LEGEND

SANITARY SEWER MANHOLE

EXISTING

PROPOSED

ABBREVIATIONS

BL	BASE LINE	NWL	NORMAL WATER LEVEL
С	LONG CHORD OF CURVE	PC	POINT OF CURVATURE
C & G	CURB AND GUTTER	PT	POINT OF TANGENCY
CB	CATCH BASIN	PVI	POINT OF VERTICAL INTERSECTION
CL	CENTERLINE	R	RADIUS
D	DEGREE OF CURVE	ROW	RIGHT-OF-WAY
EP	EDGE OF PAVEMENT	SAN	SANITARY SEWER
FF	FINISHED FLOOR	ST	STORM SEWER
FG	FINISHED GRADE	T	TANGENCY OF CURVE
FL	FLOW LINE	TB	TOP OF BANK
FP	FLOODPLAIN	TC	TOP OF CURB
FR	FRAME	TF	TOP OF FOUNDATION
FW	FLOODWAY	TP	TOP OF PIPE
HWL	HIGH WATER LEVEL	TS	TOP OF SIDEWALK
INV	INVERT	TW	TOP OF WALK
L	LENGTH OF CURVE	WM	WATER MAIN

INTERSECTION ANGLE

ONSITE CIVIL ENGINEERING INFRASTRUCTURE PLANS

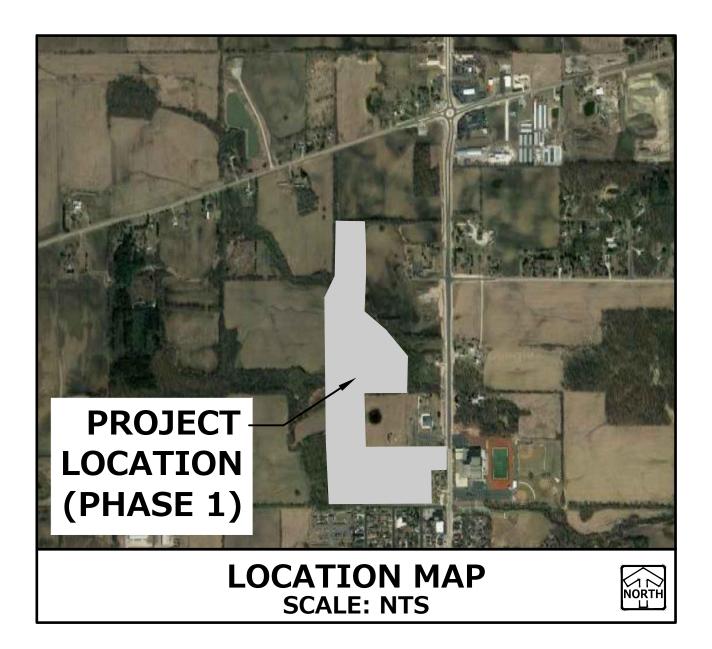
CANOPY HILL

UNION GROVE, WISCONSIN

PLANS PREPARED FOR

BEAR DEVELOPMENT

4011 80TH STREET KENOSHA, WI 53142



INDEX OF SHEETS

COVER SHEET EXISTING CONDITIONS

SITE PLAN 3 - 7

8 - 12 **GRADING PLAN**

12A - 12B PUBLIC TRAIL PLAN 13 - 17 **EROSION CONTROL PLAN**

18 **SANITARY SEWER MAP**

SANITARY SEWER PLAN & PROFILE 19 - 26

27 WATER MAIN MAP

28 - 35 WATER MAIN PLAN & PROFILE

36 **STORM SEWER MAP**

37 - 43 STORM SEWER & PAVEMENT PLAN & PROFILE

CONSTRUCTION DETAILS & SPECIFICATIONS

PROJECT TEAM CONTACTS

CIVIL ENGINEER:

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(262) 754-8888

(262) 754-8888

SURVEYOR: JOHN KONOPACKI, PLS PINNACLE ENGINEERING GROUP 20725 WATERTOWN ROAD, SUITE 100 BROOKFIELD, WI 53186

DEVELOPER:

BEAR DEVELOPMENT 4011 80TH STREET KENOSHA, WI 53142 (262) 308-2656 CRAIG BARTSCH & DAN SZCZAF

GENERAL NOTES

- BE COMPLETED IN ACCORDANCE WITH ALL REQUIREMENTS FROM LOCAL, STATE, FEDERAL OR OTHER GOVERNING AGENCY'S LAWS, REGULATIONS, JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., AND THE OWNER'S DIRECTION.
- CONTINUITY OF SUCH CONDITIONS BETWEEN BORINGS OR INDICATED SAMPLING LOCATIONS. IT SHALL BE EXPRESSLY UNDERSTOOD THAT OWNER WILL NOT BE RESPONSIBLE FOR ANY INTERPRETATIONS OR CONCLUSIONS DRAWN THERE BY THE CONTRACTOR. DATA IS MADE AVAILABLE FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ANY ADDITIONAL SOILS INVESTIGATIONS THEY FEEL ARE NECESSARY FOR THE PROPER EVALUATION OF THE SITE FOR PURPOSES OF PLANNING, BIDDING, OR CONSTRUCTING THE PROJECT AT NO ADDITIONAL COST TO THE OWNER.
- 3. THE CONTRACTOR IS RESPONSIBLE TO REVIEW AND UNDERSTAND ALL COMPONENTS OF THE PLANS AND SPECIFICATIONS, INCLUDING FIELD VERIFYING SOIL CONDITIONS, PRIOR TO SUBMISSION OF A BID PROPOSAL
- 4. THE CONTRACTOR SHALL PROMPTLY REPORT ANY ERRORS OR AMBIGUITIES LEARNED AS PART OF THEIR REVIEW OF PLANS, SPECIFICATIONS, REPORTS AND FIELD INVESTIGATIONS.
- 5. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE COMPUTATION OF QUANTITIES AND WORK REQUIRED TO COMPLETE THIS PROJECT. THE CONTRACTOR'S BID SHALL BE BASED ON ITS OWN COMPUTATIONS AND IN NO SUCH INSTANCE RELY ON THE ENGINEER'S ESTIMATE.
- . QUESTIONS/CLARIFICATIONS WILL BE INTERPRETED BY ENGINEER/OWNER PRIOR TO THE AWARD OF CONTRACT. ENGINEER/OWNER WILL SUBMIT OFFICIAL RESPONSES IN WRITING. INTERPRETATIONS PRESENTED IN OFFICIAL RESPONSES SHALL BE BINDING ON ALL PARTIES ASSOCIATED WITH THE CONTRACT. IN NO WAY SHALL WORD-OF-MOUTH DIALOG CONSTITUTE AN OFFICIAL RESPONSE
- LIMITATIONS OF WORK ACCESS, SPACE LIMITATIONS, OVERHEAD OBSTRUCTIONS, TRAFFIC PATTERNS, LOCAL REQUIREMENTS, ADJACENT ACTIVITIES, ETC. FAILURE TO CONSIDER SITE CONDITIONS SHALL NOT BE CAUSE FOR CLAIM OF JOB

PRIOR TO START OF WORK, CONTRACTOR SHALL BE COMPLETELY FAMILIAR WITH ALL CONDITIONS OF THE SITE, AND SHALL ACCOUNT FOR CONDITIONS THAT AFFECT, OR MAY AFFECT CONSTRUCTION INCLUDING, BUT NOT LIMITED TO,

- COMMENCEMENT OF CONSTRUCTION SHALL EXPLICITLY CONFIRM THAT THE CONTRACTOR HAS REVIEWED THE PLANS AND SPECIFICATIONS IN ENTIRETY AND CERTIFIES THAT THEIR SUBMITTED BID PROPOSAL CONTAINS PROVISIONS TO COMPLETE THE PROJECT, WITH THE EXCEPTION OF UNFORESEEN FIELD CONDITIONS; ALL APPLICABLE PERMITS HAVE BEEN OBTAINED; AND CONTRACTOR UNDERSTANDS ALL OF THE REQUIREMENTS OF THE PROJECT. SHOULD ANY DISCREPANCIES OR CONFLICTS IN THE PLANS OR SPECIFICATIONS BE DISCOVERED AFTER THE AWARD OF CONTRACT, ENGINEER SHALL BE NOTIFIED IN WRITING IMMEDIATELY AND CONSTRUCTION OF ITEMS AFFECTED BY THE
- DISCREPANCIES/CONFLICTS SHALL NOT COMMENCE, OR CONTINUE, UNTIL A WRITTEN RESPONSE FROM ENGINEER/OWNER IS DISTRIBUTED. IN THE EVENT OF A CONFLICT BETWEEN REFERENCED CODES, STANDARDS, SPECIFICATIONS AND PLANS, THE ONE ESTABLISHING THE MOST STRINGENT REQUIREMENTS SHALL BE FOLLOWED. 10. THE CONTRACTOR SHALL, AT ITS OWN EXPENSE, OBTAIN ALL NECESSARY PERMITS AND LICENSES TO COMPLETE THE PROJECT. OBTAINING PERMITS, OR DELAYS, IS NOT CAUSE FOR DELAY OF THE CONTRACT OR SCHEDULE. CONTRACTOR SHALL
- COMPLY WITH ALL PERMIT REQUIREMENTS. 11. THE CONTRACTOR SHALL NOTIFY ALL INTERESTED GOVERNING AGENCIES, UTILITY COMPANIES AFFECTED BY THIS CONSTRUCTION PROJECT, AND DIGGER'S HOTLINE IN ADVANCE OF CONSTRUCTION TO COMPLY WITH ALL JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., PERMIT STIPULATIONS, AND OTHER APPLICABLE STANDARDS.
- 12. SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE TO INITIATE, INSTITUTE, ENFORCE, MAINTAIN, AND SUPERVISE ALL SAFETY PRECAUTIONS AND JOB SITE SAFETY PROGRAMS IN CONNECTION WITH THE WORK.
- 13. CONTRACTOR SHALL KEEP THE JOBSITE CLEAN AND ORDERLY AT ALL TIMES. ALL LOCATIONS OF THE SITE SHALL BE KEPT IN A WORKING MANNER SUCH THAT DEBRIS IS REMOVED CONTINUOUSLY AND ALL RESPECTIVE CONTRACTORS OPERATE UNDER GENERAL "GOOD HOUSEKEEPING."

14. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, ENGINEER, AND THEIR AGENTS FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT



Hearing Impaired TDD (800) 542-2289

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PINNACLE ENGINEERING GROUP, LLC ENGINEER'S LIMITATION

PINNACLE ENGINEERING GROUP, LLC AND THEIR CONSULTANTS DO NOT WARRANT OR GUARANTEE THE ACCURACY AND COMPLETENESS EXIST WITHIN THE DELIVERABLES. THE ENGINEER SHALL BE PROMPTLY NOTIFIED PRIOR TO BID SO THAT HE MAY HAVE THE OPPORTUNIT) TO TAKE WHATEVER STEPS NECESSARY TO RESOLVE THEM. FAILURE TO PROMPTLY NOTIFY THE ENGINEER OF SUCH CONDITIONS SHAL ABSOLVE THE ENGINEER FROM ANY RESPONSIBILITY FOR THE CONSEQUENCES OF SUCH FAILURE. ACTIONS TAKEN WITHOUT THE KNOWLEDGE AND CONSENT TO THE ENGINEER, OR IN CONTRADICTION TO THE ENGINEER'S DELIVERABLES OR RECOMMENDATIONS, SHALL BECOME THE RESPONSIBILITY NOT OF THE ENGINEER BUT OF THE PARTIES RESPONSIBLE FOR TAKING SUCH ACTION.

