BE LINED UNDER A SEPARATE CONTRACT.

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)	PLOT DATE = 7/24/2019	DATE	-	07/25/2019	REVISED -



EROSION AND SEDIMENT CONTROL NOTES

- 1. THE CONTRACTOR SHALL INSTALL AND ASSUME RESPONSIBILITY FOR MAINTENANCE OF ALL SOIL AND EROSION CONTROL FEATURES DURING CONSTRUCTION AND THE DURATION OF THE PROJECT IN ACCORDANCE OF THE REQUIREMENTS OF THE CURRENT EDITION OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S URBAN MANUAL. IF EROSION CONTROL MEASURES ARE DAMAGED OR NO LONGER FUNCTIONING TO THEIR FULL PURPOSE THEY SHALL BE REPLACED, THROUGHOUT THE DURATION OF THE PROJECT.
- 2. IN LOCATIONS WHERE VEHICLES ENTER OR EXIT THE CONSTRUCTION SITE SHALL BE INSPECTED FOR EVIDENCE OF OFFSITE SEDIMENT TACKING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING ANY ROAD OF MATERIAL THAT IS TRACKED FROM THE PROJECT SITE. THIS WILL BE COMPLETED AT THE CLOSE OF EACH DAY OF WORK OR MORE FREQUENTLY AS FIELD CONDITIONS WARRANT AND AT THE DIRECTION OF THE ENGINEER.
- 3. DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE. THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS.
- 4. INLET FILTER BASKETS SHALL BE INSTALLED AND MAINTAINED IN INTAKE STRUCTURES WITHIN THE PROJECT LIMITS AND AT LOCATIONS DIRECTED BY THE ENGINEER. SEDIMENT AND DEBRIS SHALL BE REMOVED FROM THE BASKETS AS NECESSARY AND THE BASKETS SHALL BE REPAIRED OR REPLACED AS NEEDED.
- 5. THE CONTRACTOR SHALL STABILIZE ALL DISTURBED LOCATIONS WHERE WORK IS COMPLETED OR CEASED WITHIN SEVEN (7) DAYS FROM THE CESSATION OF CONSTRUCTION ACTIVITIES AT THAT LOCATION.
- 6. TREE TRUNK PROTECTION SHALL BE ERECTED ALONG THE DRIP LINE OF EXISTING TREES TO REMAIN WITHIN THE PROJECT LIMITS. AFTER TREES ARE SAFELY FENCED NOTHING IS TO BE STORED, DRIVE, OR DISTURBED WITHIN THE FENCE.
- 7. ALL EROSION CONTROL MEASURES MUST BE INSPECTED AND DOCUMENTED EVERY SEVEN DAYS AND AFTER EACH • INCH RAIN EVENT OR EQUIVALENT SNOWFALL OR SIGNIFICANT SNOWMFIT.
- 8. LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF THE GUTTERS OR DRAINAGE STRUCTURES SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY SO NATURAL FLOW OF WATER IS NOT OBSTRUCTED.
- 9. THE CONTRACTOR IS EXPRESSLY ADVISED NOT TO DISTURB AREAS WHICH ARE OUTSIDE THOSE NECESSARY TO PROVIDE THE IMPROVEMENTS AS CALLED FOR IN THE PLANS.
- 10.ALL EROSION CONTROL MEASURES SHALL BE REPLACED IF DAMAGED OR MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT.
- 11.ALL BYPASS CHANNELS, MUST BE CONSTRUCTED SO THAT CHANNEL FLOWS WILL NOT CAUSE EROSION OF EXCAVATED MATERIAL. IN EACH CASE A SEDIMENTATION BASIN MUST BE CONSTRUCTED SO TO ALLOW THE SEDIMENT TO SETTLE PRIOR TO THE DOWNSTREAM OUTLET OF THE PROJECT AREA.
- 12.PUMPS MAY BE USED AS BYPASS DEVICES, BUT IN NO CASE WILL THE WATER BE DIVERTED OUTSIDE THE PROJECT LIMIT. ALL PUMPED WATER SHALL BE FREE OF SILT. PUMPING MAY REQUIRE THE USE OF A SEDIMENT CONTAINMENT FILTER BAG AND OTHER SUPPLEMENTAL SEDIMENT CONTROL MEASURES.
- 13.SEDIMENT AND EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED AT WHICH TIME THE EROSION CONTROL DEVICES SHALL BE REMOVED PROPERLY FROM THE SITE.
- 14.SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO LAND DISTURBING ACTIVITIES. SEDIMENT AND EROSION CONTROL DEVICES SHALL BE REVISED AND IMPLEMENTED AS NECESSARY THROUGHOUT CONSTRUCTION AS CONSTRUCTION OPERATIONS DICTATE AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL EXPENSE TO THE VILLAGE.
- 15.THE CONTRACTOR SHALL MAINTAIN A SOURCE OF WATER AT THEIR DISPOSAL FOR THE PURPOSED OF DUST CONTROL WITHIN THE PROJECT LIMITS AND ADJACENT SIDEROADS.
- 16. WASTE, CONSTRUCTION DEBRIS AND CONSTRUCTION MATERIALS SHALL BE COLLECTED AND DISPOSED OF IN APPROVED RECEPTACLES.
- 17.THE CONTRACTOR SHALL PROPERLY MAINTAIN AND MANAGE MATERIAL STORAGE SITES, PORTABLE TOILETS, AND EQUIPMENT FUELING AND CLEANING TO ENSURE THE PROJECT IS FREE OF SPILLS, LEAKS, OR OTHER POTENTIAL POLLUTANTS.
- 18.CONCRETE WASHOUT FACILITIES SHALL BE AVAILABLE IF DETERMINED NECESSARY BY THE ENGINEER.
- 19.IF BYPASS IS NECESSARY THE INLET OF THE HOSE SHALL BE PLACED IN A SUMP PIT AND THE OUTLET SHALL BE PLACED ON AN A NON-ERODIBLE, ENERGY DISSIPATING SURFACE. A SEDIMENTATION BASIN MUST BE CONSTRUCTED TO ALLOW THE SEDIMENT TO SETTLE PRIOR TO REJOINING THE ORIGINAL FLOW OF WATER. PUMPS MAY BE UTILIZED AS BYPASS DEVICES, IF DEEMED NECESSARY, BUT SHALL NOT DIVERT WATER OUTSIDE OF THE PROJECT LIMITS.

DEMOLITION NOTES

- RESIDENT ACCESS MUST BE MAINTAINED THROUGHOUT THE PROJECT. TEMPORARY RAMPS SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER AT DRIVEWAY LOCATIONS. REFER TO THE SPECIFICATIONS "CONSTRUCTION STAGING AND MAINTENANCE OF BASE COURSE" FOR REDUIREMENTS.
- 2. THE CONTRACTOR SHALL BE ADVISED THAT THERE ARE LOCATIONS OF EXISTING BRICK PAVERS WITHIN THE VILLAGE RIGHT OF WAY. THE BRICK PAVERS SHALL BE CAREFULLY REMOVED AND NEATLY STACKED ADJACENT TO THE LOCATION THEY WERE REMOVED. BRICK PAVERS SHALL ONLY BE REMOVED IF IN CONFLICT WITH CONSTRUCTION OPERATIONS AND APPROVED BY THE ENGINEER.
- 3. ALL FIRE HYDRANTS, HYDRANT AUXILIARY, B-BOXES AND VALUES SHALL BE CAREFULLY REMOVED. ALL HYDRANTS, VALVES, AND B-BOXES REMOVED SHALL BE SALVAGED AND DELIVERED TO THE BUFFALO GROVE PUBLIC WORKS YARD.
- 4. EXISTING STRUCTURES TO REMAIN SHALL BE PROTECTED FROM DAMAGE. ANY DAMAGE OCCURRED TO THE STRUCTURES DUE TO THE CONTRACTORS NEGLIGENCE SHALL BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE, TO THE SATISFACTION OF THE ENGINEER.
- 5. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER A MINIMUM OF 48 HOURS PRIOR FOR OPERATION OF EXISTING VALUE OR HYDRANT. AT NO TIME SHALL THE CONTRACTOR OPERATE ANY EXISTING VALVES OR HYDRANTS. NON COMPLIANCE WITH THIS REQUIREMENT WILL RESULT IN A \$500 FINE PER OCCURRENCE AS DETERMINED BY THE ENGINEER.
- 6. THE CONTRACTOR SHALL REMOVE AND SAWCUT SLURRY PROMPTLY TO PREVENT TRACKING ON EXISTING SURFACES TO REMAIN. ANY SLURRY TRACKED ON SURFACES TO REMAIN SHALL BE CLEANED THOROUGHLY OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE VILLAGE.

CONSTRUCTION SEQUENCING NOTES

- FURNISH AND INSTALL ALL EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON PLANS AND/OR AS REQUIRED/DIRECTED BY THE ENGINEER.
- 2. FURNISH AND INSTALL ALL TREE PROTECTION AND TREE ROOT PRUNING AS SHOWN ON PLANS AND/OR AS REQUIRED/DIRECTED BY THE ENGINEER.
- 3. FULL-DEPTH SAW CUT ALL UTILITY TRENCHES. THE RESIDUE FROM SAW CUTTING SHALL BE IMMEDIATELY AND THOROUGHLY CLEANED OFF THE PAVEMENT TO PREVENT TRACKING.
- 4. INSTALL WATERMAIN AND WATER SERVICES ALONG UNIVERSITY DRIVE. WATER SERVICES CAN BE OPEN CUT OR MOLED. TRENCHES TO BE BACKFILLED UP TO ROADWAY FINISHED GRADE AND STONE TO BE REMOVED TO NECESSARY DEPTH IN ORDER TO INSTALL PAVEMENT.
- 5. STORM SEWERS TO BE INSTALLED AS INDICATED ON PLANS.
- 6. FORCEMAIN TO BE INSTALLED ALONG UNIVERSITY DRIVE VIA DIRECTIONAL BORING. THE CONTRACTOR HAS OPTION TO OPEN CUT FORCEMAIN AS APPROVED BY ENGINEER.
- THE FOLLOWING DETAILS ARE THE SUGGESTED STAGING FOR THE WORK. IF DESIRED, THE CONTRACTOR MAY SUBMIT AN ALTERNATE SEQUENCING/STAGING PLAN AT THE PRE-CONSTRUCTION MEETING FOR APPROVAL BY THE ENGINEER. AT NO TIME WILL ANY RESIDENT BE ALLOWED TO BE WITHOUT VEHICLE ACCESS TO THEIR HOME. SIDEWALKS SHALL NOT BE REMOVED UNTIL REQUIRED, SIDEWALKS SHALL BE RE-POURED FOLLOWING CURB INSTALLATION PRIOR TO REMOVAL OF THE CURB IN THE NEXT PHASE. THE CONTRACTOR SHALL BE REQUIRED TO INSTALL THE HOT-MIX ASPHALT BINDER COURSE PRIOR TO MOVING ON TO THE NEXT PHASE.
- 7. DRIVEWAYS, CURB AND GUTTERS AND SIDEWALKS/ADA RAMPS TO BE CONSTRUCTED CONCURRENTLY WITH WORK AFOREMENTIONED ABOVE, AND PRIOR TO ROADWAY RECONSTRUCTION. THE CONTRACTOR WILL BE REQUIRED TO COMPLETE ALL CURB WORK ON ONE SIDE OF THE STREET AT A TIME. PRIOR TO REMOVING CURB ON OPPOSITE SIDE OF STREET, THE FULLY CURED CURB SHALL HAVE VOIDS BETWEEN EXISTING PAVEMENT FILLED WITH STONE FOR RESIDENT PARKING.
- 8. ALLOW DRIVEWAY APRONS A MINIMUM OF 72-HOURS TO CURE BEFORE OPENING TO TRAFFIC.
- 9. CONTRACTOR TO REMOVE EXISTING PAVEMENT DOWN TO EXISTING STONE BASE. GIVEN HMA DEPTHS VARY THROUGHOUT PROJECT, AGGREGATE SUBGRADE WILL BE INSTALLED UP TO 4.5 IN BELOW FINSH ROAD GRADE.
- 10.PROOF ROLL EXISTING PAVEMENT BASE COURSE AND INSTALL ANY AGGREGATE SUBGRADE IMPROVEMENTS AS REQUIRED AND MARKED BY THE ENGINEER.
- 11.PAVE HOT-MIX ASPHALT BINDER COURSE. THE CONTRACTOR WILL HAVE 14 CALENDAR DAYS FROM THE BEGINNING OF PAVEMENT REMOVAL OPERATIONS TO INSTALL BINDER COURSE IN THE AREA OF REMOVAL.
- 12.PAVE HOT-MIX ASPHALT SURFACE COURSE AND INSTALL PAVEMENT MARKINGS INDICATED ON PLANS.
- 13.COMPLETE ALL GENERAL LANDSCAPE RESTORATION.

BUFFALO GROVE ROAD SEQUENCING NOTES

ALL REQUIRED WORK ON UNIVERSITY DRIVE SHALL BE DONE DURING NO MORE THAN TWO SHUT DOWNS ON BACK TO BACK DAYS.

- 1. INSTALL TEMPORARY INFORMATION SIGNING AND TRAFFIC CONTROL PROTECTION.
- 2. LOCATE EXISTING 12 IN WATERMAIN VALVE VAULT ON NORTHEAST SIDE OF BUFFALO GROVE ROAD AND UNIVERSITY DRIVE INTERSECTION. CONTRACTOR TO CONDUCT EXPLORATORY EXCAVATION TO VERIFY PIPE DEPTH, SIZE AND MATERIAL OF EXISTING 12 IN WATERMAIN. REPORT EXISTING CONDITIONS TO THE ENGINEER.
- 3. UPON ENGINEER'S ARROVAL TO PROCEED, SHUT OFF 12 IN WATERMAIN AT THE NORTHEAST AND SOUTHEAST VALVE VAULTS. REMOVE REQUIRED SEGMENTS OF EXISTING 12 IN WATERMAIN.
- 4. CHLORINATE AND INSTALL PROPOSED 12 IN WATERMAIN SEGMENTS, CONNECTING TO THE EXISTING WATERMAIN.
- 5. CUT AND CAP EXISTING 12 IN WATERMAIN AND INSTALL THRUST BLOCK.
- 6. REPEAT STEPS FOR PROPOSED WATERMAIN INSTALLATION AT #23 UNIVERSITY DRIVE AS SHOWN ON PLANS
- 7. CONTRACTOR TO ABANDON THE TWO VALVE VAULTS AT THE SOUTHEAST CORNER OF THE INTERSECTION.
- 8. COMPLETE ALL REMAINING UTILITY IMPROVEMENTS ON AND ADJACENT TO BUFFALO GROVE ROADWAY.
- 9. INSTALL SIDEWALK AND CURB ON AND ADJACENT TO BUFFALO GROVE ROADWAY.
- 10. INSTALL REQUIRED PATCHING.
- 11.REMOVE TEMPORARY TRAFFIC CONTROL AND TRAFFIC CONTROL PROTECTION.
- 12.COMPLETE ALL GENERAL LANDSCAPE RESTORATION.

ALL WORK ON AND ADJACENT TO BUFFALO GROVE ROADWAY SHALL BE COMPLETE, INCLUDING RESTORATION, WITHIN TWO CALENDAR WEEKS OF INITIAL DISTRUBANCE. FAILURE TO COMPLETE THIS WORK WITHIN TWO CALENDAR WEEKS OF STARTING WILL BE CAUSE FOR LIQUIDATED DAMAGES OF \$2,500 PER DAY AND WILL BE APPLIED ACCORDING TO THE STANDARD SPECIFICATIONS.

ALL WORK ON AND ADJACENT TO BUFFALO GROVE ROADWAY SHALL BE COMPLETED DURING THE HOURS SPECIFIED ON THE COOK COUNTY PERMIT.

DOWNING & SELWYN SEQUENCING NOTES

- 1. CONTRACTOR TO CONDUCT EXPLORATORY EXCAVATION ON THE SOUTHEAST CORNER OF INTERSECTION TO VERIFY EXISTING PIPE DEPTHS, SIZE AND MATERIALS FOR WATERMAIN AND STORM SEWERS. REPORT EXISTING CONDITIONS TO THE ENGINEER.
- 2. PRESSURE CONNECTION WILL BE MADE INTO EXISTING 6 IN WATERMAIN ON THE SOUTHEAST CORNER.
- 3. ONCE PROPOSED WATERMAIN IS INSTALLED, CONTRACTOR TO CLOSE VALVE AND HAVE OPERATING NUT REMOVED AND A PLATE, PROVIDED BY THE VILLAGE, INSTALLED ON TOP OF CLOSED VALVE.
- 4. CUT AND CAP EXISTING WATER MAIN AND INSTALL THRUST BLOCK.
- 5. INSTALL WATERMAIN QUALITY STORM SEWERS AS SHOWN ON PLANS.

CAMBRIDGE DRIVE SEQUENCING NOTES

- CONTRACTOR TO CONDUCT EXPLORATORY EXCAVATION ON THE NORTHEAST AND SOUTHEAST CORNERS OF INTERSECTION TO VERIFY EXISTING PIPE DEPTHS, SIZE AND MATERIALS FOR WATERMAIN AND STORM SEWERS. REPORT EXISTING CONDITIONS TO THE ENGINEER.
- 2. TWO PRESSURE CONNECTIONS WILL BE MADE ADJACENT TO THE EXISTING VALVE VAULTS ON THE NORTHEAST AND SOUTHEAST CORNERS OF THE INTERSECTION AS INDICATED ON THE PLANS.
- 3. ONCE PROPOSED WATERMAIN IS INSTALLED, CONTRACTOR TO CLOSE VALVE AND HAVE OPERATING NUT REMOVED AND A PLATE, PROVIDED BY THE VILLAGE, INSTALLED ON TOP OF CLOSED VALVE.
- 4. CUT AND CAP EXISTING WATER MAIN AND INSTALL THRUST BLOCK.
- 5. INSTALL WATERMAIN QUALITY STORM SEWERS AS SHOWN ON PLANS.
- 6. INSTALL REQUIRED PATCHING.

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•	PLOT DATE = 7/24/2019	DATE	-	07/25/2019	REVISED -



PROJECT CONTACTS

- 1. THE VILLAGE OF BUFFALO GROVE
 MR. KYLE JOHNSON, PE
 51 RAUPP BOULEVARD
 BUFFALO GROVE, ILLINOIS 60089
 PH: 847-459-2523
- 2. BLA, INC.

