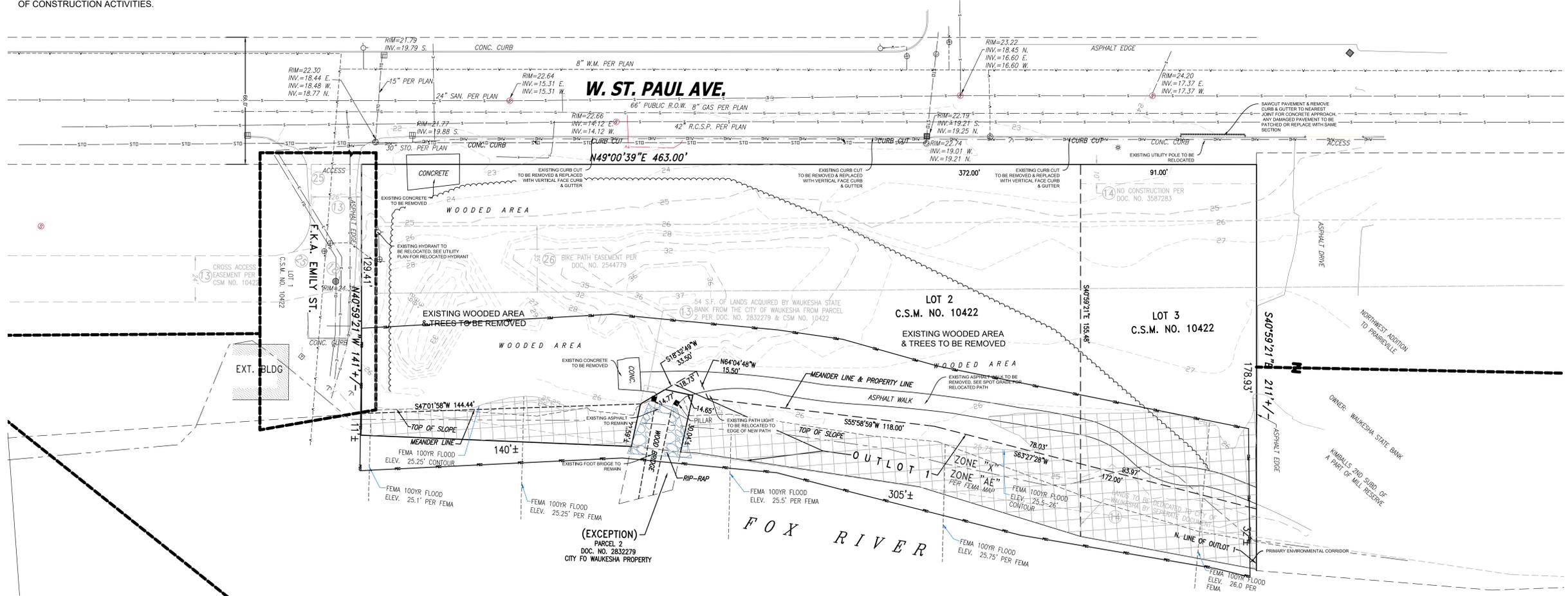


LEGEND

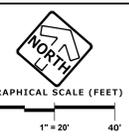
- INDICATES FOUND 1" IRON PIPE
- INDICATES SET 1" IRON PIPE
- + INDICATES FOUND CHISELED CROSS
- ⊙ SANITARY MANHOLE
- ⊕ SANITARY CLEANOUT OR VENT
- ⊗ SEPTIC TANK ACCESS COVER
- ⊙ M.I.S. MANHOLE
- ⊙ UNKNOWN MANHOLE
- ⊙ STORM MANHOLE
- ⊙ INLET (ROUND)
- ⊙ INLET (SQUARE)
- ⊙ CURB INLET
- ⊙ STORM SEWER END SECTION
- ⊙ GAS VALVE
- ⊙ GAS METER
- ⊙ WATER VALVE
- ⊙ HYDRANT
- ⊙ WATER MANHOLE
- ⊙ WATER SERVICE CURB STOP
- ⊙ WELL HEAD
- ⊙ STAND PIPE
- ⊙ WALL INDICATOR VALVE
- ⊙ POST INDICATOR VALVE
- ⊙ LIGHT POLE
- ⊙ SPOT/YARD LIGHT
- ⊙ UTILITY POLE
- ⊙ GUY POLE
- ⊙ GUY WIRE
- ⊙ ELECTRIC MANHOLE
- ⊙ ELECTRIC PEDESTAL
- ⊙ ELECTRIC METER
- ⊙ TELEPHONE MANHOLE
- ⊙ TELEPHONE PEDESTAL
- ⊙ CABLE PEDESTAL