FURTHERMORE, PINNACLE ENGINEERING GROUP, LLC IS NOT RESPONSIBLE FOR CONSTRUCTION SAFETY OR THE MEANS AND METHODS OF



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CANOPY HILL

UNION GROVE, WISCONSIN

COVER SHEET

2 PER VILLAGE COMMENTS 05/03/21 3 PER VILLAGE COMMENTS <u>06/22/21</u> 4 PER VILLAGE COMMENTS 06/29/21

REVISIONS

Z:\PROJECTS\2017\959.00-WI\CAD\SHEETS\FINAL\COVER SHEET.DWG

FENCE LINE, WOOD OR PLASTIC

REVERSE PITCH CURB & GUTTER

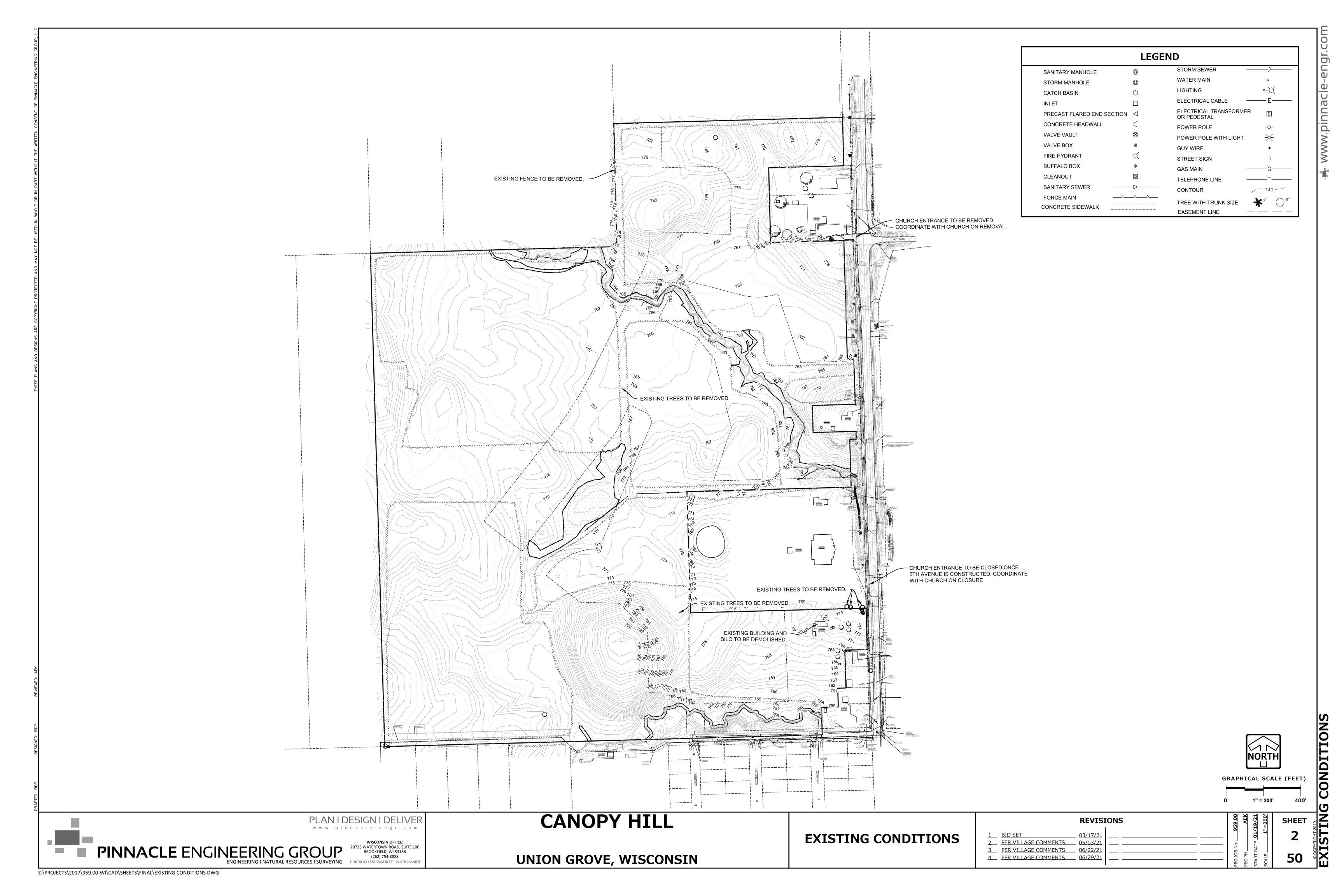
MANHOLE

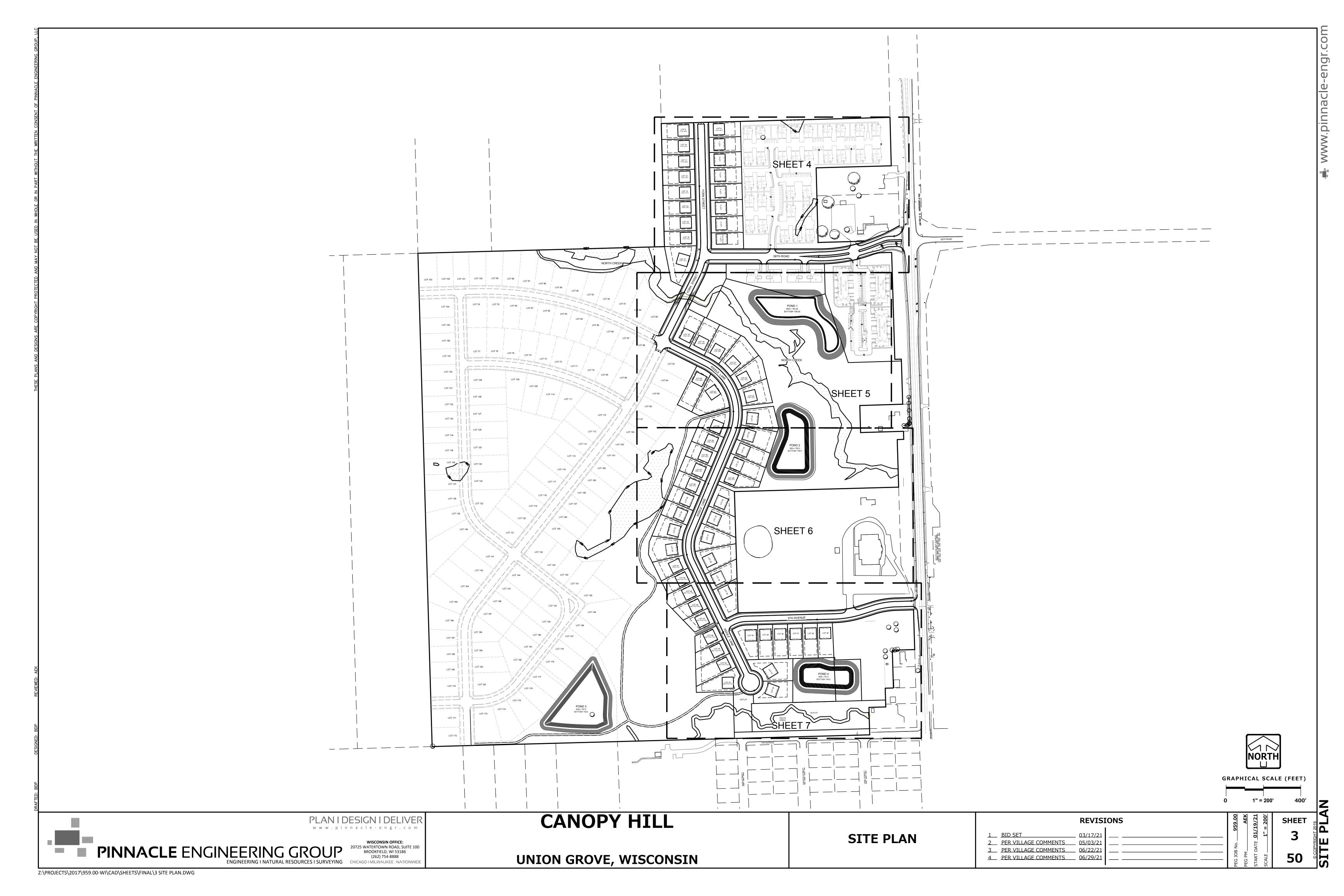
CONCRETE SIDEWALK

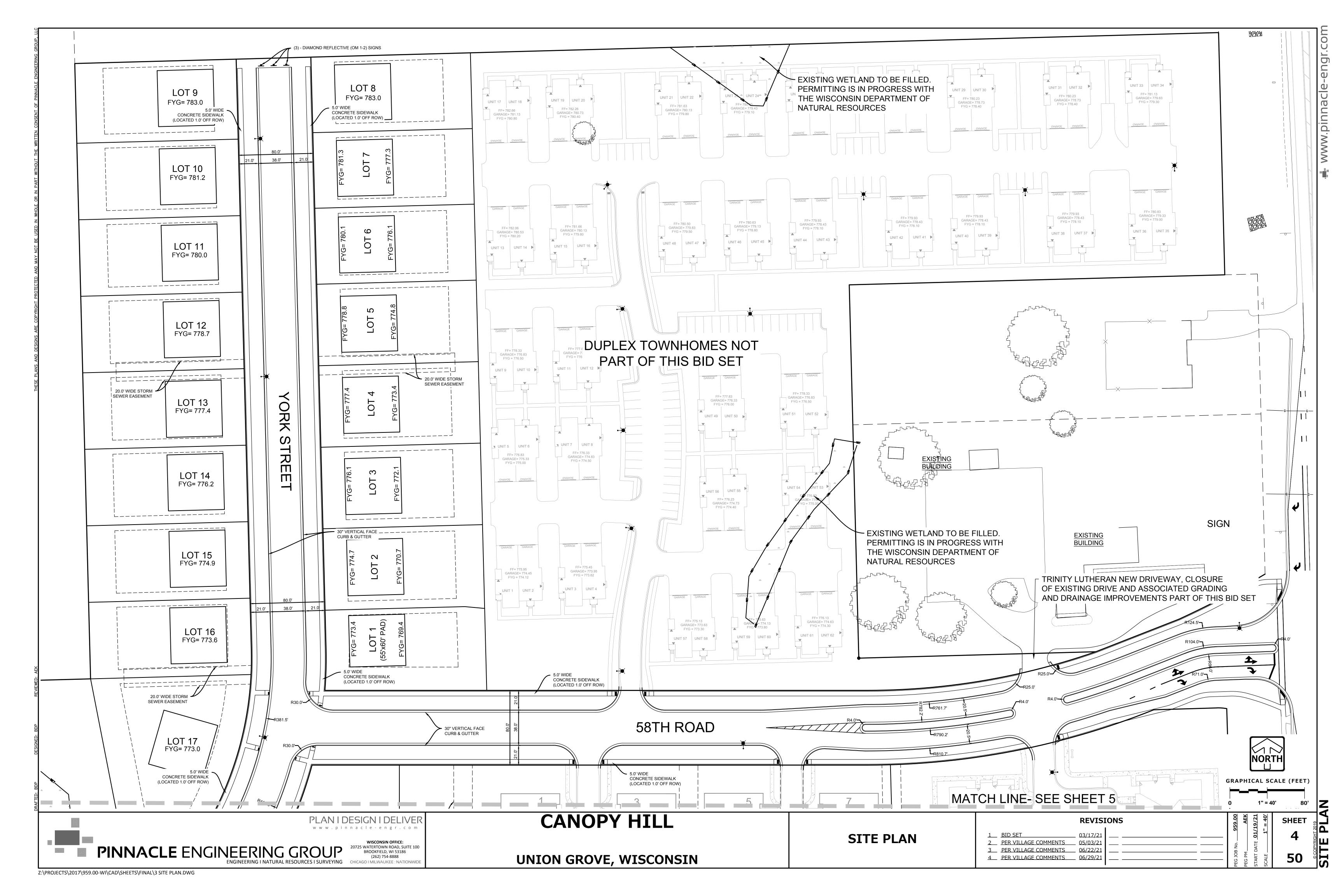
CURB AND GUTTER

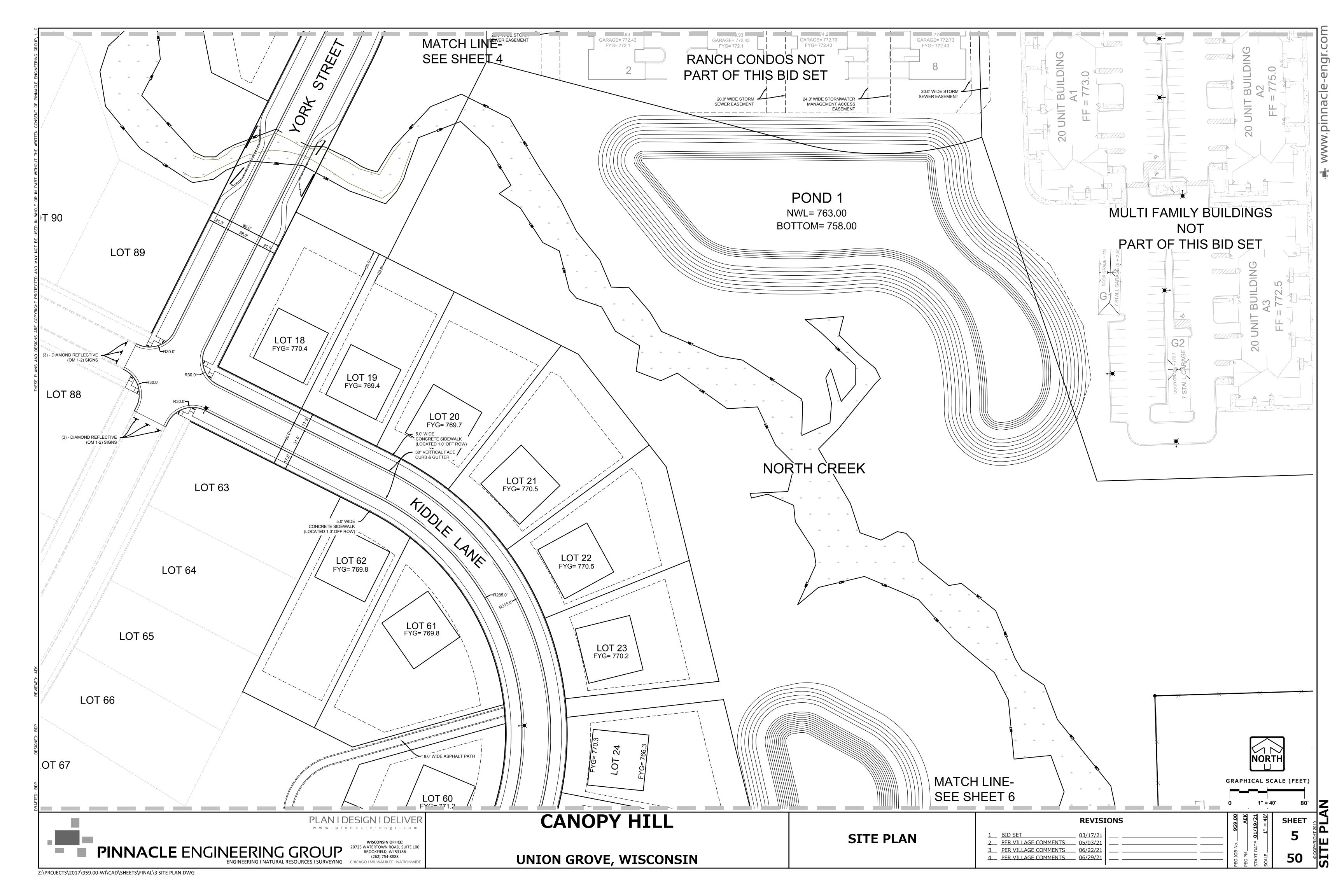
DEPRESSED CURB

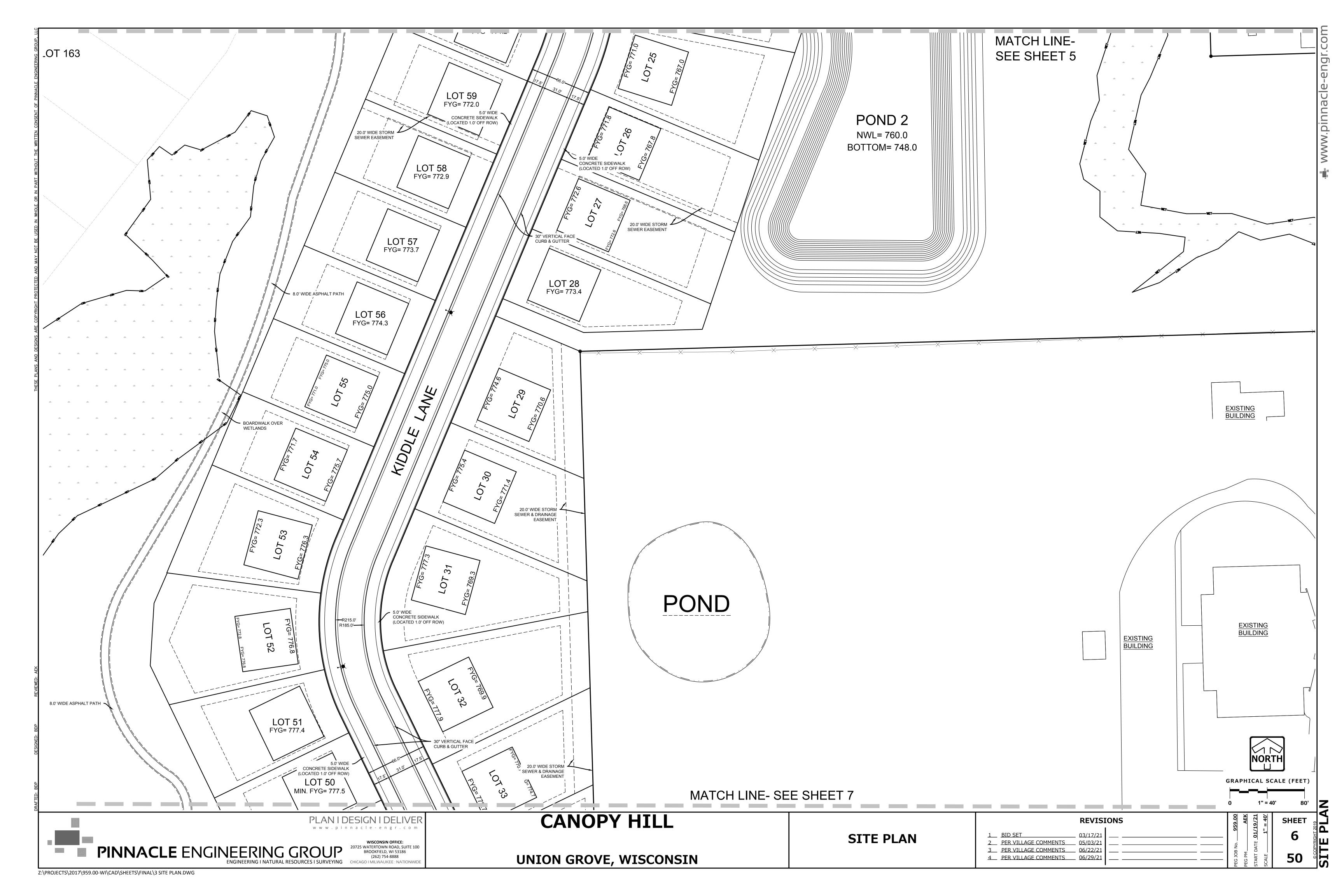
EASEMENT LINE

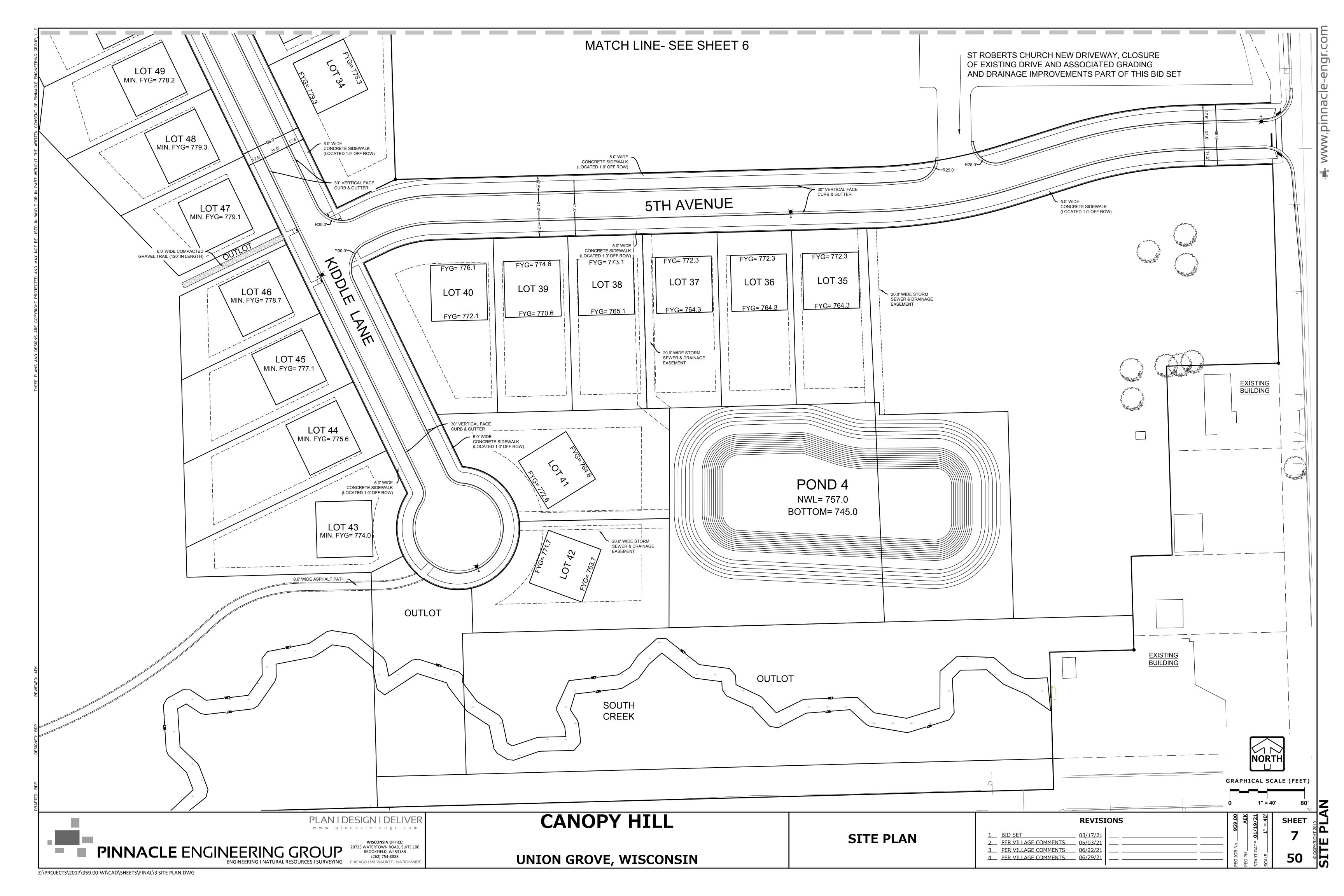


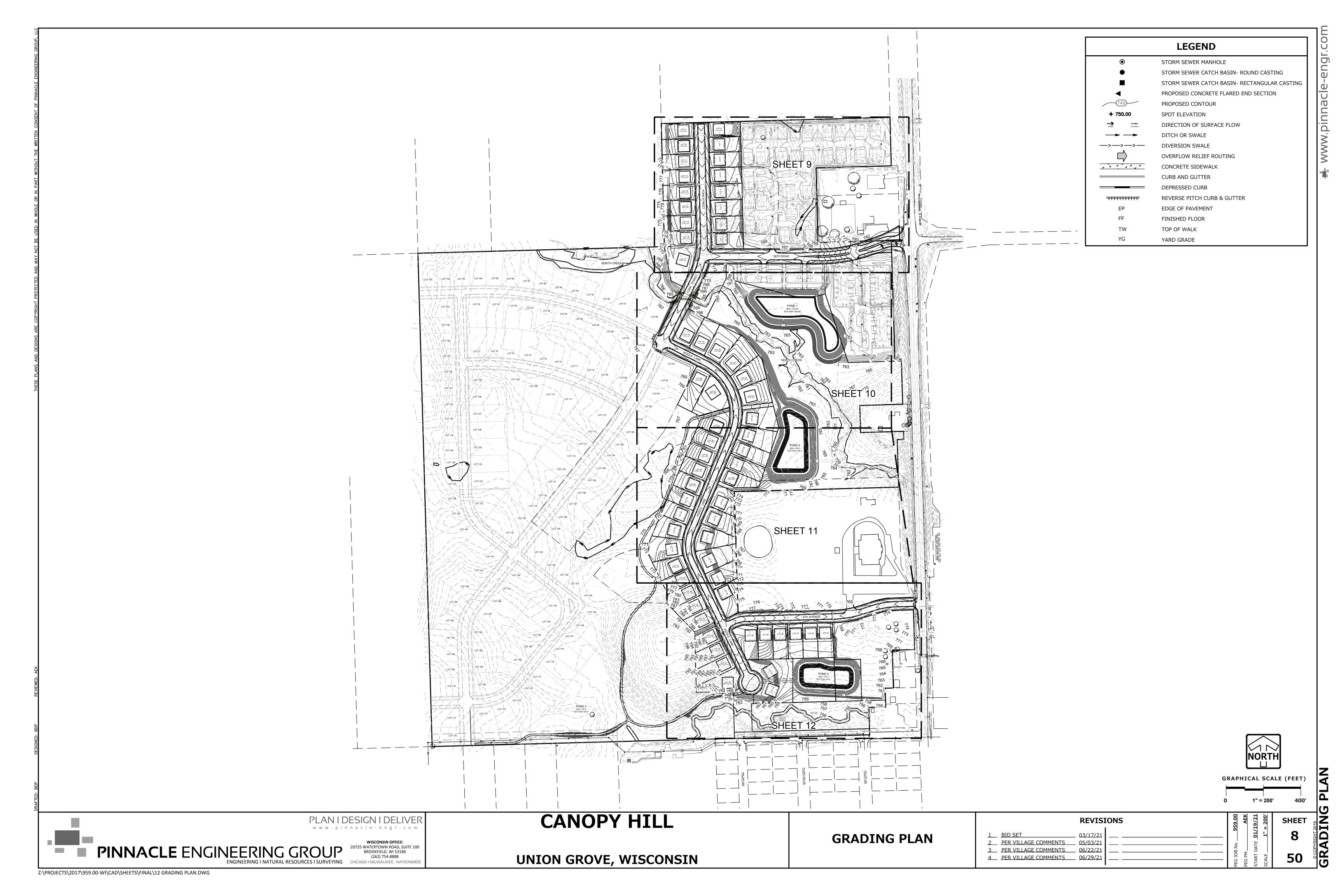


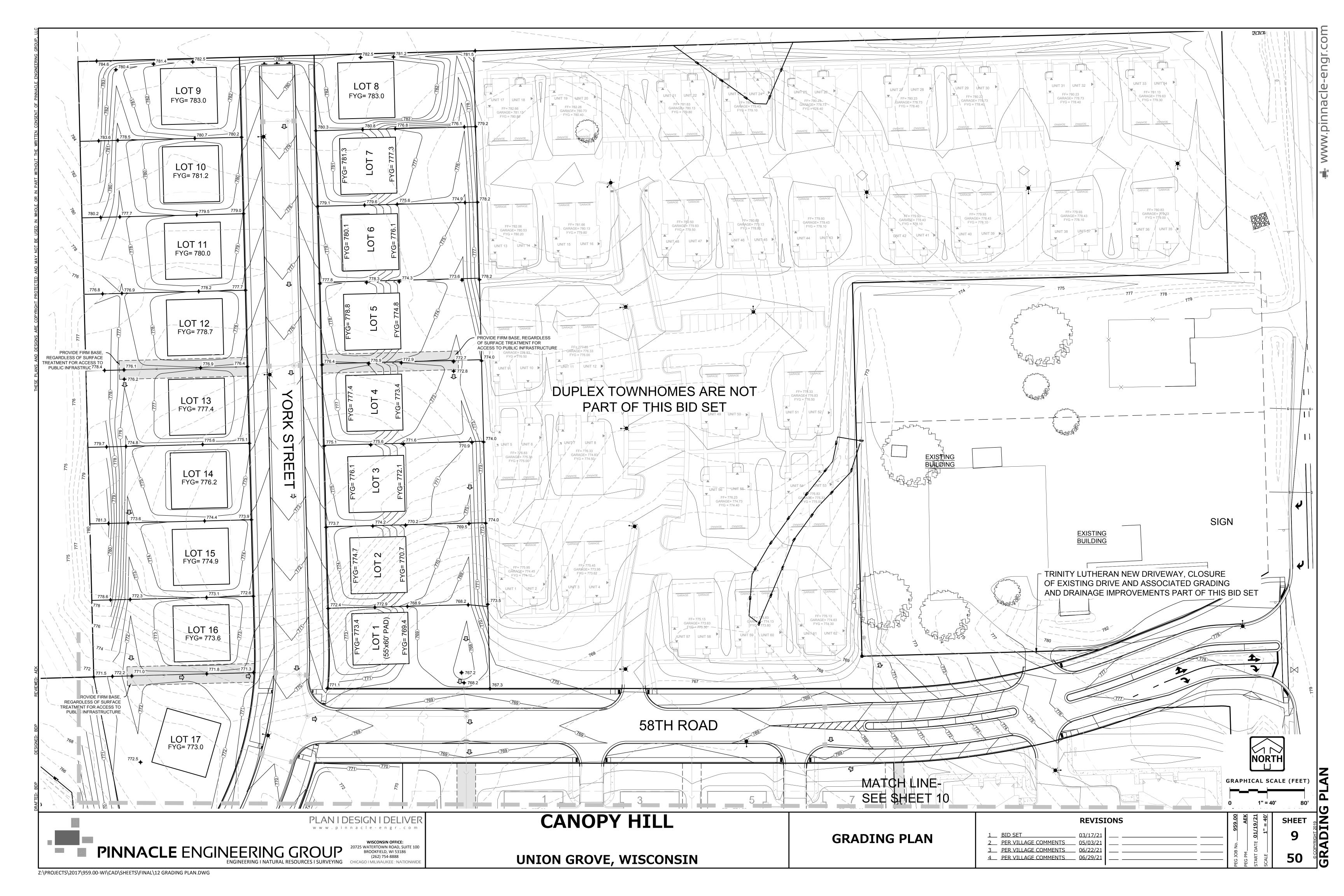


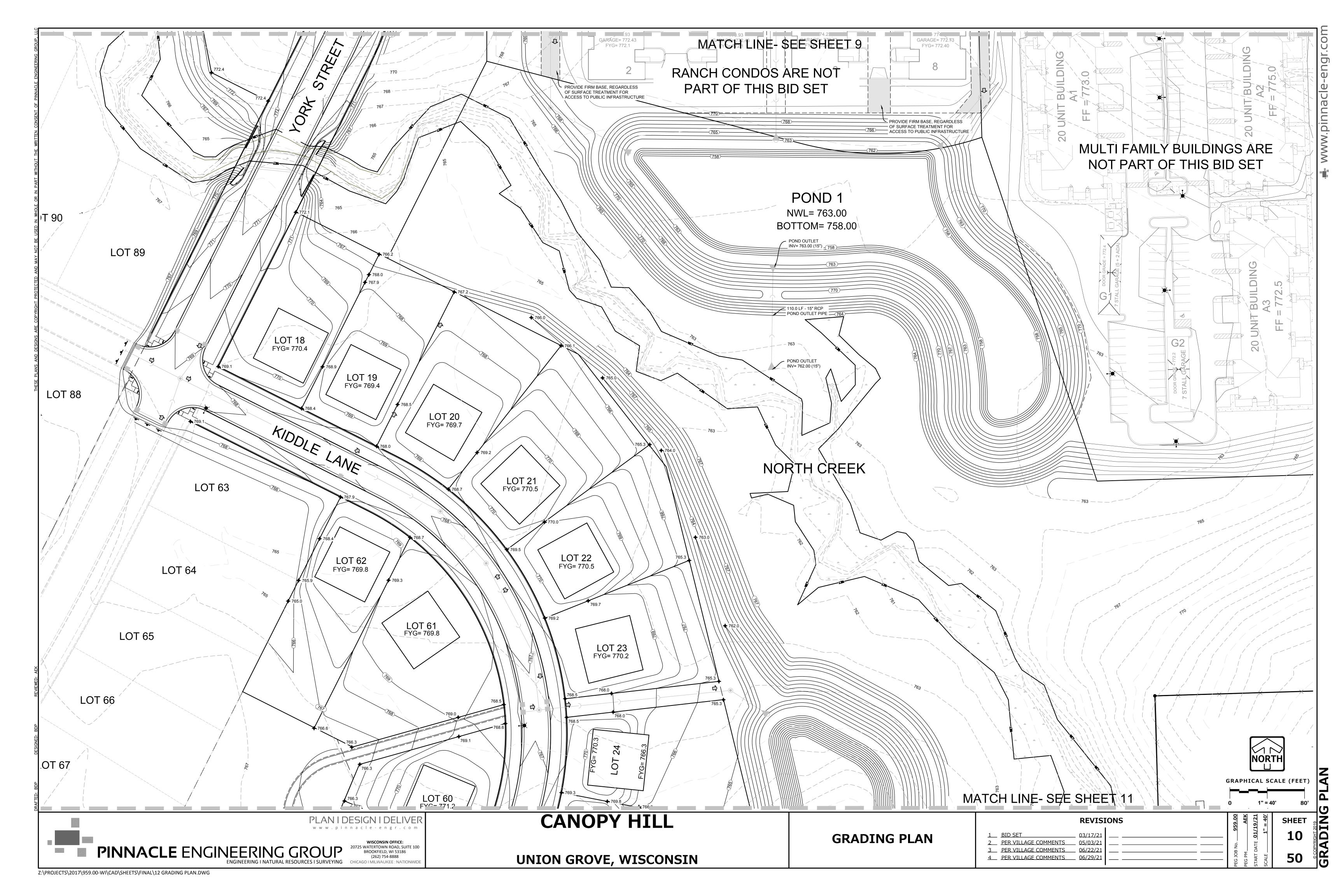


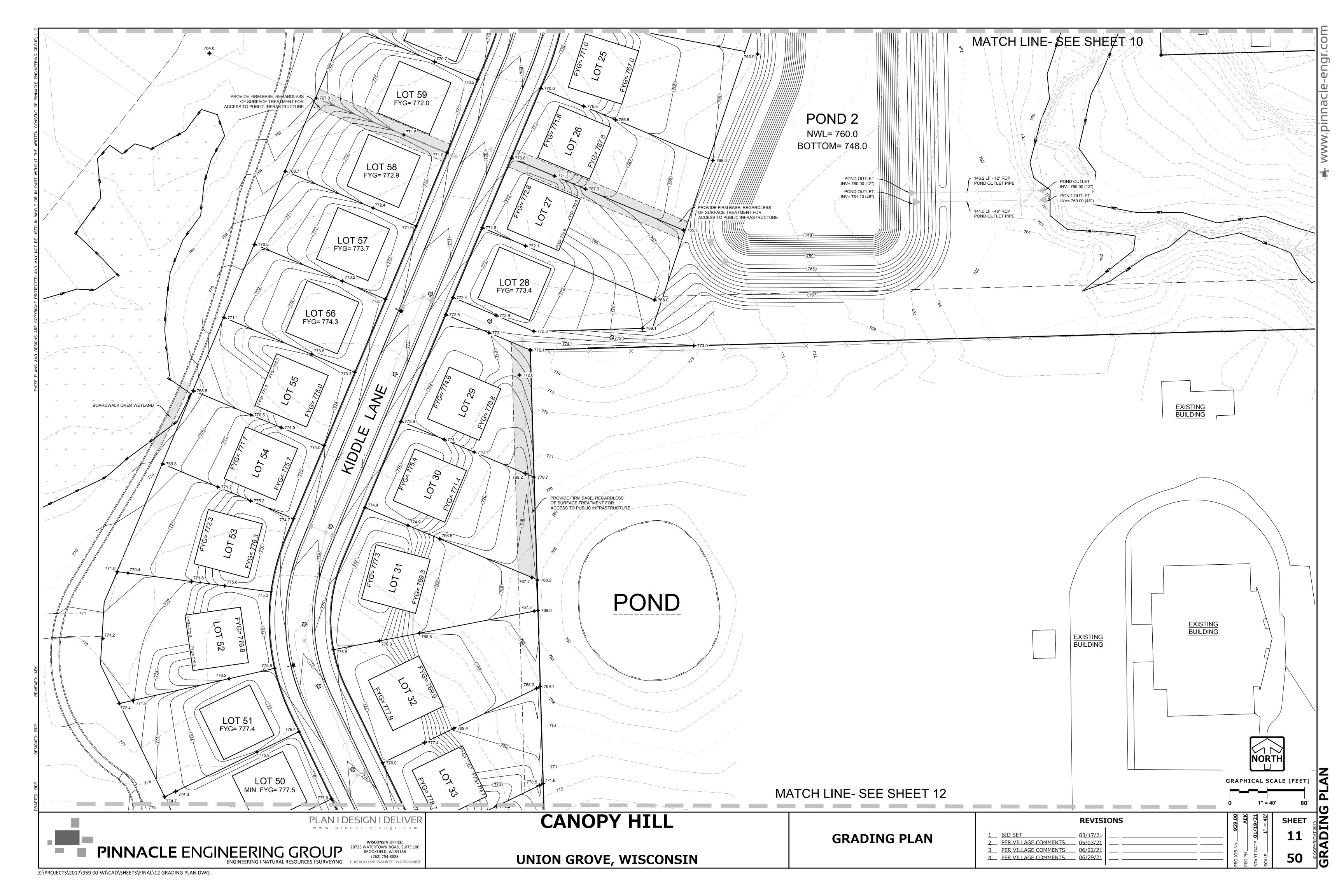


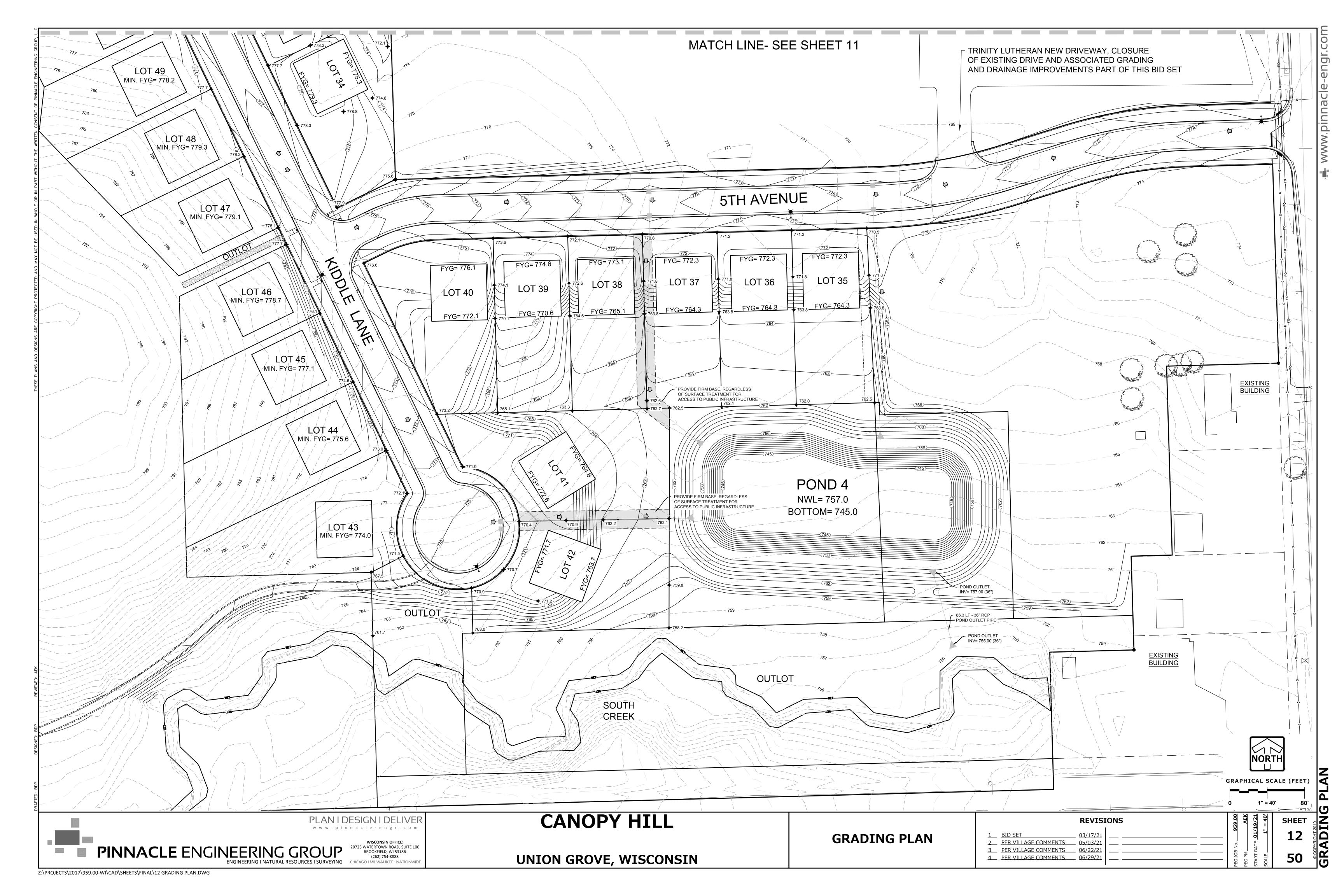


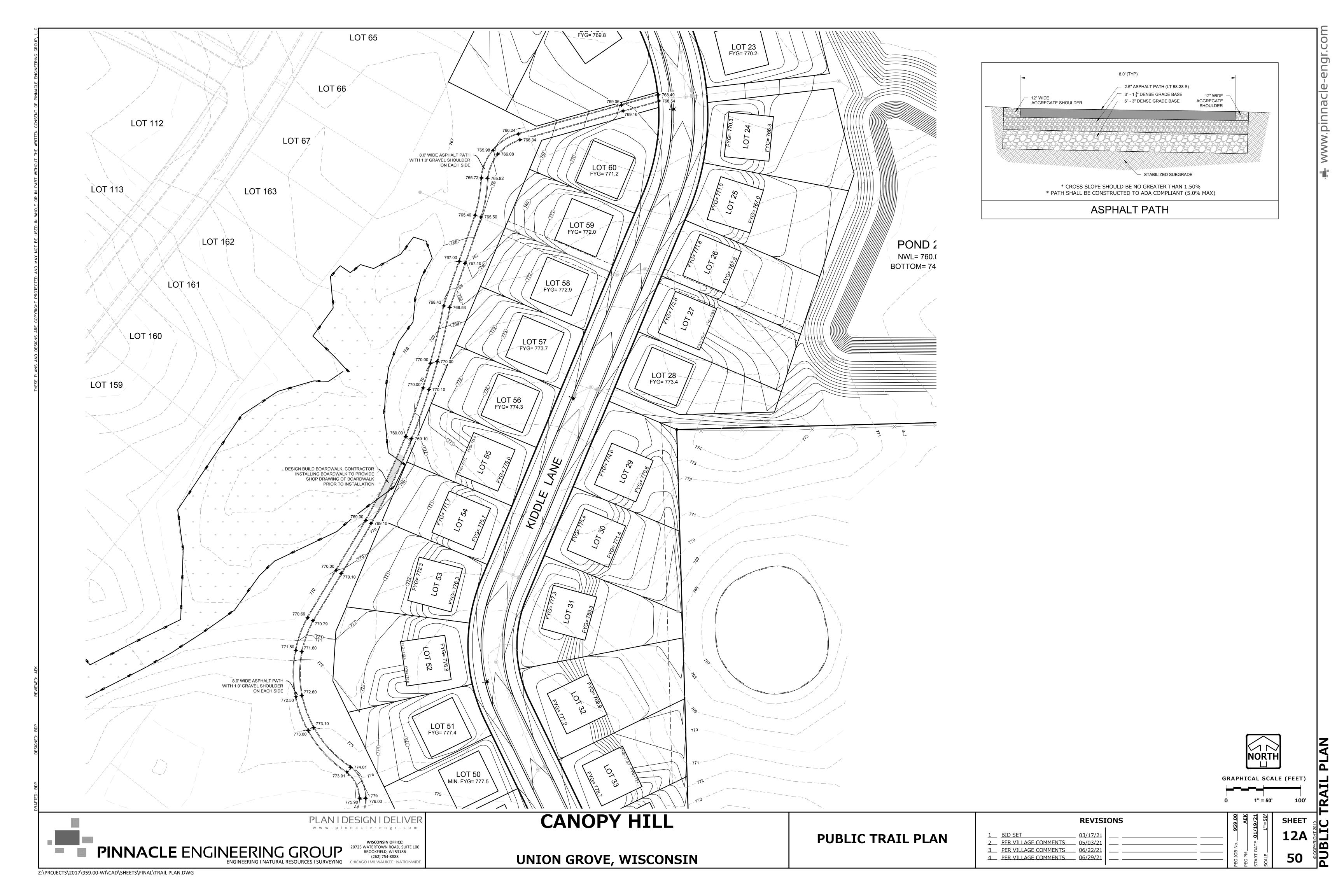


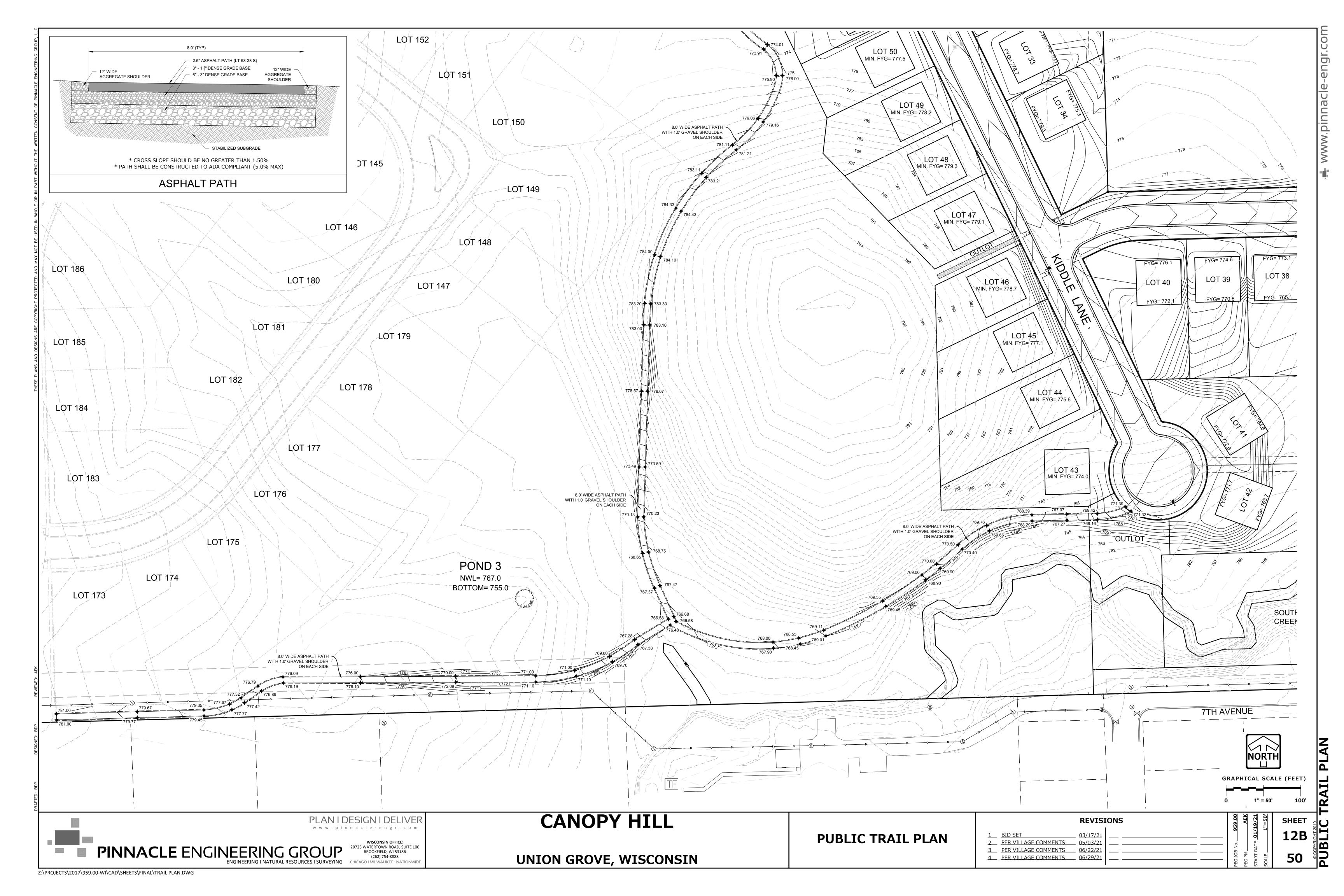


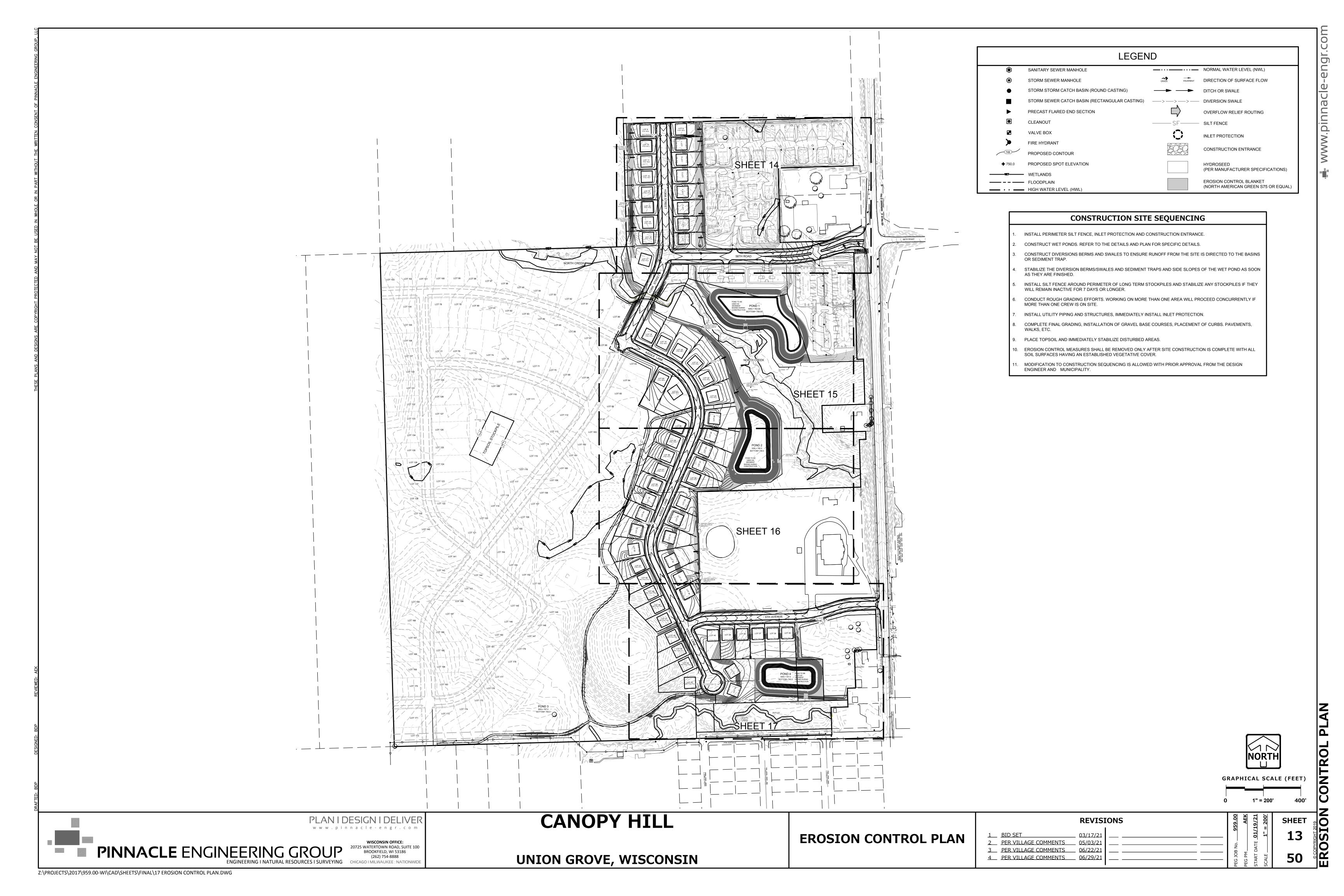


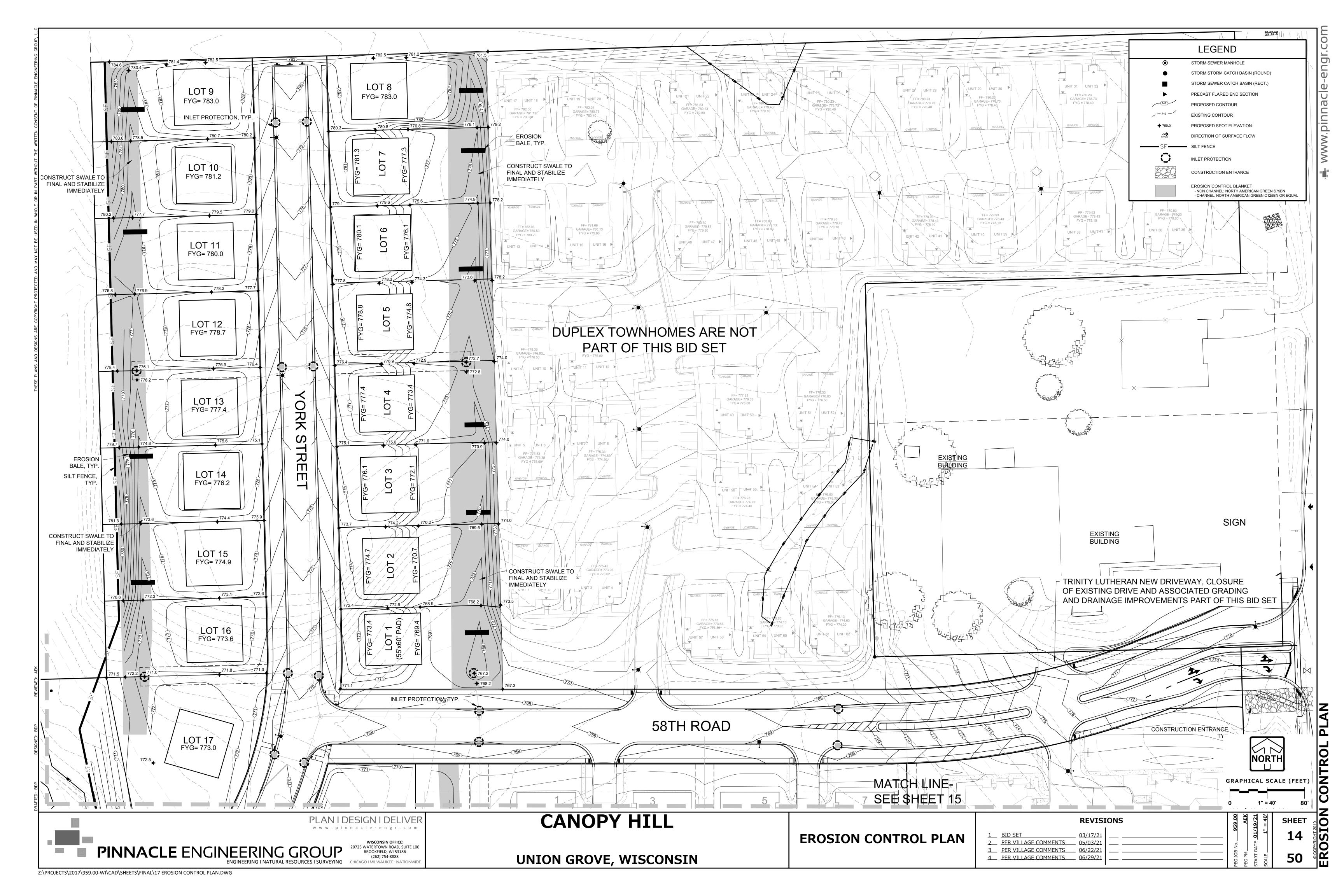


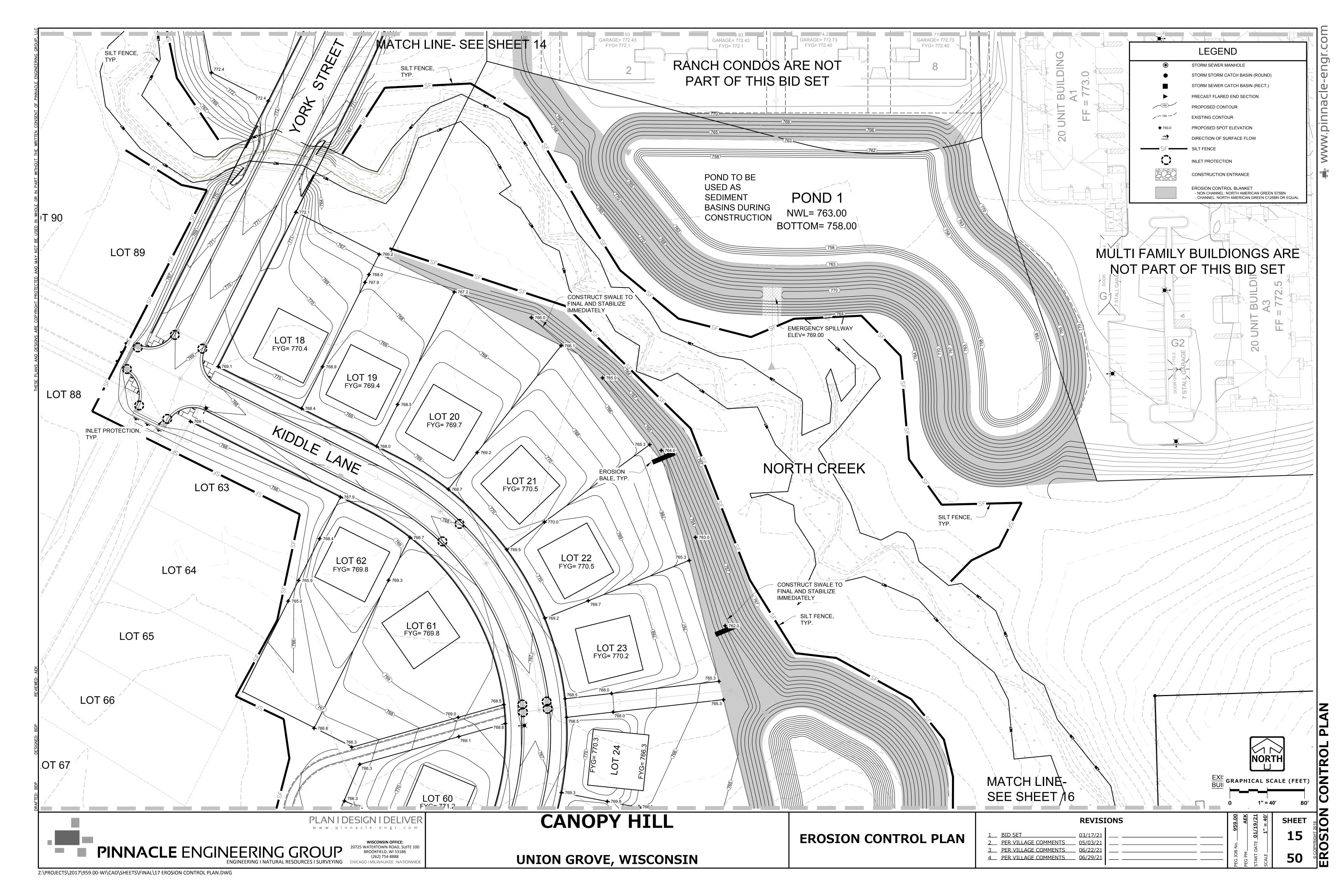


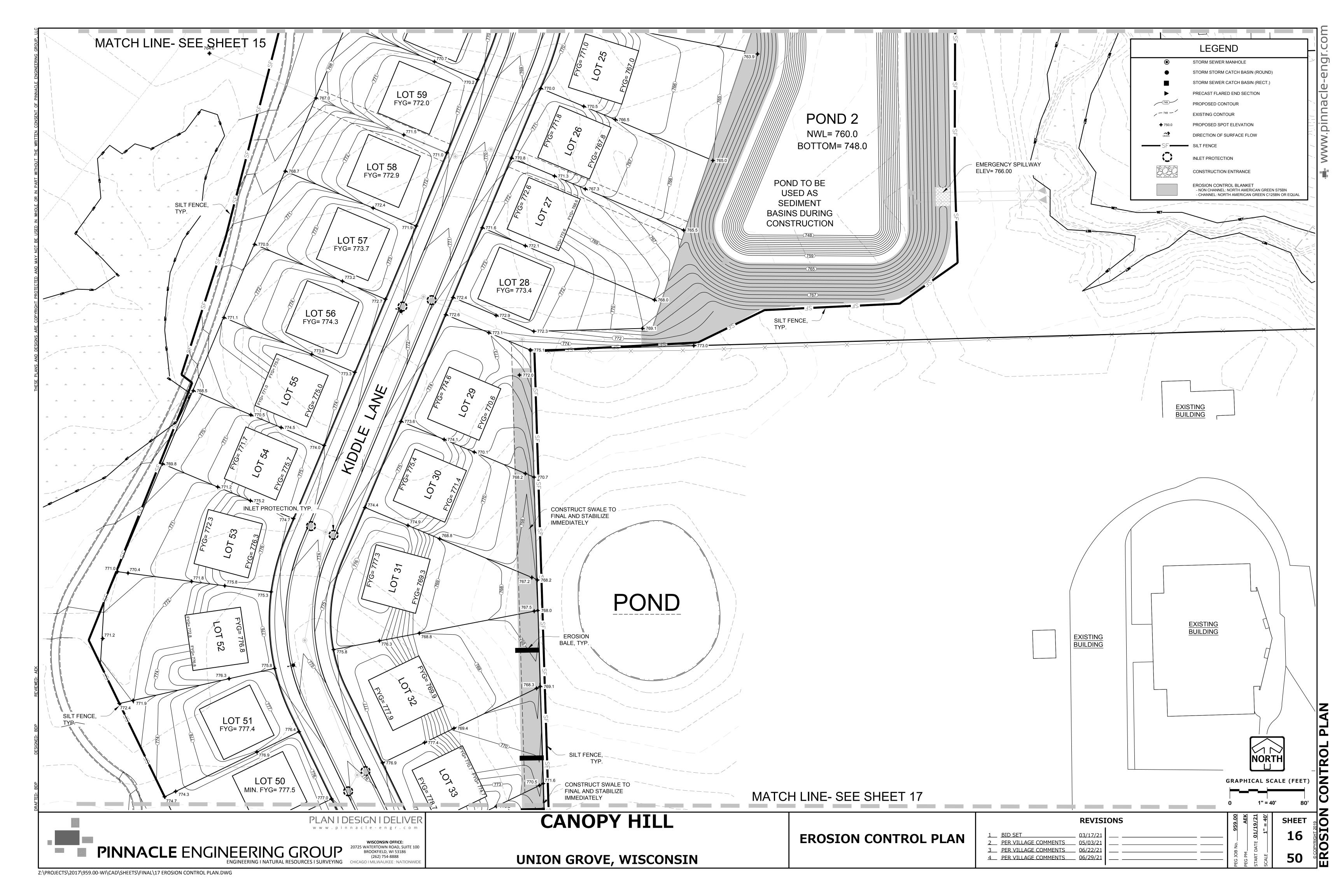


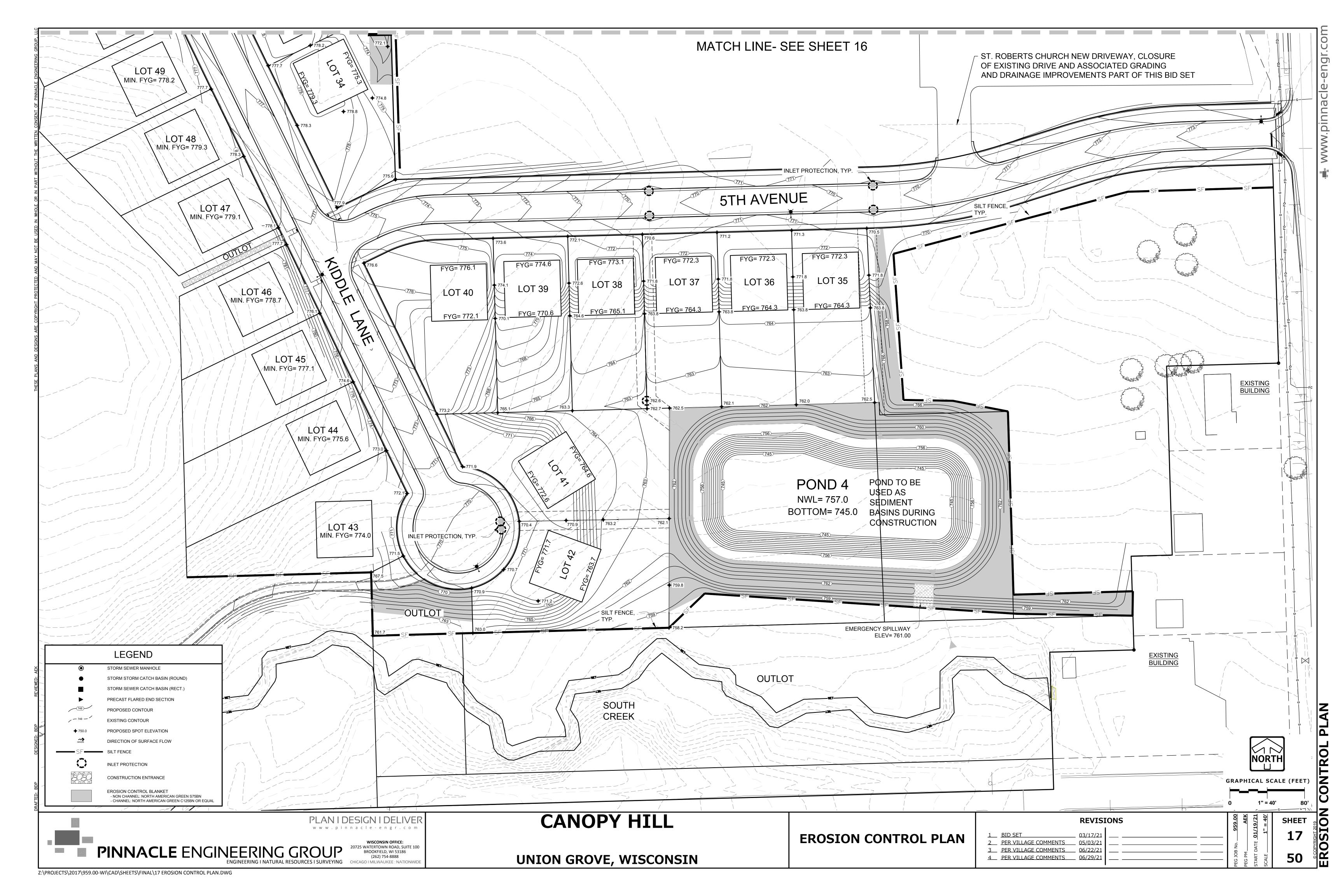


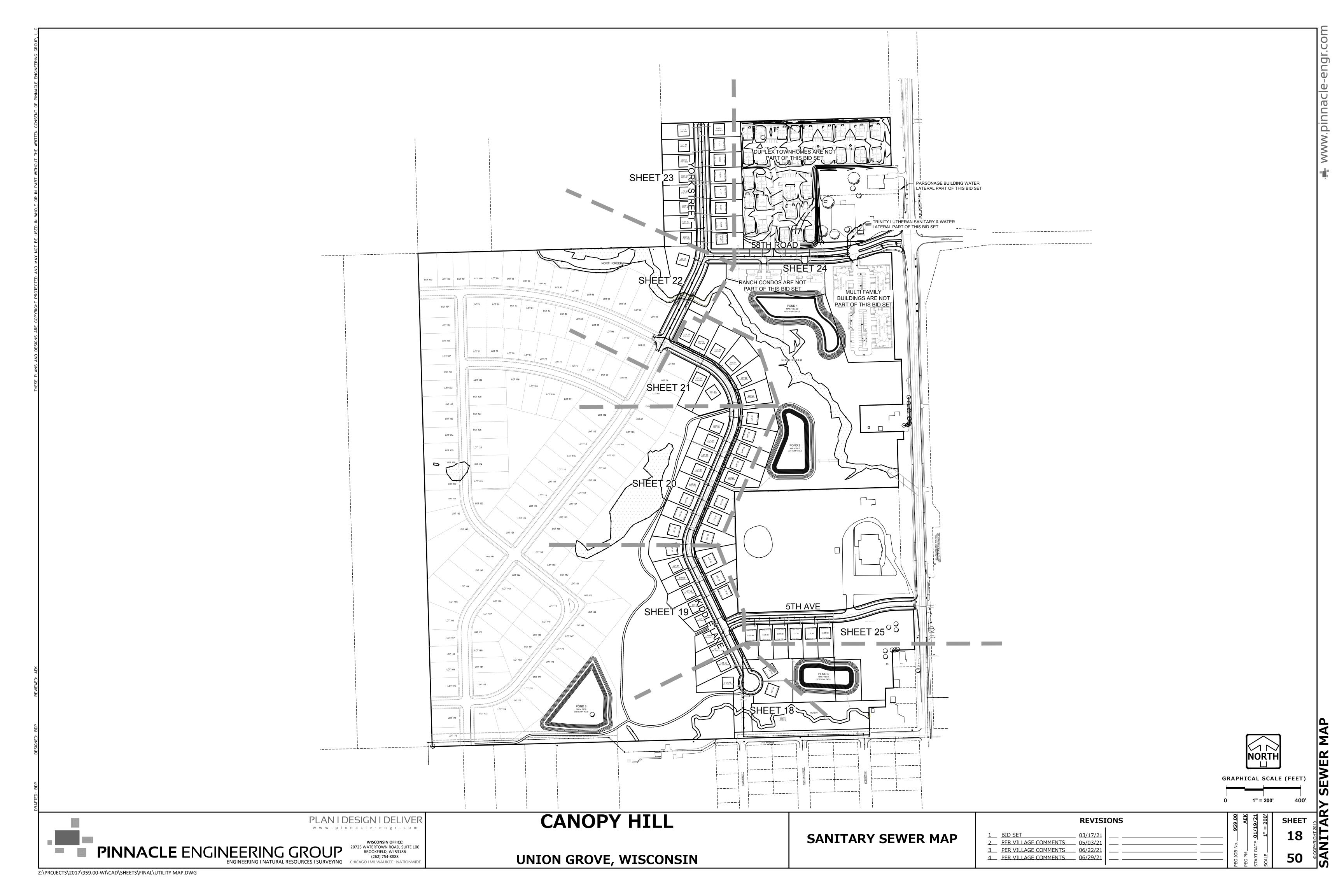


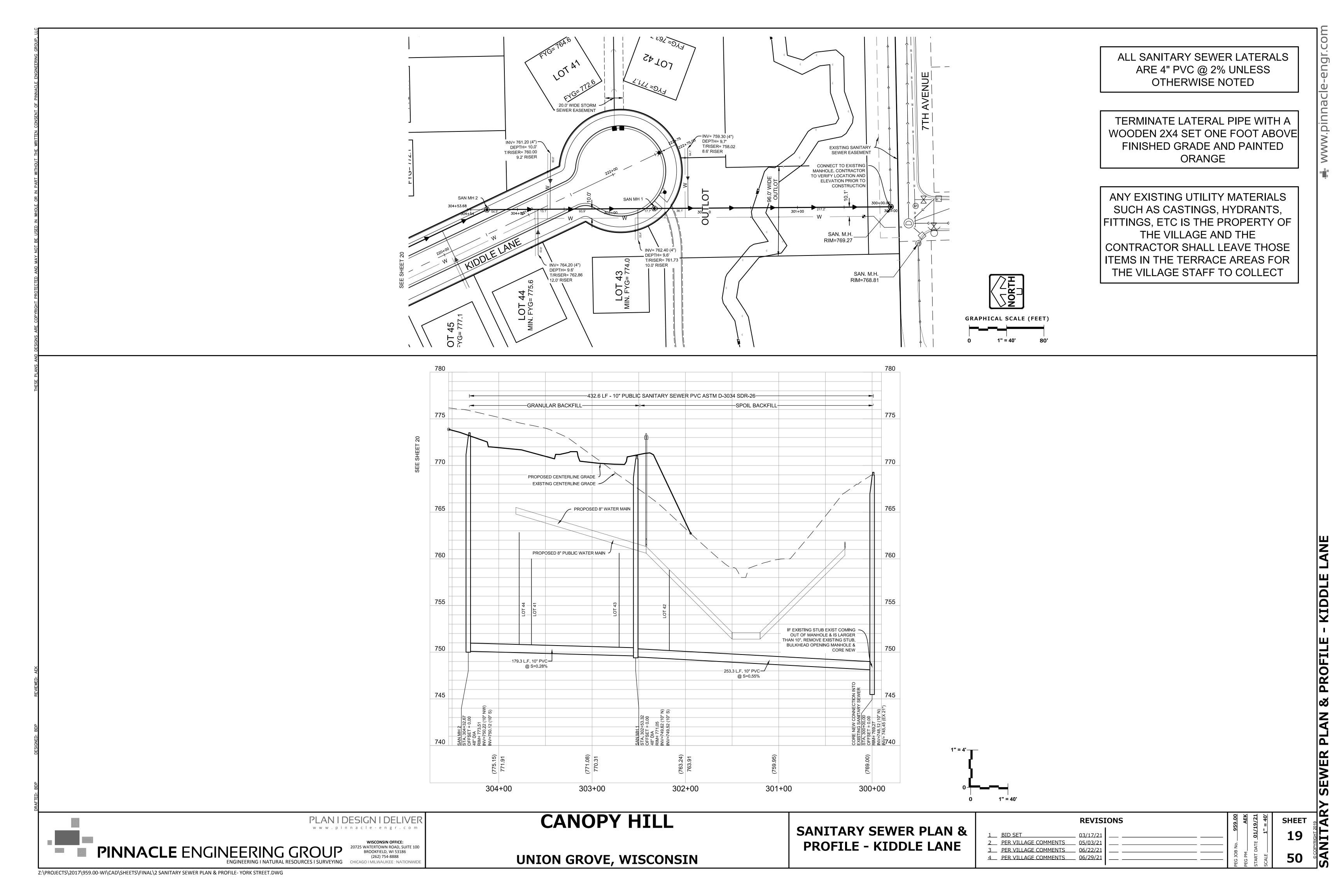


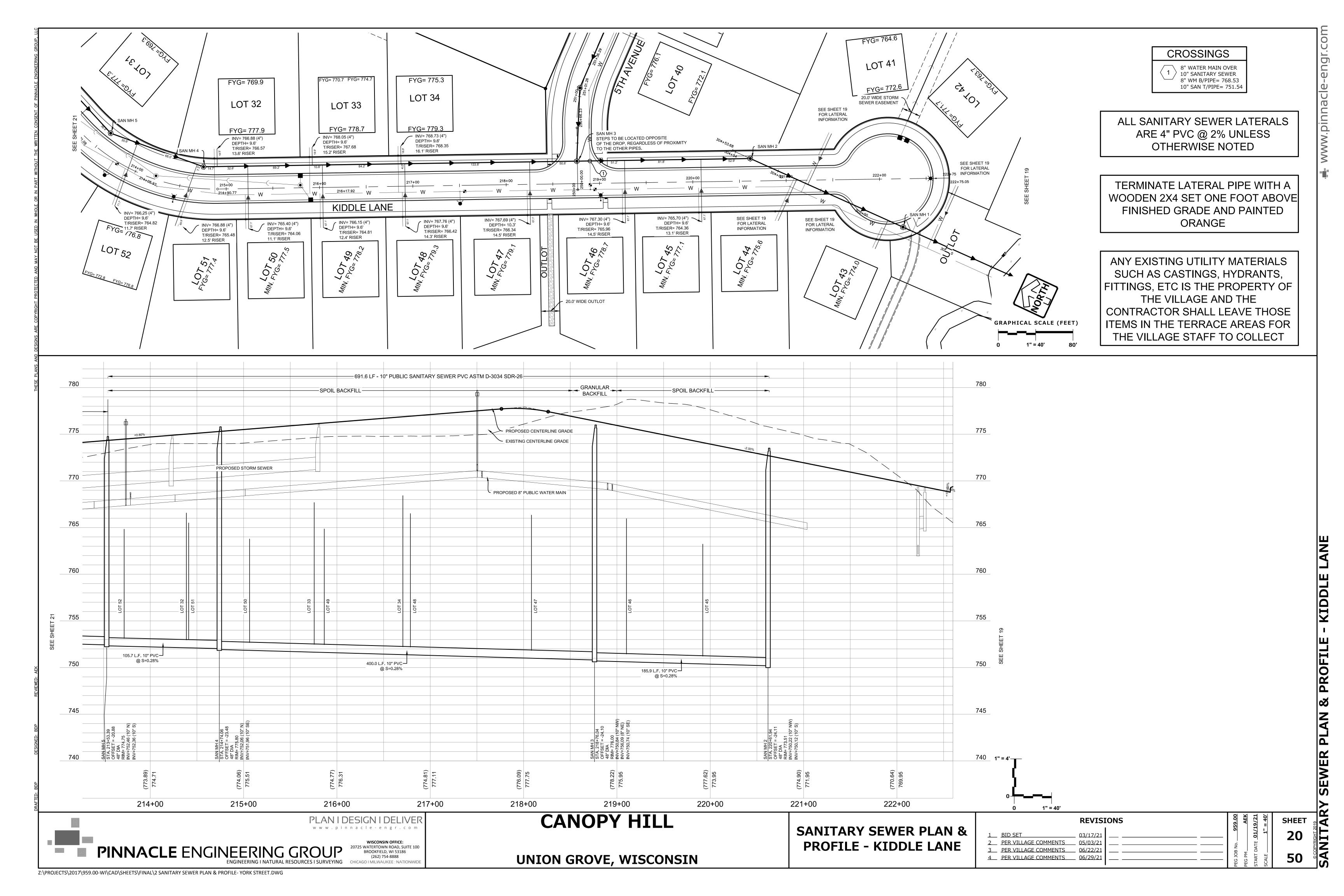


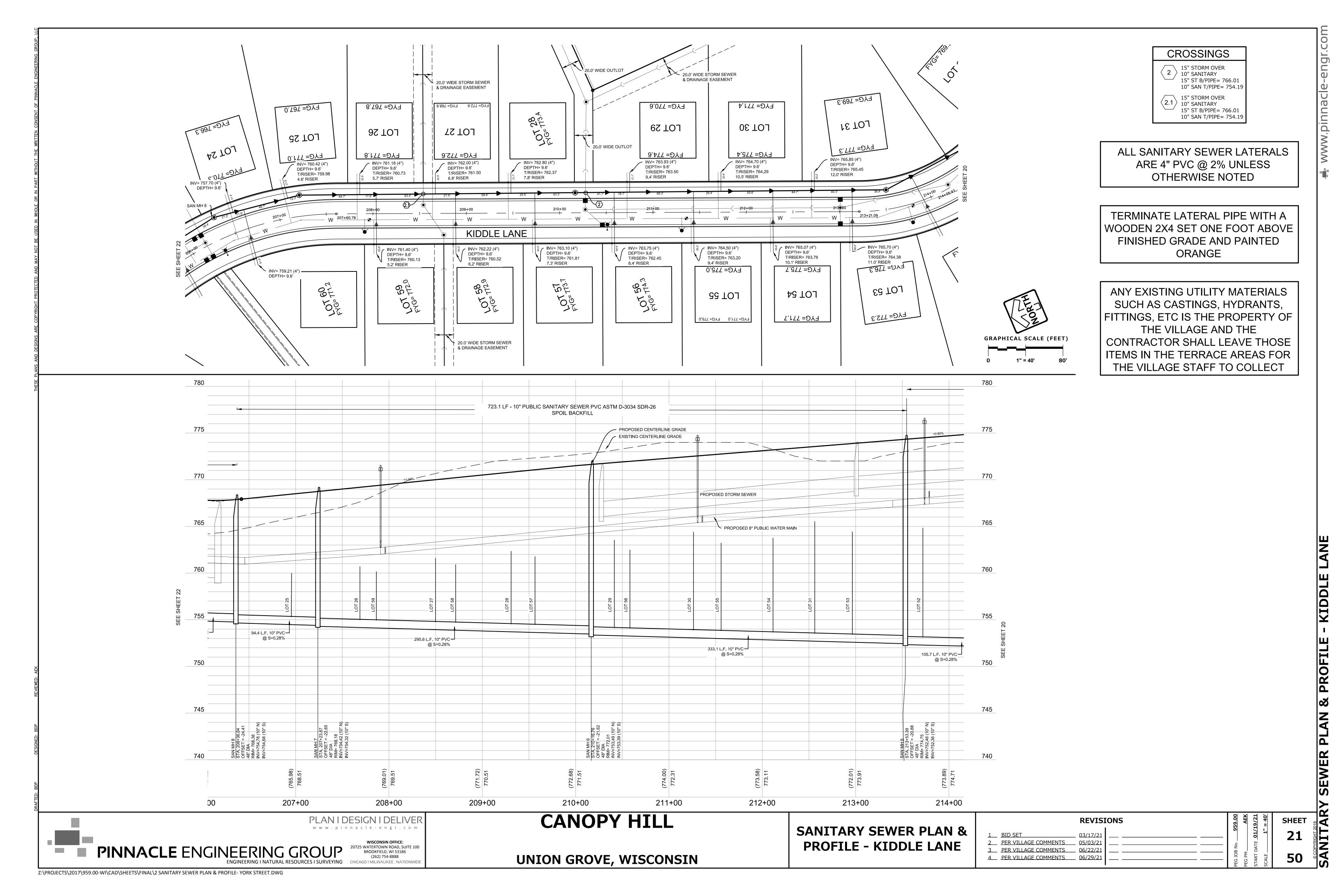


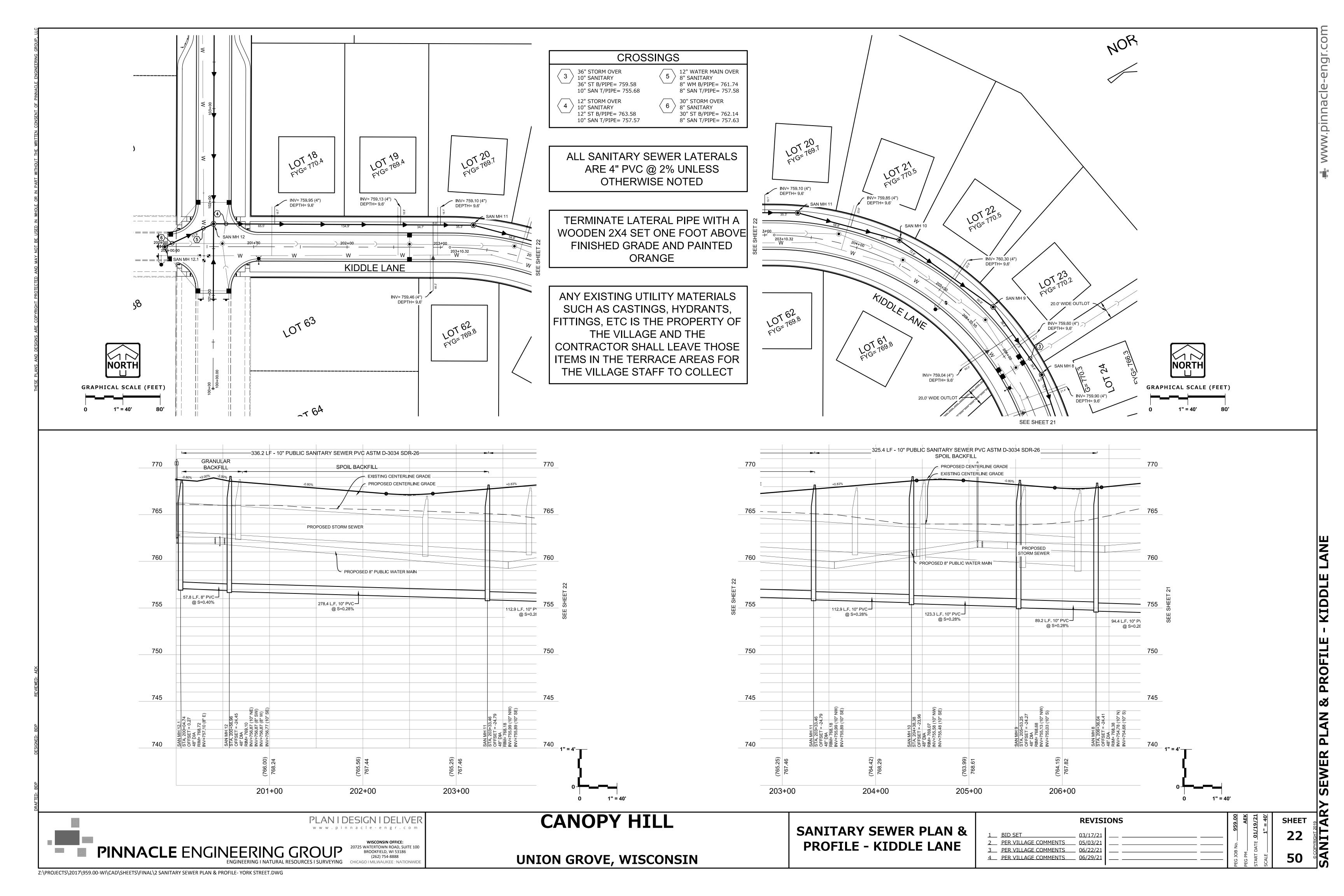


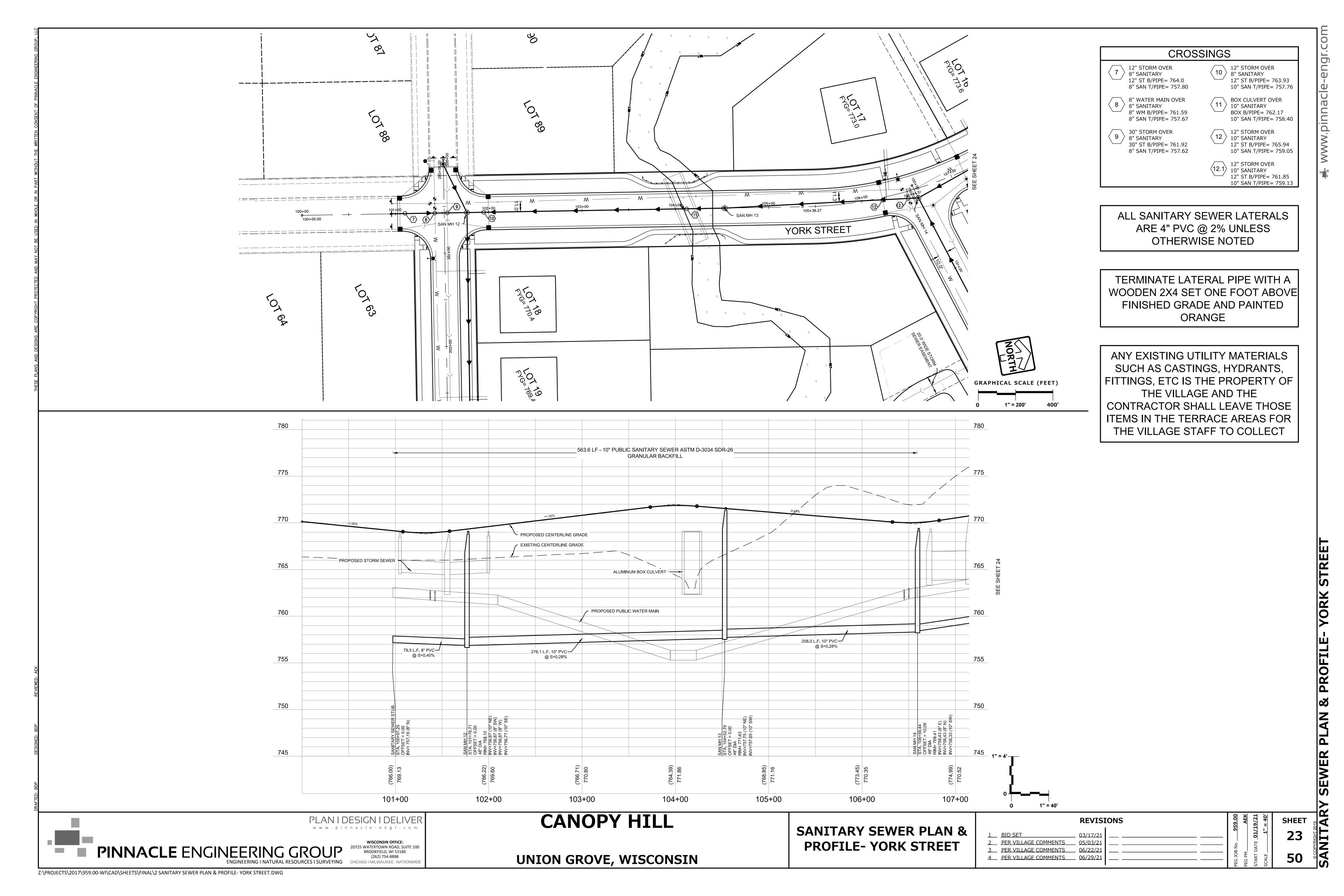


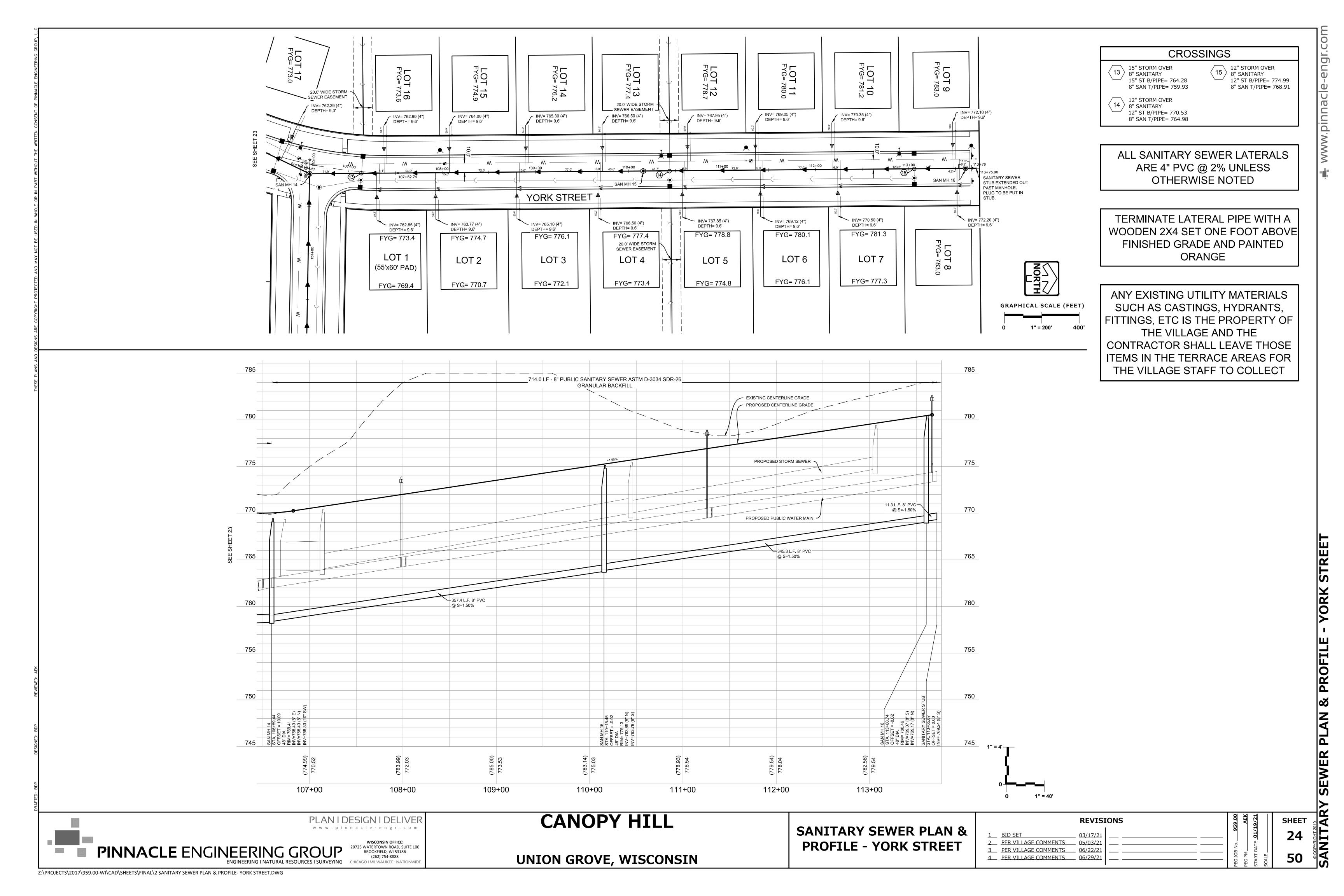


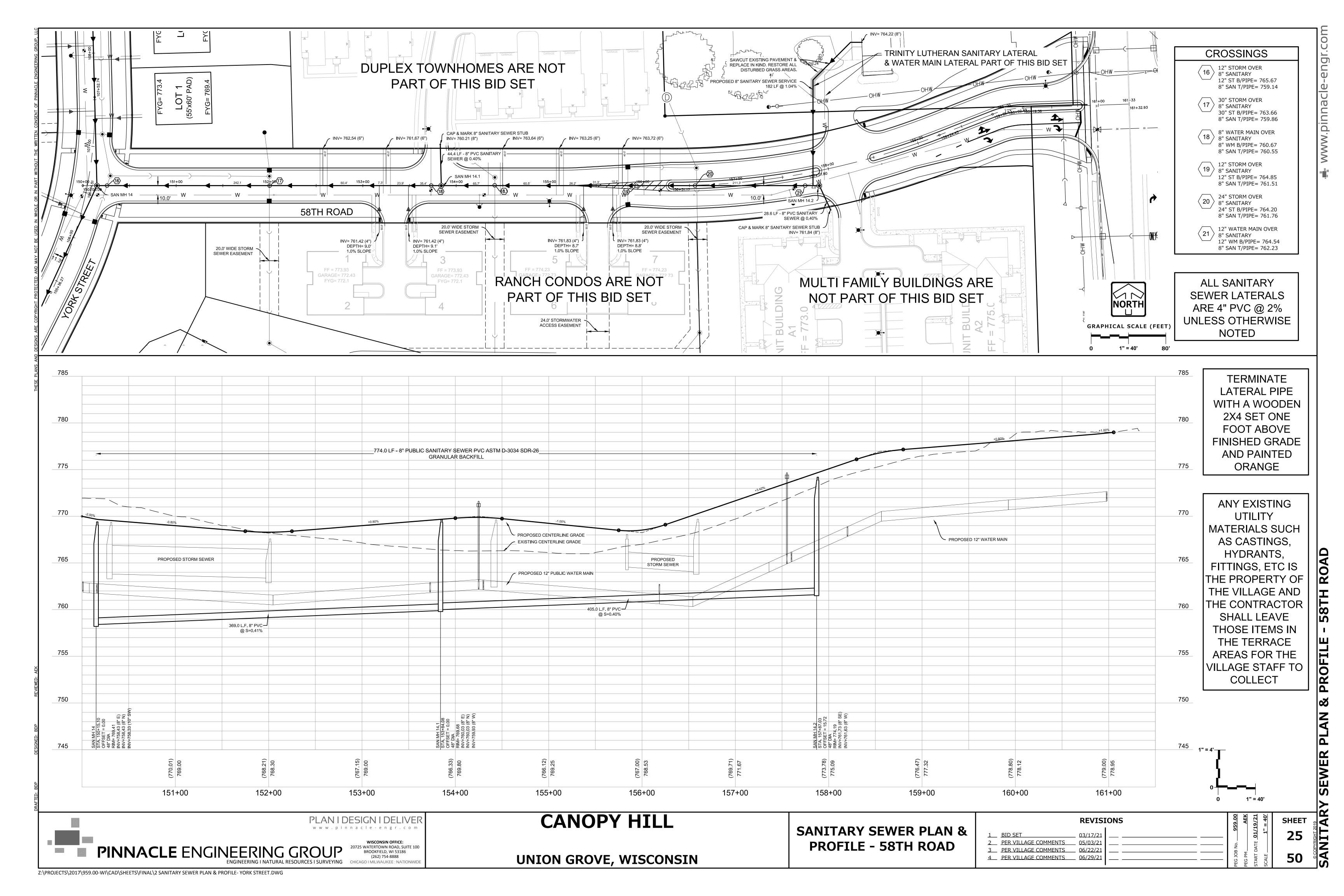


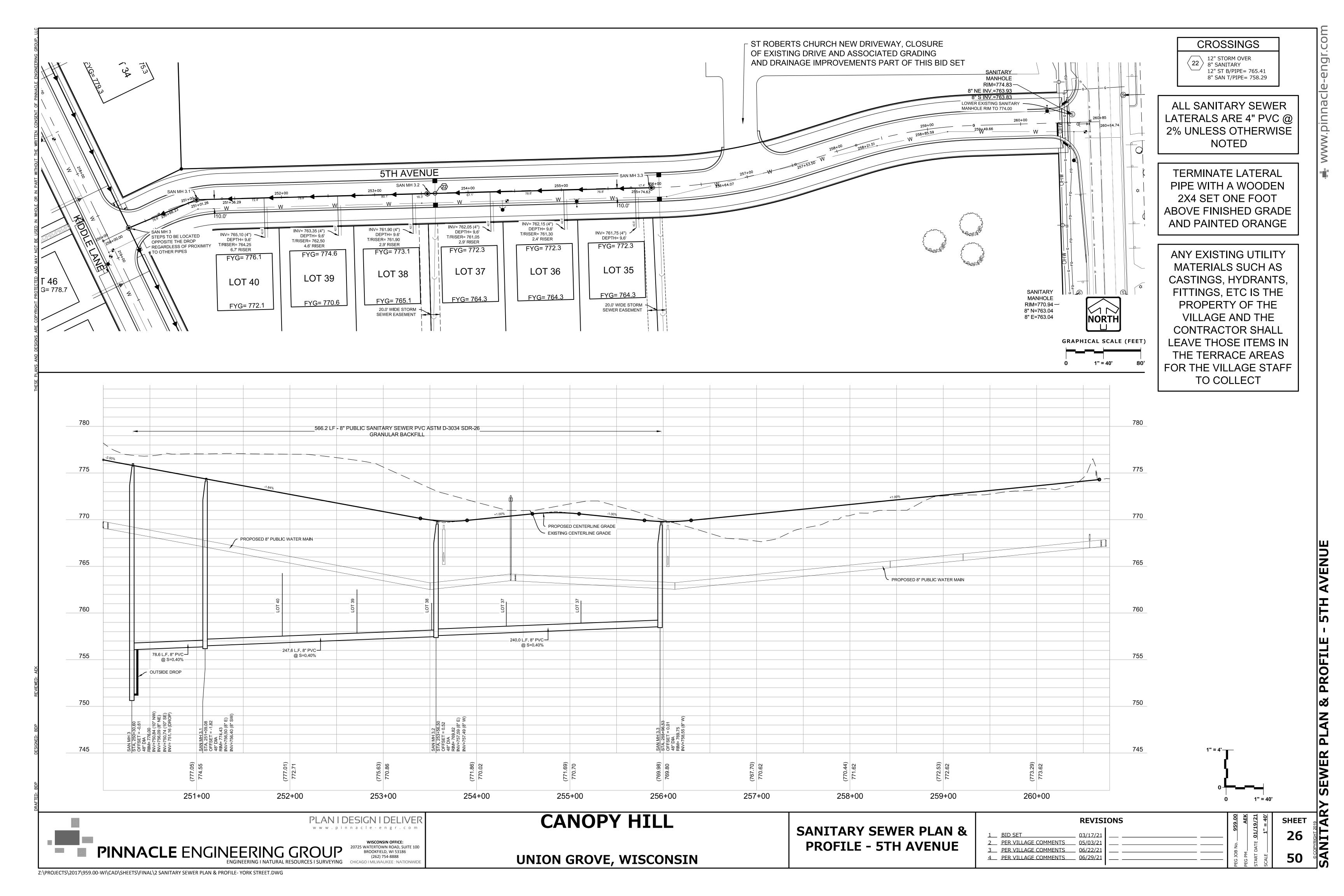


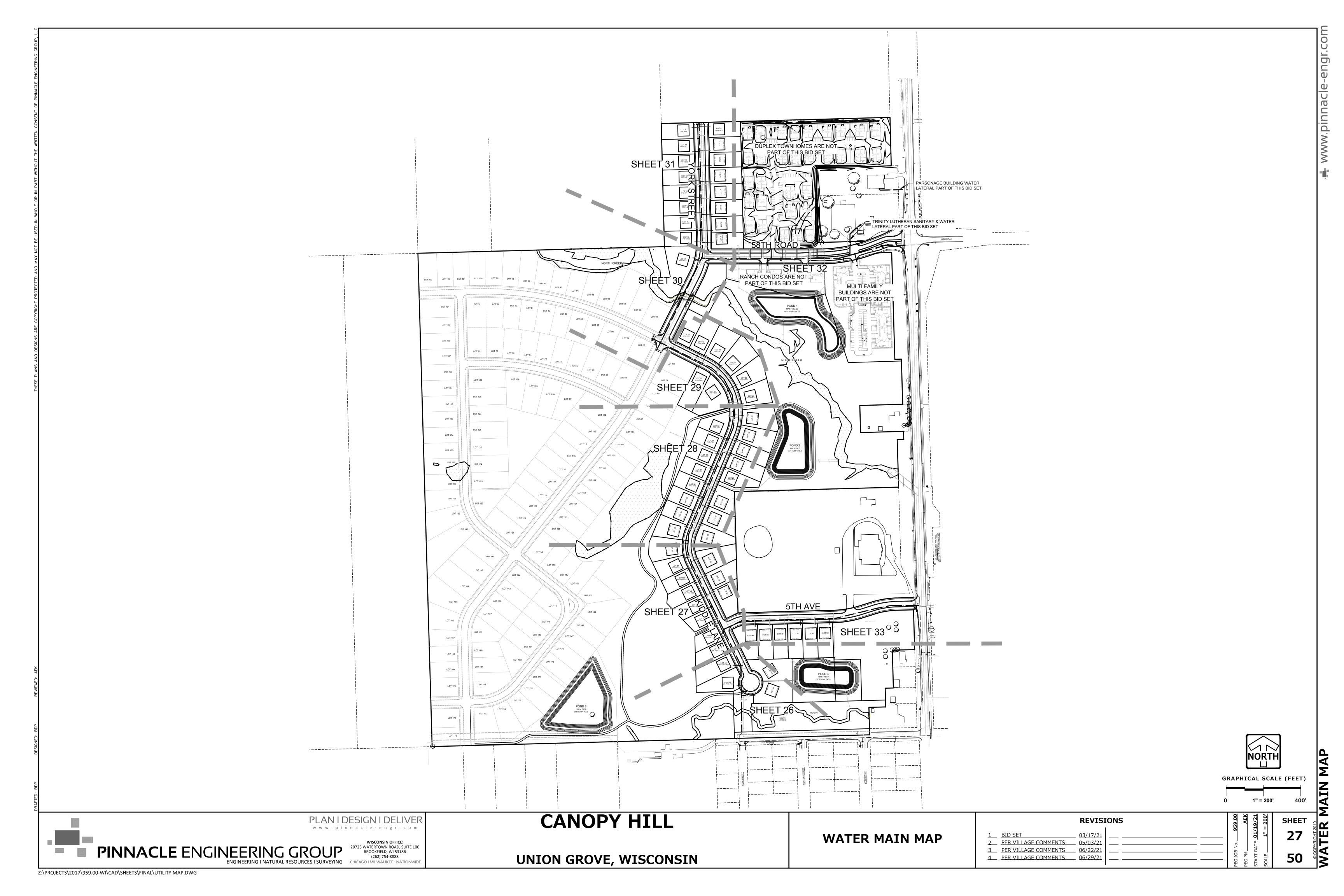


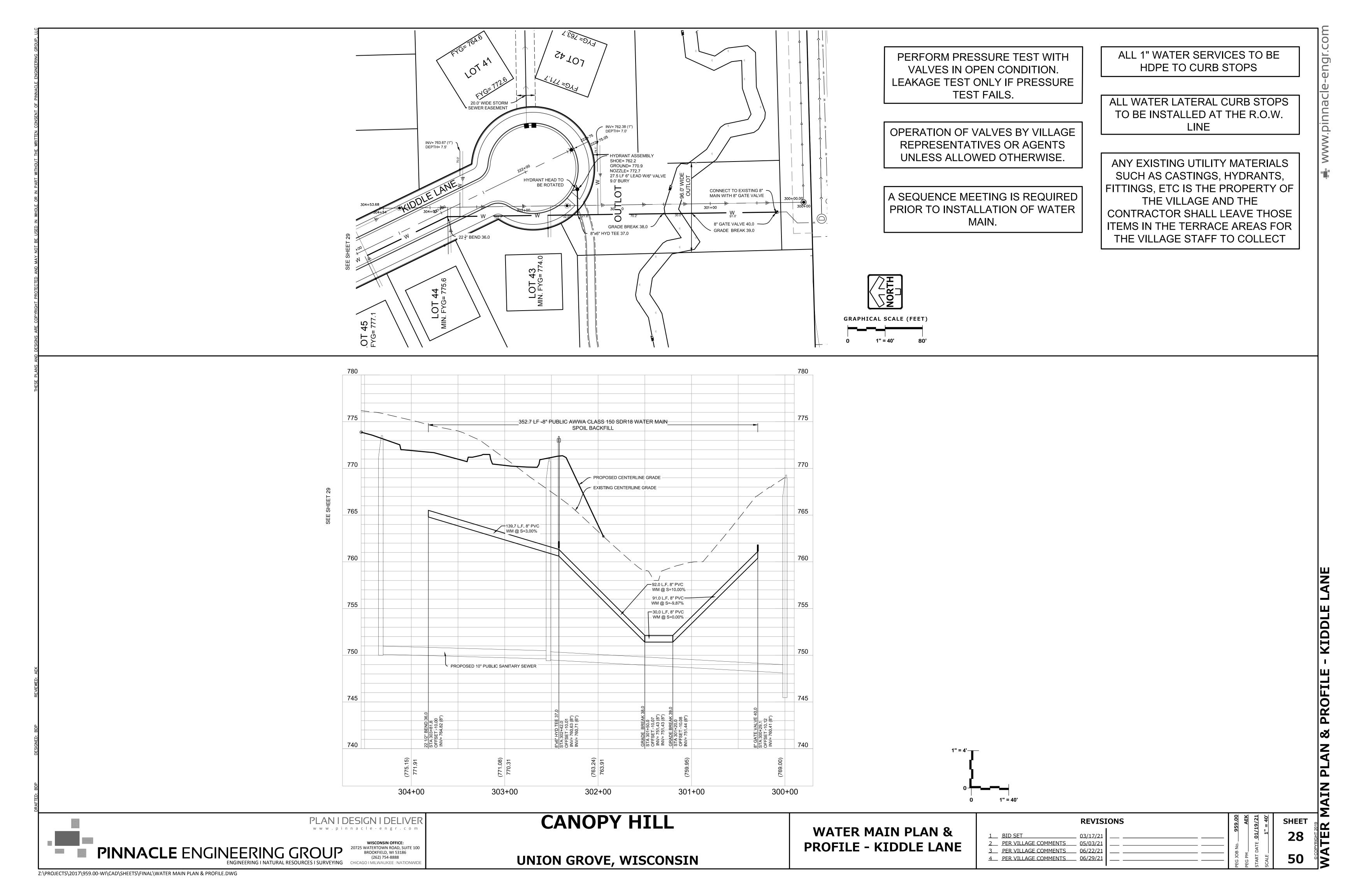


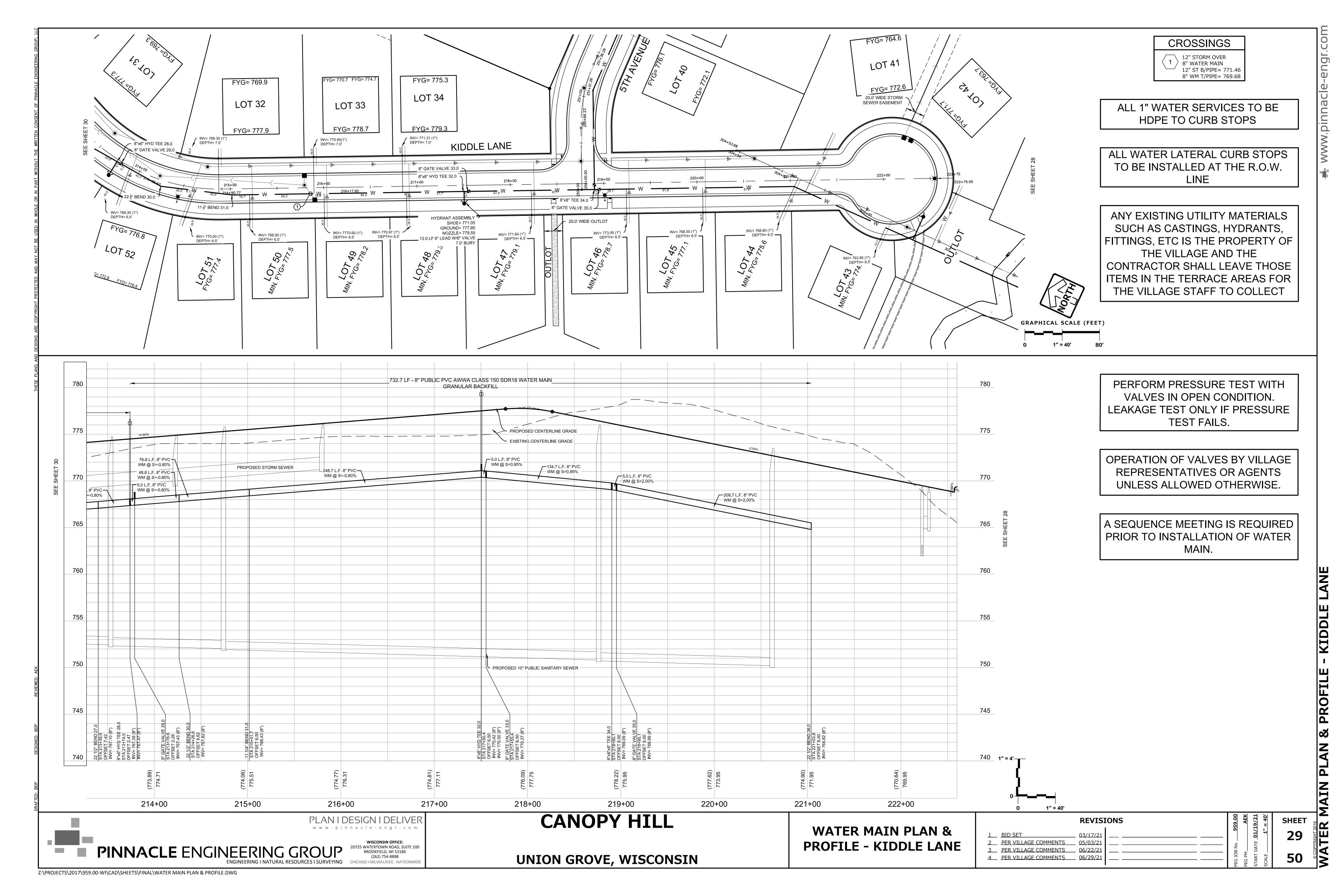


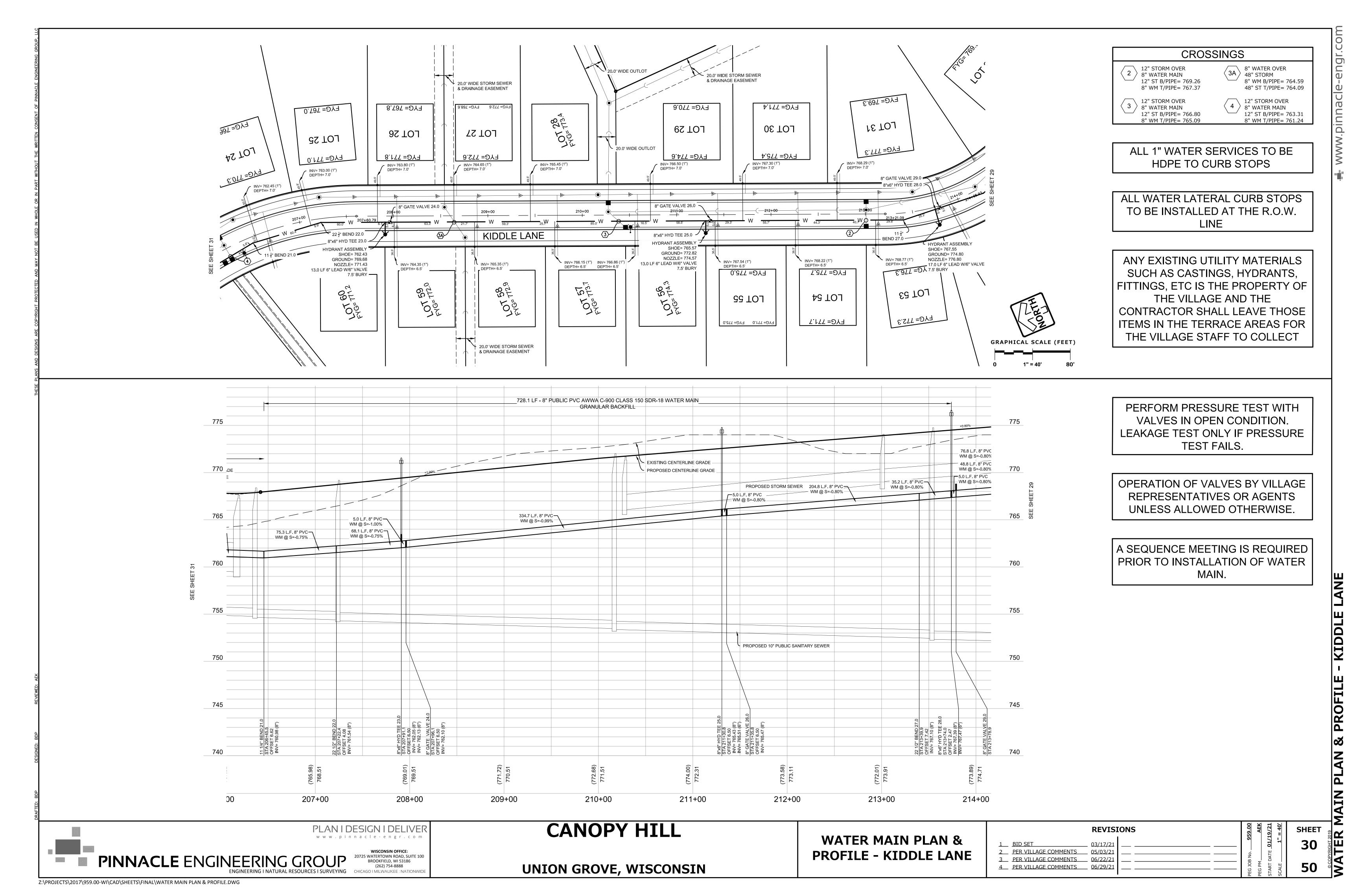


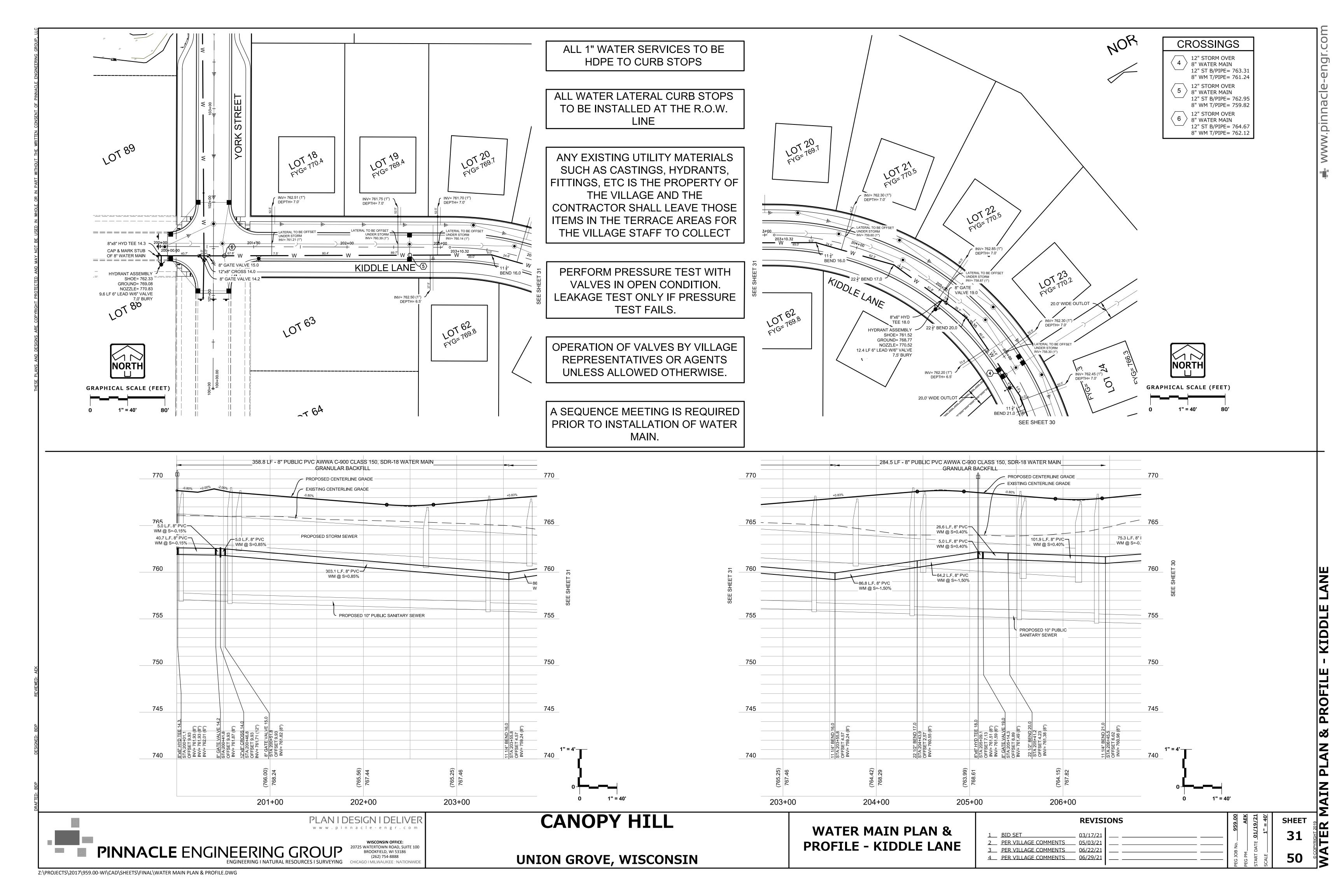


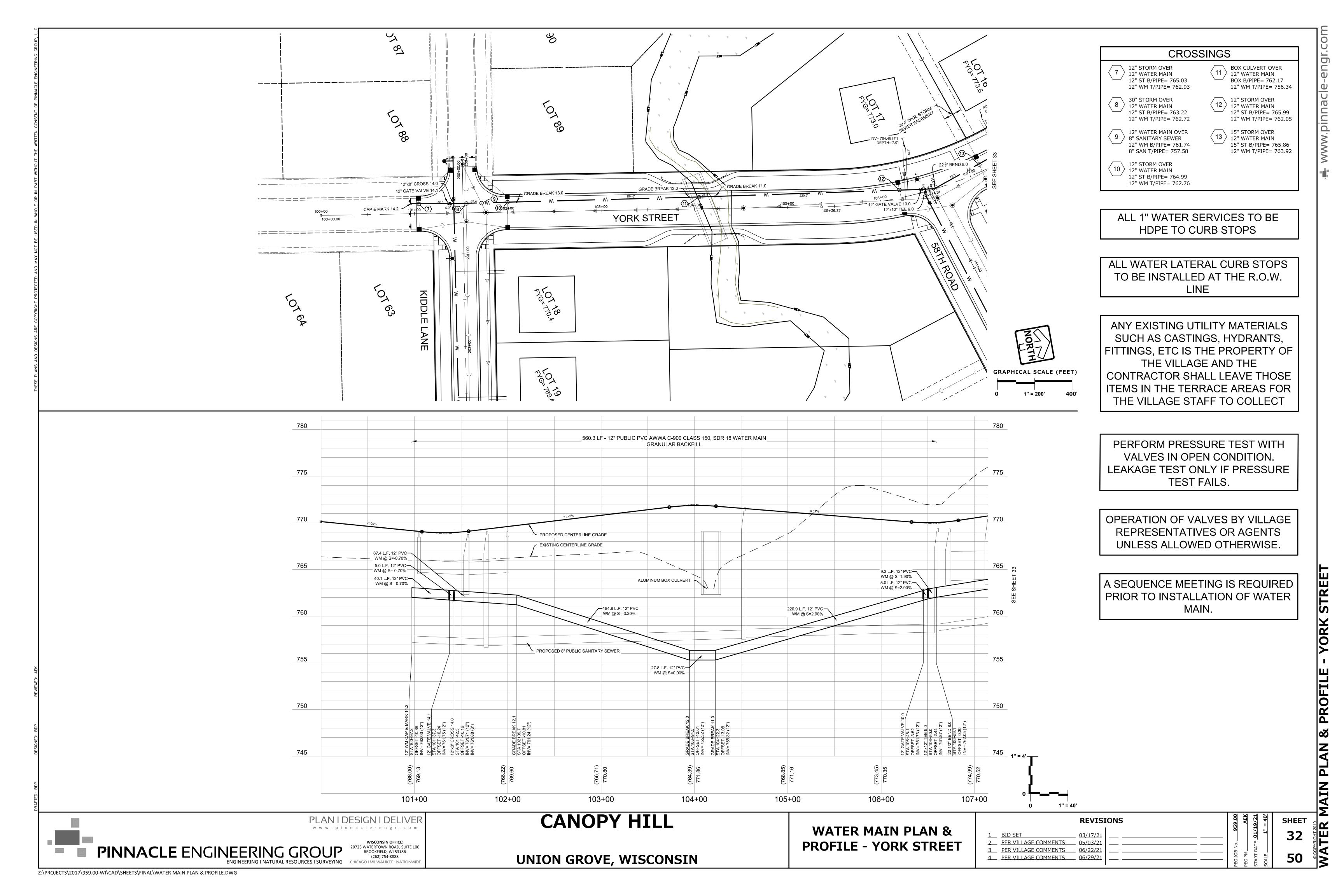


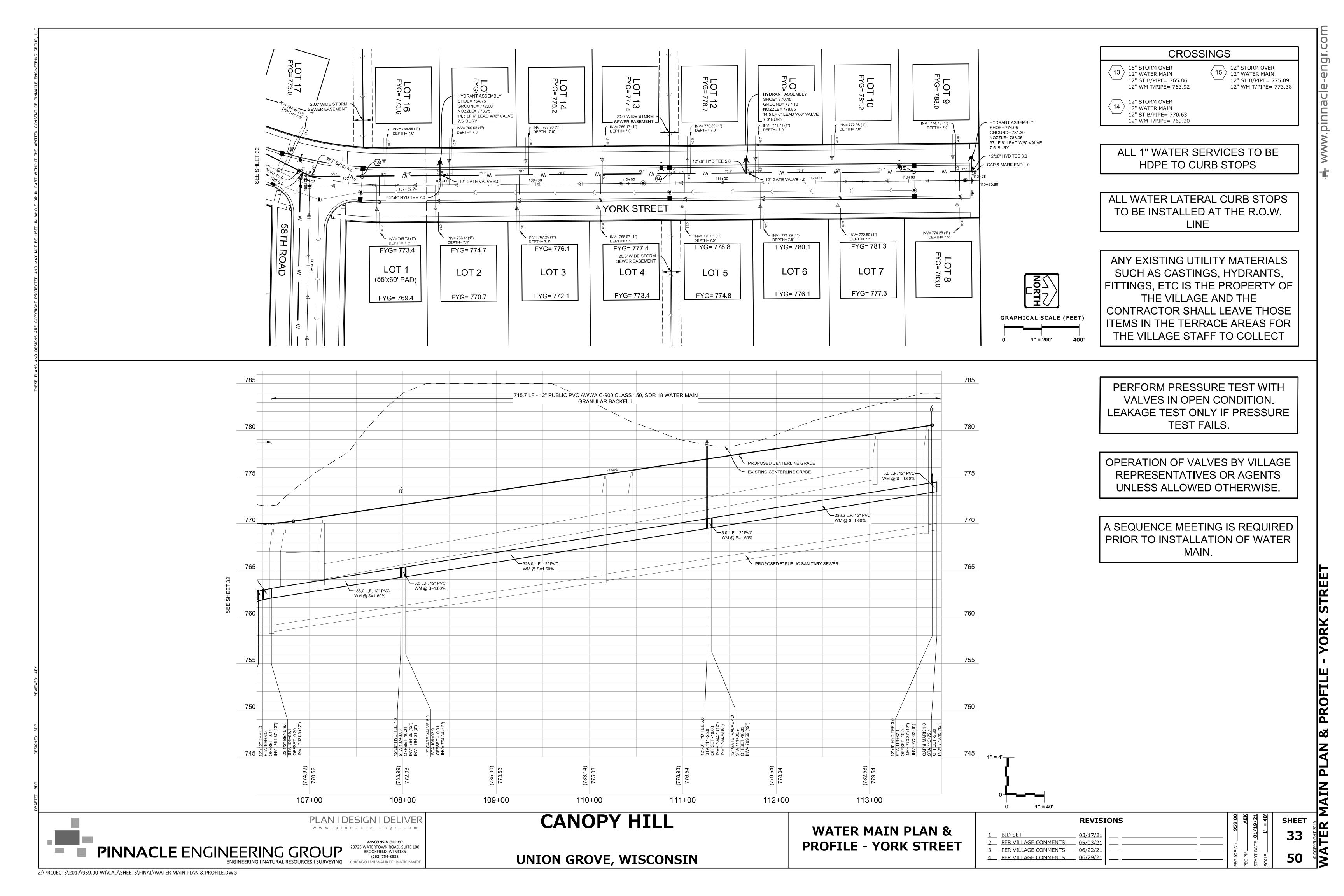


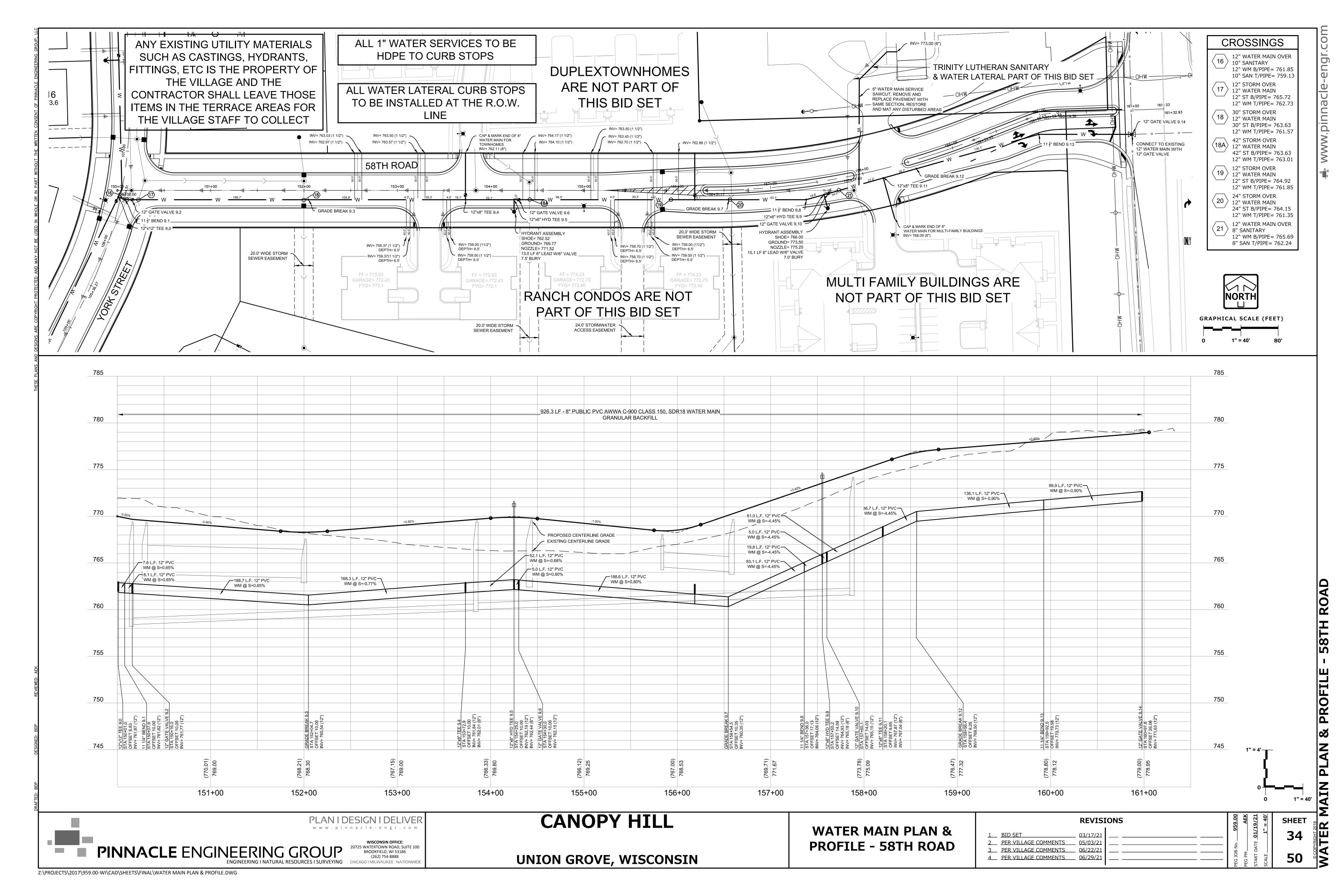


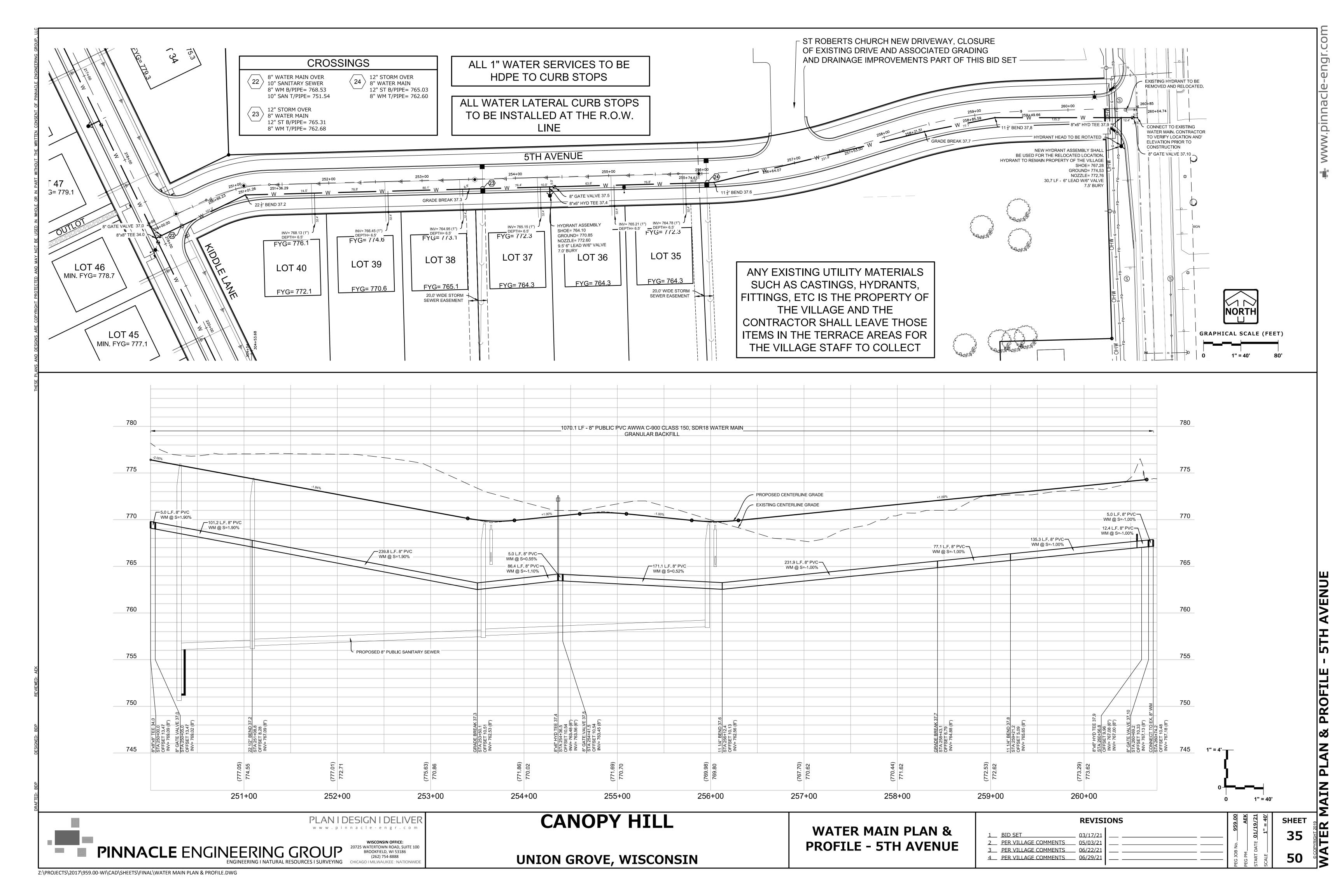


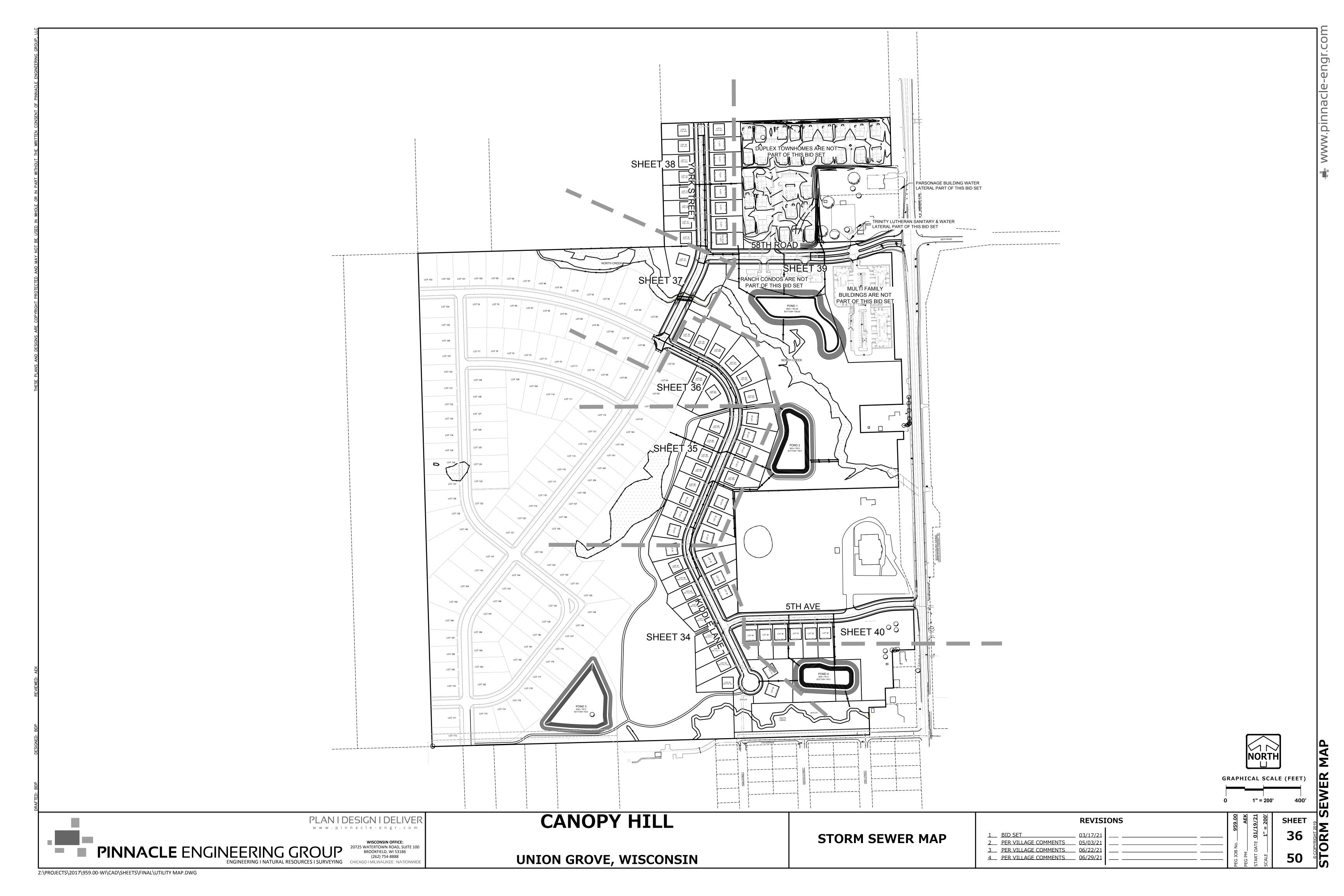


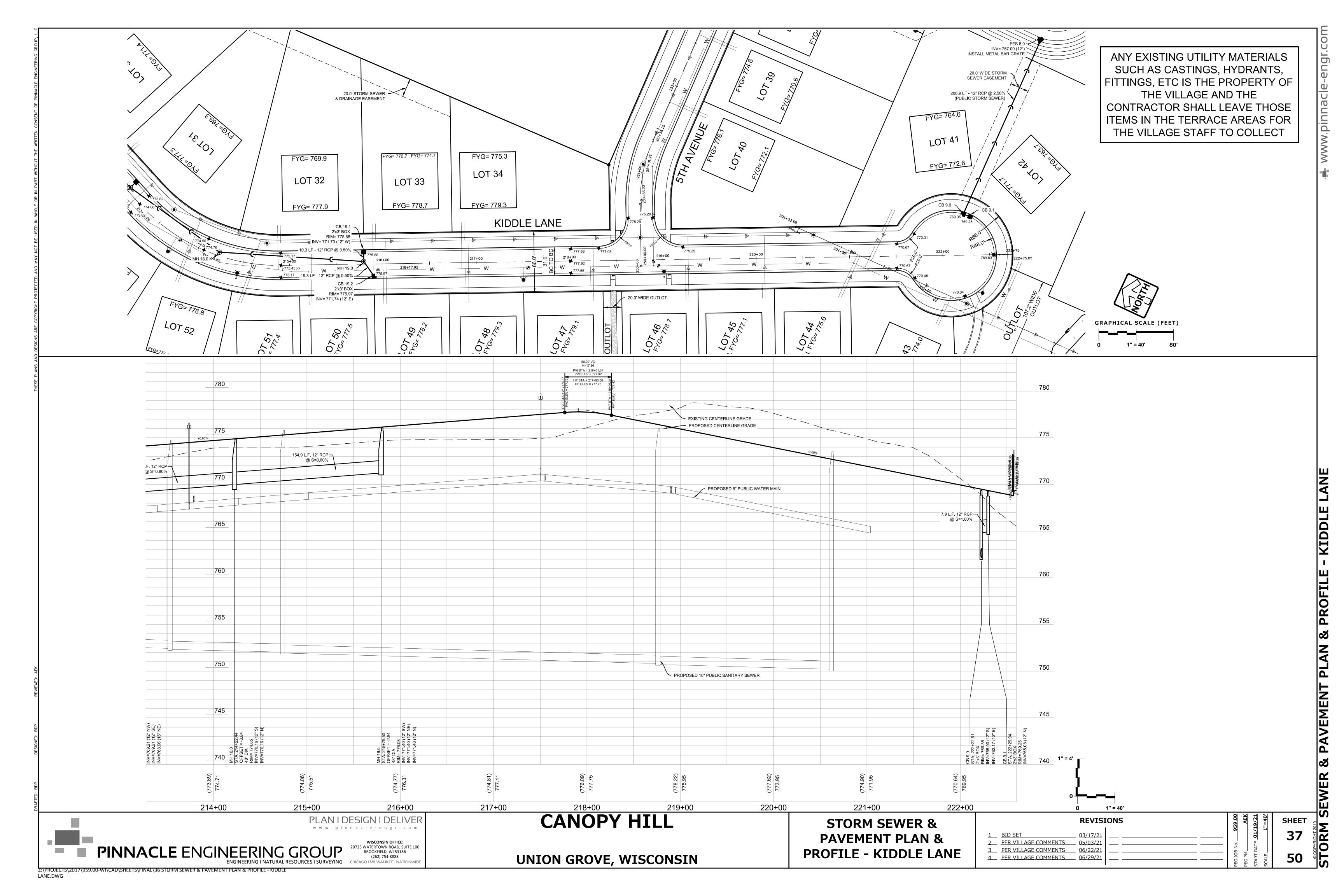


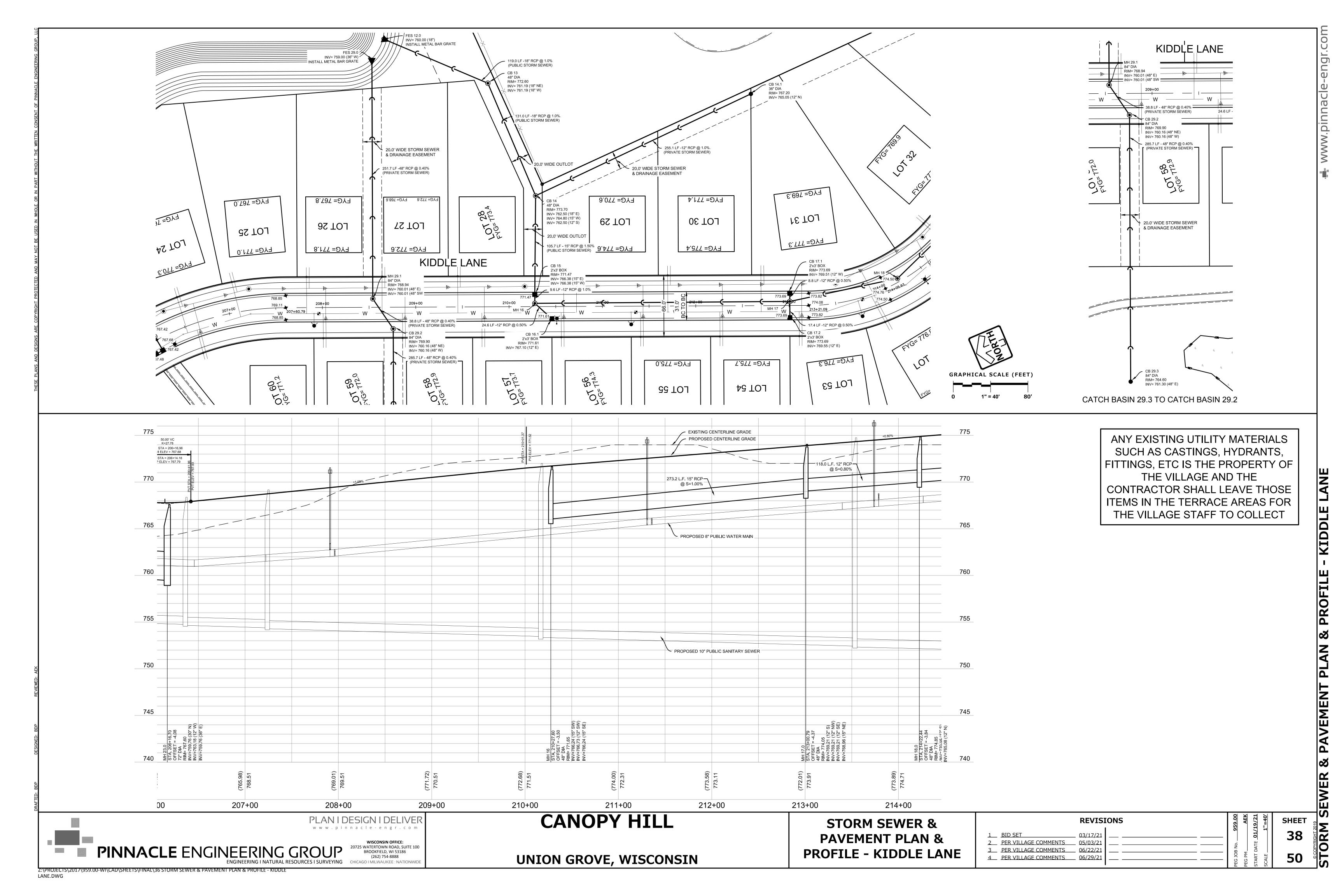


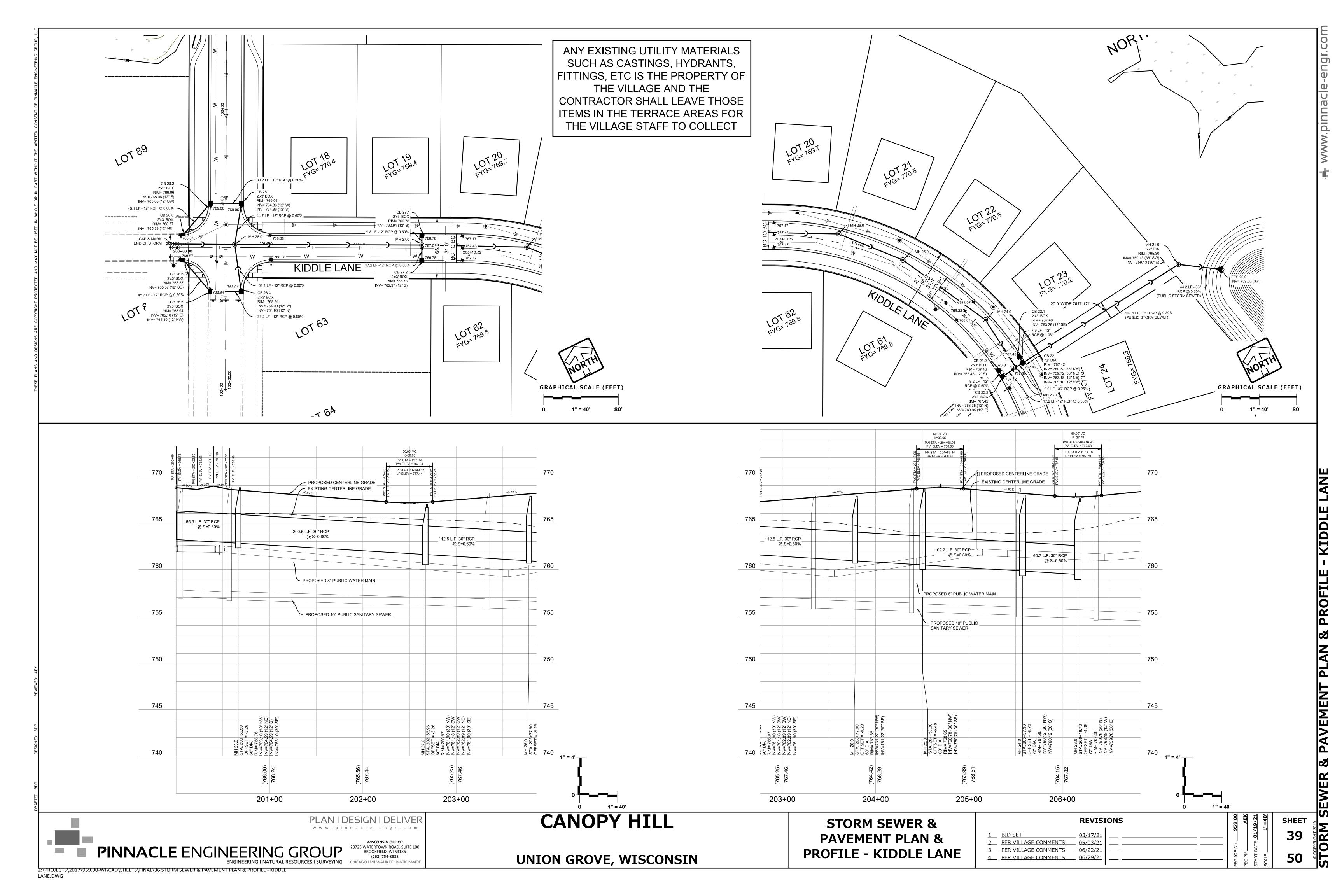


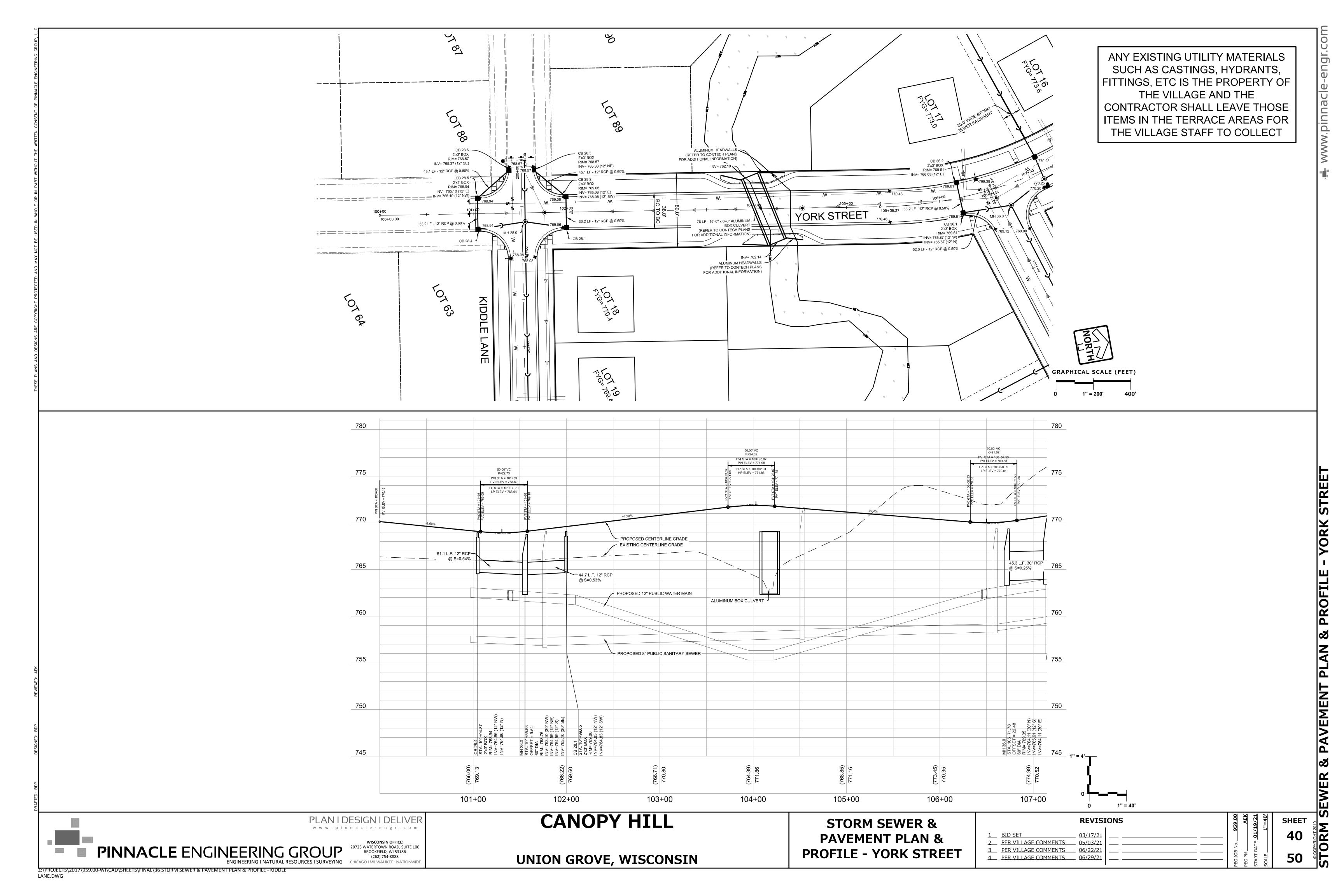


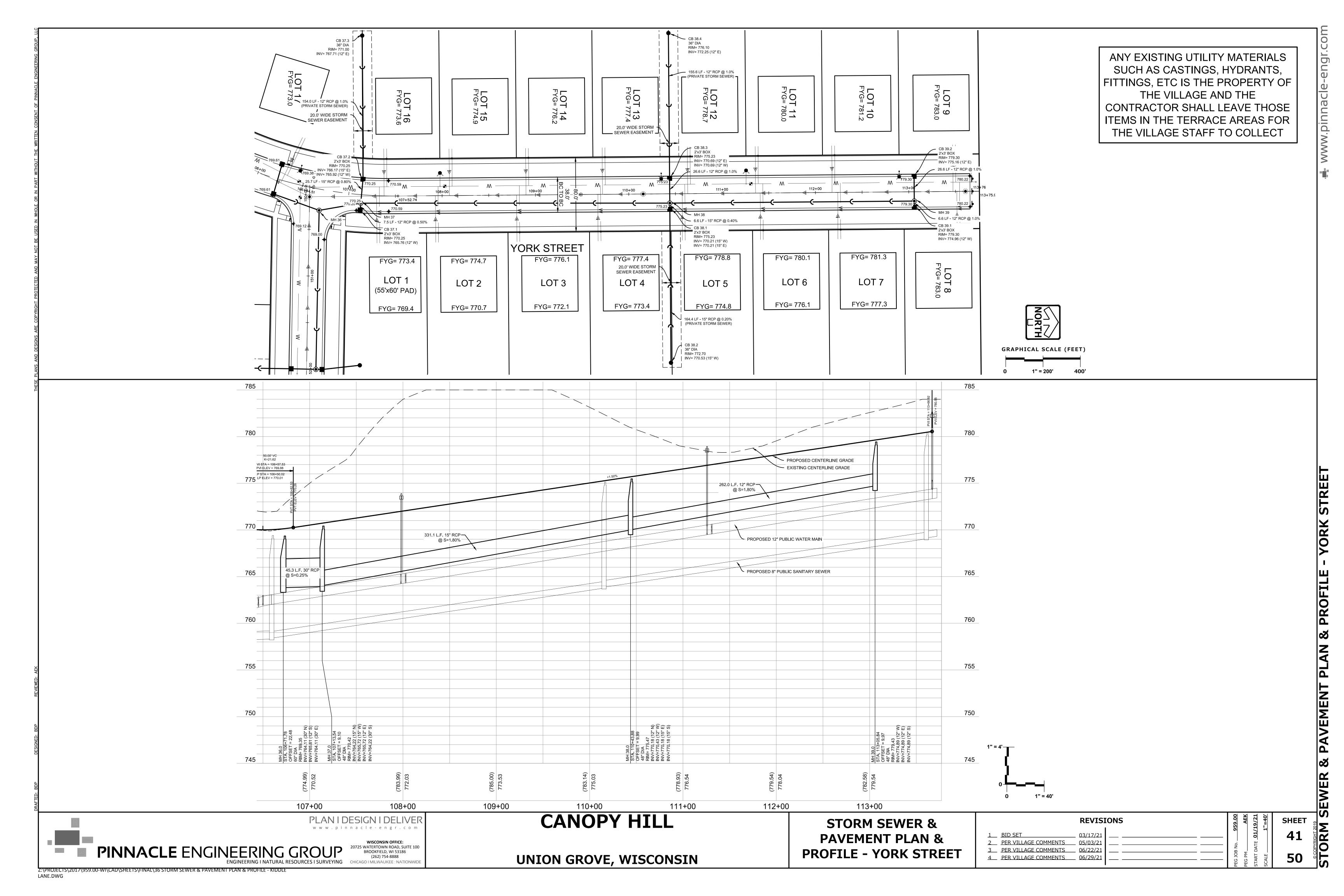


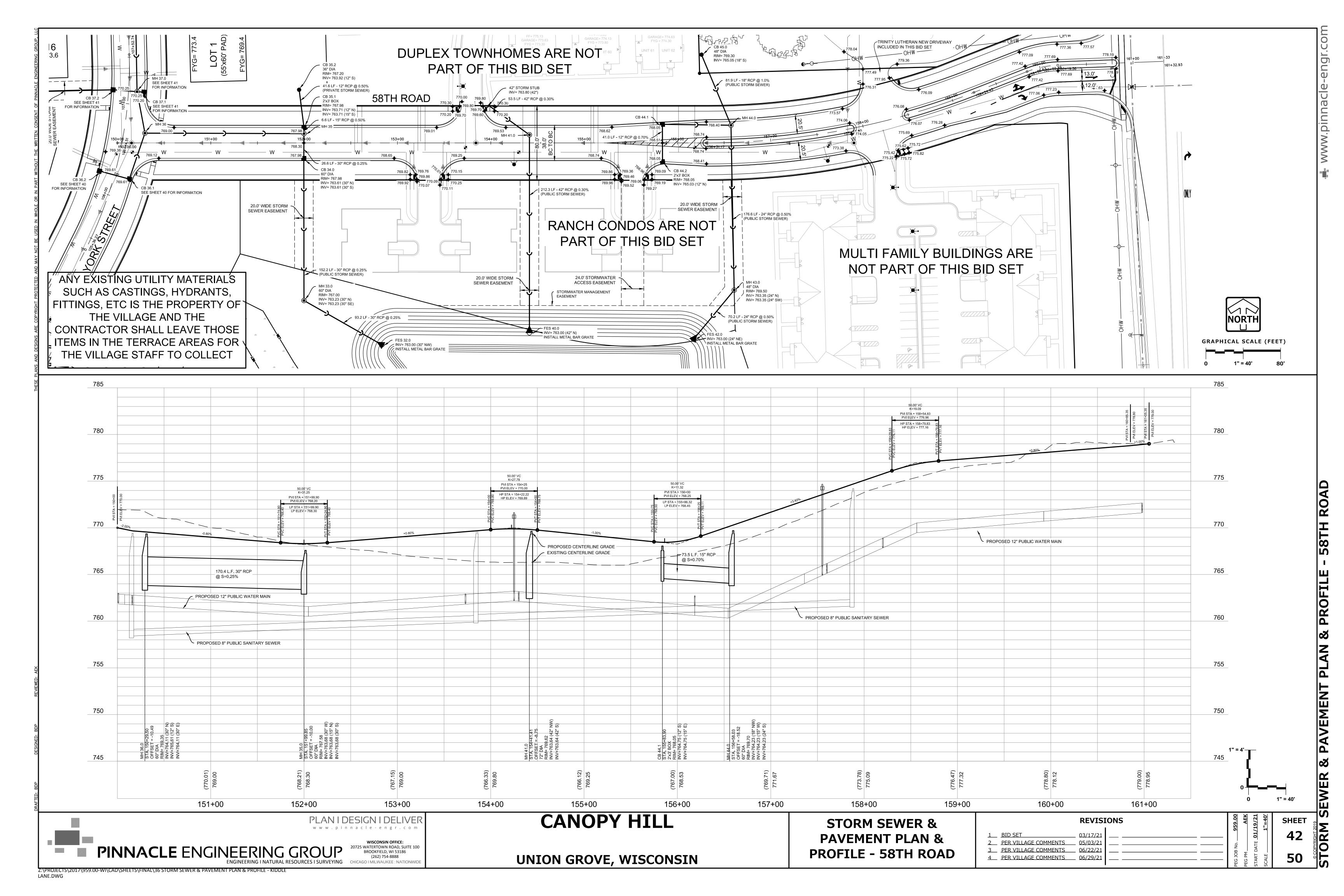


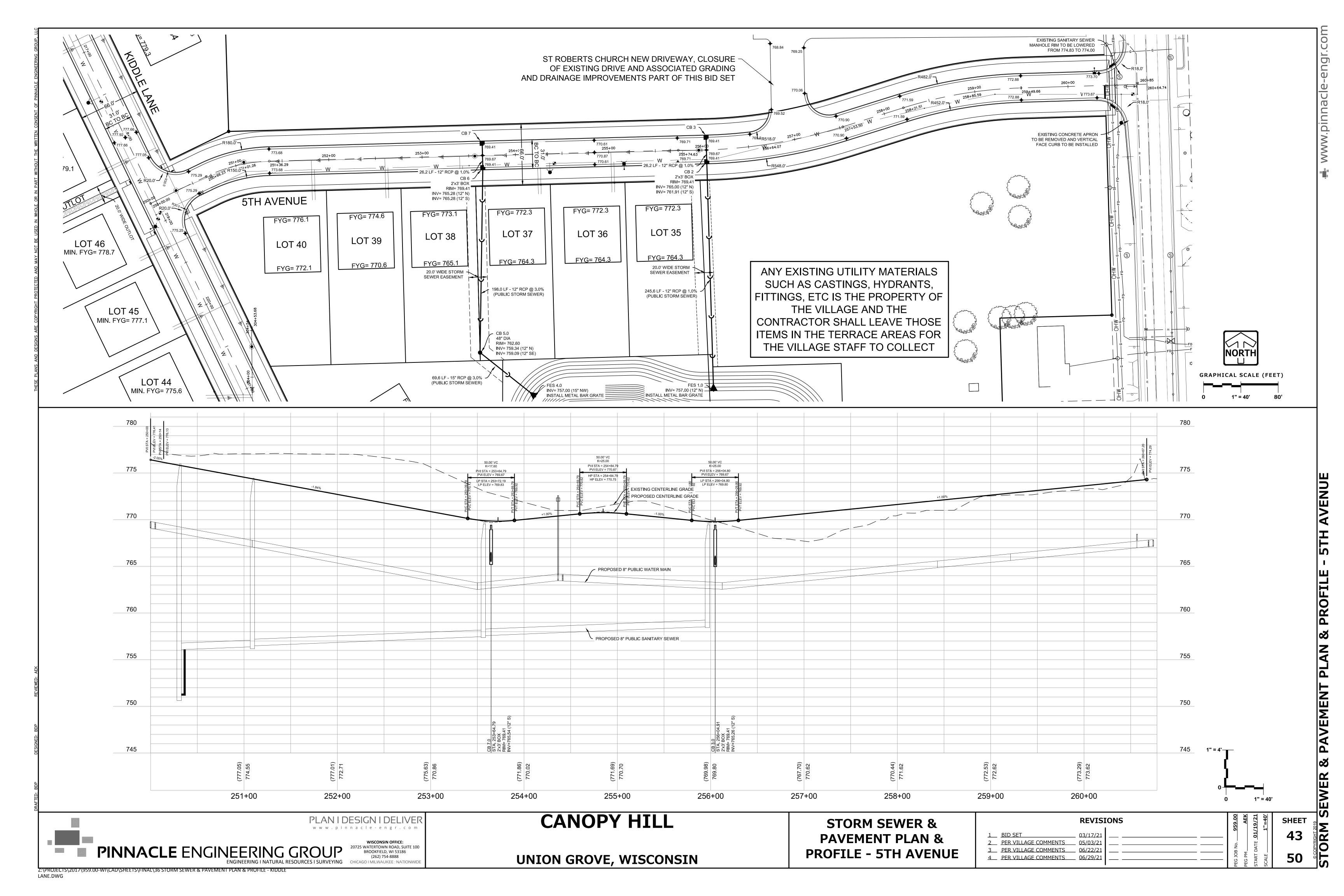












GENERAL SPECIFICATIONS FOR CONSTRUCTION ACTIVITIES