 MR. MATTHEW CESARIO

 333 PIERCE ROAD, SUITE 200

 ITASCA, ILLINOIS 60143

 PH: 630-438-6400
- 3. METROPOLITAN WATER RECLAMATION DISTRICT
 100 EAST ERIE STREET
 CHICAGO, ILLINOIS 60611
 PH: 708-588-4055
- 4. ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
 1021 NORTH GRAND AVENUE EAST
 PO BOX 19276
 SPRINGFIELD, ILLINOIS 62794-9276
 PH: 217-782-3397
- 5. COOK COUNTY DEPARTMENT OF TRANS AND HIGHWAYS

 PERMITS DIVISION

 69 WEST WASHINGTON STREET, 24[™] FLOOR

 CHICAGO, ILLINOIS 60602

 PH: 312-603-1670
- 6. VILLAGE OF ARLINGTON HEIGHTS

 MR. SCOTT SHIRLEY

 33 S. ARLINGTON HEIGHTS ROAD

 ARLINGTON HEIGHTS, ILLINOIS 60005

 PH: 847-368-5800

7. NICOR GAS
MR. BRUCE KOPPANG
1844 FERRY ROAD
NAPERVILLE, ILLINOIS 60563

PH: 630-388-2362

- 8. WIDE OPEN WEST (WOW)

 MR. PAUL FLINKOW

 1674 FRONTENAC ROAD

 NAPERVILLE, ILLINOIS 60563

 PH: 630-563-3139
- 9. ATT

 MS. JANET AHERN

 1000 COMMERCE DRIVE

 OAK BROOK, ILLINOIS 60523
- 10.COMCAST

 MS. MARTHA GIERAS

 688 INDUSTRIAL DRIVE

 ELMHURST, ILLINOIS 60126

 PH: 630-600-6352
- 11.COMED

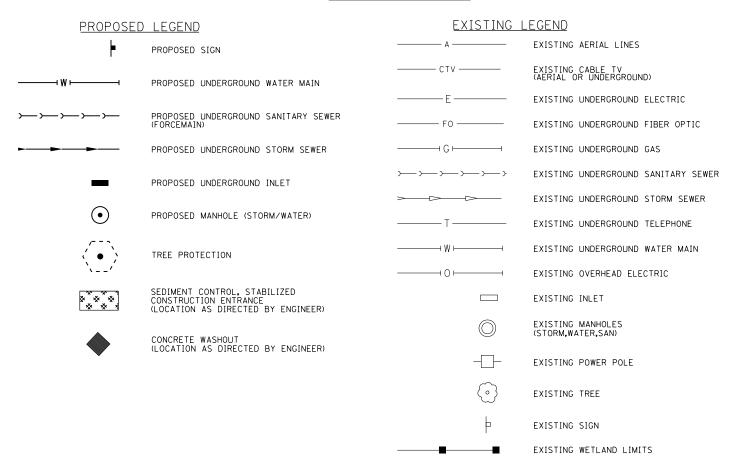
 MS. TINA LOSIANOWYCZ

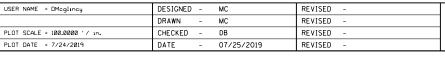
 860 OAK CREEK DRIVE

 LOMBARD, ILLINOIS 60148

 PH: 630-396-8220

STANDARD SYMBOLS







REFERENCED SPECIFCATIONS

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS:

- STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), BY THE ILLINOIS DEPARTMENT OF -TRANSPORTATION (IDOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION;
- 2. STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION;
- 3. VILLAGE OF BUFFALO GROVE MUNICIPAL CODE;
- 4. THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRD) WATERSHED MANAGEMENT ORDINANCE AND TECHNICAL GUIDANCE MANUAL;
- 5. IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.

NOTIFICATIONS

- THE MWRD LOCAL SEWER SYSTEMS SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK (CALL 708-588-4055).
- 2. THE VILLAGE OF BUFFALO GROVE ENGINEERING DEPARTMENT AND PUBLIC MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK. CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OR EACH WORK PHASE.
- 3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR THE EXACT LOCATIONS OF UTILITIES AND FOR THEIR PROTECTION DURING CONSTRUCTION. IF EXISTING UTILITIES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED. CALL J.U.L.I.E. AT 1-800-892-0123.

GENERAL NOTES

- ALL ELEVATIONS SHOWN ON PLANS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- MWRD, THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION IMPROVEMENTS
- 3. THE CONTRACTOR(S) SHALL INDEMNIFY THE OWNER, ENGINEER, MUNICIPALITY, MWRD, AND THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT.
- 4. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY MWRD AND THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY MWRD, THE MUNICIPALITY, OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THE PLANS, MUST BE FOLLOWED. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED ON THE IMPROVEMENTS INDICATED ON THE PLANS.
- 5. THE LOCATION OF VARIOUS UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS.
- S. ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIONS AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
- 7. MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY, MWRD, AND OWNER.
- 8. THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES.
- 9. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS DISTURBED DURING CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION.
- 10.RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENTS TO THE CONTRACTOR SHALL BE HELD UNTIL THEY ARE RECEIVED. ANY CHANGES IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN IN RED. ALL WYES OR BENDS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, B-BOXES, TEES OR BENDS SHALL BE TIED TO A FIRE HYDRANT.

SANITARY SEWER

- 1. THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT ANY POLLUTED WATER, SUCH AS GROUND AND SURFACE WATER, FROM ENTERING THE EXISTING SANITARY SEWERS.
- 2. A WATER-TIGHT PLUG SHALL BE INSTALLED IN THE DOWNSTREAM SEWER PIPE AT THE POINT OF SEWER CONNECTION PRIOR TO COMMENCING ANY SEWER CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL REMOVAL IS AUTHORIZED BY THE MUNICIPALITY AND/OR MWRD AFTER THE SEWERS HAVE BEEN TESTED AND ACCEPTED.
- 3. DISCHARGING ANY UNPOLLUTED WATER INTO THE SANITARY SEWER SYSTEM FOR THE PURPOSE OF SEWER FLUSHING OF LINES FOR THE DEFLECTION TEST SHALL BE PROHIBITED WITHOUT PRIOR APPROVAL FROM THE MUNICIPALITY OR MWRD.
- 4. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (LATEST EDITION).
- 5. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM.

- ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.
- 7. ALL SANITARY SEWER PIPE MATERIALS AND JOINTS (AND STORM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA) SHALL CONFORM TO THE FOLLOWING:

	PIPE	JOINT	
PIPE MATERIAL	SPECIFICATIONS	SPECIFICATIONS	
VITRIFIED CLAY PIPE	ASTM C-700	ASTM C-425	
REINFORCED CONCRETE SEWER PIPE	ASTM C-76	ASTM C-443	
CAST IRON SOIL PIPE	ASTM A-74	ASTM C-564	
DUCTILE IRON PIPE	ANSI A21.51	ANSI A21.11	
POLYVINYL CHLORIDE (PVC) PIPE			
6-INCH TO 15-INCH DIAMETER SDR 26	ASTM D-3034	ASTM D-3212	
18-INCH TO 27-INCH DIAMETER F/DY=26	ASTM F-679	ASTM D-3212	
HIGH DENSITY POLYETHYLENE (HDPE	ASTM D-3350	ASTM D-3261.F-2620 (HEA	AT EUSTON
	ASTM D-3330	ASTM D-3201, F-2020 (NEX	
WATER MAIN QUALITY PVC	ASTM D 3033	A31W D 3212,1 411 (0A3)	(LILD)
4-INCH TO 36-INCH	ASTM D-2241	ASTM D-3139	
4-INCH TO 12-INCH	AWWA C900	ASTM D-3139	
14-INCH TO 48-INCH	AWWA C905	ASTM D-3139	
E FOLLOWING MATERIALS ARE ALLOWED ON	A QUALIFIED BAS	SIS SUBJECT TO DISTRICT RE	VIEW

THE FOLLOWING MATERIALS ARE ALLOWED ON A QUALIFIED BASIS SUBJECT TO DISTRICT REVIEW AND APPROVAL PRIOR TO PERMIT ISSUANCE. A SPECIAL CONDITION WILL BE ADDED TO THE PERMIT WHEN THE PIPE MATERIAL BELOW IS USED FOR SEWER CONSTRUCTION OR A CONNECTION IS MADE.

POLYPROPYLENE (PP) PIPE 12-INCH TO 24-INCH DOUBLE WALL ASTM F-2736 D-3212, F-477 30-INCH TO 60-INCH TRIPLE WALL ASTM F-2764 D3212, F-477

- 8. ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS), REQUIRES STONE BEDDING WITH STONE " TO 1" IN SIZE, WITH MINIMUM BEDDING THICKNESS EQUAL TO THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES NOR MORE THAN EIGHT (8) INCHES. MATERIAL SHALL BE CA-7, CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC.
- 9. NON-SHEAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPES OF DISSIMILAR PIPE MATERIALS.
- 10.ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS, SANITARY LIDS SHALL BE CONSTRUCTED WITH A CONCEALED PICKHOLE AND WATERTIGHT GASKET WITH THE WORD "SANITARY" CAST INTO THE LID.
- 11. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED:
 - G. A CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SHEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUBWYE SADDLE OR HUB-TEE SADDLE.
 - b. REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL) AND REPLACE WITH A WYE OR TEE BRANCH SECTION.
 - c. WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION OF PROPER FITTING, USING "BAND SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE.
- 12. WHENEVER A SANITARY/COMBINED SEWER CROSSES UNDER A WATERMAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATERMAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY/COMBINED SEWERS AND WATERMAINS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATERMAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATER MAIN, THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN STANDARDS OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.
- 13.ALL EXISTING SEPTIC SYSTEMS SHALL BE ABANDONED. ABANDONED TANKS SHALL BE FILLED WITH GRANULAR MATERIAL OR REMOVED.
- 14.ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES, AND SHALL BE CAST IN PLACE OR PRE-CAST REINFORCED CONCRETE.
- 15.ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE PRECAST "RUBBER BOOTS" THAT CONFORM TO ASTM C-923 FOR ALL PIPE CONNECTIONS. PRECAST SECTIONS SHALL CONSIST OF MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS.
- 16.ALL ABANDONED SANITARY SEWERS SHALL BE PLUGGED AT BOTH ENDS WITH AT LEAST 2 FEET LONG NON-SHRINK CONCRETE OR MORTAR PLUG.
- 17.EXCEPT FOR FOUNDATION/FOOTING DRAINS PROVIDED TO PROTECT BUILDINGS, OR PERFORATED PIPES ASSOCIATED WITH VOLUME CONTROL FACILITIES, DRAIN TILES/FIELD TILES/UNDERDRAINS/PERFORATED PIPES ARE NOT ALLOWED TO BE CONNECTED TO OR TRIBUTARY TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS IN COMBINED SEWER AREAS. CONSTRUCTION OF NEW FACILITIES OF THIS TYPE IS PROHIBITED; AND ALL EXISTING DRAIN TILES AND PERFORATED PIPES ENCOUNTERED WITHIN THE PROJECT AREA SHALL BE PLUGGED OR REMOVED, AND SHALL NOT BE CONNECTED TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS.
- 18.A BACKFLOW PREVENTER IS REQUIRED FOR ALL DETENTION BASINS TRIBUTARY TO COMBINED SEWERS. REQUIRED BACKFLOW PREVENTERS SHALL BE INSPECTED AND EXERCISED ANNUALLY BY THE PROPERTY OWNER TO ENSURE PROPER OPERATION, AND ANY NECESSARY MAINTENANCES SHALL BE PERFORMED TO ENSURE FUNCTIONALITY. IN THE EVENT OF A SEWER SURCHARGE INTO AN OPEN DETENTION BASIN TRIBUTARY TO COMBINED SEWERS, THE PERMITTEE SHALL ENSURE THAT CLEAN UP AND WASH OUT OF SEWAGE TAKES PLACE WITHIN 48 HOURS OF THE STORM EVENT.

EROSION AND SEDIMENT CONTROL

- 1. THE CONTRACTOR SHALL INSTALL THE EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
- 2. EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE FUNCTIONAL PRIOR TO HYDROLOGIC DISTURBANCE OF THE SITE.
- 3. ALL DESIGN CRITERIA, SPECIFICATIONS, AND INSTALLATION OF EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL.
- 4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- 5. INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED, AT A MINIMUM:
 - d. UPON COMPLETION OF INITIAL EROSION AND SEDIMENT CONTROL MEASURES, PRIOR TO ANY SOIL DISTURBANCE.
 - b. ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION.
- 6. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES, THE CO-PERMITTEE SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES.
- 7. A STABILIZED MAT OF CRUSHED STONE MEETING THE STANDARDS OF THE ILLINOIS URBAN MANUAL SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE. SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
- 8. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL AND SHALL BE INSTALLED PRIOR TO ANY ON SITE CONSTRUCTION ACTIVITIES INVOLVING CONCRETE.
- MORTAR WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ADDITION TO CONCRETE WASHOUT FACILITIES FOR ANY BRICK AND MORTAR BUILDING ENVELOPE CONSTRUCTION ACTIVITIES.
- 10.TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR BASIN. VOLUME CONTROL FACILITIES SHALL NOT BE USED AS TEMPORARY SEDIMENT BASINS.
- 11.DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) DAYS.
- 12.ALL FLOOD PROTECTION AREAS AND VOLUME CONTROL FACILITIES SHALL, AT A MINIMUM, BE PROTECTED WITH A DOUBLE-ROW OF SILT FENCE (OR EQUIVALENT).
- 13.VOLUME CONTROL FACILITIES SHALL NOT BE CONSTRUCTED UNTIL ALL OF THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
- 14.SOIL STOCKPILES SHALL, AT A MINIMUM, BE PROTECTED WITH PERIMETER SEDIMENT CONTROLS. SOIL STOCKPILES SHALL NOT BE PLACED IN FLOOD PROTECTION AREAS OR THEIR BUFFERS.
- 15.EARTHEN EMBANKMENT SIDE SLOPES SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL BLANKET.
- 16.STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY APPROPRIATE SEDIMENT CONTROL MEASURES.
- 17.THE CONTRACTOR SHALL EITHER REMOVE OR REPLACE ANY EXISTING DRAIN TILES AND INCORPORATE THEM INTO THE DRAINAGE PLAN FOR THE DEVELOPMENT. DRAIN TILES CANNOT BE TRIBUTARY TO A SANITARY OR COMBINED SEWER. DRAIN TILES ALLOWED IN COMBINED SEWER AREA FOR GREEN INFRASTRUCTURE PRACTICES.
- 18.IF DEWATERING SERVICES ARE USED. ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. DEWATERING SYSTEMS SHOULD BE INSPECTED DAILY DURING OPERATIONAL PERIODS. THE SITE INSPECTOR MUST BE PRESENT AT THE COMMENCEMENT OF DEWATERING ACTIVITIES.
- 19.THE CONTRCTOR SHALL BE RESPONSIBLE FOR TRENCH DEWATERING AND EXCAVATION FOR THE INSTALLATION OF SANITARY SEWERS, STORM SEWERS, WATERMAINS AS WELL AS THEIR SERVICES AND OTHER APPURTENANCES. ANY TRENCH DEWATERING, WHICH CONTAINS SEDIMENT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO A SUMP PIT, FILTER BAG OR EXISTING VEGETATED UPSLOPE AREA, SEDIMENT LADEN WATERS SHALL NOT BE DISCHARGE TO WATERWAYS, FLOOD PROTECTION AREAS OR THE COMBINED SEWER SYSTEM.
- 20.ALL PERMANENT EROSION CONTROL PRACTICES SHALL BE INITIATED WITHIN SEVEN (7) DAYS FOLLOWING THE COMPLETION OF SOIL DISTURBING ACTIVITIES.
- 21.ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED ON A YEAR-ROUND BASIS DURING CONSTRUCTION AND ANY PERIODS OF CONSTRUCTION SHUTDOWN UNTIL PERMANENT STABILIZATION IS ACHIEVED.
- 22.ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER PERMANENT SITE STABILIZATION.
- 23.THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, SITE INSPECTOR, OR MWRD.

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BLA, Inc.	F
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	USER NAME = DMcglincy	DESIGNED	-	MC	REVISED -
		DRAWN	-	MC	REVISED -
~	PLOT SCALE = 100.0000 ' / in.	CHECKED	-	DB	REVISED -
-	PLOT DATE = 7/24/2019	DATE	-	07/25/2019	REVISED -



I TEM NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 0005 STREET	UTILITY 0043 WATERMAIN	UTILITY 0043 SANITARY	UTILITY 0043 STORM
1	TREE TRUNK PROTECTION	EACH	46	46			
2	TREE ROOT PRUNING	EACH	30	30			
3	SUPPLEMENTAL WATERING	UNIT	15	15			
4	INLET FILTERS	EACH	18				18
5	GYMNOCLADUS DIOICUS (KENTUCKY COFFEETREE), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	7	7			
6	TEMPORARY LANDSCAPE RESTORATION (SPECIAL)	SO YD	143	143			
7	TEMPORARY EROSION CONTROL SEEDING	SO YD	143	143			
8	(TEMPORARY) MULCH METHOD 3	SO YD	143	143			
9	GENERAL LANDSCAPE RESTORATION (SPECIAL)	SQ YD	1430	1430			
10	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	194	194			
11	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	104	104			
12	PAVEMENT REMOVAL	SQ YD	7757	7757			
13	DRIVEWAY PAVEMENT REMOVAL	SQ YD	57	57			
14	COMBINATION CURB AND GUTTER REMOVAL	FOOT	850	850			
15	SIDEWALK REMOVAL	SO FT	2473	2473			
16	REMOVE AND STACK BRICK PAVER DRWY PVMT (SPECIAL)	SQ FT	65	65			
1 7	SANITARY/STORM SEWER TO BE REMOVED, UP TO 15 INCHES (SPECIAL)	FOOT	248				248
18	STORM SEWER REMOVAL 24"	FOOT	141				141
19	REMOVING MANHOLES	EACH	1			1	
20	VALVE BOXES TO BE REMOVED	EACH	52		52		
21	FIRE HYDRANT TO BE REMOVED (SPECIAL)	EACH	6		6		
22	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	194	194			
23	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	388	388			



	USER NAME = DMcglincy	DESIGNED	-	MC	REVISED	-
		DRAWN	-	MC	REVISED	-
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-	PLOT DATE = 7/24/2019	DATE	-	07/25/2019	REVISED	-



MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4220		соок	31	6
		СО	NTRAC	NO.
	ILLINOIS			

ITEM NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 0005 STREET	UTILITY 0043 WATERMAIN	UTILITY 0043 SANITARY	UTILITY 0043 STORM
24	PREPARATION OF BASE	SQ YD	7757	7757			
25	TRENCH BACKFILL - COURSE AGGREGATE, CA-11 (SPECIAL)	CU YD	4423	4423			
26	TRENCH BACKFILL - FA-1 (SPECIAL)	CU YD	791	791			
27	AGGREGATE BASE COURSE, TYPE B (SPECIAL)	TON	2996	2996			
28	BITUMINOUS MATERIALS (TACK COAT)	POUND	5236	5236			
29	LONGITUDINAL JOINT SEALANT	FOOT	2122	2122			
30	PROTECTIVE COAT	SO YD	507	507			
31	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SO YD	57	57			
32	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	2279	2279			
33	DETECTABLE WARNINGS (SPECIAL)	SO FT	20	20			
34	DETECTABLE WARNINGS, FURNISHED BY OTHERS (SPECIAL)	SO FT	64	64			
35	CLASS B PATCHES, TYPE I, 9 INCH	SO YD	10	10			
36	CLASS B PATCHES, TYPE II, 9 INCH	SO YD	10	10			
37	CLASS B PATCHES, TYPE III, 9 INCH	SO YD	10	10			
38	CLASS B PATCHES, TYPE IV, 9 INCH	SO YD	252	252			
39	CLASS D PATCHES, TYPE I-IV, 4.5 INCH	SQ YD	20	20			
40	COMBINATION CONCRETE CURB AND GUTTER, VARIES (SPECIAL)	FOOT	791	791			
41	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	59	59			
42	HOT-MIX ASPHALT BINDER COURSE (SPECIAL)	TON	1086	1086			
43	HOT-MIX ASPHALT SURFACE COURSE (SPECIAL)	TON	869	869			
44	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	15				15
45	VALVE VAULTS TO BE ABANDONED	EACH	4		4		
46	WATER VALVES 10"	EACH	10		10		



	USER NAME = DMcglincy	DESIGNED	-	MC	REVISED	-
		DRAWN	-	MC	REVISED	=
7	PLOT SCALE = 100.0000 ' / in.	CHECKED	-	DB	REVISED	=
-	PLOT DATE = 7/24/2019	DATE	-	07/25/2019	REVISED	=





				UNI	VEF	RSITY D	RIVE				MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SUMMARY OF QUANTITIES										4220		соок	31	7	
			30	,1011017		01 40	^!V!!!!	LJ					cc	NTRAC	NO.
SCALE:	NTS	SHEET	2	OF	4	SHEETS	STA.	N/A	TO STA.	N/A		ILLINOIS	•		