- ⊙ CONTROL BOX
- ⊙ FIBER OPTIC SIGN
- ⊙ TRAFFIC LIGHT
- ⊙ COMMUNICATION MANHOLE
- ⊙ BOLLARD
- ⊙ SOIL BORING/MONITORING WELL
- ⊙ WATER SURFACE
- ⊙ WETLANDS FLAG
- ⊙ MARSH
- ⊙ FLAGPOLE
- ⊙ PARKING METER
- ⊙ SIGN
- ⊙ MAILBOX
- ⊙ RAILROAD CROSSING SIGNAL
- ⊙ HANDICAP SPACE
- ⊙ CONIFEROUS TREE
- ⊙ DECIDUOUS TREE
- SANITARY SEWER
- STORM SEWER
- WATERLINE
- MARKED GAS MAIN
- MARKED ELECTRIC
- OVERHEAD WIRES
- MARKED TELEPHONE
- MARKED CABLE TV LINE
- MARKED FIBER OPTIC
- BURIED ELECTRIC SERVICE
- BOARD FENCE
- CHAIN LINK FENCE
- WIRE FENCE
- PRIMARY ENVIRONMENTAL CORRIDOR

CONTACT DIGGERS HOTLINE TO LOCATE ANY UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.

NOTE: LIMITS OF FINAL CITY STREET PAVEMENT AND CURB AND GUTTER REPLACEMENTS TO BE MARKED BY CITY ENGINEERING STAFF IN FIELD.