- 1. THE PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED ACCORDING TO THE WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION, THE STANDARD SPECIFICATIONS FOR SEWER & WATER IN WISCONSIN, AND WISCONSIN ADMINISTRATIVE CODE, SPS 360, 382-383, AND THE LOCAL ORDINANCES AND SPECIFICATIONS.
- 2. THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR EXECUTION OF THE WORK, THE CONTRACTOR SHALL CONDUCT HIS WORK ACCORDING TO THE REQUIREMENTS OF THE PERMITS
- 3. THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE MUNICIPALITY FORTY- EIGHT (48) HOURS PRIOR TO THE START OF CONSTRUCTION.
- 4. THE MUNICIPALITY SHALL HAVE THE RIGHT TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF THE PUBLIC PORTIONS OF THE WORK. THE OWNER SHALL HAVE THE RIGHT TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF ALL PRIVATE PORTIONS OF THE WORK.
- 5. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, THE ENGINEER, AND THE MUNICIPALITY, THEIR AGENTS, ETC, FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.
- SITE SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR 7. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL UTILITY INFORMATION SHOWN ON THE PLANS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL CALL DIGGER'S HOTLINE AT 1-800-242-8511 TO NOTIFY THE UTILITIES OF HIS INTENTIONS, AND TO REQUEST
- 8. SILT FENCE AND OTHER EROSION CONTROL FACILITIES MUST BE INSTALLED PRIOR TO CONSTRUCTION OR ANY OTHER LAND DISTURBING ACTIVITY. FOLLOW THE SEQUENCE OF CONSTRUCTION ON THE EROSION CONTROL PLAN FOR MORE DETAILS. INSPECTIONS SHALL BE MADE WEEKLY OR AFTER EVERY RAINFALL OF 0.5" OR MORE. REPAIRS SHALL BE MADE IMMEDIATELY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL EROSION CONTROL FACILITIES ONCE THE THREAT OF EROSION HAS PASSED WITH THE APPROVAL OF THE GOVERNING
- 9. ANY ADJACENT PROPERTIES OR ROAD RIGHT-OF-WAYS WHICH ARE DAMAGED DURING. CONSTRUCTION MUST BE RESTORED BY THE CONTRACTOR.
- 10. TRASH AND DEBRIS SHALL BE NOT BE ALLOWED TO ACCUMULATE ON THIS SITE AND THE SITE SHALL BE CLEAN UPON COMPLETION OF WORK.
- 11. THE OWNER SHALL HAVE THE RIGHT TO HAVE ALL MATERIALS USED IN CONSTRUCTION TESTED FOR COMPLIANCE WITH THESE SPECIFICATIONS.

SPECIFICATIONS FOR GRADING & EROSION CONTRO

FIELD STAKING OF EXISTING UTILITIES.

- 1. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE COMPUTATIONS OF ALL GRADING AND FOR ACTUAL LAND BALANCE, INCLUDING UTILITY TRENCH SPOIL. THE CONTRACTOR SHALL IMPORT OR EXPORT MATERIAL AS NECESSARY TO COMPLETE THE PROJECT. CONTRACTOR SHALL NOTIFY OWNER OF THE NEED TO IMPORT OR HAUL OFF SOIL. ON-SITE LOCATIONS SUITABLE FOR BORROW OR FILL MAY BE PRESENT. COORDINATE WITH OWNER.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING SOIL CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. A GEOTECHNICAL REPORT MAY BE AVAILABLE FROM THE OWNER.