ITEM NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 0005 STREET	UTILITY 0043 WATERMAIN	UTILITY 0043 SANITARY	UTILITY 0043 STORM
47	WATER VALVES 12"	EACH	2		2		
48	VALVE VAULTS, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	16		16		
49	WATERMAIN, DUCTILE IRON PIPE, CLASS 52, 6" (SPECIAL)	FOOT	121		121		
50	WATERMAIN, DUCTILE IRON PIPE, CLASS 52, 8" (SPECIAL)	FOOT	38		38		
51	WATERMAIN, DUCTILE IRON PIPE, CLASS 52, 10" (SPECIAL)	FOOT	2322		2322		
52	WATERMAIN, DUCTILE IRON PIPE, CLASS 52, 12" (SPECIAL)	FOOT	130		130		
53	WATERMAIN, DUCTILE IRON PIPE, CLASS 52, INSULATED 10"	FOOT	50		50		
54	WATER SERVICE, TYPE K COPPER, 1" (SPECIAL)	FOOT	1302		1302		
55	WATER SERVICE, CONNECT EXISTING, COMPLETE (SPECIAL)	EACH	52		52		
56	WATER SERVICE, B-BOX FRAME & LID (SPECIAL)	EACH	52		52		
57	WATER SERVICE, TAP 1" COMPLETE (SPECIAL)	EACH	52		52		
58	PRESSURE CONNECTION, 6" X 6", COMPLETE (SPECIAL)	EACH	4		4		
59	PRESSURE CONNECTION, 8" X 8", COMPLETE (SPECIAL)	EACH	2		2		
60	FIRE HYDRANT ASSEMBLY, COMPLETE (SPECIAL)	EACH	8		8		
61	CUT AND CAP EXISTING WATER MAIN (SPECIAL)	EACH	5		5		
62	FILL AND ABANDON EXISTING WATER MAIN (SPECIAL)	CU YD	171		171		
63	CONNECTION TO EXISTING WATER MAIN (SPECIAL)	EACH	3		3		
64	MANHOLES, SANITARY, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1			1	
65	INSPECTION MANHOLE, TYPE 1 FRAME, CLOSED LID	EACH	1			1	
66	FILL AND ABANDON EXISTING FORCE MAIN (SPECIAL)	CU YD	160			160	
67	FORCEMAIN, 10" PVC, C900, DR14 (SPECIAL)	FOOT	2167			2167	
68	STORM SEWERS TO BE CLEANED 12"	FOOT	50				50
69	DRAINAGE STRUCTURES TO BE CLEANED	EACH	10				10



	USER NAME = DMcglincy	DESIGNED	-	MC	REVISED	-
		DRAWN	-	MC	REVISED	=
7	PLOT SCALE = 100.0000 ' / in.	CHECKED	-	DB	REVISED	=
-	PLOT DATE = 7/24/2019	DATE	-	07/25/2019	REVISED	=



ITEM NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 0005 STREET	UTILITY 0043 WATERMAIN	UTILITY 0043 SANITARY	UTILI 0043 STOR
70	DRAINAGE STRUCTURES TO BE RECONSTRUCTED	EACH	5				5
71	STORM SEWERS, TYPE 2, WATER MAIN QUALITY PIPE, 12"	FOOT	239				239
72	STORM SEWERS, TYPE 2, WATER MAIN QUALITY PIPE, 15"	FOOT	53				53
73	STORM SEWERS, TYPE 2, WATER MAIN QUALITY PIPE, 24"	FOOT	141				141
74	PIPE UNDERDRAINS 4"	FOOT	860				860
75	CONNECT NEW STM SWR TO EX STM STR (SPECIAL)	EACH	12				12
76	WASHOUT BASIN	L SUM	1	0.25	0.25	0. 25	0. 25
77	STABILIZED CONSTRUCTION ENTRANCE	SQ YD	110	110			
78	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	168	168			
79	TEMPORARY PAVEMENT MARKING - 24"	FOOT	84	84			
80	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	84	84			
81	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	66	66			
82	POLYUREA PAVEMENT MARKING TYPE I - LINE 6"	FOOT	105	105			
83	POLYUREA PAVEMENT MARKING TYPE I - LINE 6"	FOOT	18	18			
84	CHANGEABLE MESSAGE SIGN	CAL DA	180	180			
85	TEMPORARY INFORMATION SIGNING	SQ FT	180	180			
86	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1			
87	TRAFFIC CONTROL AND PROTECTION - BUFFALO GROVE ROAD, (SPECIAL)	L SUM	1	1			
88	REMOVE AND RESET MAILBOXES (SPECIAL)	EACH	28	28			
89	MOWING (SPECIAL)	EACH	10	10			
90	CONSTRUCTION LAYOUT	L SUM	1	0. 25	0.25	0.25	0.25
91	MOBILIZATION	L SUM	1	0.25	0. 25	0.25	0. 25

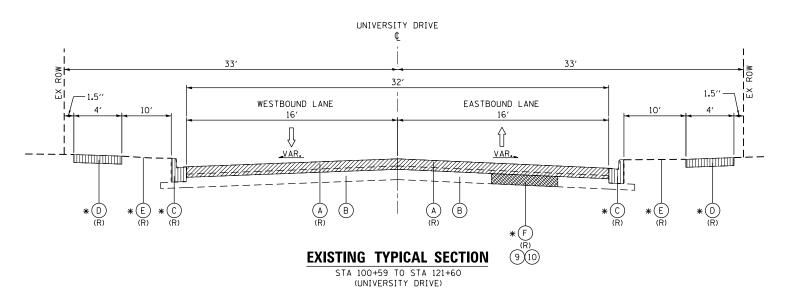
•SPECIALTY ITEM



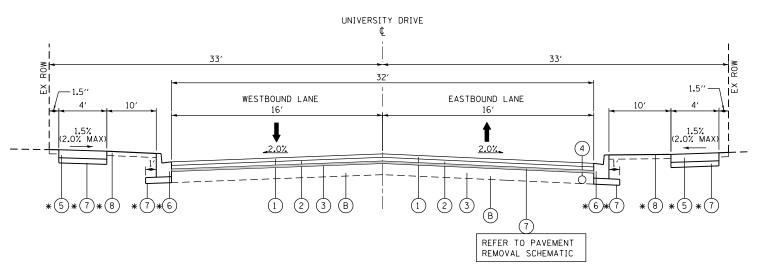
	USER NAME = DMcglincy	DESIGNED	-	MC	REVISED -
		DRAWN	-	MC	REVISED -
7	PLOT SCALE = 100.0000 ' / in.	CHECKED	-	DB	REVISED -
-	PLOT DATE = 7/24/2019	DATE	-	07/25/2019	REVISED -



	UNIVERSITY DRIVE											
	SUMMARY OF QUANTITIES											
SC	CALE:	NTS	SHEET	4	0F	4	SHEETS	STA.	N/A	TO STA.	N/A	



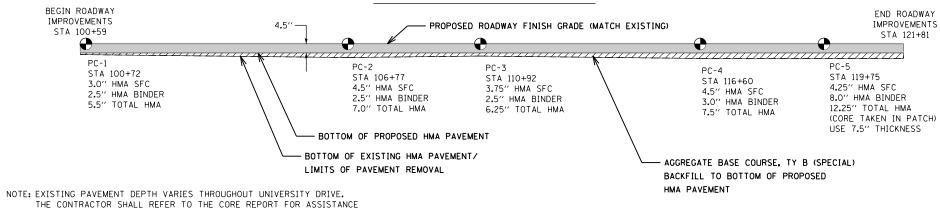
NOTE: PROEJCT IMPROVEMENT
BEGINS AT STA: 100+22.00
PROJECT IMPROVEMENT
ENDS AT STA: 122+50.00



PROPOSED TYPICAL SECTION

STA 100+59 TO STA 121+60 (UNIVERSITY DRIVE)

PAVEMENT REMOVAL SCHEMATIC



EXISTING LEGEND

- (A) EX. HOT-MIX ASPHALT SURFACE / BINDER COURSE, 5.5"-7.5" (R-PVMT REMOVAL)
- (B) EX. AGGREGATE BASE COURSE, 8.0"-17.75"
- *(C) EX. COMB. CONCRETE CURB & GUTTER, TY B-6.12
- *(D) EX. P.C.C. SIDEWALK
- *(E) EX. TOPSOIL
- *(F) REMOVAL AND DISPOSAL OF UNSUITABLE MATERIALS

ITEMS WITH (R) ARE TO BE REMOVED AS SHOWN ON THE TYPICAL SECTIONS AND/OR ON THE PLAN SHEETS.

* ITEM TO BE REMOVED AND REPLACED AT LOCATIONS INDICATED IN THE PLANS AND/OR DIRECTED BY THE ENGINEER

HOT-MIX ASPHALT PAVEMENT REMOVAL. 4.5"

COMBINATION CURB AND GUTTER REMOVAL / SIDEWALK REMOVAL (AS SHOWN IN THE PLANS OR DIRECTED BY THE ENGINEER)

PAVEMENT REMOVAL SHALL CONSIST OF REMOVING ALL EXISTING HMA DOWN TO EXISTING STONE

PROPOSED LEGEND

- 1) PR. HMA SURFACE COURSE, MIX "D", N50, 2.0"
- 2) PR. HMA BINDER COURSE (MACHINE METHOD), IL-19.0, N50, 2.5"
- (3) PR. PREPARATION OF BASE
- (4) PR. PIPE UNDERDRAIN, 4"
- *(5) PR. PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH
- *(6) PR. COMBINATION CONCRETE CURB AND GUTTER, VARIES (SPECIAL)
- *(7) PR. AGGREGATE BASE COURSE, TY B (SPECIAL) VARIABLE
- *(8) PR. GENERAL LANDSCAPE RESTORATION (SPECIAL)
- *(9) PR. AGGREGATE SUBGRADE IMPROVEMENTS (CY)
- *(10) PR. GEOTECHNICAL FABRIC FOR GROUND STABILIZATION (SY)
- ITEM TO BE REMOVED AND REPLACED AT LOCATIONS INDICATED IN THE PLANS * AND/OR DIRECTED BY THE ENGINEER

THE CONTRACTOR SHALL MILL ROADWAY PAVEMENT PRIOR TO PAVEMENT PATCHING.

THE CONTRACTOR SHALL MILE ROADWAT FAVEMENT FRIOR TO FAVEMENT FATCHING.								
HOT-MIX ASPHALT MIXTURE REQUIREMENTS								
MIXTURE TYPE	AIR VOIDS @ Ndes							
ROADWAY PAVEMENT (MURPHY MIX)								
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm); 2.0"	4% ⊚ 50 GYR							
HOT-MIX ASPHALT BINDER COURSE (MACHINE METHOD), IL-19.0, N50 (IL 9.5 mm), 2.5	4% @ 50 GYR							
PAVEMENT PATCHING (MURPHY MIX)								
CLASS D PATCHES, HOT-MIX ASPHALT BINDER (IL 19 mm), N70; 4.5"	4% @ 70 GYR							

NOTES:

THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES 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 58-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

FOR USE OF RECYCLED MATERIALS SEE DISTRICT ONE SPECIAL PROVISIONS.

THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED UNDER THE SURFACE LIFT, PER BDE SPECIAL PROVISION

	USER NAME = DMcglincy	DESIGNED -	MC	REVISED -
TDT .		DRAWN -	MC	REVISED -
BI.A Inc.	PLOT SCALE = 100.0000 ' / in.	CHECKED -	DB	REVISED -
Dm 1, 1110.	PLOT DATE = 7/24/2019	DATE -	07/25/2019	REVISED -



VILLAGE OF

				UNI	VER:	SITY D	RIVE				MUN RTE.	SECTION	COUNTY	SHEETS	NO.	
BUFFALO GROVE				TYP	ICAI	L SECT	IONS				4220		соок	31	10	
			1			. 020.					l		cc	NTRACI	NO.	
	CCALE.	NTC	CUEET 1	ΛE	1	CHEETC	CTA	100+22 00	TO CTA	122+50.00		Tr. Diote				

1	1 INLET FILTERS							
UNIVERSITY	DR							
STATION	OFFSET	QUANTITY						
STATION	(LT / RT)	(EA)						
100+43.60	21.94′ LT	1						
100+45.32	21.13' RT	1						
104+57.80	16.87′ LT	1						
104+64.87	16.88′ RT	1						
111+08.10	21.60' LT	1						
111+28.42	17.22' RT	1						
114+07.66	17.53′ RT	1						
115+74.95	26.83' RT	1						
116+15.94	23.35′ RT	1						
116+18.25	16.62′ LT	1						
117+35.55	16.96′ RT	1						
118+76.72	21.33' RT	1						
119+30.47	19.94′ RT	1						
121+59.17	18.30' LT	1						
121+71.40	21.78' RT	1						
121+89.74	57.55′ RT	1						
122+14.42	55.40' RT	1						
122+20.18	20.86' RT	1						
	TOTAL	18						

5			PROPOSED ROA	DWAY PAVEMENT	
STAT	TION	OFFSET	PREPARATION OF	HMA SURFACE COURSE - MURPHY	HMA BINDER COURSE
FROM	то	(LT / RT)	BASE (SQ YD)	MIX (TON) (SPECIAL)	(TON) (SPECIAL)
UNIVERSITY	DR				
100+59	105+00	LT / RT	1,541	173	216
105+00	111+00	LT / RT	2, 117	237	296
111+00	117+00	LT / RT	2, 242	251	314
117+00	121+60	LT / RT	1,857	208	260
		TOTAL:	7, 757	869	1,086

6	COMBINATION CONCRETE CURB AND GUTTER, VARIES									
UNIVERSITY		055657								
SIA	TION	OFFSET	LENGTH							
FROM	TO	(LT / RT)	(FOOT)							
100+30	105+00	LT / RT	127							
105+00	111+00	LT / RT	128							
111+00	117+00	LT / RT	207							
117+00	122+48	LT / RT	329							
		TOTAL:	791							

7	COMBINATION CONCRETE CURB AND				
1	GUT ⁻	TER, TYPE B-0	6.24		
UNIVERSITY	DR				
STA	TION	OFFSET	LENGTH		
FROM	TO	(LT / RT)	(F00T)		
100+30	105+00	LT / RT	59		
105+00	111+00	LT / RT	0		
111+00	117+00	LT / RT	0		
117+00	122+48	LT / RT	0		
		TOTAL:	59		

2	PCC DRIVEWAYS					
674740W 4000566		OFFSET	PCC DRIVEWAY	DRIVEWAY PAVEMENT	REMOVE & STACK BRICK PAVER	
STATION	ATION ADDRESS	(LT / RT)	PAVEMENT, 6"	REMOVAL (SQ YD)	DRWY PVMT (SQ FT) (SPECIAL)	
UNIVERSITY DR						
101+08	22	LT	10	10	0	
103+35	64	LT	6	6	0	
104+97	86	LT	7	7	0	
107+68	128	LT	11	11	0	
109+53	160	LT	0	0	65	
113+15	222	LT	1	1	0	
114+04	232	LT	11	11	0	
114+49	244	RT	11	11	0	
		TOTAL	57	57	65	

8	PAVEMENT REMOVAL				
UNIVERSITY	DR				
STA	TION	OFFSET	AREA	AREA	
FROM	T0	(LT / RT)	(SQ FEET)	(SQ YARD)	
100+59	105+00	LT / RT	13,868	1,541	
105+00	111+00	LT / RT	19,050	2, 117	
111+00	117+00	LT / RT	20, 180	2, 242	
117+00	121+60	LT / RT	16,709	1,857	
			TOTAL:	7, 757	

		LOCATION			TION	STA
ROAD BASE (TON)	TRENCH ROAD CAPPING BACKFILL (TON)	PCC SIDEWALKS	PCC DRIVEWAYS	COMB. CONCRETE CURB & GUTTER (TON)	то	FROM
					DR	JNIVERSITY
148	452	7	7	11	105+00	100+59
129	566	6	4	8	111+00	105+00
204	562	12	8	13	117+00	111+00
245	568	26	0	20	121+60	117+00
726	2, 148	51	19	52	TOTAL	
245	568	26	0	20	121+60	

VILLAGE OF BUFFALO GROVE

J	PURILAND	INCH	TE SIDEWALK 5
STATION		PORTLAND CEMENT CONCRETE	SIDEWALK
FROM	то	SIDEWALK 5 INCH (SQ FT)	REMOVAL (SQ FT)
UNIVERSITY	DR		
100+59	105+00	550	550
105+00	111+00	252	252
111+00	117+00	477	552
117+00	121+60	1,000	1,119
	TOTAL:	2, 279	2, 473

COMBINA	TION CURR AND	CUTTER	10
COMBINA	REMOVAL	OUTTEN	STA
DR			
TION	OFFSET	LENGTH	FROM
TO	(LT / RT)	(F00T)	
105+00	LT / RT	186	UNIVERSITY
111+00	LT / RT	128	100+59
117+00	LT / RT	207	105+00
121+60	LT / RT	329	111+00
	TOTAL:	850	117+00
	DR TION TO 105+00 111+00 117+00	REMOVAL	DR TION OFFSET LENGTH TO (LT / RT) (FOOT) 105+00 LT / RT 186 111+00 LT / RT 128 117+00 LT / RT 207 121+60 LT / RT 329

10	TRENCH BACKFILL				
STA			TRENCH BACKFILL -		
FROM	то	CA-11 (CY) (SPECIAL)	FA-1 (CY) (SPECIAL)		
UNIVERSITY	DR				
100+59	105+00	973	219		
105+00	111+00	1,170	131		
111+00	117+00	1,178	156		
117+00	121+60	1, 102	285		
	TOTAL:	4, 423	791		

1 1	SANITARY	REMOVED.	UP TO 15		
UNIVERSITY	DR				
STATION	OFFSET	STATION	OFFSET	MATERIAL	QUANTITY
STATION	(LT / RT)	STATION	(LT / RT)	MAIERIAL	(FT)
100+45.32	21.13' RT	100+39.58	2.00' RT	RCP	20
104+61.75	2.00' RT	104+64.87	16.88' RT	RCP	15
104+64.87	16.88' RT	104+94.76	19.43' RT	RCP	30
111+20.53	2.00' RT	111+28.36	17.11' RT	RCP	17
111+28.36	17.11' RT	111+29.90	22.51' RT	RCP	5
114+14.07	22.00' RT	114+68.25	17.53' RT	RCP	53
116+17.29	2.00' RT	116+17.29	23.36′ RT	RCP	21
117+35.73	22.00' RT	117+35.51	17.00' RT	RCP	5
114+68.25	17.53′ RT	115+00.50	22.00' RT	RCP	33
115+96.16	25.32' RT	116+17.29	23.11' RT	RCP	20
122+13.62	49.22′ LT	122+15.03	34.24′ LT	RCP	15
122+18.92	7.00' RT	122+20.18	20.86' RT	RCP	14
				TOTAL	248

12	STORM SEWER REMOVAL 24"				
		UN I VERS	SITY DR		
STATION	OFFSET	STATION	OFFSET	MATERIAL	QUANTITY
STATION	(LT / RT)	SIAIIUN	(LT / RT)	MAIERIAL	(FT)
116+86.09	22.00' RT	117+35.67	17.04' RT	RCP	49
117+35.67	17.04' RT	117+74.00	20.22' RT	RCP	38
118+76.72	21.33' RT	119+30.53	19.94′ RT	RCP	54
				TOTAL	141

13	REMOVING	MANHOLES
UNIVERSITY	DR	
STATION	OFFSET	QUANTITY
STATION	(LT / RT)	(EA)
100+26.23	12.50' LT	1
	TOTAL:	1

FIRE HYDRANTS TO BE REMOVED			
DR			
OFFSET	QUANTITY		
(LT / RT)	(EA)		
21.02' RT	1		
21.66' RT	1		
22.01' RT	1		
21.79' RT	1		
22.69' RT	1		
22.03' RT	1		
TOTAL	6		
	BE RE OR OFFSET (LT / RT) 21.02' RT 21.66' RT 22.01' RT 21.79' RT 22.69' RT		