REVISIONS	
1	CITY COMMENTS 11-18-2024



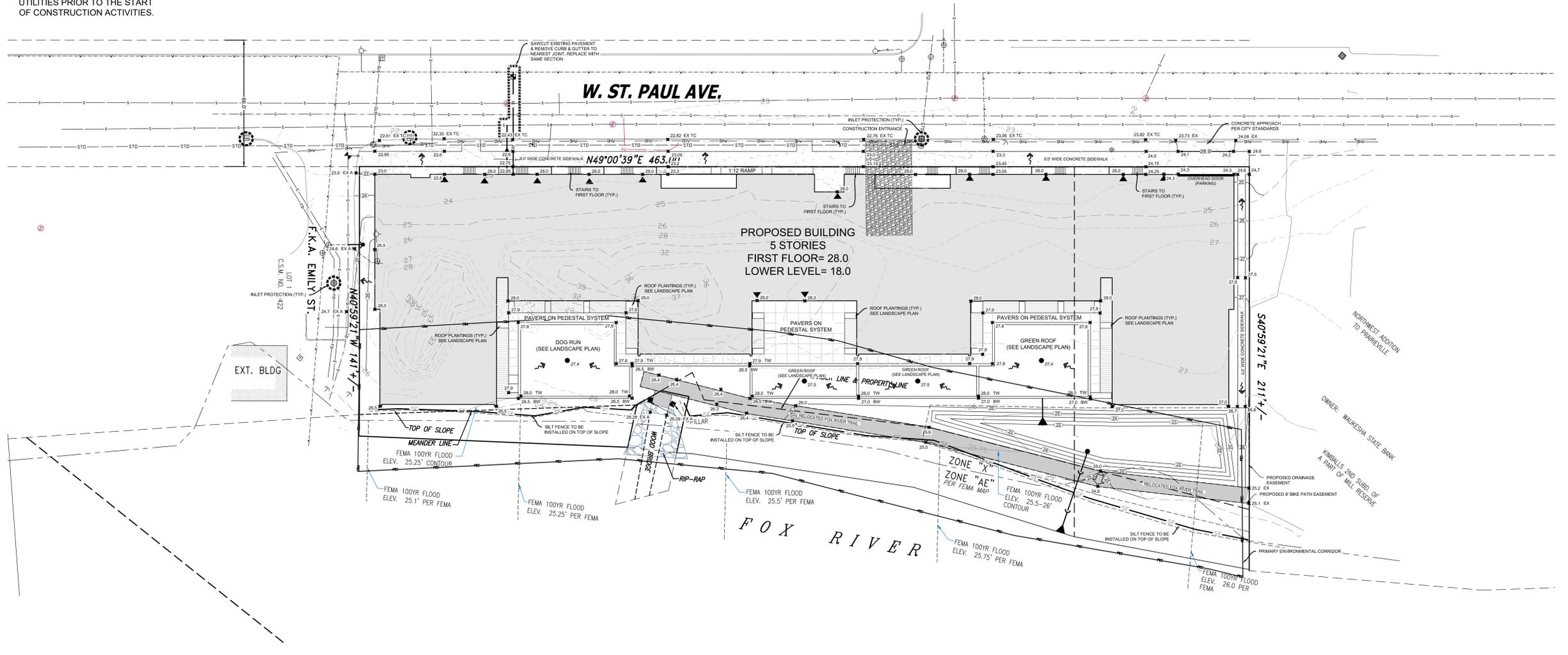
LEGEND	
	STORM SEWER MANHOLE
	STORM SEWER CATCH BASIN- ROUND CASTING
	PROPOSED CONCRETE FLARED END SECTION
	PROPOSED CONTOUR
	SPOT ELEVATION
	DIRECTION OF SURFACE FLOW
	DITCH OR SWALE
	DIVERSION SWALE
	OVERFLOW RELIEF ROUTING
	CONCRETE SIDEWALK
	CURB AND GUTTER
	DEPRESSED CURB
	REVERSE PITCH CURB & GUTTER
	EDGE OF PAVEMENT
	FINISHED FLOOR
	TOP OF WALK
	YARD GRADE