- 3. SITE SHALL BE CLEARED TO THE LIMITS SHOWN ON THE PLANS. REMOVE VEGETATION FROM THE SITE. BURNING IS NOT PERMITTED. PROTECT TREES AND OTHER FEATURES FROM DAMAGE WITH FENCING. STOCKPILES SHALL NOT BE LOCATED CLOSER THAN 25' TO A DRAINAGE STRUCTURE OR FEATURE AND SHALL BE SURROUNDED WITH SILT FENCE. 4. THE GEOTECHNICAL ENGINEER IS RESPONSIBLE FOR VERIFYING COMPACTION AND FILL PLACEMENT IN THE FIELD. THE GEOTECHNICAL ENGINEER MAY SUPERCEDE THESE SPECIFICATIONS IF THERE IS GOOD CAUSE TO DO SO. AN EXPLANATION MUST BE SUBMITTED TO THE ENGINEER
- IN WITTING BEFORE ANY DEVIATIONS ARE MADE. 5. IF NO GEOTECHNICAL RECOMMENDATION IS AVAILABLE, THEN THE FOLLOWING SPECIFICATIONS SHALL APPLY. ALL FILL SHALL BE CONSIDERED STRUCTURAL FILL AND SHALL BE PLACED IN ACCORDANCE WITH THE FOLLOWING: THE COMPACTED FILL SUBGRADE SHALL CONSIST OF AND SHALL BE UNDERLAIN BY SUITABLE BEARING MATERIALS, FREE OF ALL ORGANIC, FROZEN OR OTHER DELETERIOUS MATERIAL AND INSPECTED AND APPROVED BY THE RESIDENT GEOTECHNICAL ENGINEER. PREPARATION OF THE SUBGRADE, AFTER STRIPPING, SHALL CONSIST OF PROOF-ROLLING TO DETECT UNSTABLE AREAS THAT MIGHT BE UNDERCUT, AND COMPACTING THE SCARIFIED SURFACE TO THE SAME MINIMUM DENSITY INDICATED BELOW. THE COMPACTED FILL MATERIALS SHALL BE FREE OF ANY DELETERIOUS, ORGANIC OR FROZEN MATTER AND SHALL HAVE A MAXIMUM LIQUID LIMIT (ASTM-D-423) AND PLASTICITY INDEX (ASTM D-424) IF 30 AND 10 RESPECTFULLY, UNLESS SPECIFICALLY TESTED AND FOUND TO HAVE LOW EXPANSIVE PROPERTIES AND APPROVED BY AN EXPERIENCED SOILS ENGINEER. THE TOP TWELVE (12") INCHES OF COMPACTED FILL SHOULD HAVE A MAXIMUM THREE (3") INCH PARTICLE DIAMETER AND ALL UNDERLYING COMPACTED FILL A MAXIMUM SIX (6") INCH PARTICLE DIAMETER UNLESS SPECIFICALLY APPROVED BY AN EXPERIENCED SOILS ENGINEER. ALL FILL MATERIAL MUST BE TESTED AND APPROVED LINDER THE DIRECTION AND SUPERVISION OF AN EXPERIENCED SOILS ENGINEER PRIOR TO PLACEMENT, IF THE FILL IS TO PROVIDE NON-FROST SUSCEPTIBLE CHARACTERISTICS, IT MUST BE CLASSIFIED AS A CLEAN GW. GP. SW. OR SP. PER UNITED SOIL