VALVE VAULTS TO BE ABANDONED			
DR			
OFFSET	QUANTITY		
(LT / RT)	(EA)		
25.67' RT	1		
24.53′ RT	1		
26.20' RT	1		
25.11' RT	1		
TOTAL	1		
	BE ABA DR OFFSET (LT / RT) 25.67' RT 24.53' RT 26.20' RT		

	USER	NAME	
D			
BLA, Inc.	PLOT	SCALE	
Dm1, 111C.	PLOT	DATE	

USER NAME = DMcglincy	DESIGNED	-	MC	REVISED -
	DRAWN	-	MC	REVISED -
PLOT SCALE = 100.0000 '/ in.	CHECKED	-	DB	REVISED -
PLOT DATE = 7/24/2019	DATE	-	07/25/2019	REVISED -



			S			RSITY D OF QU/		ES		
SCALE:	NTS	SHEET	1	OF	3	SHEETS	STA.	N/A	TO STA.	N/A

TOTAL:

UNIVERSITY DR

STATION OFFSET QUANTITY
(LT / RT) (EA)

100+45. 32 21. 13' RT 1
104+64. 87 16. 88' RT 1
111+28. 42 17. 22' RT 1
111+28. 42 17. 22' RT 1

111+28.42 11.22 RT 111+38.02 5.27' RT 114+68.05 17.53' RT 115+75.09 26.81' RT 116+16.57 23.34' RT 117+05.31 16.97' RT

118+76. 74 21. 33' RT 119+30. 47 19. 94' RT 121+59. 17 18. 30' LT 121+69. 28 23. 54' LT

121+71.40 21.78' RT 121+87.71 22.42' LT 122+20.18 20.87' RT

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.
4220		COOK	31	11
		CO	NTRACT	NO.
	ILLINOIS			

17	WATER VA	LVES 10"
UNIVERSITY	DR	
STATION	OFFSET	QUANTITY
STATION	(LT / RT)	(EA)
100+77.40	12.00' RT	1
101+24.17	26.08' RT	1
108+15.09	12.00' RT	1
115+69.89	12.00' RT	1
116+03.73	31.97′ RT	1
119+13.43	35.64′ RT	1
121+57.64	10.00' RT	1
122+03.78	28.26′ LT	1
122+08.28	30.65′ RT	1
122+34.05	10.00' RT	1
	TOTAL	10

18	WATER VA	ALVES 12"	
UNIVERSITY	DR		
CTATION	OFFSET	QUANTITY	
STATION	(LT / RT)	(EA)	
100+35.08	35.41' LT	1	
100+37.06	82.57′ RT	1	
	TOTAL	2	

19		LTS, TYPE A,
UNIVERSITY D	5'-DIA, TY	1 FRAME, CL
DIALAEKSTII D		OUANITITY
STATION	OFFSET	QUANTITY
•	(LT / RT)	(EA)
100+35.08	35.41′ LT	1
100+37.06	82.57' RT	1
100+77.40	12.00' RT	1
101+24.17	26.08' RT	1
101+30.00	37.90' RT	1
108+15.09	12.00' RT	1
115+69.89	12.00' RT	1
116+03.73	31.97' RT	1
116+17.54	43.39' RT	1
119+13.43	35.64' RT	1
119+33.05	45.45' RT	1
121+57.64	10.00' RT	1
122+03.78	28.26′ LT	1
122+16.97	40.01' LT	1
122+34.05	10.00' RT	1
122+42.27	20.50' RT	1
	TOTAL	16

20	PRESSURE				
	CONNECTI	ON 6"x6"			
UNIVERSITY	DR				
STATION	OFFSET	QUANTITY			
STATION	(LT / RT)	(EA)			
116+18.00	47.52' RT	1			
119+33.38	49.91' RT	1			
122+23.65	43.80' RT	1			
122+43.79	20.49' RT	1			
	TOTAL	4			

\bigcirc 1	PRESSURE					
$\angle \perp$	CONNECTI	CONNECTION 8"x8"				
JNIVERSITY DR						
STATION	OFFSET	QUANTITY				
	(LT / RT)	(EA)				
101+30.00	37.90′ RT	1				
122+16.61	44.52′ LT	1				
	2					

22	WATER	MAIN, DUC	TILE IRON	PIPE, CL	52, 6"
UNIVERSITY	DR				
STATION	OFFSET	STATION	OFFSET	MATERIAL	QUANTITY
STATION	(LT / RT)	STATION	(LT / RT)	MAIERIAL	(FT)
100+30.03	60.88' RT	100+30.03	68.93' RT	DI	8
101+15.05	12.00' RT	101+15.05	19.06' RT	DI	7
104+75.09	12.00' RT	104+75.09	19.06' RT	DI	7
108+05.09	12.00' RT	108+05.09	19.06' RT	DI	7
111+95.09	12.00' RT	111+95.09	19.20' RT	DI	7
115+51.07	11.55' RT	115+51.07	18.65' RT	DI	7
116+04.82	34.67′ RT	116+17.54	43.39' RT	DI	17
119+13.10	40.45' RT	119+33.05	45.45′ RT	DI	22
119+45.00	10.00' RT	119+45.00	21.12' RT	DI	1 1
122+08.47	35.79' RT	123+23.10	36.65′ RT	DI	16
122+40.82	10.00' RT	122+43.79	20.49' RT	DI	12
				TOTAL	121

23 WATERMAIN, DUCTILE IRON PIPE, CL52, 8"						
UNIVERSITY			055557		0114117777	
STATION	OFFSET	STATION	OFFSET	MATERIAL	QUANTITY	
	(LT / RT)		(LT / RT)		(FT)	
100+22.12	68.93' RT	100+36.83	68.93' RT	DI	15	
111+38.10	12.00' RT	111+38.10	5.27′ RT	DI	6	
122+03.40	31.35′ LT	122+16.97	39.95′ LT	DI	17	
122+21.04	10.00' RT	122+21.95	24.96′ RT	DI	15	
				TOTAL	38	

	,				
24	WATERM	AIN, DUCT	ILE IRON	PIPE, CL5	2. 10"
UNIVERSITY	DR				
STATION	OFFSET	STATION	OFFSET	MATERIAL	QUANTITY
STATION	(LT / RT)	STATION	(LT / RT)	MAIERIAL	(FT)
100+35.88	12.00' RT	105+00.00	12.00' RT	DI	464
101+24.08	12.00' RT	101+24.08	25.90' RT	DI	26
105+00.00	12.00' RT	111+00.00	12.00' RT	DI	600
111+00.00	12.00' RT	117+00.00	10.75' RT	DI	600
116+10.11	11+37' RT	116+04.82	34.67' RT	DI	24
117+00.00	10.75' RT	122+40.82	10.00' RT	DI	541
119+13.43	10.00' RT	119+13.10	40.45' RT	DI	26
122+03.40	31.35′ LT	122+06.53	10.00' RT	DI	41
				TOTAL:	2, 322

25	WATERM	AIN, DUCT	ILE IRON	PIPE, CL5	2. 12"				
UNIVERSITY	DR								
STATION	OFFSET	STATION	OFFSET	MATERIAL	QUANTITY				
STATION	(LT / RT)	STATION	(LT / RT)	MAIERIAL	(FT)				
100+29.93	45.43′ LT	100+37.06	82.57' RT	DΙ	1 30				
TOTAL: 130									

26	WATER SERVICE, TYPE K COPPER, 1"						
UNIVERSITY	DR						
STATION	OFFSET	STATION	OFFSET	QUANTITY			
STATION	(LT / RT)	STATION	(LT / RT)	(FT)			
100+59	LT / RT	105+00	LT / RT	356			
105+00	LT / RT	111+00	LT / RT	367			
111+00	LT / RT	117+00	LT / RT	316			
117+00	LT / RT	122+00	LT / RT	263			
			TOTAL:	1, 302			

27	FIRE H ASSEMBLY,	IYDRANT COMPLET
UNIVERSITY	DR	
STATION	OFFSET	QUANTITY
STATION	(LT / RT)	(EA)
100+30.03	60.88' RT	1
100+39.64	78.42' RT	1
101+15.14	21.48' RT	1
104+75.14	21.49' RT	1
108+05.14	20.94' RT	1
111+95.14	20.94' RT	1
115+03.29	20.08' RT	1
119+45.00	22.84' RT	1
	TOTAL	8

28	CUT & CAP EXISTING WATERMAIN							
UNIVERSITY DR								
STATION	OFFSET	QUANTITY						
STATION	(LT / RT)	(EA)						
100+29.94	41.31′ LT	1						
100+32.79	67.23' RT	1						
116+19.96	36.05' RT	1						
119+32.43	37.00' RT	1						
122+17.60	32.00' LT	1						
TOTAL: 5								
	TOTAL	. <u> </u>						

29		CTION TO WATERMAIN					
	EXIDITING	WAIERMAIN					
UNIVERSITY	DR						
STATION	OFFSET	QUANTITY					
STATION	(LT / RT)	(EA)					
100+29.93	45.43′ LT	1					
111+38.02	6.77' RT	1					
122+22.00	24.97′ RT	1					
TOTAL: 3							

30	MANHOLES 4'-DIA, TY	S, SANITARY, 1 FRAME, CL							
UNIVERSITY DR									
STATION	OFFSET	QUANTITY							
SIMITUN	(LT / RT)	(EA)							
100+26.23	12.50' IT	1							
TOTAL: 1									

32 UNIVERSITY DR	EXIS	T. WATER	SERVICE B	-BOX
			OFFSET	QUANTITY
ID NUMBER	ADDRESS	STATION	(LT / RT)	(EA)
B13-021377417	23	100+89.55	26.94' RT	1
B13-021382670	22	101+14.90	26.03' LT	1
B13-021379295	33	101+63.95	25.95' RT	1
B13-021379406	34	101+68.68	25.07' LT	1
B13-021380709	45	102+32.56	25.89' RT	1
B13-021380575	44	102+35.28	24.12' LT	1
B13-021381701	54	102+92.44	25.11' LT	1
B13-021381798	55	102+98.43	24.81' RT	1
B13-021377151	64	103+41.82	25.96′ LT	1
B13-021382768	65	103+59.02	26.16' RT	1
B13-021383397	74	104+30.00	25.79' LT	1
B13-021383604	77	104+33.23	26.05' RT	1
B13-021384285	86	104+98.80	24.92' LT	1
B13-021384358	87	105+00.40	26.15' RT	1
B13-021385181	97	105+53.04	25.03' RT	1
B13-021385126	96	105+67.62	25.13′ LT	1
B13-021373789 B13-021373743	108	106+29.68	24.75' LT 26.40' RT	1
B13-0213737446	118	106+32.24	26.40° RT	1
B13-021374446	118	106+95.89	26.04' RT	1
B13-021374909	128	107+64.82	22.85' LT	1
B13-021374877	127	107+65.45	24.06' RT	1
B13-021375418	138	108+23.10	21.62' LT	1
B13-021375446	139	108+31.32	25.54' RT	1
B13-021375794	148	108+92.87	23.53' LT	1
B13-021375811	149	108+98.15	23.38' RT	1
B13-021376210	160	109+60.19	22.52' LT	1
B13-021376179	159	109+65.91	23.56' RT	1
B13-021376345	171	110+30.60	20.00' RT	1
B13-021376438	183	110+99.75	22.65' RT	1
B13-021376539	193	111+61.28	23.75' RT	1
B13-021376798	205	112+31.00	22.72' RT	1
B13-021376973	212	112+60.80	21.59' LT	1
B13-021377040	215	112+95.66	21.81' RT	1
B14-021377247	222	113+32.12	21.20' LT	1
B14-021377310	225	113+67.08	22.70' RT	1
B14-021377497	232	114+04.36	21.73′ LT	1
B14-021377581	237	114+36.05	24.64' RT	1
B14-021377773	244	114+63.28	23.39' LT	1
B14-021378071	254	115+27.64	24.66′ LT	1
B14-021374413	1172	115+54.96	23.13' RT	1
B14-021378214	264	115+64.21	26.17' LT	1
B14-021378335	274	116+56.13	25.31' LT	1
B14-021378514	284	117+14.39	24. 22' LT	1
B14-021378352 B14-021378744	275	117+14.97	26.34' RT 24.83' LT	1
B14-021378744	294 291	117+79.73		1
B14-021378666	302	118+18.36		1
B14-021378926	312	119+09.98	23.10' LT 24.28' LT	1
B14-021379187	320	119+80.92	23. 28' LT	1
B14-021379309	330	120+37.71	23. 17' LT	1
B14-021374484	1188	121+08.67	22.25' LT	1
51. 021313404	1100	121.00.01	TOTAL:	
L			10125	J.L

マ 1	FORCEMAIN	N INSPECTION				
) J I	MANHOLE					
UNIVERSITY	DR					
STATION	OFFSET	QUANTITY				
STATION	(LT / RT)	(EA)				
112+44.14	6.00' LT	1				
	TOTAL:	1				
•						

33	FORCEMAIN, 10" PVC, C900, DR14								
UNIVERSITY	UNIVERSITY DR								
STATION	OFFSET	STATION	OFFSET	QUANTITY					
STATION	(LT / RT)	STATION	(LT / RT)	(FT)					
100+26.23	12.50' LT	105+00	6.00' LT	476					
105+00	6.00' LT	111+00	6.00' LT	600					
111+00	6.00' LT	117+00	6.00' LT	600					
117+00	6.00' LT	121+85.05	0.50' LT	491					
	TOTAL 2 167								



USER NAME = DMcglincy	DESIGNED	-	MC	REVISED -
	DRAWN	-	MC	REVISED -
PLOT SCALE = 100.0000 '/ in.	CHECKED	-	DB	REVISED -
PLOT DATE = 7/24/2019	DATE	-	07/25/2019	REVISED -



									MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
	SCHEDULE OF QUANTITIES									4220		соок	31	12		
												CO	NTRAC	T NO.		
	SCALE:	NTS	SHEET	2	OF	3	SHEETS	STA.	N/A	TO STA.	N/A		ILLINOIS			

34	STORM S	OUAL I TY									
UNIVERSITY	UNIVERSITY DR										
STATION	OFFSET	STATION	OFFSET	MATERIAL	QUANTITY						
STATION	(LT / RT)	STATION	(LT / RT)	MAIERIAL	(FT)						
100+45.60	21.94′ LT	100+23.72	19.86′ LT	WM QUALITY	20						
100+45.32	21.13' RT	100+32.74	20.80' LT	WM QUALITY	44						
104+61.75	2.00' RT	104+64.87	16.88′ RT	WM QUALITY	15						
104+64.87	16.88' RT	104+94.76	19.43' RT	WM QUALITY	30						
111+20.53	2.00' RT	111+28.36	17.11' RT	WM QUALITY	17						
111+28.36	17.11' RT	111+29.90	22.51' RT	WM QUALITY	5						
114+01.36	22.00' RT	114+68.25	17.53′ RT	WM QUALITY	53						
116+17.29	2.00' RT	116+17.29	23.36′ RT	WM QUALITY	21						
117+35.73	22.00' RT	117+35.51	17.00' RT	WM QUALITY	5						
122+13.62	49.22' LT	122+15.03	34.24′ LT	WM QUALITY	15						
122+18.92	7.00' RT	122+20.18	20.86′ RT	WM QUALITY	14						
	239										

35	STORM SEWERS, TYPE 2, WATER MAIN QUALITY PIPE, 15"										
UNIVERSITY	JNIVERSITY DR										
STATION	OFFSET	STATION	OFFSET	MATERIAL	QUANTITY						
STATION	(LT / RT)	STATION	(LT / RT)	MAIERIAL	(FT)						
114+68.25	17.53' RT	115+00.50	22.00' RT	WM QUALITY	33						
115+96.16	25.32′ RT	116+17.29	23.11' RT	WM QUALITY	20						
				TOTAL:	53						

36	STORM SEWERS, TYPE 2, WATER MAIN O PIPE, 24"											
STATION	OFFSET OFFSET											
STATION	(LT / RT)	STATION	(LT / RT)	MATERIAL	(FT)							
116+86.09	22.00' RT	117+35.67	17.04' RT	WM QUALITY	49							
117+35.67	17.04' RT	117+74.00	20.22' RT	WM QUALITY	38							
118+76.72	21.33' RT	119+30.53	19.94' RT	WM QUALITY	54							
				TOTAL	141							

37	PIPE UNDERDRAINS 4"											
UNIVERSITY	JNIVERSITY DR											
STATION	TATION OFFSET STATION OFFSET											
STATION	(LT / RT)		STATION	(LT / RT)	(FT)							
104+13.00	15.00′	RT	105+16.75	15.00' RT	105							
104+05.93	15.00'	LT	105+09.69	15.00' LT	105							
110+76.54	15.00′	RT	111+80.30	15.00' RT	105							
114+15.91	15.00'	RT	115+19.31	15.00' RT	105							
115+24.33	15.00'	RT	115+83.65	41.18' RT	70							
116+05.67	44.21'	RT	116+66.70	15.00' RT	82							
116+84.86	15.00' RT 15.00' RT		117+86.62	15.00' RT	105							
118+26.36			118+99.12	53.27' RT	95							
119+20.66	49.91'	RT	119+81.12	15.00' RT	88							
				TOTAL	860							

38		NEW STM
	SWR TO E	EX STM STR
UNIVERSITY	DR	
STATION	OFFSET	QUANTITY
STATION	(LT / RT)	(EA)
100+45.60	21.94′ L1	Г 1
100+45.32	21.13' R1	Г 1
105+27.28	22.21' R1	Г 1
111+29.89	22.51' RT	Г 1
114+68.67	17.53' R1	Г 1
116+16.66	23.34' R1	Γ 1
117+35.35	17.09' RT	Γ 1
118+76.72	21.33' R1	Г 1
119+30.53	19.94′ RT	Г 1
121+71.40	21.78' R1	Г 1
122+20.18	20.86' R1	Г 1
122+20.60	55.08' R1	Г 1
	TOTAL	L: 12

39	THERMOP	THERMOPLASTIC PAVEMENT MARKING - LINE 6'										
UNIVERSITY	UNIVERSITY DR											
STATION	OFFSET	STATION	OFFSET	TYPE	QUANTITY							
STATION	(LT / RT)	STATION	(LT / RT)	ITE	(FT)							
121+61.51	18.36′ LT	121+68.70	19.48' RT	CROSSWALK	39							
121+65.81	21.85′ LT	121+74.37	22.87' RT	CROSSWALK	45							
				TOTAL:	84							

40	THERMOPLASTIC PAVEMENT MARKING - LINE 24"												
UNIVERSITY DR													
STATION	OFFSET	STATION	OFFSET	TYPE	QUANTITY								
STATION	(LT / RT)	STATION	(LT / RT)	ITE	(FT)								
100+49.72	CL	100+49.72	17.65' LT	STOP BAR	18								
110+81.65	CL	110+81.65	16.21' RT	STOP BAR	16								
111+83.61	CL	111+83.61	15.54′ LT	STOP BAR	16								
121+52.04	CL	121+52.04	15.93' RT	STOP BAR	16								
				TOTAL:	66								

41	POLYURE	LINE 6"			
UNIVERSITY	DR				
STATION	OFFSET	STATION	OFFSET	TYPE	QUANTITY
STATION	(LT / RT)	STATION	(LT / RT)	ITPE	(FT)
100+31.97	28.75′ LT	100+32.56	29.03' RT	CROSSWALK	58
100+37.11	23.91' LT	100+38.11	23.56′ RT	CROSSWALK	47
				TOTAL	105

42	POLYUREA	PAVEMENT	MARKING	TYPE I -	LINE 24"
UNIVERSITY	DR				
STATION	OFFSET	STATION	OFFSET	TYPE	QUANTITY
STATION	(LT / RT)	STATION	(LT / RT)	IIFE	(FT)
100+49.72	CL	100+79.72	17.65′ LT	STOPBAR	18
				TOTAL:	18