EROSION CONTROL SPECIFICATIONS & REQUIREMENTS	
1. ALL CONSTRUCTION SHALL ADHERE TO THE REQUIREMENTS SET FORTH IN ERAS NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER GENERAL PERMIT (WATER PERMIT NO. W-0000001) 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 (BMP). IT IS THE RESPONSIBILITY OF ALL CONTRACTORS ASSOCIATED WITH THE PROJECT TO OBTAIN A COPY OF AND UNDERSTAND THE BMP PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.	13. 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 (10 GPM OR MORE) DEWATERING ONLY AFTER THE APPROPRIATE WORK DEWATERING DISCHARGE PERMIT HAS BEEN OBTAINED.
2. 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 1/4-INCH OR MORE PRECIPITATION EVENTS WITH A MINIMUM INSPECTION INTERVAL 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/REDO.	14. 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.
3. POST NPDES 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 WNR.	15. PROVIDE ANTI-SOILUR PROTECTION AND MAINTAIN NONEROSIVE FLOW DURING DEWATERING. LIST MATING TO EITHER (A) THE SEDIMENT BASIN/TRAP DESIGN DISCHARGE RATE OR (B) THE BASIN RELEASE RATE WITH THE CORRECTLY-FITTED HOSE AND GEOTEXTILE FILTER BAG. PERFORMANCE OF ACCUMULATED SURFACE RUNOFF IN ACCORDANCE WITH WNR TECHNICAL STANDARD DEWATERING #106.
4. KEEP COPY OF THE CURRENT EROSION CONTROL PLAN ON SITE THROUGHOUT THE DURATION OF THE PROJECT.	16. COMPLETE AND STABILIZE SEDIMENT BASINS/TRAPS OR WET PONDS PRIOR TO MASS LAND DISTURBANCE TO CONTROL RUNOFF DURING CONSTRUCTION. REMOVE SEDIMENT AS NEEDED TO MAINTAIN 3 FEET OF DEPTH TO THE OUTLET, AND PROPERLY DISPOSE OF SEDIMENT REMOVED DURING MAINTENANCE (REFER TO NR 200). CONSTRUCT AND MAINTAIN THE SEDIMENT BARR FOR WNR TECHNICAL STANDARD SEDIMENT BASIN #104 AND SEDIMENT TRAP #103.
5. MODIFICATIONS TO THE APPROVED SWAMP IN ORDER TO MEET UNFORESEEN FIELD CONDITIONS ARE ALLOWED IF MODIFICATIONS CONFORM TO BMP. ALL MODIFICATIONS MUST BE APPROVED BY OWNER/ENGINEER/GOVERNMENT AGENCY PRIOR TO DEVIATION OF THE APPROVED PLAN.	17. CONSTRUCT AND PROTECT THE BIONFILTRATION BASIN AND VEGETATION FROM RUNOFF AND SEDIMENT DURING CONSTRUCTION. REFERENCE THE WNR TECHNICAL STANDARD BIONFILTRATION FOR INFILTRATION #105A. BIONFILTRATION MAY BE USED AS A SEDIMENT BASIN DURING CONSTRUCTION. DO NOT EXCAVATE FINAL "F" OR INSTALL STONE/ENGINEERED MEDIA UNTIL UPSTREAM AREA IS STABILIZED. WHEN THIS ACCOMPLISHED REMOVE THE FINAL "F" PLUS ANY SOIL WHICH APPEARS TO BE IMPACTED BY SEDIMENT AND COMPLETE CONSTRUCTION OF BIONFILTRATION AREA.
6. 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.	18. INSTALL AND MAINTAIN SILT FENCING PER WNR TECHNICAL STANDARD SILT FENCE #109. 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.
7. INSPECT AND MAINTAIN ALL INSTALLED EROSION CONTROL PRACTICES UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.	19. 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 WNR TECHNICAL STANDARD DITCH CHECKS #106.
8. 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 TOPSOIL.	20. INSTALL AND MAINTAIN FILTER SOCK IN ACCORDANCE WITH WNR TECHNICAL STANDARD INTERIOR MANUFACTURED PERIMETER CONTROL AND SLOPE INTERRUPTION PRODUCTS #101.
9. REFER TO THE WNR STORMWATER CONSTRUCTION TECHNICAL STANDARDS.	21. 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.