- CLASSIFICATION SYSTEM (ASTM D-2487). FOR STRUCTURAL FILL THE DENSITY OF THE STRUCTURAL COMPACTED FILL AND SCARIFIED SUBGRADE AND GRADES SHALL NOT BE LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR (ASTM D-698) WITH THE EXCEPTION TO THE TOP 12 INCHES OF PAVEMENT SUBGRADE WHICH SHALL A MINIMUM IN-SITU DENSITY, OR 5 PERCENT HIGHER THAN UNDERLYING FILL MATERIALS. THE MOISTURE CONTENT OF COHESIVE SOIL SHALL NOT VARY BY MORE THAN -1 TO +3 PERCENT AND GRANULAR SOIL ±3 PERCENT OF OPTIMUM WHEN PLACED AND COMPACTED, UNLESS SPECIFICALLY APPROVED BY THE SOILS ENGINEER TAKING INTO CONSIDERATION THE TYPE OF MATERIALS AND COMPACTION EQUIPMENT BEING USED. THE COMPACTION EQUIPMENT SHOULD CONSIST OF SUITABLE MECHANICAL EQUIPMENT SPECIFICALLY DESIGNED FOR SOIL COMPACTION. BULLDOZERS OR SIMILAR TRACKED VEHICLES ARE TYPICALLY NOT SUITABLE FOR COMPACTION. MATERIAL THAT IS TOO WET TO PERMIT PROPER COMPACTION MAY BE SPREAD ON THE FILL AND PERMITTED TO DRY. DISCING, HARROWING OR PULVERIZING MAY BE NECESSARY TO REDUCE THE MOISTURE CONTENT TO A SATISFACTORY VALUE, AFTER WHICH IT SHALL BE COMPACTED. THE FINISHED SUBGRADE AREAS OF THE SITE SHALL BE COMPACTED TO 100 PERCENT OF THE STANDARD PROCTOR (ASTM D-398) MAXIMUM DENSITY
- 6. NO FILL SHALL BE PLACED ON A WET OR SOFT SUBGRADE. THE SUBGRADE SHALL BE PROOF-ROLLED AND INSPECTED BY THE GEOTECHNICAL ENGINEER BEFORE ANY MATERIAL IS PLACED.
- 7. SUBGRADE TOLERANCES ARE +/-1" FOR LANDSCAPE AREAS AND +/- 1/2" FOR ALL PAVEMENT AND BUILDING AREAS. 8. TOPSOIL SHALL BE FREE OF DELETERIOUS MATERIALS, ROOTS, OLD VEGETATION, ROCKS OVER 2" DIAMETER AND SHALL NOT BE EXCESSIVELY CLAYEY IN NATURE. NO CLUMPS LARGER THAN 4" ARE ACCEPTABLE. TOPSOIL MAY BE AMENDED AS NEEDED WITH SAND OR COMPOST TO BE
- 9. THE CONTRACTOR SHALL MAINTAIN SITE DRAINAGE THROUGHOUT CONSTRUCTION. THIS MAY INCLUDE THE EXCAVATION OF TEMPORARY DITCHES OR PUMPING TO ALLEVIATE WATER PONDING. ANY DEWATERING SHALL NOT GO DIRECTLY TO STREAMS, CREEKS, WETLANDS OR OTHER ENVIRONMENTALLY SENSITIVE AREAS WITHOUT BEING TREATED FIRST. A DIRT BAG OR OTHER DEWATERING TREATMENT DEVICE MAY BE USED TO CAPTURE SEDIMENT FROM THE PUMPED WATER
- 10. CONTRACTOR IS ADVISED THAT ALL MUD AND DEBRIS MUST NOT BE DEPOSITED ONTO THE ADJACENT ROADWAYS PER THE REQUIREMENT OF THE MUNICIPALITY OR OTHER APPROPRIATE GOVERNMENT AGENCIES. IN THE EVENT THIS OCCURS, THE ROADWAYS SHALL BE POWER SWEPT IMMEDIATELY AND ALL SEDIMENT REMOVED FROM DOWNSTREAM FACILITIES.

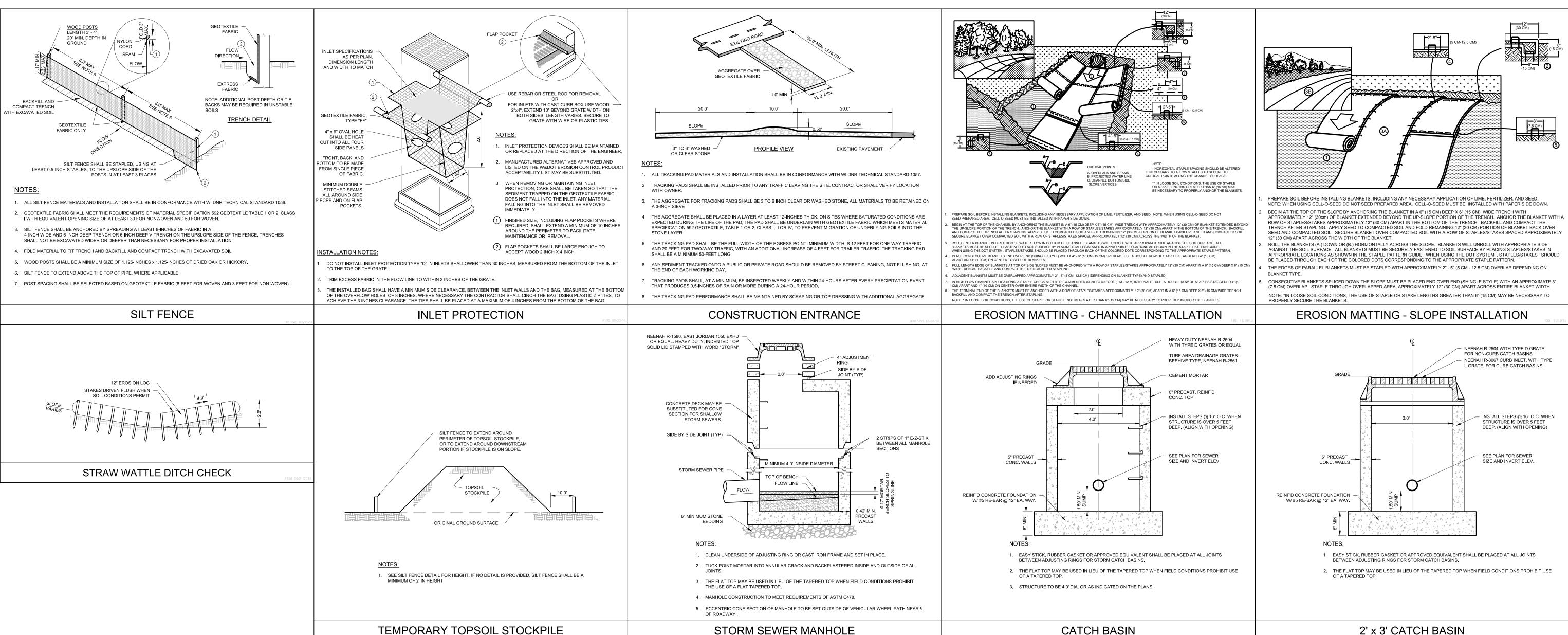
SPECIFICATIONS FOR PUBLIC UTILITIES

- 1. BEFORE PROCEEDING WITH ANY UTILITY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE EACH EXISTING LATERAL OR POINT OF CONNECTION AND VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES. IF ANY EXISTING UTILITIES ARE NOT AS SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR POSSIBLE REDESIGN.