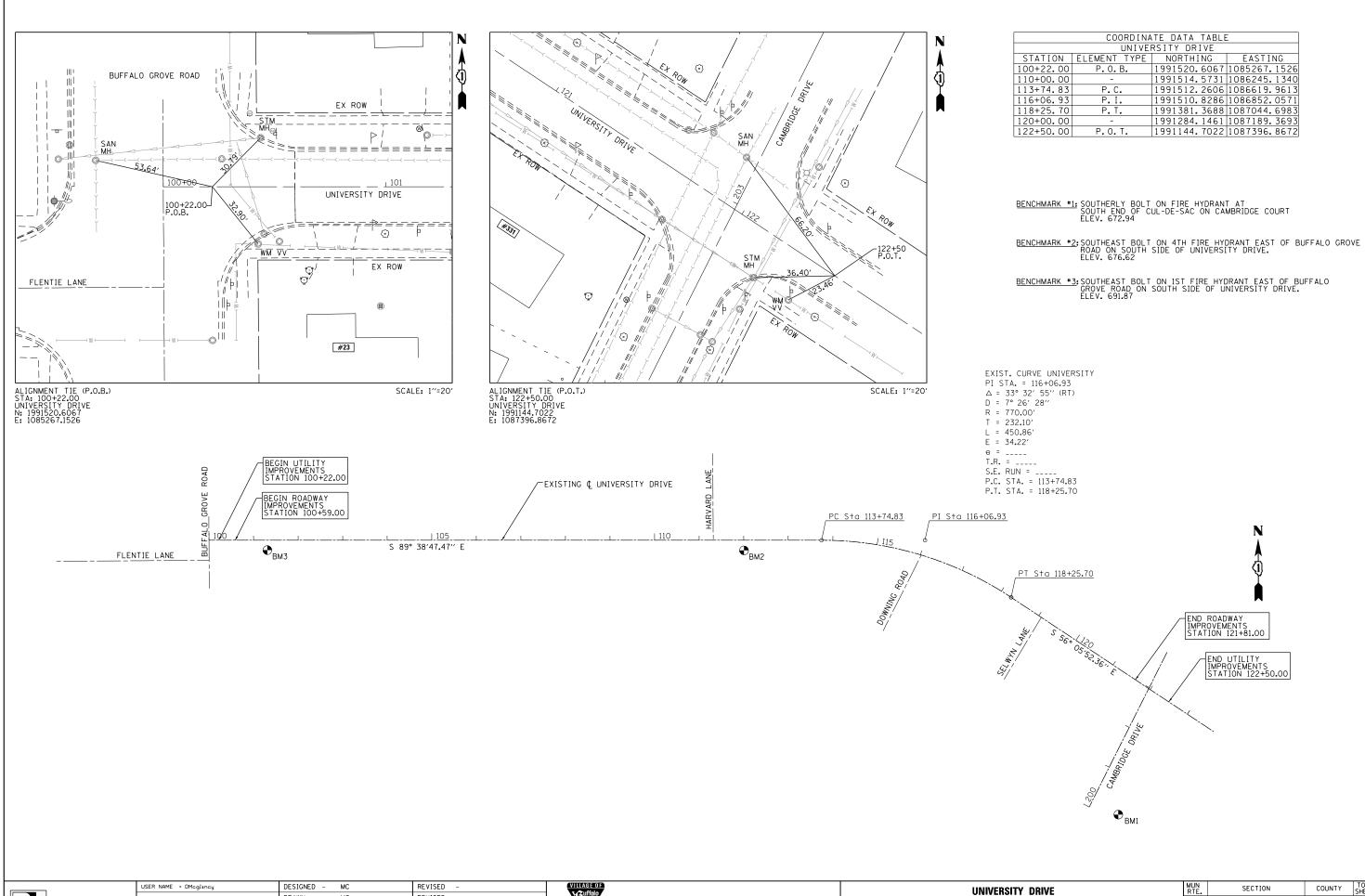
17	GENERAL LANDSCAPE							
40	RESTOR	RATION						
UNIVERSITY	DR							
STATION	STATION	QUANTITY						
STATION	STATION	(SY)						
100+00	105+00	341						
105+00	111+00	278						
111+00	116+00	360						
116+00	122+50	451						
	TOTAL:	1,430						

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	_	L
BLA,	Inc.	ŀ

	USER NAME = DMcglincy	DESIGNED	-	MC	REVISED -
		DRAWN	-	MC	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED	-	DB	REVISED -
•	PLOT DATE = 7/24/2019	DATE	-	07/25/2019	REVISED -



	UNIVERSITY DRIVE											SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	SCHEDULE OF QUANTITIES									4220		соок	31	13	
2CHEDOLE OF GOANIIIE2											cc	NTRAC	ſ NO.		
SCALE: NTS SHEET 3 OF 3 SHEETS STA. N/A TO STA. N/A								ILLINOIS	'						



	USER NAME = DMegliney	DESIGNED - MC	REVISED -	VILLAGE OF Grove		UNIVERSITY DRIVE	MUN RTE.	SECTION	COUNTY TOTAL SHEET NO.
BLA. Inc.	PLOT SCALE = 200.0000 '/ in.	DRAWN - MC CHECKED - DB	REVISED - REVISED -	Grove	VILLAGE OF BUFFALO GROVE	ALGINMENT, TIES, AND BENCHMARK	4220		CONTRACT NO.
DLA, IIIC.	PLOT DATE = 7/24/2019	DATE - 07/25/2019	REVISED -			SCALE: 1"=100" SHEET 1 OF 1 SHEETS STA. TO STA.		ILLINOIS	233777777

MAINTENANCE OF TRAFFIC – GENERAL NOTES

- ALL OF THE TRAFFIC CONTROL DEVICES SHALL BE IN PLACE BEFORE CONSTRUCTION IS STARTED. TEMPORARY TRAFFIC SIGNALS SHALL BE CONSTRUCTED AT THE INTERSECTIONS NOTED IN THE PLANS. TEMPORARY INTERSECTION SIGNALIZATION SHALL BE ADJUSTED TO ACCOMMODATE THE VARIOUS STAGES OF CONSTRUCTION SHOWN, THE TRAFFIC CONTROL PLANS SHALL SERVE AS A GUIDE FOR THE SAFE DIVERSION OF TRAFFIC DURING EXECUTION OF THIS CONTRACT.
- 2. TAPER LENGTH FOR TRAFFIC CONTROL DEVICES IS DEFINED BY: $L = W \times S^2$

THE TAPER IS DEFINED AS FOLLOWS:

L = TAPER LENGTH IN FEET

W = WIDTH OF OFFSET IN FEET

- THE FOLLOWING TEMPORARY PAVEMENT MARKINGS SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 703 "WORK ZONE PAVEMENT MARKINGS" OF STANDARD SPECIFICATIONS AT ALL THE FOLLOWING LOCATIONS IN EACH OF THE VARIOUS STAGES OF
 - 4 IN WHITE EDGE LINE EACH EDGE (YELLOW FOR INSIDE EDGE)
 - 6 IN WHITE LANE LINE STORAGE AREA OF LEFT TURN BAY
 - 6 IN WHITE SKIP DASH (6 ft SKIP 2 ft DASH) LEFT TURN
 - 24 IN WHITE STOP BAR ALL LOCATIONS

S = POSTED SPEED IN MPH.

WHITE LETTERS AND SYMBOLS - TURN LANES

- 4. IT WILL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE INFORMATIONAL SIGNS ON TEMPORARY SUPPORTS FOR DRIVEWAYS. THESE SIGNS SHALL BE WHITE ON GREEN IN ACCORDANCE WITH THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES. ALSO, "CAUTION NEW LANES OPEN STOP HERE" SIGNS WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE AT THE APPROPRIATE LOCATIONS. THIS WORK WILL BE PER DISTRICT DETAIL TC-26 INCLUDED IN THE VARIOUS ITEMS FOR "TEMPORARY INFORMATION SIGNING".
- PORTABLE CHANGEABLE MESSAGE SIGN SHALL BE USED AND ITS PLACEMENT SHALL BE DIRECTED BY THE ENGINEER AND IT SHALL BE PAID FOR AS "CHANGEABLE MESSAGE
- THE CONTRACTOR WILL GIVE THE ENGINEER AT LEAST 10 DAYS NOTICE PRIOR TO ANY TRAFFIC STAGING CHANGES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COVERING OR REMOVING ANY EXISTING ROADWAY SIGNAGE THAT CONFLICTS WITH THE STAGED TRAFFIC PATTERN. TEMPORARY TRAFFIC CONTROL BARRIERS AND SIGNAGE SHALL BE IN PLACE PRIOR TO
- PEDESTRIAN AND BICYCLE ACCESS MUST BE MAINTAINED ON ALL EXISTING FACILITIES AND ON NEW FACILITIES AS THEY BECOME AVAILABLE FOR PEDESTRIAN AND BICYCLE TRAFFIC.
- 9. ARROW BOARDS SHALL HAVE SOLAR POWER CAPABILITY.
- 10. A MONO-DIRECTIONAL FLASHING AMBER BEACON SHALL BE MOUNTED TO THE FIRST TWO WARNING SIGNS ON EACH APPROACH DURING HOURS OF DARKNESS.
- 11. STOP SIGNS AND STOP BARS ARE TO BE MAINTAINED FOR UNSIGNALIZED SIDE STREETS AND DRIVEWAYS THROUGH ALL CONSTRUCTION STAGES.
- 12. THE CONTRACTOR SHALL INSTALL AND UNCOVER ALL TEMPORARY SIGNS BEFORE EXISTING SIGNS ARE REMOVED. THE CONTRACTOR SHALL RELOCATE EXISTING SIGNS AS INDICATED ON THE PLANS. THE CONTRACTOR SHALL INSTALL AND UNCOVER ALL PERMENANT SIGNING BEFORE TEMPORARY SIGNING IS REMOVED.
- 13. ALL EXISTING TRAFFIC GUIDE SIGNS (i.e. STREET NAME SIGNS, ADVANCED STREET NAME_SIGNS, ETC.) SHALL BE MAINTAINED AND VISIBLE TO TRAFFIC THROUGHOUT

USER NAME = DMcglincy

PLOT DATE = 7/24/2019

LOT SCALE = 100.0000 '/ in.

🖪 BLA, Inc.

DESIGNED -

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07/25/2019

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DATE

CHECKED

- 15. EXISTING TRAFFIC SIGNS IN CONFLICT WITH STAGING SHALL BE REMOVED, RELOCATED, OR COVERED AS DIRECTED BY THE ENGINEER.

 16. POSITIVE DRAINAGE WITHIN THE WORK ZONE MUST BE MAINTAINED AT ALL TIMES. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, INCLUDING THE FLOW LINE OF DITCHES, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY FINLETS, OUTLETS, AND CONNECTIONS FOR ALL EXISTING AND PROPOSED FACILITIES INCLUDING TEMPORARY PUMPING IF NECESSARY. TEMPORARY ACCOMMODATIONS SHALL BE MAINTAINED UNTIL SUCH TIME AS THE PERMANENT CONNECTIONS WITH SEWERS ARE BUILT AND IN SERVICE AND THE FINAL SHAPING AND GRADING OF DITCHES IS PERFORMED. THE COST OF ALL LABOR, EQUIPMENT, AND MATERIALS (TEMPORARY OR PERMANENT USED AS TEMPORARY) TO COMPLY WITH THIS REQUIREMENT WILL NOT BE PAID FOR DIRECTLY, BUT THE COST SHALL BE CONSIDERED INCLUDED IN THE PROPOSED ITEMS OF WORK IN THE CONTRACT.
- 17. CONTRACTOR SHALL REMOVE ANY TEMPORARY AND PERMANENT PAVEMENT MARKINGS CONFLICTING WITH PROPOSED MOT BY METHODS APPROVED BY THE ENGINEER. REMOVAL FOR THESE PURPOSES SHALL BE CONSIDERED INCLUDED IN THE PRICE OF TEMPORARY PAVEMENT MARKING REMOVAL.
- 18. THE CONTRACTOR SHALL NOTE LOCATIONS OF ALL PAVEMENT MARKINGS OUTSIDE OF THE PROJECT LIMITS FOR RESTORATION PURPOSES.
- THE CONTRACTOR SHALL USE TEMPORARY PAVEMENT MARKING TAPE, TYPE IV ON EXISTING SURFACES TO REMAIN, AREAS IN CONFLICT WITH OTHER STAGES, AND PERMENANT SURFACES.
- 20. THE CONTRACTOR SHALL MAINTAIN ALL DRIVEWAY AND SIDE STREET ENTRANCES AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. ACCESS TO EXISTING DRIVEWAY ENTRANCES SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "TEMPORARY ACCESS (PRIVATE OR COMMERCIAL)". THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL SIDE STREETS AND DRIVEWAYS BY UTILIZING STAGED CONSTRUCTION, FLAGGERS, TEMPORARY ACCESSES, OR OTHER METHODS APPROVED BY THE ENGINEER. THIS WORK SHALL NOT BE CONSIDERED FOR ADDITIONAL PAYMENT, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEMS OF WORK. EACH ENTRANCE AND SIDEROAD WILL BE MEASURE FOR PAYMENT ONCE.

SYMBOLS

BARRICADE TYPE III WITH 2 2-WAY FLASHING LIGHTS (ONE SYMBOL SHALL REPRESENT ANY NUMBER OF BARRICADES REQUIRED TO ADEQUATELY PROTECT THE AREA SHOWN).

BARRICADE TYPE II OR DRUMS, WITH STEADY-BURN LIGHT (50' C-C SPACING TYP. AND 25' C-C ON TAPERS AND CURVES).

TEMPORARY TRAFFIC ADVISORY SIGN

REVISED

REVISED

REVISED

REVISED

WORK ZONE

DIRECTION OF TRAFFIC

SIGNS





36 IN × 36 IN



48 IN × 48 IN



W20-7(0) 48 IN × 48 IN

SECTION

4220

COUNTY

COOK

31

CONTRACT NO.



W20-I103(0) 48 IN × 48 IN



W 20-5R 48 IN × 48 IN



R11-I101 24 IN x 18 IN WITH DETECTABLE PEDESTRIAN BARRICADE

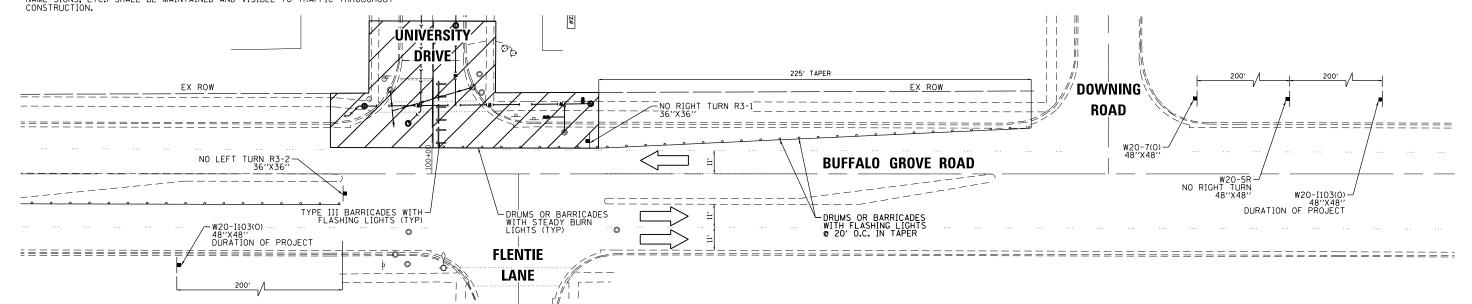
*SIGNS TO BE REMOVED OR COVERED WHEN WORKERS ARE NOT PRESENT FOR MORE THAN ONE HOUR

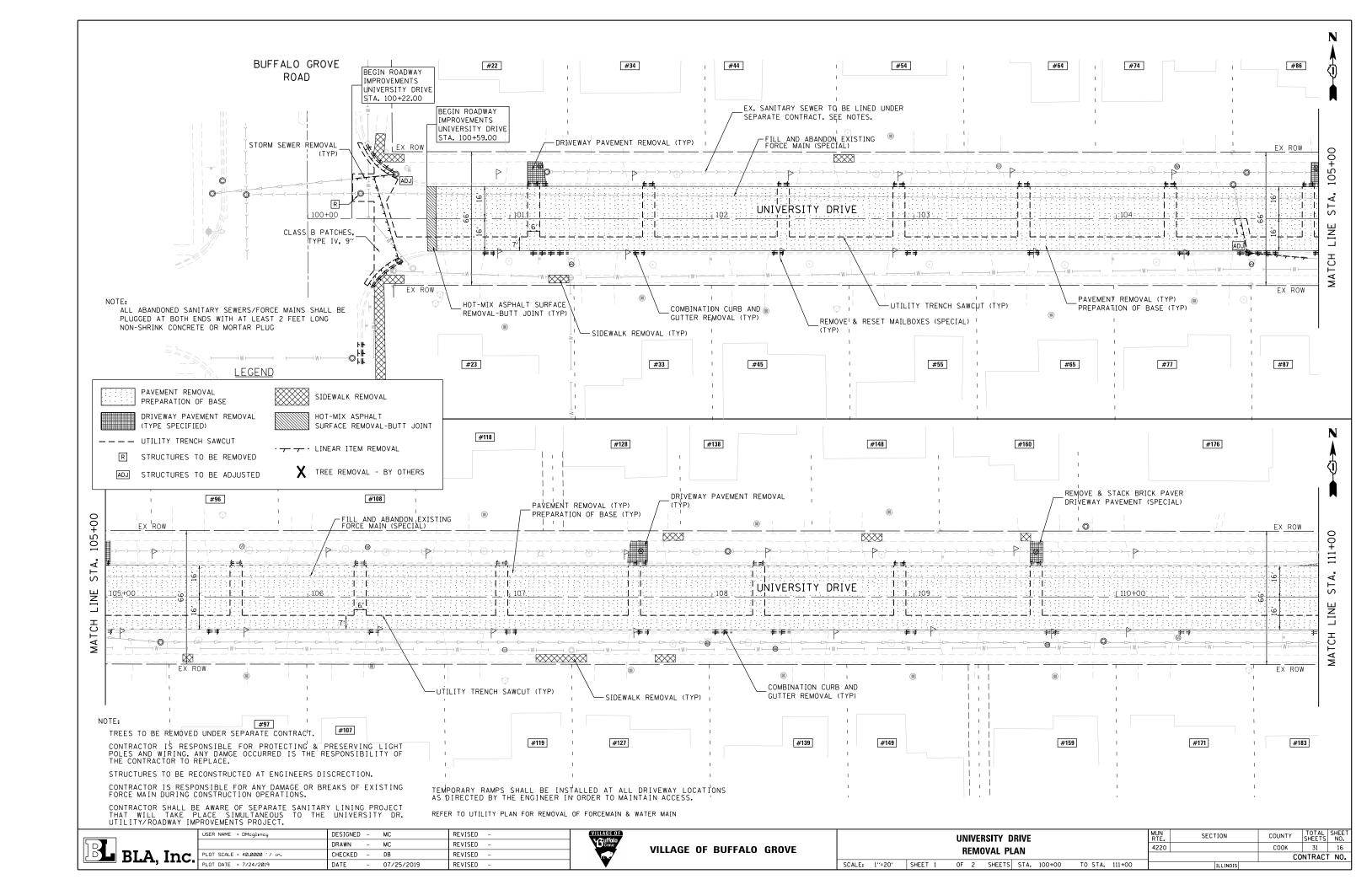
UNIVERSITY DRIVE

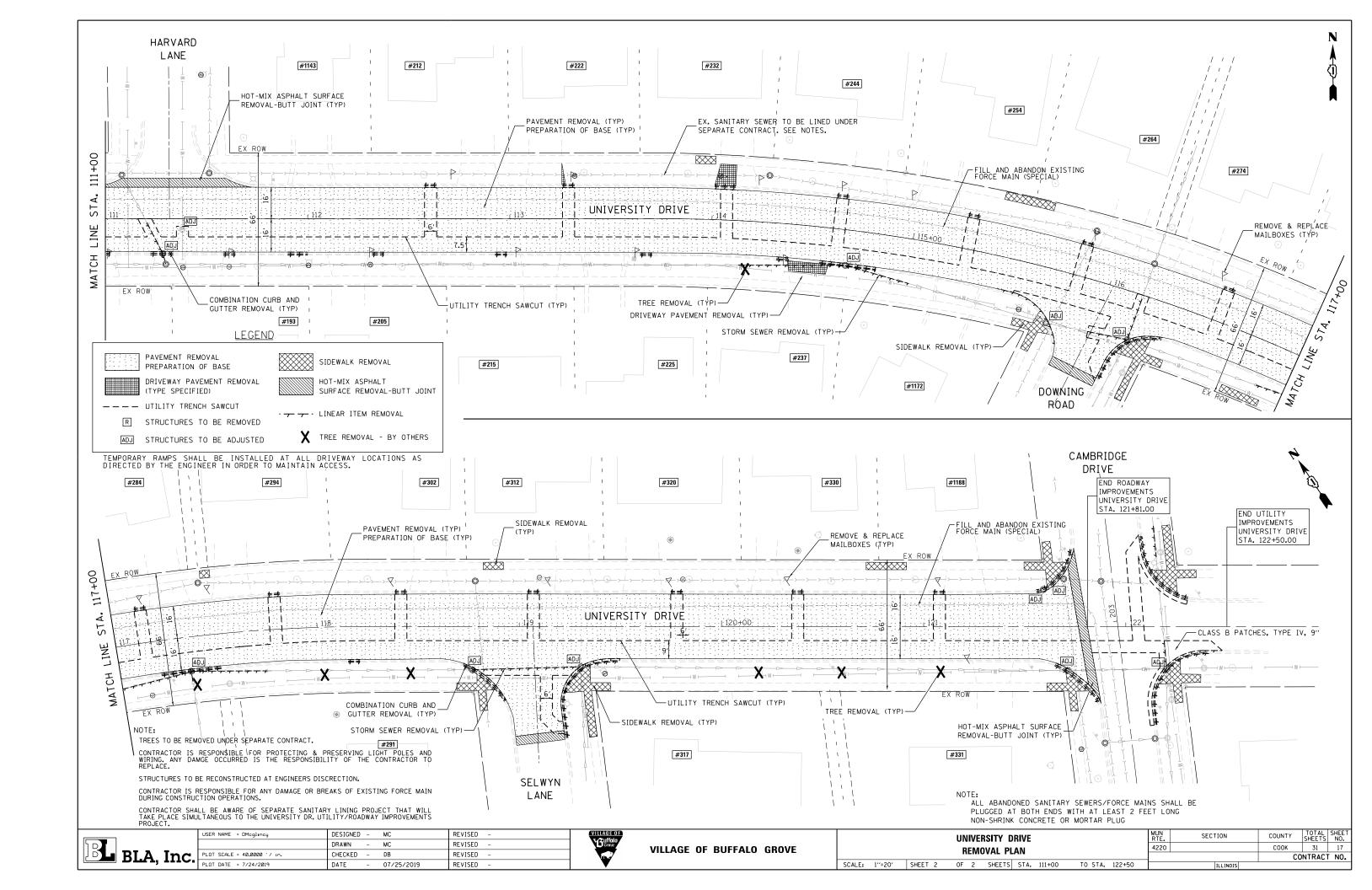
MAINTENANCE OF TRAFFIC - NOTES

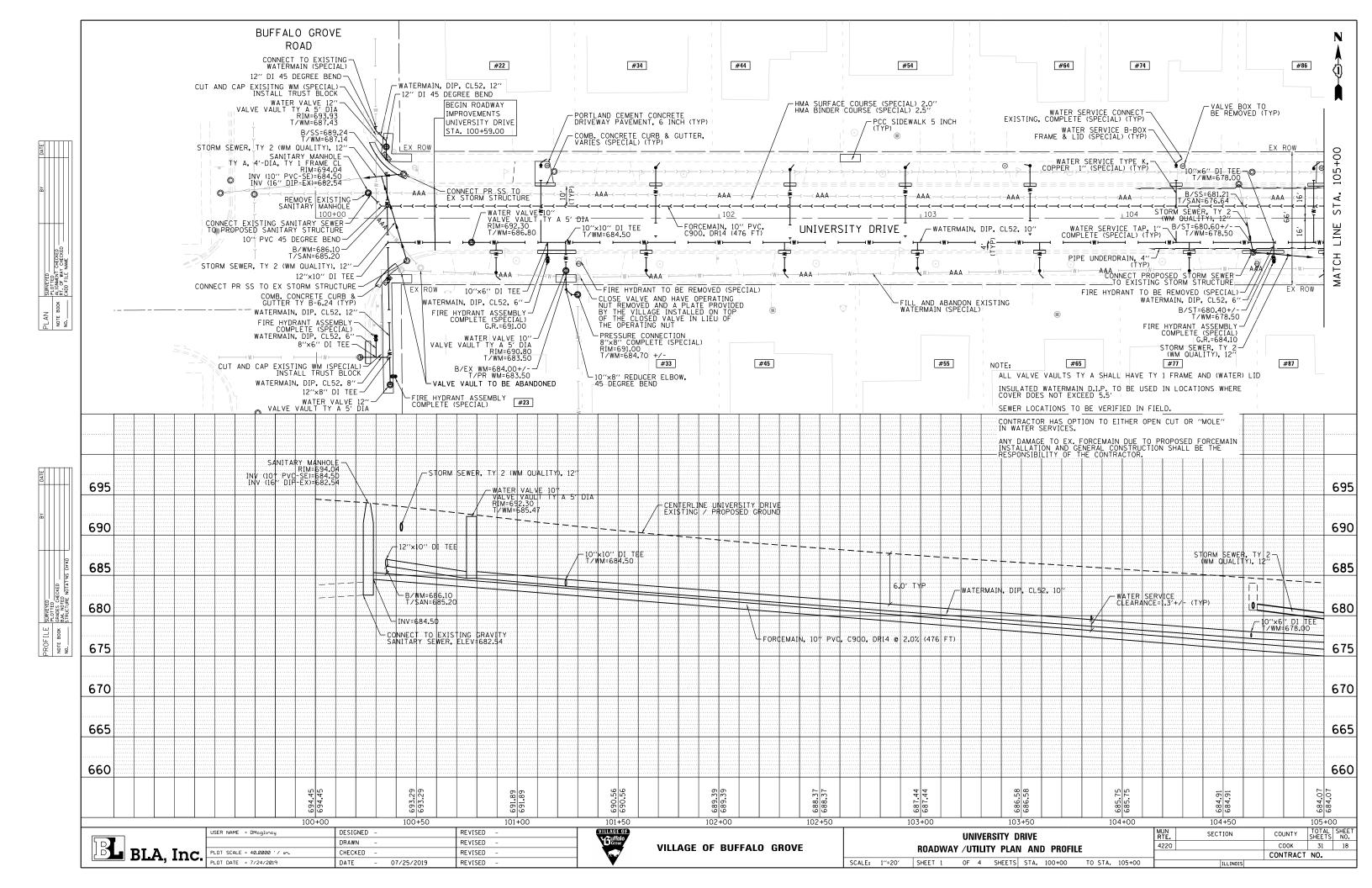
OF 1 SHEETS STA. N/A TO STA. N/A

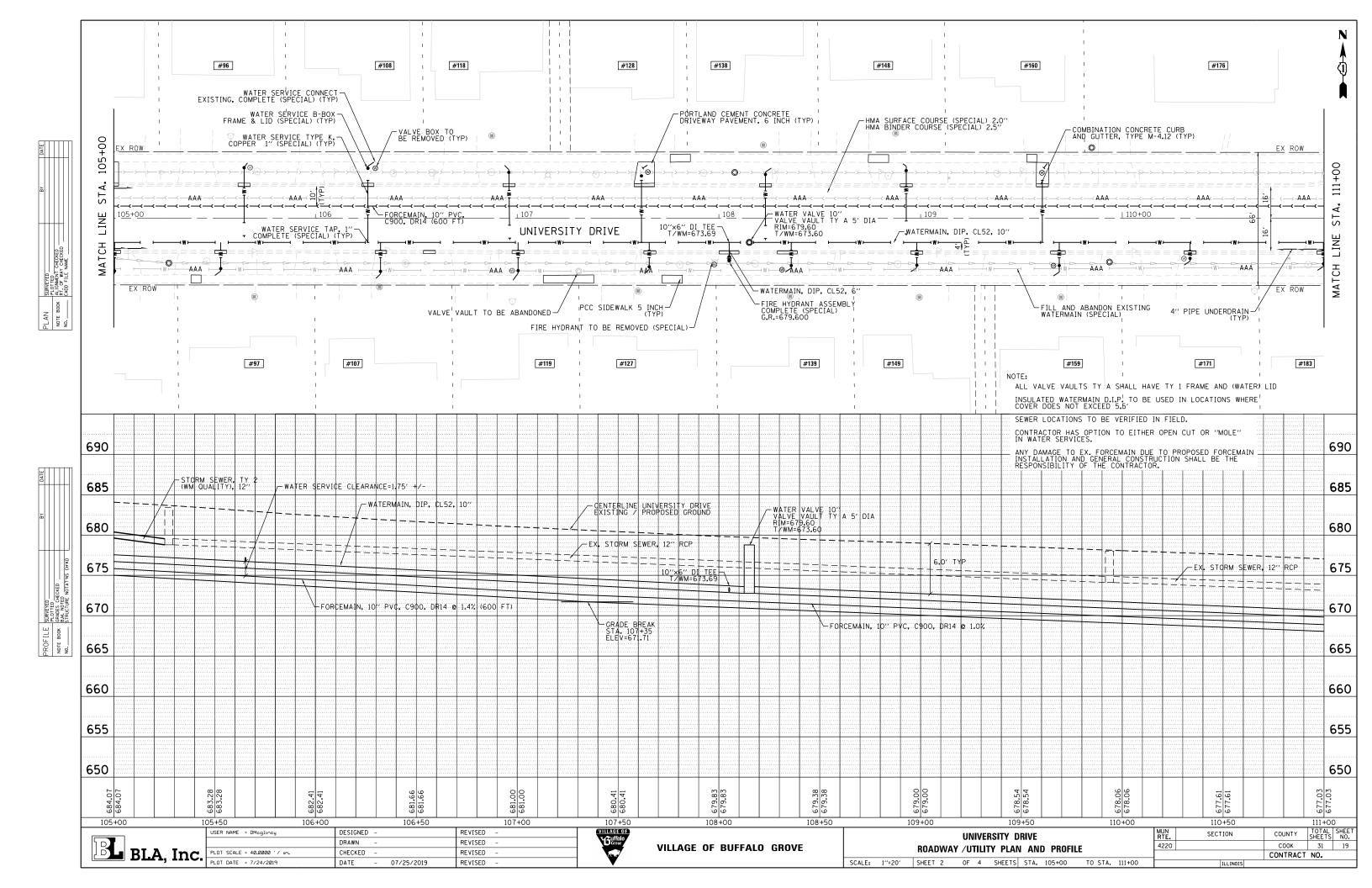
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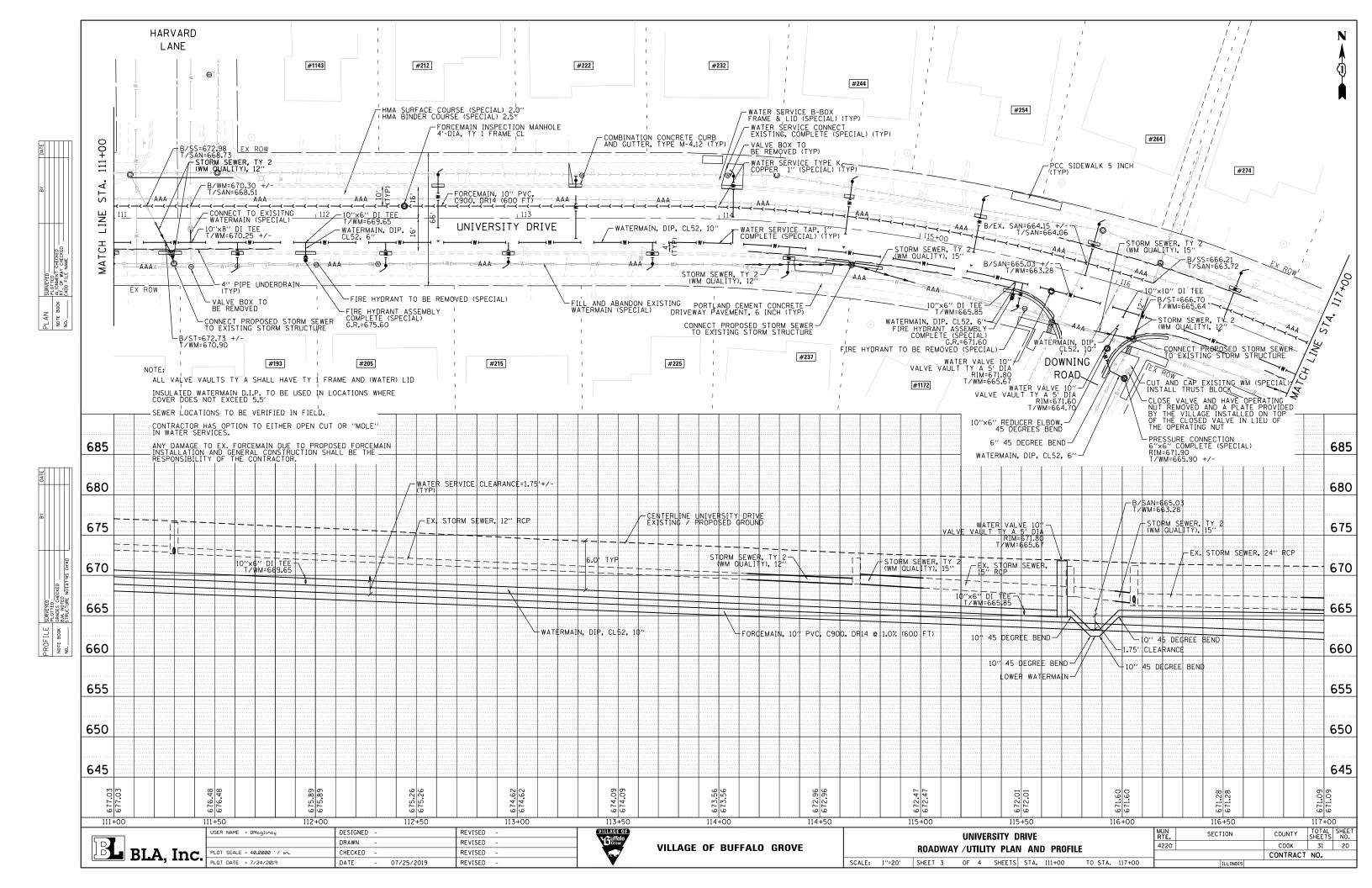