- 2. ALL CONNECTIONS TO EXISTING PIPES AND MANHOLES SHALL BE CORED CONNECTIONS. CONNECTIONS TO WATERMAIN SHALL BE WET TAPED WITH A STAINLESS STEEP TAPPING SLEEVE.
- 3. PROPOSED SANITARY SEWER AND INTERNALLY CONNECTED STORM SEWER SHOWN ON THIS PLAN SHALL TERMINATE AT A POINT FIVE (5) FEET FROM THE EXTERIOR BUILDING WALL. THE EXACT LOCATION OF ALL DOWN SPOUTS CONNECTIONS SHALL BE PER THE ARCHITECTURAL
- 4. CONTRACTOR SHALL NOT SHUT OFF WATER OR PLUG SANITARY SEWER IN MUNICIPAL LINES WITHOUT PRIOR APPROVAL. 5. MATERIALS FOR STORM SEWER WITHIN RIGHT OF WAY SHALL BE A MINIMUM 12-INCH REINFORED CONCRETE PIPE. MINIMUM CLASS III CONFORMING TO ASTM C76 OR ASTM C507, OUTSIDE OF ROAD RIGHT OF WAY ALTERNATE PIPE MATERIAL SUCH AS HDPE ADS N-12 MAY BE PEMITTED BY PUBLIC WORKS. TRENCH SECTION SHALL BE CLASS "B" FOR PVC AND HDPE AND CLASS "C" FOR CONCRETE (PER STANDARD SPECIFICATIONS), MANHOLES, INLETS AND CATCH BASINS SHALL BE PRE CAST REINFORCED CONCRETE, ASTM C-478. FRAME AND CLOSED LIDS SHALL BE HEAVY DUTY, INDENTED TOP SOLID LID WITH THE WORD "STORM", NEENAH R-1580, EAST JORDAN 1050 EXHD OR EQUIAL. FRAMES AND OPEN LID SHALL BE HEAVY DUTY, NEENAH R-2504 WITH TYPE D GRATES OR EQUIAL. AREA DRAINS SHALL BE PER DETAIL ON PLAN OR EQUIVALENT AND SHALL BE A MINIMUM OF 24" IN DIAMETER. CONNECTIONS TO EXISTING PIPES SHALL BE MADE WITH INSERTA WYE OR EQUIVALENT. LAST (3) THREE JOINTS SHALL BE RESTRAINED WITH RODS.
- 6. MATERIALS FOR SANITARY SEWER SHALL BE AS FOLLOWS: SANITARY SEWER SHALL BE PVC SDR-26 (MIN.) CONFORMING TO ASTM D-3034, WITH RUBBER GASKETED JOINTS, CONFORMING TO ASTM D-3212 UNLESS ALLOWED OTHERWISE. TRENCH SECTIONS SHALL BE CLASS "B" BEDDING (PER STANDARD SPECIFICATIONS). CRUSHED STONE CHIPS SHALL BE USED FOR BEDDING MATERIAL. LATERAL CONNECTIONS SHALL BE MADE WITH A INSERTA WYE UNLESS ALLOWED OTHERWISE. PROVIDE DUCTILE IRON RISER TEE ON DEEPER INSTALLATIONS. TERMINATE LATERAL PIPE WITH A WOODEN 2X4 SET ONE FOOT ABOVE FINISH GRADE AND PAINTED ORANGE. LATERAL PIPE LOCATOR WIRE AND TERMINAL POST: NO. 10 AWG SINGLE STRAND INSULATED COPPER WIRE TERMINATE AT COPPERHEAD SNAKEPIT ROADWAY, SINGLE TERMINAL, ACCESS POINT OR
- 7. A MINIMUM OF 6' OF COVER IS REQUIRED FOR ALL SANITARY SEWER.