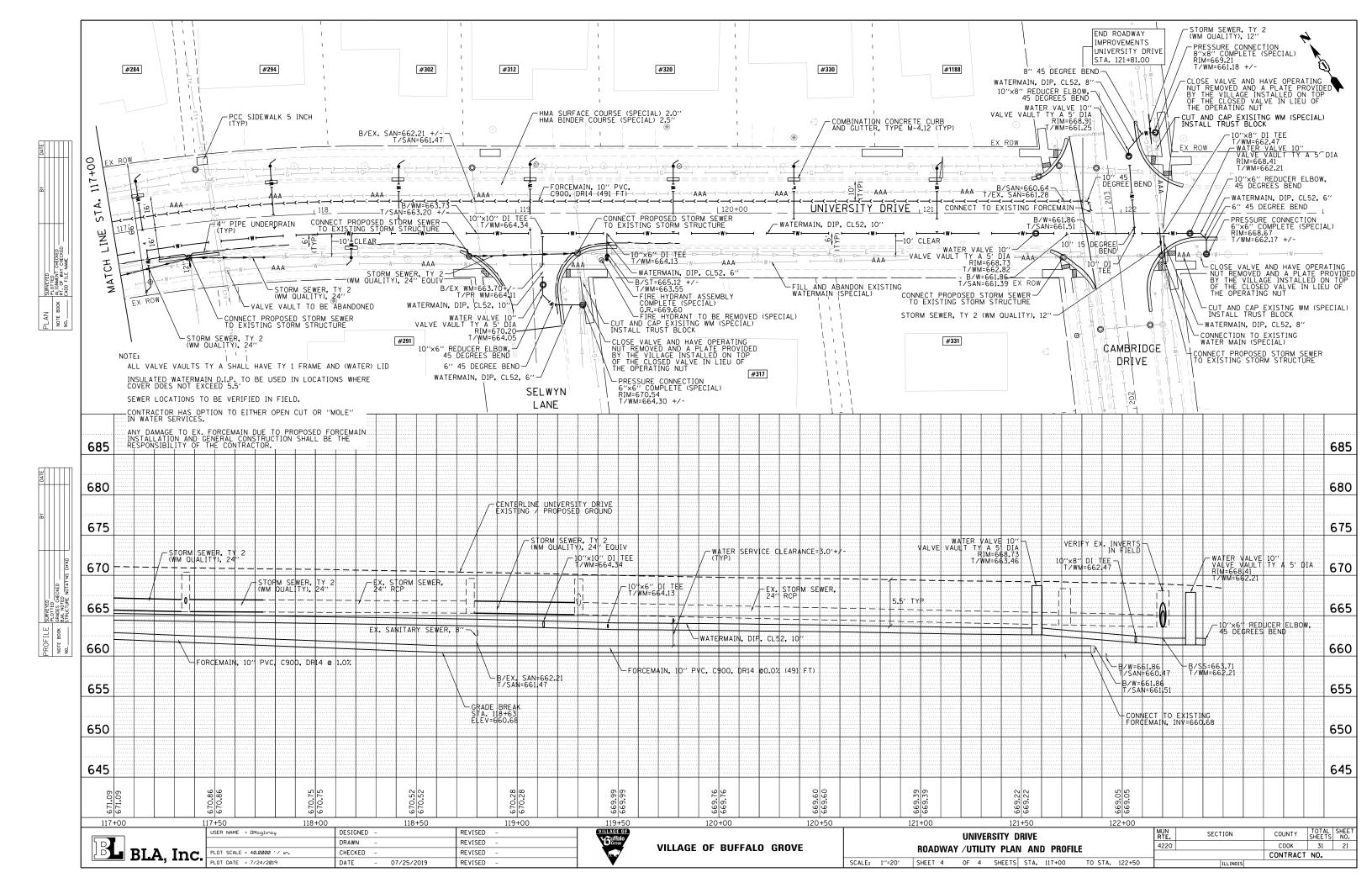


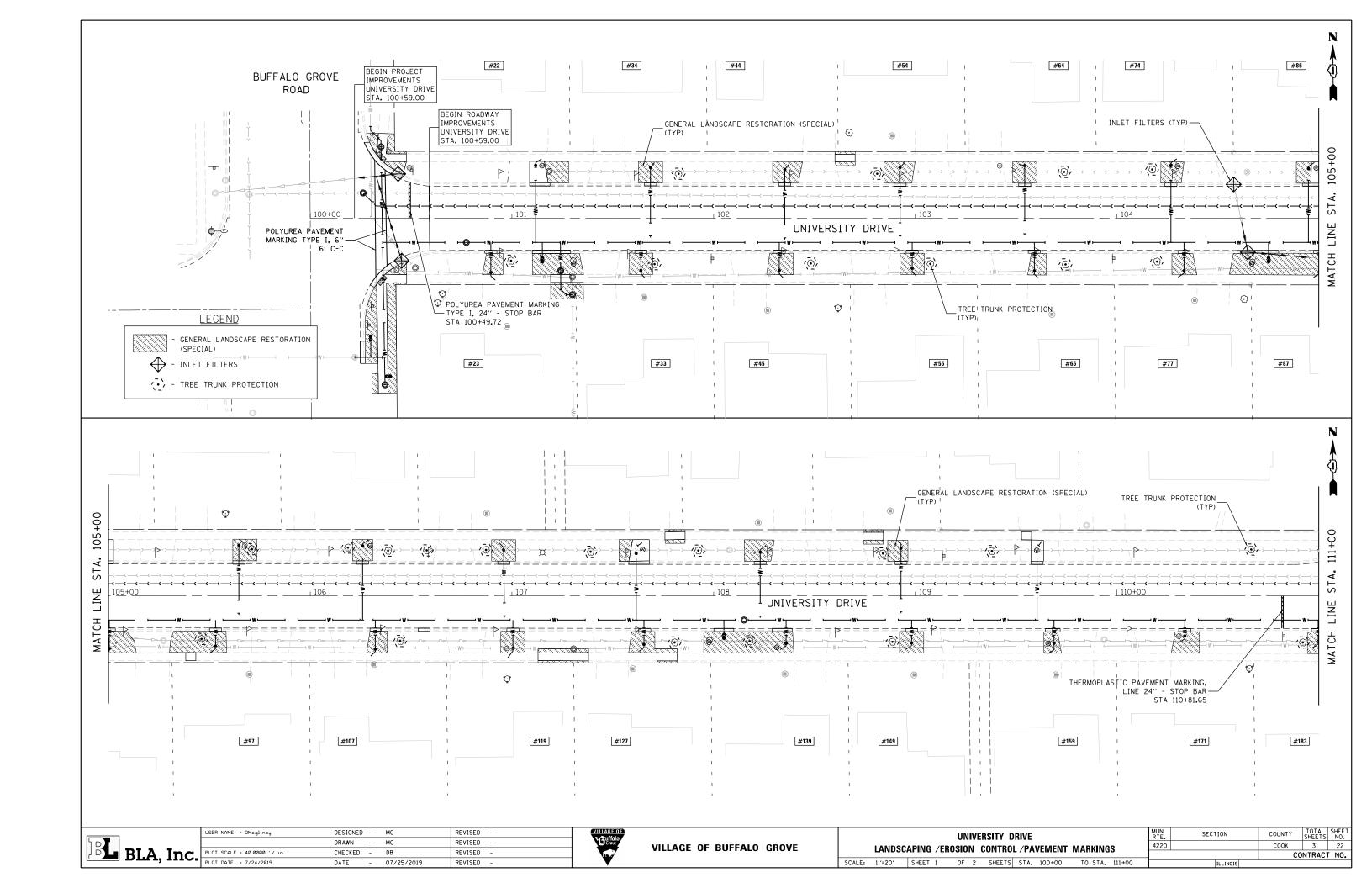


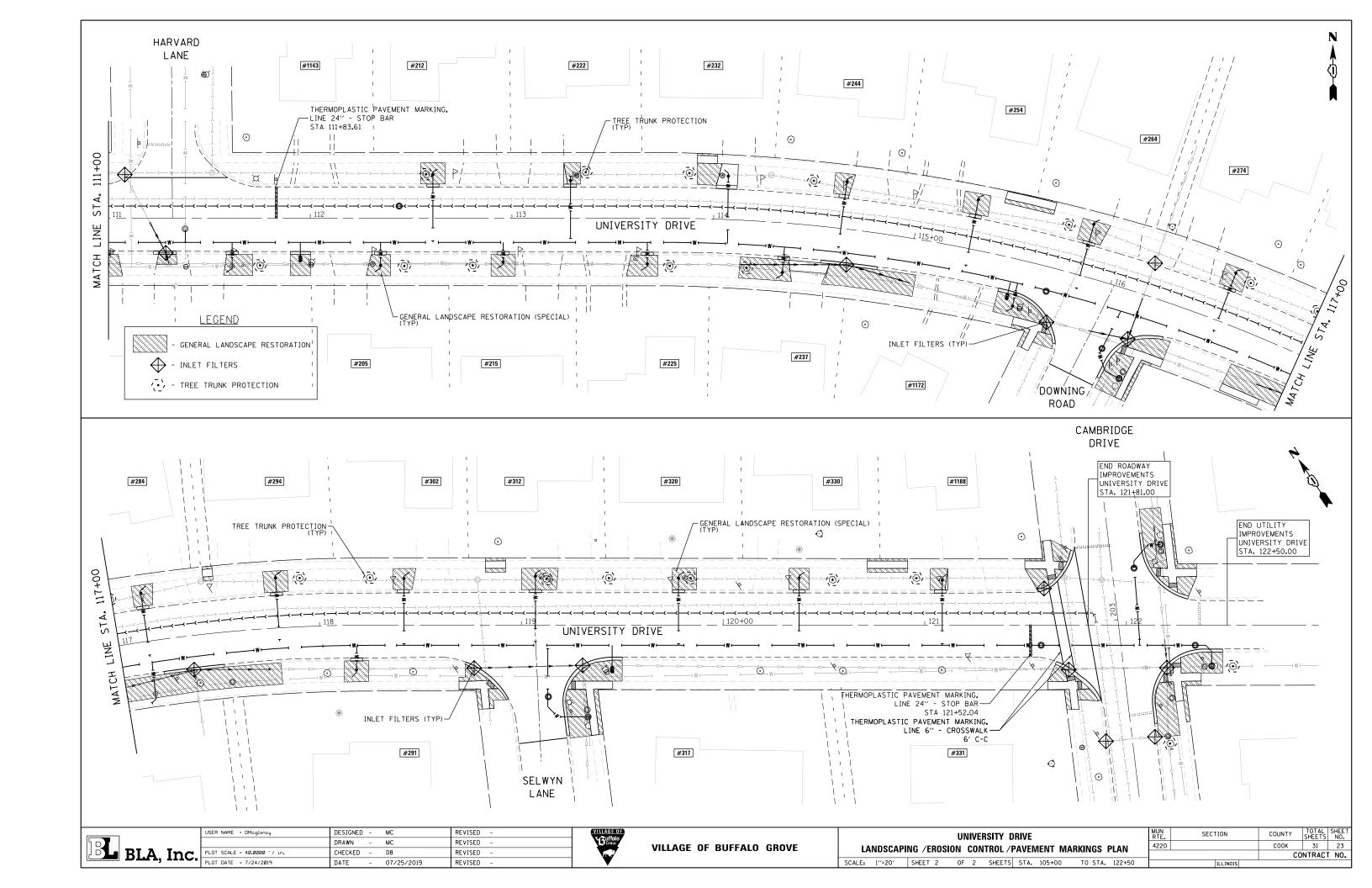


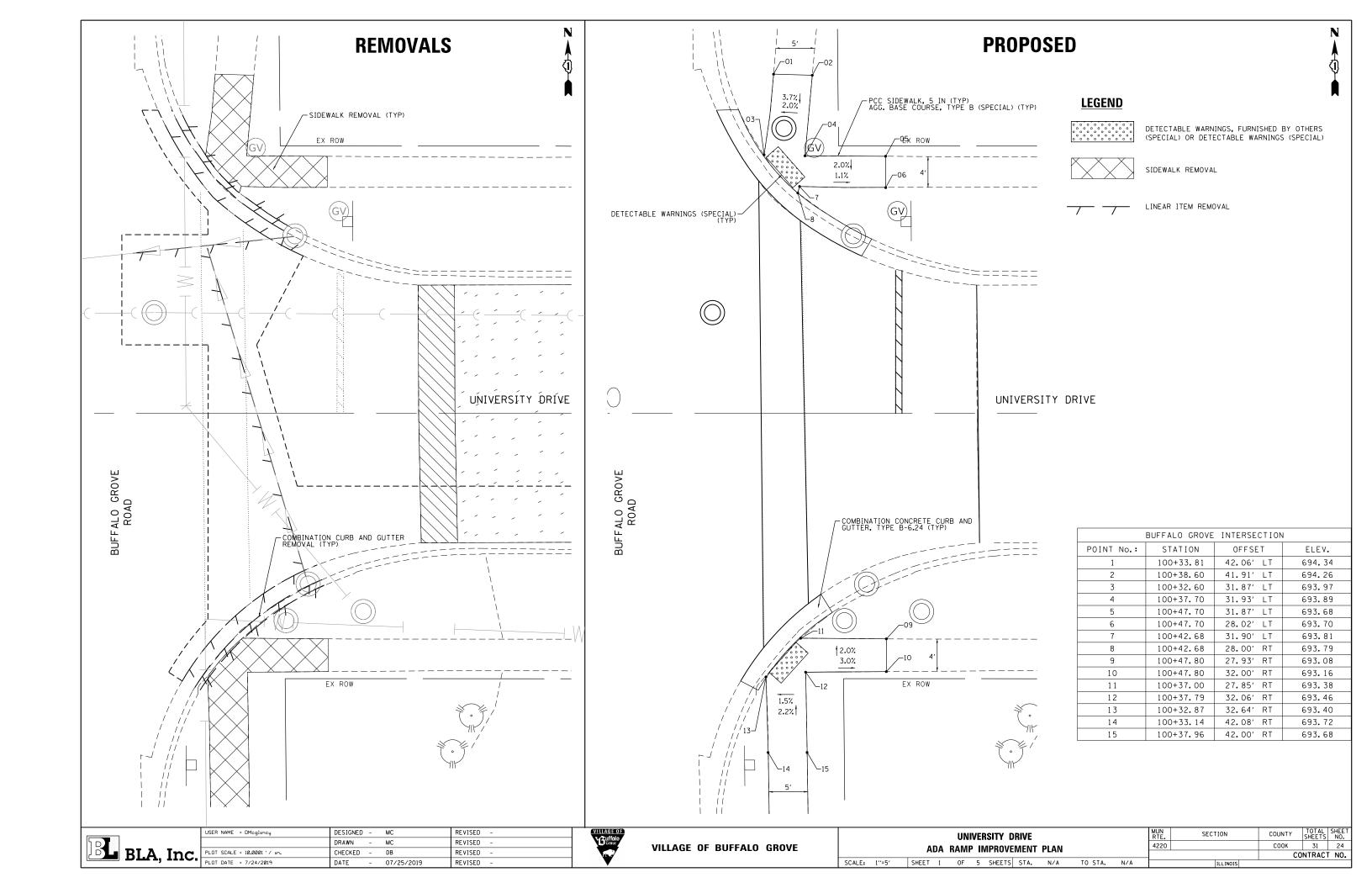


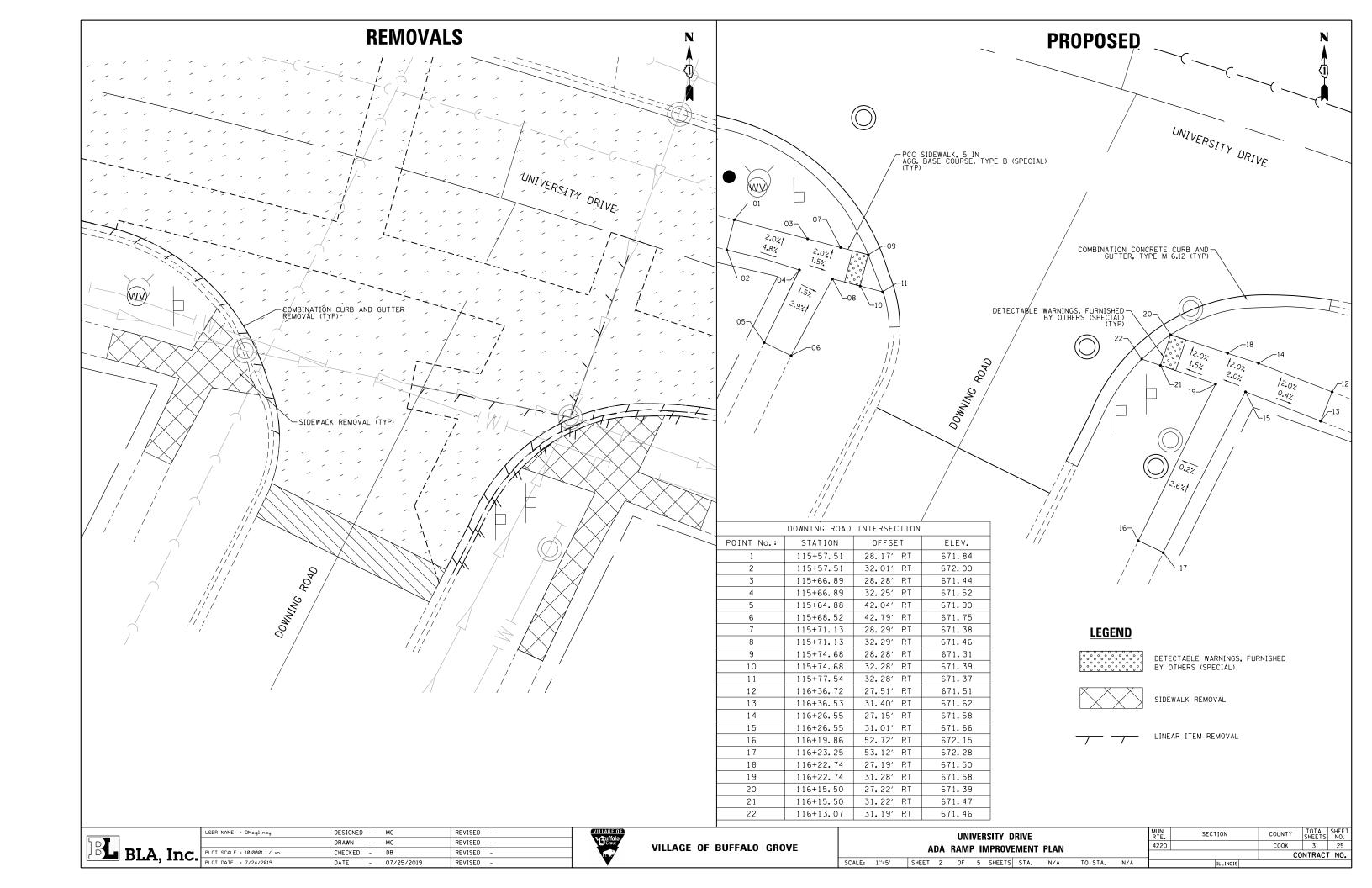


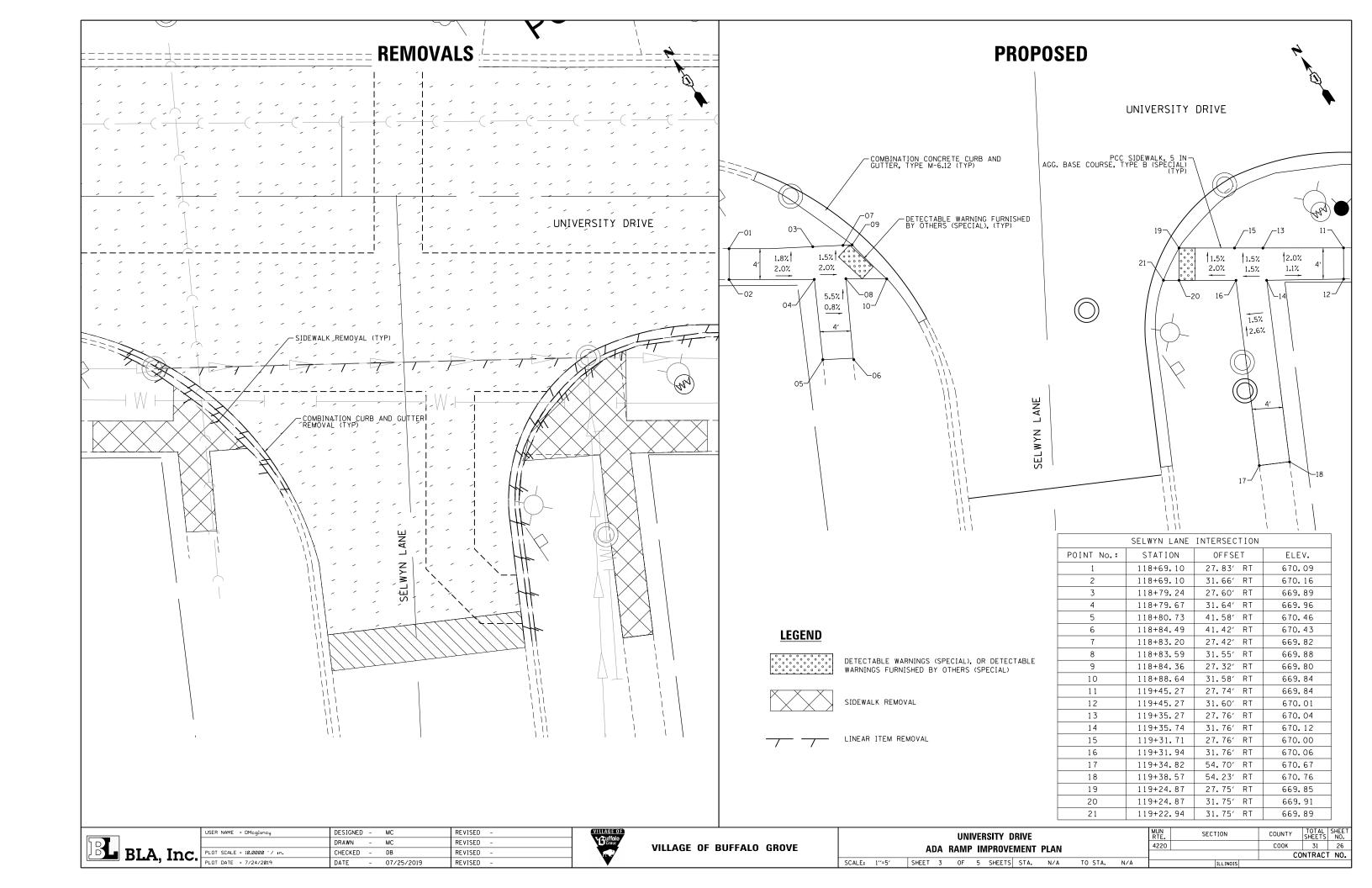


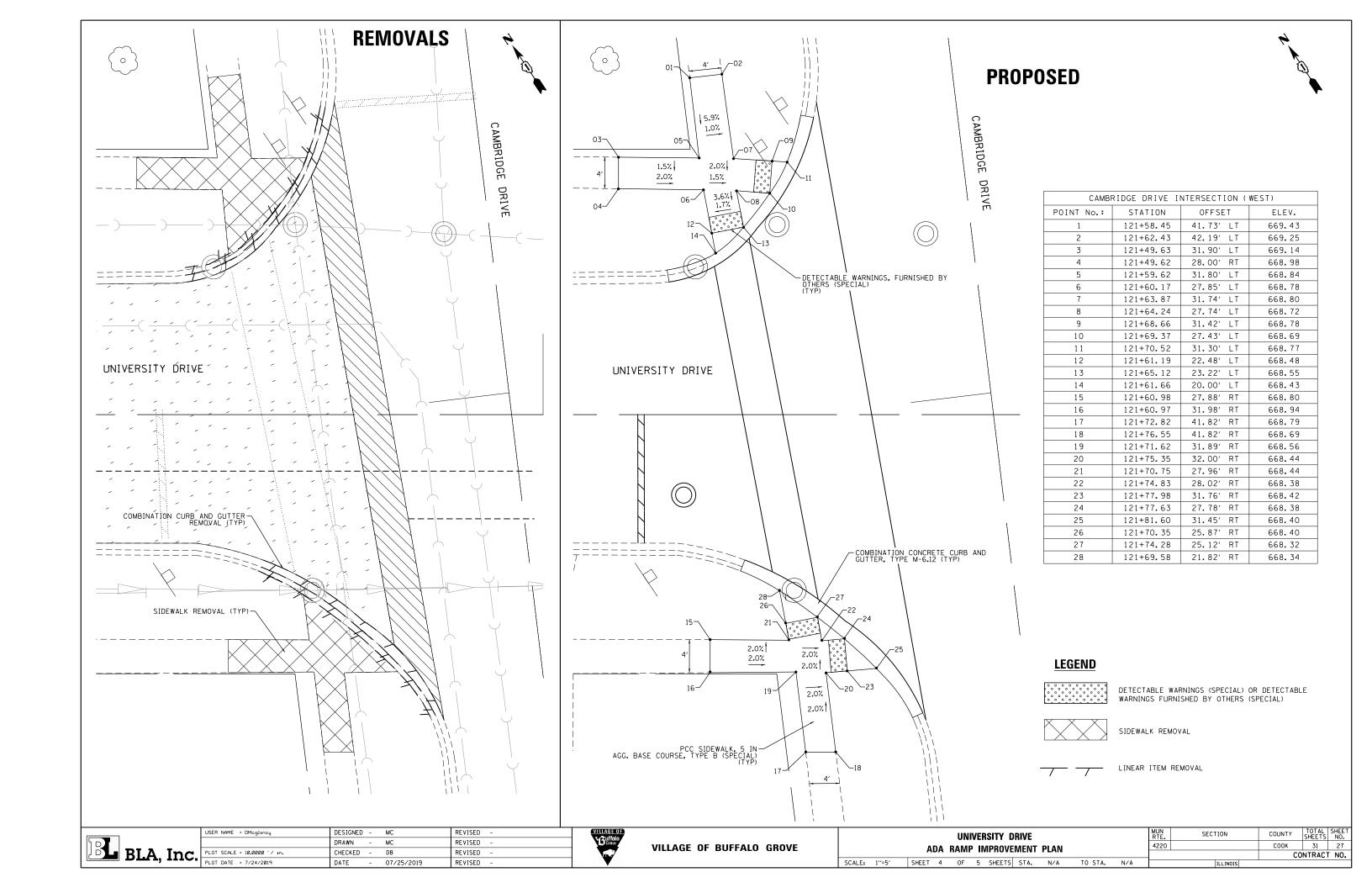


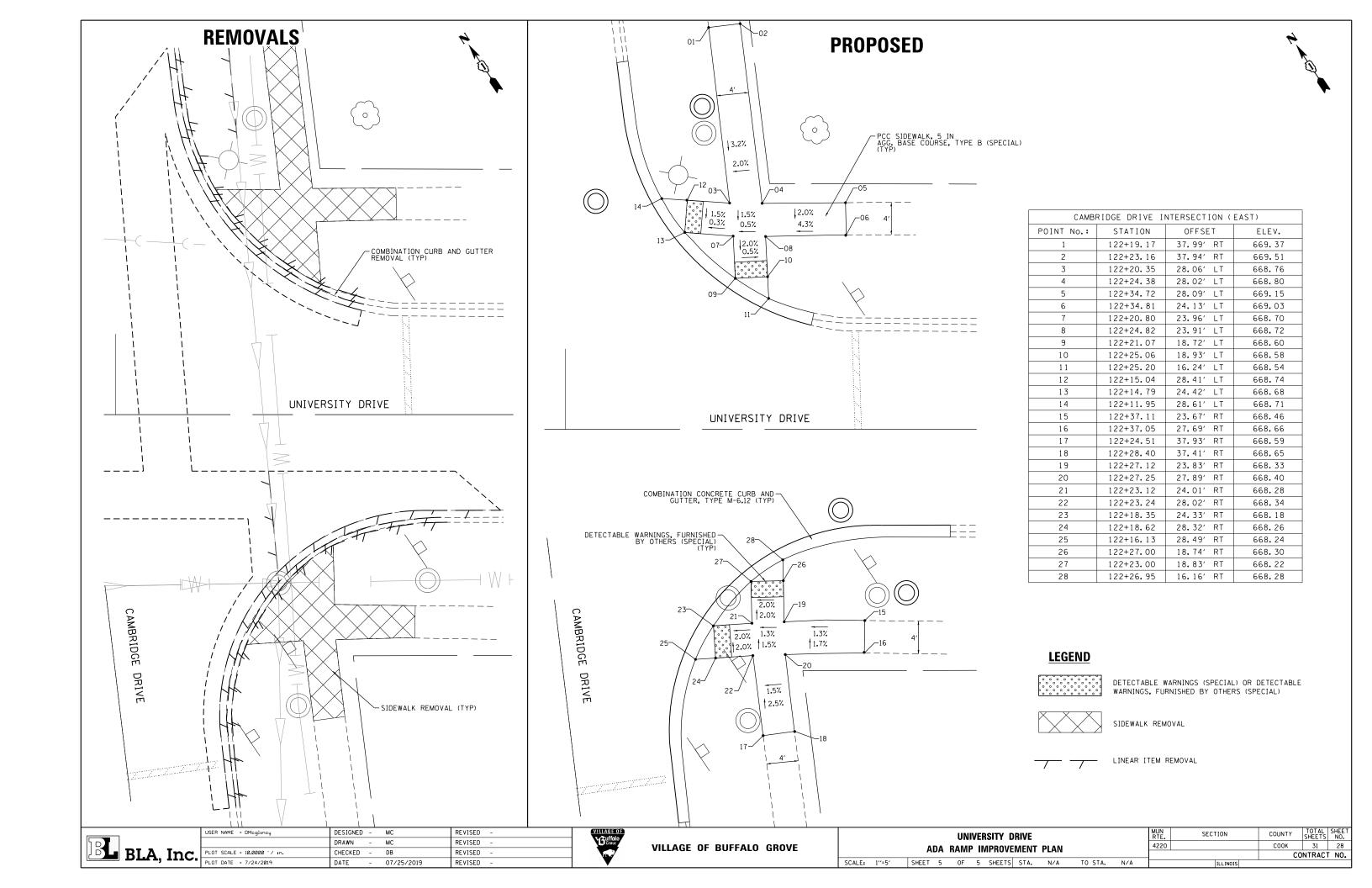


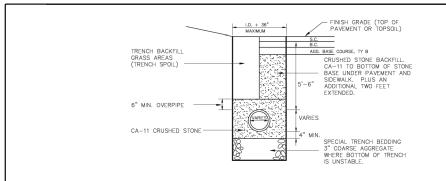




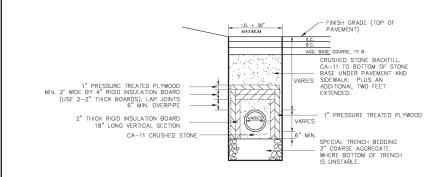




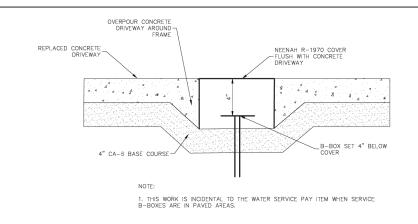




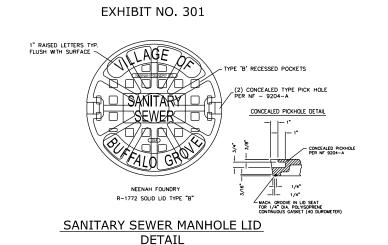
WATERMAIN TRENCH DETAIL

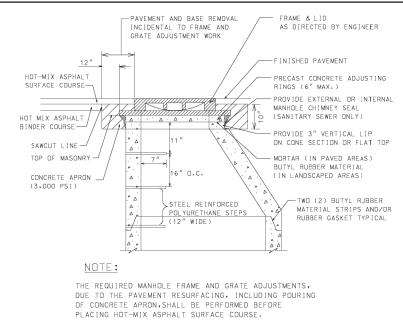


WATERMAIN INSULATION TRENCH DETAIL



WATER SERVICE IN DRIVEWAYS





STRUCTURE FRAME & GRATE ADJUSTMENT DETAIL

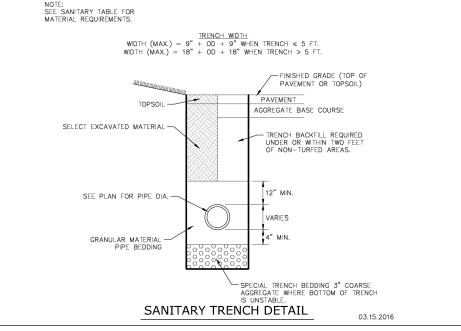
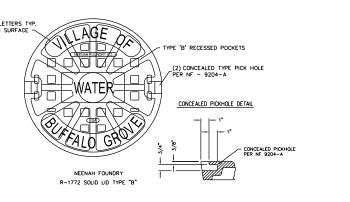


EXHIBIT NO. 401



VALVE VAULT LID DETAIL

NOTES:

- EXTERIOR NEOPRENE CHIMNEY SEAL STAINLESS STEEL TRIM PER ASTM C-923.

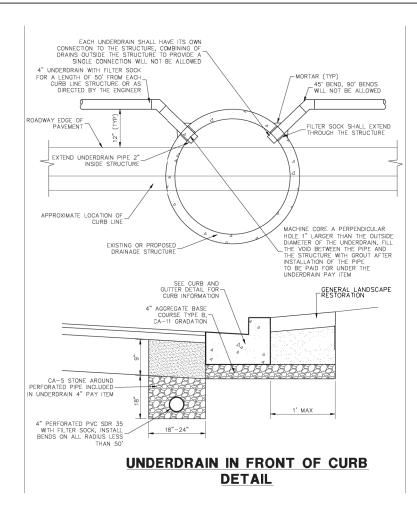
 PIPE OPENINGS SHALL BE PECAST INTO WALLS CAST IN PEGLIENT WATERTICHT
- PIPE OPENINGS SHALL BE PRECAST INTO WALLS. CAST IN RESILIENT WATERTIGHT SLEEVE WITH STAINLESS STEEL TRIM PER ASTM C-923.
- 3. PRECAST REINFORCED CONCRETE SECTIONS PER ASTM C-478 AND PREFORMED BITUMINOUS JOINTS WITH INTEGRAL PRECAST BOTTOMS.
- 4. FINAL ADJUSTMENT TO FRAMES TO BE DONE WITH STEEL SHIMS SET IN MORTAR.
- 5. STEPS TO BE STEEL REINFORCED PLASTIC.
 A. IMBEDDED 3" INTO STRUCTURE WALL.
 B. SPACED AT 16" CENTER TO CENTER.
 C. FIRST STEP LOCATED 8"-12" BELOW
- 6. PRECAST PCC BENCH SHALL EXTEND TO CROWN AND SLOPE TO OUTSIDE WALL, SMOOTH FINISH.
- 7. SEE SANITARY TABLE FOR FURTHER REQUIREMENTS.

DIM	MIN. THICKNESS
48"	4"
60"	5"
72"	6"

SANITARY MANHOLE

GROUND LINE -

DIA. PER PLAN VARIES



UNDERDRAIN DETAIL

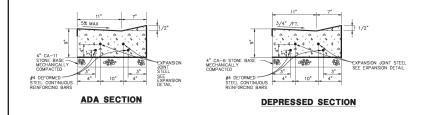
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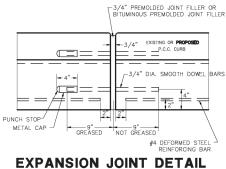
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VILLAGE OF BUFFALO GROVE					VI
	SCALE.	NTS	SHEET	1	OF

UNIVERSITY DRIVE				MUN RTE.	SECTION	1	COUNTY	TOTAL SHEETS	SHEET NO.
VILLAGE DETAILS				4220			соок	31	29
							C	NTRAC	NO.
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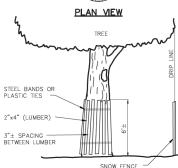


- SET EXPANSION JOINTS AT ALL PC'S, PT'S, FIVE FEET ON EITHER SIDE OF ANY FRAMES, AND AT 45' MAX. INTERVALS.
- SAW CUT CONTRACTION JOINTS FULL FACE AND TOP, AT LEAST 2 INCHES IN DEPTH AND AT 15' MAXIMUM INTERVALS WITHIN 24 HOURS OF POURING.
- CURING COMPOUND REQUIRED.

CURB & GUTTER







ELEVATION

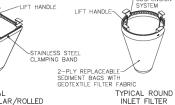