- 8. MATERIALS FOR WATER MAIN SHALL BE PVC CONFORMING TO AWWA C-900, CLASS 150, SDR-18. TRACER WIRE (SINGE STRAND BLUE INSULATED COPPER, MIN. NO.10 AWG) SHALL BE INSTALLED WITH PVC PIPE, EXTEND WIRE UP ALL VALVE BOXES AND TO HYDRANTS TERMINATED IN A ACCESS BOX SET BEHIND THE HYDRANT. MATERIALS FOR WATER SERVICES SHALL BE HIGH DENSITY POLYETHYLENE TUBING, SDR 9, 200 PSI. TRENCH SECTIONS SHALL BE CLASS "B" BEDDING (PER STANDARD SPECIFICATIONS). CRUSHED STONE CHIPS SHALL BE USED FOR BEDDING MATERIAL, CONNECTION SHALL BE MADE WITH A WET TAP, CORPORATE STOP AND VALVE BOX PER MUNICIPAL STANDARDS, A MINIMUM OF 6' COVER IS REQUIRED FOR ALL WATERMAIN, VALVES SHALL BE RESILIENT WEDGE GATE VALVE, NON-RISING STEM MEETING AWWA C-509, CLOW MODEL 2636/2640.PROVIDE RESTRAINED JOINTS ON ALL VALVE FITTINGS. DISINFECT ALL NEW LINES AND OBTAIN SAFE WATER SAMPLE PRIOR TO USE. COPPERHEAD SNAKEPIT ROADWAY TERMINAL BOXES, SINGLE TERMINAL, ACCESS POINT OR EQUAL AND EXTEND LOCATOR WIRE TO TOP OF TERMINAL BOXES LEAVING 12 INCHES OF SLACK FOR FUTURE CONNECTION AND CONNECT TO TERMINAL BOX.
- 9. ONLY NORTH AMERICAN MADE FITTINGS, PIPE, VALVES AND HYDRANTS WILL BE ALLOWED. SIGMA AND STAR ARE NOT ALLOWED. DUCTILE IRON FITTINGS SHALL MEET AWWA C-110 STANDARD. ALL FITTINGS SHALL BE FULL-BODIED STYLES, FITTINGS SHALL BE POLYETHYLENE WRAPPED PER STANDARD SPECIFICATIONS. BOLTS AND NUTS SHALL BE COR-BLUE OR A-304 STAINLESS STEEL, NO SUBSTITUTIONS. USE RESTRAINED JOINTS ON ALL FITTINGS. THRUST BLOCKING SOLID CONCRETE MASONRY UNITS OR CLASS F POURED CONCRETE PER SECTION 4.3.13 OF THE STANDARD SPECIFICATIONS. WOOD THRUST BLOCKING WILL NOT BE PERMITTED. FIRE HYDRANTS SHALL BE CLOW MEDALLION, NO SUBSTITUTIONS AND FACTORY PAINTED PER VILLAGE FLOW RATE TABLE. NOZZLE HEIGHT SHALL BE 18 INCHES TO 26 INCHES TO FINISH GRADE. EQUIP STREAMER NOZZLE WITH A FACTORY INSTALLED 4 # STORZ QUICK CONNECTION. STANDARD HYDRANTS EXTENSIONS ARE REQUIRED FOR HYDRANTS WITH OVER 6 FEET OR COVER OR WHERE REQUIRED TO ADJUST NOZZLE HEIGHT. HYDRANT LEAD PIPE SHALL BE CLASS 52 DUCTILE IRON OR C-900 PVC WITH RESTRAINED JOINTS. HYDRANT LEADS AND FITTINGS SHALL BE RESTRAIN BY MEGA-LUG GLAND OR EQUAL. PROVIDE STOP NUT OR FACTORY-INSTALLED MEANS OF PREVENTING DAMAGE TO HYDRANT WHEN TORQUE IS APPLIED TO CLOSE HYDRANT.
- 10. EXTREME CAUTION MUST BE FOLLOWED REGARDING THE COMPACTION OF ALL UTILITY TRENCHES. MECHANICALLY COMPACTED GRANULAR BACKFILL IS REQUIRED UNDER & WITHIN 5 FEET OF ALL PAVEMENT INCLUDING SIDEWALKS. FLOODING OF BACKFILL MATERIAL IS NOT
- 11. MANDREL TESTING ON SANITARY LINES AND PRESSURE TESTING ON WATERMAIN MAY BE REQUIRED BY THE OWNER OR MUNICIPALITY.
- 12. UPON COMPLETION OF FINAL PAVING OPERATIONS, THE UTILITY CONTRACTOR SHALL ADJUST ALL MANHOLE AND INLET RIMS AND VALVE BOXES TO FINISHED GRADE.