- 1. EXISTING VEGETATION WHICH IS TO REMAIN IN PLACE SHALL BE PROTECTED AGAINST UNINECESSARY CUTTING, BERAKING OR SKINNING OF FRONTS, SKINNING AND BRUISING OF BEARK, SMOTHERING BY STOCKPILING OCONSTRUCTION MATERIALS OR EXCAVATE MATERIALS WITHIN THE DRIP LINE; EXCESS FOOT OR VEHICULAR TRAFFIC OF PARKING OF VEHICLES WITHIN THE DRIP LINE.
- ALL TREES TO REMAIN SHALL BE PROTECTED WITH A SNOW FENCE INSTALLED AROUND THE PERIMETER OF THE TREES DRIP LINE. ANY CONSTRUCTION INSIDE THE DRIP LINE OF THE TREE REQUIRES ROOT PRUNING PRIOR TO THE EXCAVATION.

TREE PROTECTION DETAIL





STANDARD 2" OVERFLOW AREA



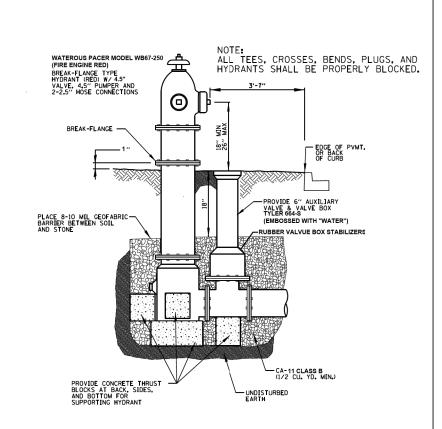
TYPICAL CURB BOX INLET FILTER

MAINTENANCE 1. CLEAN OUT AFTER EVERY RAIN EVENT

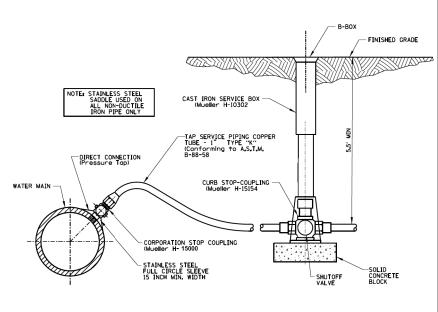
ACCEPTABLE MANUFACTURER'S AS LISTED BELOW 1. NLET & PIPE PROTECTION, INC. Naperville, IL 60564 847 722-0590

Material Property	Test Method	Value (mir	ı. ave.)		
> Inner Filter Bag Specs	(2ft ³ min vol)	Non-Woven	Woven Mono		
Grab Tensile	ASTM D 4632	100 lbs	200 lbs		
Puncture Strength	ASTM D 4833	65 lbs	90 lbs		
Trapezoidal Tear	ASTM D 4535	45 lbs	75 lbs		
UV Resistance	ASTM D 4355	70% at 500 hrs	90%		
	1071 D 1751	70 sieve	40 sieve		
App Open Size (AOS)	ASTM D 4751	(.212 mm)	(.425 mm)		
Premittivity	ASTM D 4491	2.0/sec.	2.1/sec		
Water Flow Rate	ASTM D 4491	145 gpm/sqft.	145gpm/sqft		
> Polyester Outer Reinford	ement Bag Speci	ifications			
Weight	ASTM D 3776	4.55 oz/sq	yd +/-15%		
Thickness	ASTM D 1777	.040 +,	/005		
> Frame Construction					
A36 Structural Steel;	ASTM A 576	Tensile Strength	> 58,000 psi		
11 Gauge, Zinc Plated	ASIM A S/6	Yield Strength	Yield Strenath > 36,000 psi		

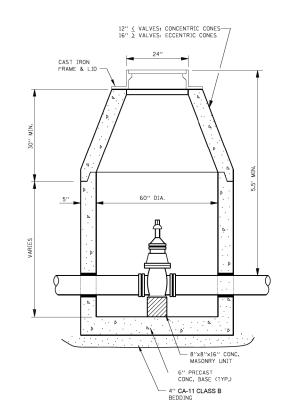
INLET FILTER BASKET DETAIL

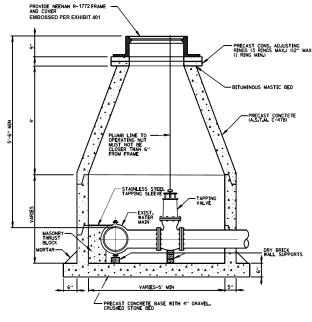


FIRE HYDRANT



RESIDENTIAL WATER SERVICE





- - 2. PRECAST CONCRETE BASE TO BE CAST INTEGRAL WITH LOWEST WALL SECTION.
- 3. PRECAST SECTIONS TO BE JOINED WITH TONGUE AND GROOVE JOINTS SEALED WITH MASTIC TYPE BITUMINOUS JOINTING COMPOUND.
- 4. MASONRY THRUST BLOCK TO BE FULL WIDTH OF SLEEVE.

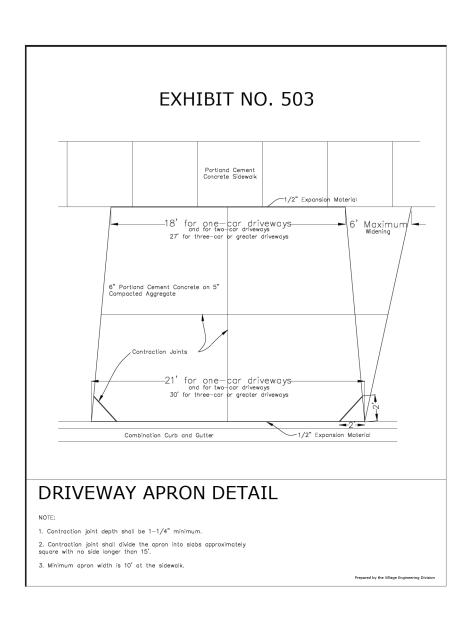
PRESSURE CONNECTION IN VAULT

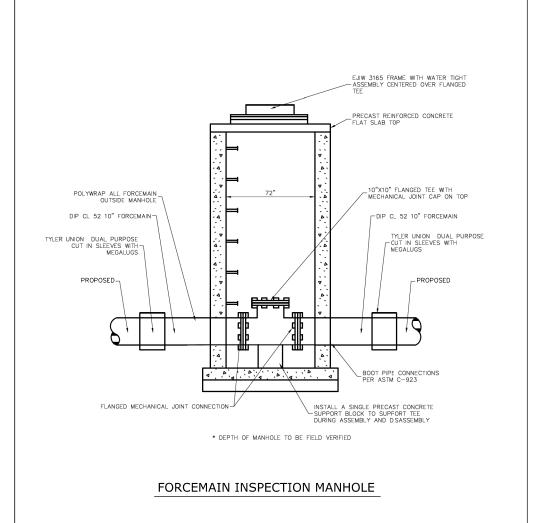
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-	PLOT DATE = 7/24/2019	DATE	-	07/25/2019	REVISED	=



	UNIVERSITY DRIVE						MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
							4220		соок	31	30			
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PLOT DATE = 7/24/2019	DATE	-	07/25/2019	REVISED -	



UNIVERSITY DRIVE											SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VILLAGE DETAILS										4220		соок	31	31
												CONTRACT NO.		
SCALE:	N.T.S.	SHEET 3	OF	3	SHEETS	STA.	N/A	TO STA.	N/A		ILLINOIS			