SPECIFICATIONS FOR PAVING

- 1. AGGREGATES USED IN THE CRUSHED STONE BASE SHALL CONFORM TO THE GRADATION REQUIREMENTS SECTIONS 301.2 AND 305.2.2 OF THE STANDARD SPECIFICATIONS. THICKNESS SHALL BE PER THE DETAIL ON THE PLANS. BASE SHALL BE 11/4" INCH DIAMETER LIMESTONE TRAFFIC BOND AGGREGATE BASE COURSE UNLESS NOTED OTHERWISE. SUBSTITUTION AND/OR RECYCLED MATERIALS MAY BE ALLOWED WITH APPROVAL FROM THE OWNER.
- 2. SUBGRADE SHALL BE PROOFROLLED AND APPROVED BY A GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF STONE BASE. EXCAVATE UNSUITABLE AREAS AND REPLACE WITH BREAKER RUN STONE AND RECOMPACT. REFER TO THE GEOTECHNICAL REPORT FOR ADDITIONAL
- 3. EXISTING PAVEMENT SHALL BE SAWCUT IN NEAT STRAIGHT LINES TO FULL DEPTH AT ANY POINT WHERE EXISTING PAVEMENT IS REMOVED. CURB AND WALK SHALL BE REMOVED TO THE NEAREST JOINT. REMOVED PAVEMENT SHALL BE REPLACED WITH THE SAME SECTION AS
- 4. ASPHALT FOR PARKING AREAS AND THE PRIVATE ROAD SHALL BE PER THE DETAILS MATERIALS AND PLACEMENT SHALL CONFORM TO THE DOT STANDARD SPECIFICATIONS, SECTION 450 AND 460 LT 58-28 S IS REQUIRED UNLESS NOTED OTHERWISE. A COMMERCIAL GRADE MIX MAY BE
- SUBSTITUTED ONLY WITH APPROVAL FROM THE OWNER. 5. CONCRETE FOR CURB, DRIVEWAY, WALKS AND NON-FLOOR SLABS SHALL CONFORM TO SECTION 415 OF THE STANDARD SPECIFICATIONS, GRADE A, ASTM C-94, 6 BAG MIX, WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI. JOINTING SHALL BE PER SECTION 415.3.7, 602.3.2.5, AND 601.3.4-5, OF THE STANDARD SPECIFICATIONS. CONSTRUCTION JOINTS SHALL BE SPACED NOT FURTHER THAN 10' FOR SIDEWALKS (OR THE WIDTH OF THE WALK), AND 15' FOR CURB. EXPANSION JOINTS SHALL BE SPACED NO FURTHER THAN 50' FOR

PAVEMENT, 300' FOR CURB, AND 100' FOR WALKS. CONCRETE SHALL BE FINISHED PER SECTION 415.3.8 WITH A MEDIUM BROOM TEXTURE. A CURING MEMBRANE IN CONFORMANCE WITH SECTION 415.3.12 IS REQUIRED.





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BROOKFIELD, WI 53186 (262) 754-8888

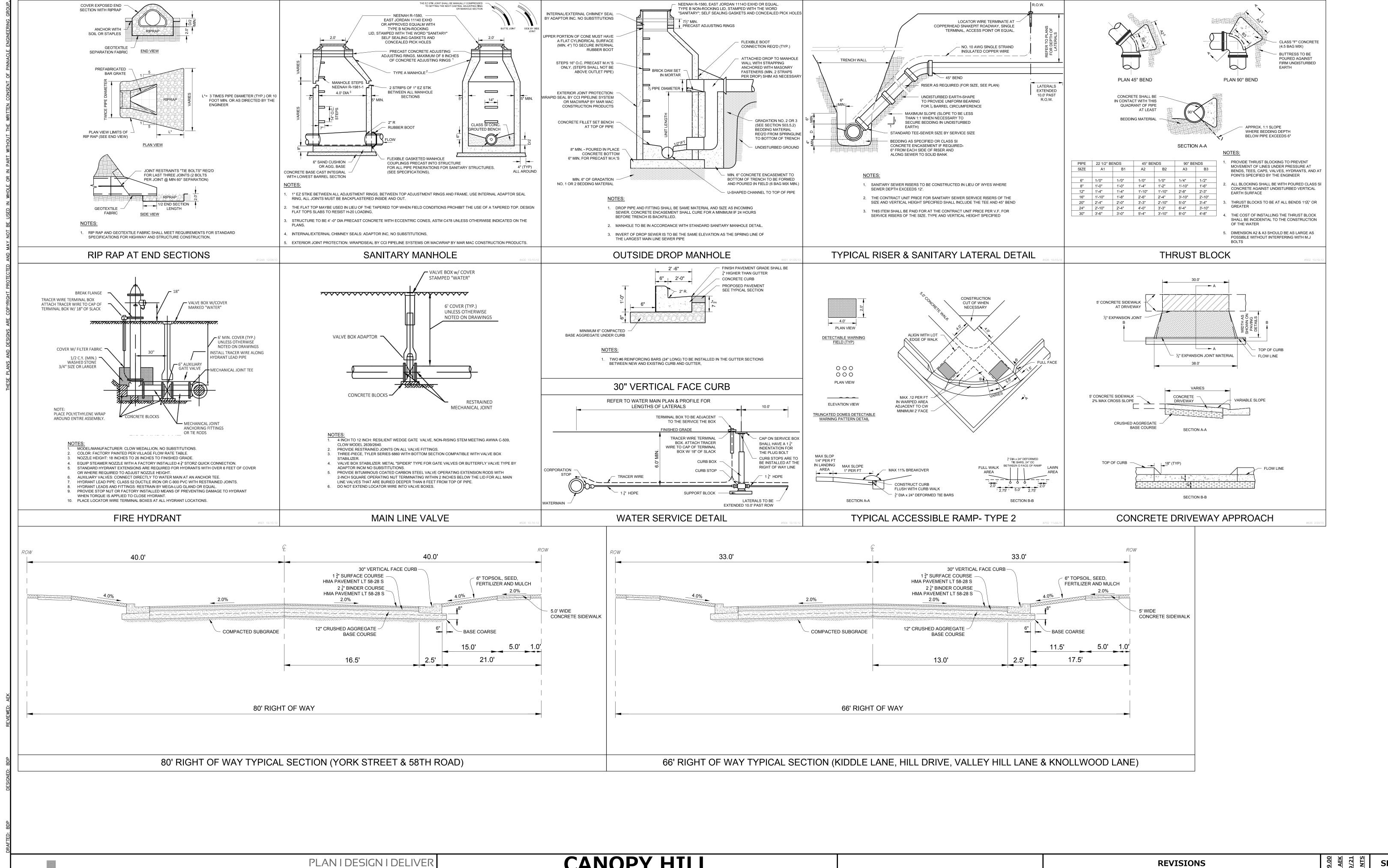
CANOPY HILL

CONSTRUCTION DETAILS & SPECIFICATIONS

2 PER VILLAGE COMMENTS 05/03/2 3 PER VILLAGE COMMENTS 4 PER VILLAGE COMMENTS

REVISIONS <u>06/29/2</u>

UNION GROVE, WISCONSIN



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PINNACLE ENGINEERING GROUP

725 WATERTOWN ROAD, SUITE 100

BROOKFIELD, WI 53186

CANOPY HILL

UNION GROVE, WISCONSIN

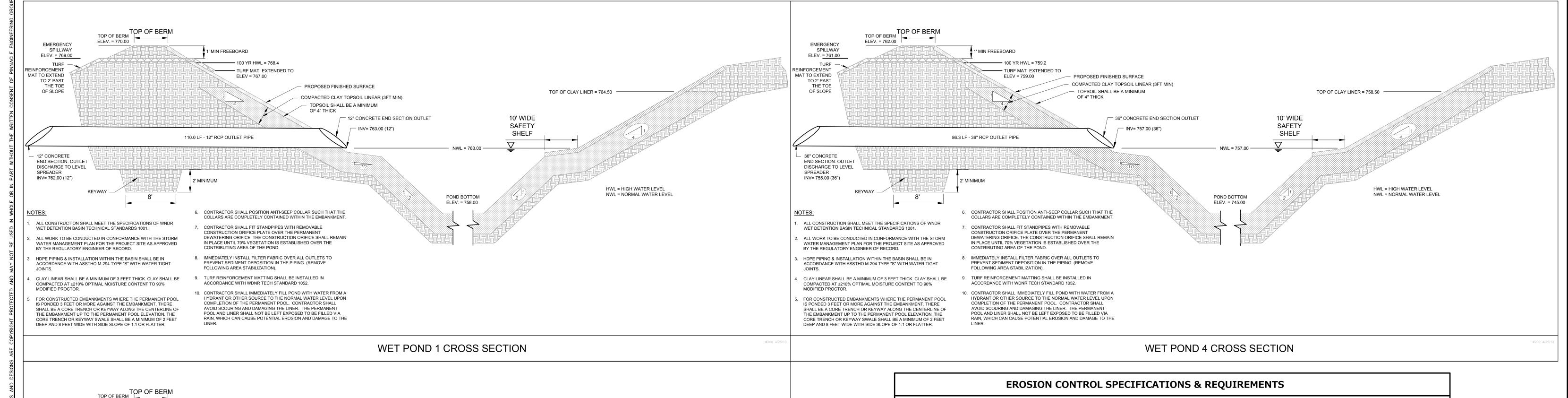
CONSTRUCTION DETAILS & SPECIFICATIONS

1 BID SET 2 PER VILLAGE COMMENTS 05/03/2 3 PER VILLAGE COMMENTS 4 PER VILLAGE COMMENTS 06/29/21

CONSTRUCTION DETAILS &

SPECIFICATIONS

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ELEV. = 767.00 EMERGENCY SPILLWAY MIN FREEBOARD ELEV. = 766.00 TURF REINFORCEMENT TURF MAT EXTENDED TO MAT TO EXTEND PROPOSED FINISHED SURFACE TO 2' PAST COMPACTED CLAY TOPSOIL LINEAR (3FT MIN) THE TOE OF SLOPE TOPSOIL SHALL BE A MINIMUM TOP OF CLAY LINER = 762.50 - 48" FLARED END SECTION OUTLET 10' WIDE - 12" FLARED END SECTION OUTLET 141.5 LF - 48" RCP OUTLET PIPE **SAFETY** INV= 760.00 (12") SHELF 146.1 LF - 12" RCP OUTLET PIPE 48" & 12" CONCRETE END SECTION. OUTLET DISCHARGE TO LEVEL SPREADER 2' MINIMUM INV= 759.00 (48") INV= 759.00 (12") HWL = HIGH WATER LEVEL NWL = NORMAL WATER LEVE POND BOTTOM ELEV. = 748.00 CONTRACTOR SHALL POSITION ANTI-SEEP COLLAR SUCH THAT THE NOTES: COLLARS ARE COMPLETELY CONTAINED WITHIN THE EMBANKMENT ALL CONSTRUCTION SHALL MEET THE SPECIFICATIONS OF WNDR WET DETENTION BASIN TECHNICAL STANDARDS 1001 CONSTRUCTION ORIFICE PLATE OVER THE PERMANENT DEWATERING ORIFICE. THE CONSTRUCTION ORIFICE SHALL REMAIN ALL WORK TO BE CONDUCTED IN CONFORMANCE WITH THE STORM IN PLACE UNTIL 70% VEGETATION IS ESTABLISHED OVER THE WATER MANAGEMENT PLAN FOR THE PROJECT SITE AS APPROVED CONTRIBUTING AREA OF THE POND. BY THE REGULATORY ENGINEER OF RECORD. IMMEDIATELY INSTALL FILTER FABRIC OVER ALL OUTLETS TO HDPE PIPING & INSTALLATION WITHIN THE BASIN SHALL BE IN PREVENT SEDIMENT DEPOSITION IN THE PIPING. (REMOVE ACCORDANCE WITH ASSTHO M-294 TYPE "S" WITH WATER TIGHT FOLLOWING AREA STABILIZATION) TURF REINFORCEMENT MATTING SHALL BE INSTALLED IN CLAY LINEAR SHALL BE A MINIMUM OF 3 FEET THICK. CLAY SHALL BE COMPACTED AT ±210% OPTIMAL MOISTURE CONTENT TO 90% ACCORDANCE WITH WDNR TECH STANDARD 1052. MODIFIED PROCTOR. . CONTRACTOR SHALL IMMEDIATELY FILL POND WITH WATER FROM A HYDRANT OR OTHER SOURCE TO THE NORMAL WATER LEVEL LIPON. FOR CONSTRUCTED EMBANKMENTS WHERE THE PERMANENT POOL COMPLETION OF THE PERMANENT POOL. CONTRACTOR SHALL IS PONDED 3 FEET OR MORE AGAINST THE EMBANKMENT. THERE AVOID SCOURING AND DAMAGING THE LINER. THE PERMANENT SHALL BE A CORE TRENCH OR KEYWAY ALONG THE CENTERLINE OF POOL AND LINER SHALL NOT BE LEFT EXPOSED TO BE FILLED VIA RAIN, WHICH CAN CAUSE POTENTIAL EROSION AND DAMAGE TO THE CORE TRENCH OR KEYWAY SWALE SHALL BE A MINIMUM OF 2 FEET DEEP AND 8 FEET WIDE WITH SIDE SLOPE OF 1:1 OR FLATTER. WET POND 2 CROSS SECTION

- SET FORTH IN EPA'S NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER GENERAL PERMIT (WPDES PERMIT NO. WI-S067831-4) FOR CONSTRUCTION SITE LAND DISTURBANCE ACTIVITIES. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH LOCAL. STATE AND FEDERAL TECHNICAL STANDARDS AND PROVISIONS IN EFFECT AT THE TIME OF CONSTRUCTION. THESE PROCEDURES AND STANDARDS SHALL BE REFERRED TO AS BEST MANAGEMENT PRACTICES (BMPs). IT IS THE RESPONSIBILITY OF ALL CONTRACTORS ASSOCIATED WITH THE PROJECT TO OBTAIN A COPY OF AND UNDERSTAND THE BMP's PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
- QUALIFIED PERSONNEL: (PROVIDED BY THE GENERAL/PRIME CONTRACTOR) SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED AND EROSION AND SEDIMENT CONTROLS WITHIN 24 HOURS OF ALL 0.5-INCH OR MORE PRECIPITATION EVENTS WITH A MINIMUM INSPECTION INTERNAL OF ONCE EVERY SEVEN (7) CALENDAR DAYS IN THE ABSENCE OF A QUALIFYING RAIN OR SNOWFALL EVENT. REPORTING SHALL BE IN ACCORDANCE WITH THE GENERAL PERMIT CONTRACTOR SHALL IMMEDIATELY ARRANGE TO HAVE ANY DEFICIENT ITEMS. REVEALED DURING INSPECTIONS REPAIRED/REPLACED.
- POST WNDR CERTIFICATE OF PERMIT COVERAGE ON SITE AND MAINTAIN UNTIL CONSTRUCTION ACTIVITIES HAVE CEASED. THE SITE IS STABILIZED AND A NOTICE OF TERMINATION IS FILED WITH WDNR
- KEEP COPY OF THE CURRENT EROSION CONTROL PLAN ON SITE THROUGHOUT THE DURATION OF THE PROJECT.
- SUBMIT PLAN REVISIONS OR AMENDMENTS TO THE WDNR AT LEAST 5 DAYS PRIOR TO FIELD IMPLEMENTATION.
- MODIFICATIONS TO THE APPROVED SWAPP IN ORDER TO MEET UNFORESEEN FIELD CONDITIONS ARE ALLOWED IF MODIFICATIONS CONFORM TO BMPS. ALL MODIFICATIONS MUST BE APPROVED BY OWNER/ENGINEER/GOVERNING AGENCY PRIOR TO DEVIATION OF THE APPROVED PLAN.
- OWNER IS RESPONSIBLE FOR ROUTINE SITE INSPECTIONS AT LEAST ONCE EVERY 7 DAYS AND WITHIN 24 HOURS AFTER A RAINFALL EVENT OF 0.5 INCHES OR GREATER. KEEP INSPECTION REPORTS ON-SITE AND MAKE THEM AVAILABLE UPON REQUEST.
- INSPECT AND MAINTAIN ALL INSTALLED EROSION CONTROL PRACTICES UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
- WHEN POSSIBLE: PRESERVE EXISTING VEGETATION (ESPECIALLY ADJACENT TO SURFACE WATERS). MINIMIZE LAND-DISTURBING CONSTRUCTION ACTIVITY ON SLOPES OF 20% OR MORE, MINIMIZE SOIL COMPACTION AND PRESERVE
- 10. REFER TO THE WDNR STORMWATER CONSTRUCTION TECHNICAL STANDARDS AT:
- 11. INSTALL PERIMETER EROSION CONTROLS AND ROCK TRACKING PAD CONSTRUCTION ENTRANCES PRIOR TO ANY LAND-DISTURBUNG ACTIVITIES, INCLUDING CLEARING AND GRUBBING. USE WDNR TECHNICAL STANDARD STONE TRACKING PAD AND TIRE WASHING #1057 FOR ROCK CONSTRUCTION ENTRANCES.
- 12. INSTALL INLET PROTECTION PRIOR TO LAND-DISTURBING ACTIVITIES IN THE CONTRIBUTING DRAINAGE AREA AND/OR IMMEDIATELY UPON INLET INSTALLATION. COMPLY WITH WDNR TECHNICAL STANDARD STORM DRAIN INLET PROTECTION FOR CONSTRUCTION SITES #1060.
- 13. WHERE POSSIBLE, STAGE CONSTRUCTION GRADING ACTIVITIES TO MINIMIZE THE CUMULATIVE EXPOSED AREA. CONDUCT TEMPORARY GRADING FOR EROSION CONTROL PER WDNR TECHNICAL STANDARD TEMPORARY GRADING PRACTICES FOR EROSION CONTROL #1067

- 14. NOTIFY OWNER & ENGINEER IF DEWATERING IS SCHEDULED TO OCCUR IN AREAS OF SOIL AND/OR GROUNDWATER CONTAMINATION OR IF DEWATERING WILL OCCUR FROM A HIGH CAPACITY WELL (70 GPM OR MORE). DEWATERING ONLY AFTER THE APPROPRIATE WDNR DEWATERING DISCHARGE PERMIT HAS BEEN OBTAINED.
- 15 PUMPS MAY BE USED AS BYPASS DEVICES IN NO CASE SHALL PUMPED WATER BE DIVERTED OUTSIDE THE PROJECT LIMITS. PUMP DISCHARGE SHALL BE DIRECTED INTO APPROVED FILTER BAG OR APPROVED SETTLING DEVICE.
- PROVIDE ANTI-SCOUR PROTECTION AND MAINTAIN NON-EROSIVE FLOW DURING DEWATERING.PERFORM DEWATERING OF ACCUMULATED SURFACE RUNOFF IN ACCORDANCE WITH WDNR TECHNICAL STANDARD **DEWATERING #1061**
- 17. COMPLETE AND STABILIZE SEDIMENT BASINS/TRAPS OR WET PONDS PRIOR TO MASS LAND DISTURBANCE TO CONTROL NEEDED TO MAINTAIN 3 FEET OF DEPTH TO THE OUTLET, AND PROPERLY DISPOSE OF SEDIMENT REMOVED DURING MAINTENANCE (REFER TO NR 528). CONSTRUCT AND MAINTAIN THE SEDIMENT BASIN PER WDNR TECHNICAL STANDARD SEDIMENT BASIN #1064 AND SEDIMENT TRAP #1063.
- CONSTRUCT AND PROTECT THE BIOINFLTRATION BASIN AND VEGETATION FROM RUNOFF AND SEDIMENT DURING CONSTRUCTION. REFERENCE THE WDNR TECHNICAL STANDARD BIORETENTION FOR INFILTRATION #1004. BIOINFILTRATION MAY BE USED AS A SEDIMENT BASIN DURING CONSTRUCTION. DO NOT EXCAVATE FINAL 1' OR INSTALL STONE/ENGINEERED MEDIA LINTII LIPSTREAM AREA IS STABILIZED. WHEN THIS ACCOMPLISHED. REMOVE THE FINAL 1' PLUS ANY SOIL WHICH APPEARS TO BE IMPACTED BY SEDIMENT AND COMPLETE CONSTRUCTION OF BIOINFILTRATION AREA.
- INSTALL AND MAINTAIN SILT FENCING PER WDNR TECHNICAL STANDARD SILT FENCE #1056. REMOVE SEDIMENT FROM BEHIND SILT FENCES AND SEDIMENT BARRIERS BEFORE SEDIMENT REACHES A DEPTH THAT IS EQUAL TO ONE-HALF OF THE FENCE AND/OR BARRIER HEIGHT.
- REPAIR BREAKS AND GAPS IN SILT FENCES AND BARRIERS IMMEDIATELY. REPLACE DECOMPOSING STRAW BALES (TYPICAL BALE LIFE IS 3 MONTHS). LOCATE, INSTALL AND MAINTAIN STRAW BALES PER WDNR TECHNICAL STANDARD DITCH CHECKS #1062.
- 21. INSTALL AND MAINTAIN FILTER SOCK IN ACCORDANCE WITH WDNR TECHNICAL STANDARD INTERIM MANUFACTURED PERIMETER CONTROL AND SLOPE INTERRUPTION PRODUCTS
- 22. IMMEDIATELY STABILIZE STOCKPILES AND SURROUND STOCKPILES AS NEEDED WITH SILT FENCE OR OTHER PERIMETER CONTROL IF STOCKPILES WILL REMAIN INACTIVE FOR 7 DAYS OR LONGER.
- 23. IMMEDIATELY STABILIZE ALL DISTURBED AREAS THAT WILL REMAIN INACTIVE FOR 14 DAYS OR LONGER. BETWEEN SEPTEMBER 15 AND OCTOBER 15: STABILIZE WITH MULCH, TACKIFIER AND A PERENNIAL SEED MIXED WITH WINTER WHEAT, ANNUAL OATS OR ANNUAL RYE, AS APPROPRIATE FOR REGION AND SOIL TYPE. OCTOBER 15 THROUGH COLD WEATHER: STABILIZE WITH A POLYMER AND DORMANT SEED MIX. AS APPROPRIATE FOR REGION AND SOIL TYPE.
- 24. STABILIZE AREAS OF FINAL GRADING WITHIN 7 DAYS OF REACHING FINAL GRADE.
- SWEEP/CLEAN UP ALL SEDIMENT/TRASH THAT MOVES OFF-SITE DUE TO CONSTRUCTION ACTIVITY OR STORM EVENTS BEFORE THE END OF THE SAME WORKDAY OR AS DIRECTED BY THE MUNICIPALITY. SEPARATE SWEPT MATERIALS (SOILS AND TRASH) AND DISPOSE OF APPROPRIATELY
- 26. OWNER IS RESPONSIBLE FOR CONTROLLING DUST PER WDNR TECHNICAL STANDARD DUST CONTROL ON CONSTRUCTION

- PROPERLY DISPOSE OF ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTE OR OTHER CONSTRUCTION MATERIALS) AND DO NOT ALLOW THESE MATERIALS TO BE CARRIED BY RUNOFF INTO THE RECEIVING CHANNEL
- 28. COORDINATE WITH THE OWNER, ENGINEER AND DNR REPRESENTATIVE TO UPDATE THE LAND DISTURBANCE PERMIT TO INDICATE THE ANTICIPATED OR LIKELY DISPOSAI LOCATIONS FOR ANY EXCAVATED SOILS OR CONSTRUCTION DEBRIS THAT WILL BE HAULED OFF-SITE FOR DISPOSAL. THE DEPOSITED OR STOCKPILED MATERIAL NEEDS TO INCLUDE PERIMETER SEDIMENT CONTROL MEASURES (SUCH AS SILT FENCE, HAY BALES, FILTER SOCKS OR COMPACTED EARTHEN
- 29. FOR NON-CHANNELIZED FLOW ON DISTURBED OR CONSTRUCTED SLOPES, PROVIDE CLASS AND TYPE MATTING FOR THE SPECIFICATIONS UNLESS SPECIFIED OTHERWISE ON MATRIX IN WDOT'S WISDOT PRODUCT ACCEPTABILITY LIST (PAL); INSTALL AND MAINTAIN PER WDNR TECHNICAI STANDARD NON-CHANNEL EROSION MAT #1052.
- 30. FOR CHANNELIZED FLOW ON DISTURBED OR CONSTRUCTED SLOPES, PROVIDE CLASS AND TYPE MATTING FOR THE SPECIFICATIONS UNLESS SPECIFIED OTHERWISE ON THE PLANS SELECT FROSION MATTING FROM APPROPRIATE MATRIX IN WOOT'S WISDOT PRODUCT ACCEPTABILITY LIST (PAL); INSTALL AND MAINTAIN PER WDNR TECHNICAL STANDARD CHANNEL EROSION MAT #1053.
- 31. MAKE PROVISIONS FOR WATERING DURING THE FIRST WEEKS FOLLOWING SEEDING OR PLANTING OF DISTURBED AREAS WHENEVER MORE THAN 7 CONSECUTIVE DAYS OF DRY
- 32. INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES (SUCH AS TEMPORARY SEDIMENT BASINS, DITCH CHECKS, EROSION CONTROL MATTING, SILT FENCING, FILTER SOCKS, WATTLES, SWALES, ETC) OR AS DIRECTED BY OWNER, MUNICIPALITY. OR DNR REPRESENTATIVE.
- 33. OWNER IS RESPONSIBLE FOR COMPLYING WITH ALI APPLICABLE WDNR REMEDIATION AND WASTE MANAGEMENT REQUIREMENTS FOR HANDLING AND DISPOSING OF CONTAMINATED MATERIALS. SITE-SPECIFIED INFORMATION FOR AREAS WITH KNOWN OR SUSPECTED SOIL AND/OR GROUNDWATER CONTAMINATION CAN BE FOUND ON WNDR'S BUREAU OF REMEDIATION AND REDEVELOPMENT TRACKING SYSTEM PUBLIC DATABASE.
- MAINTAIN SOIL EROSION CONTROL DEVICE THROUGH TH DURATION OF THIS PROJECT. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS ARE FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. DISTURBANCE ASSOCIATED WITH EROSION CONTROL REMOVAL SHALL BE IMMEDIATELY STABILIZED.
- 35. NOTIFY THE OWNER IMMEDIATELY IF THERE IS A DISCHARGE OF SEDIMENT AND/OR OTHER CONTAMINANTS. REFER TO THE SPILL PLAN DOCUMENT IF THERE IS A DISCHARGE OF SEDIMENT AND/OR OTHER CONTAMINANTS. A SPILL PLAN IS REQUIRED IF THERE IS POTENTIAL TO DISCHARGE CONTAMINANTS TO WATERS OF THE STATE.
- 36. REFER TO THE FRAC OUT DOCUMENT IF AN INADVERTANT DISCHARGE OF DRILLING FLUIDS ("FRAC OUT") OCCURS. A SPILL PLAN IS REQUIRED IF THERE IS POTENTIAL TO DISCHARGE CONTAMINANTS TO WATERS OF THE STATE.
- INSTALL AND MAINTAIN A CONCRETE WASHOUT BASIN PER EPA 833-F-11-006. REQUIRE USE BY ALL CONCRETE CONTRACTORS. LIQUID MAY BE REUSED IN CONCRETE MIXING, EVAPORATED OR DISPOSED OF AS WATERWATER.



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UNION GROVE, WISCONSIN

CONSTRUCTION DETAILS & SPECIFICATIONS

	112113		
1	BID SET	03/17/21	
2	PER VILLAGE COMMENTS	05/03/21	
3	PER VILLAGE COMMENTS	06/22/21	
4	PER VILLAGE COMMENTS	06/29/21	

REVISIONS

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