10. INSTALL PERIMETER EROSION CONTROLS AND ROCK TRACKING PAD CONSTRUCTION ENTRANCES PRIOR TO ANY LAND-DISTURBING ACTIVITIES. INCLUDING CLEANING AND GRUBBING USE WNR TECHNICAL STANDARD STONE TRACKING PAD AND THE WASHING #105F FOR ROCK CONSTRUCTION ENTRANCES.	22. 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 WHEAT. ANNUAL GRASS 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.
11. INSTALL SILT PROTECTION PRIOR TO LAND-DISTURBING ACTIVITIES IN THE CONTRIBUTING DRAINAGE AREA AND/OR IMMEDIATELY UPON SILT INSTALLATION. COMPLY WITH WNR TECHNICAL STANDARD STORM DRAIN INLET PROTECTION FOR CONSTRUCTION SITES #106G.	23. STABILIZE AREAS OF FINAL GRADING WITHIN 7 DAYS OF REACHING FINAL GRADE.
12. WHERE POSSIBLE STAGE CONSTRUCTION GRADING ACTIVITIES TO MINIMIZE THE CUMULATIVE EXPOSED AREA. CONDUCT TEMPORARY GRADING FOR EROSION CONTROL PER WNR TECHNICAL STANDARD TEMPORARY GRADING PRACTICES FOR EROSION CONTROL #108F.	24. 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 SHEET MATERIALS (BOARDS AND TRASH) AND DISPOSE OF APPROPRIATELY.
	25. 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 (10 GPM OR MORE) DEWATERING ONLY AFTER THE APPROPRIATE WORK DEWATERING DISCHARGE PERMIT HAS BEEN OBTAINED.
	26. 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.
	27. COORDINATE WITH THE OWNER, ENGINEER AND DNR REPRESENTATIVE TO UPDATE THE LAND DISTURBANCE PERMIT TO INDICATE THE ANTICIPATED OR LIKELY DISPOSAL LOCATIONS FOR ANY EXCAVATED SOILS OR CONSTRUCTION DEBRIS THAT WILL BE Hauled OFF-SITE FOR DISPOSAL. THE DEPOSITED OR STOCKPILED MATERIALS NEEDS TO INCLUDE PERIMETER SEDIMENT CONTROL MEASURES (SUCH AS SILT FENCE, HAY BALES, FILTER SOCKS OR COMPACTED EARTHEN BERM).
	28. FOR NON-CHANNELIZED FLOW ON DISTURBED OR CONSTRUCTED SLOPES, PROVIDE CLASS AND TYPE MATING FOR THE SPECIFICATIONS UNLESS SPECIFIED OTHERWISE ON THE PLANS. SELECT EROSION MATTING FROM APPROPRIATE MATRIX IN WDOTS WISDOT PRODUCT ACCEPTABILITY LIST (PAL). INSTALL AND MAINTAIN PER WNR TECHNICAL STANDARD NON-CHANNEL EROSION MAT #102.
	29. FOR CHANNELIZED FLOW ON DISTURBED OR CONSTRUCTED SLOPES, PROVIDE CLASS AND TYPE MATING FOR THE SPECIFICATIONS UNLESS SPECIFIED OTHERWISE ON THE PLANS. SELECT EROSION MATTING FROM APPROPRIATE MATRIX IN WDOTS WISDOT PRODUCT ACCEPTABILITY LIST (PAL). INSTALL AND MAINTAIN PER WNR TECHNICAL STANDARD CHANNEL EROSION MAT #103.
	30. MAKE PROVISIONS FOR WATERING DURING THE FIRST 8 WEEKS FOLLOWING SEEDING OR PLANTING OF DISTURBED AREAS WHENEVER MORE THAN 7 CONSECUTIVE DAYS OF DRY WEATHER OCCUR.
	31. 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.
	32. OWNER IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE WNR REMEDIATION AND WASTE MANAGEMENT REQUIREMENTS FOR HANDLING AND DISPOSING OF CONTAMINATED MATERIALS. SITE-SPECIFIC INFORMATION FOR AREAS WITH KNOWN OR SUSPECTED SOIL AND/OR GROUNDWATER CONTAMINATION CAN BE FOUND ON WNR'S BUREAU OF REMEDIATION AND REDEVELOPMENT TRACKING SYSTEM PUBLIC DATABASE.
	33. MAINTAIN SOIL EROSION CONTROL DEVICE THROUGH THE DURATION OF THIS PROJECT. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. DISTURBANCE ASSOCIATED WITH EROSION CONTROL REMOVAL SHALL BE IMMEDIATELY STABILIZED.
	34. NOTIFY THE OWNER IMMEDIATELY IF THERE IS A DISCHARGE OF SEDIMENT AND/OR OTHER CONTAMINANTS.

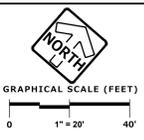
CONTACT DIGGERS HOTLINE TO LOCATE ANY UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.

TOTAL DISTURBED AREA = 1.6 ACRES

NOTE: SOIL TYPE VARIES WIDELY IN CHARACTER FROM GRAVEL TO CLAY FILL ON SITE.
NOTE: LIMITS OF FINAL CITY STREET PAVEMENT AND CURB AND GUTTER REPLACEMENTS TO BE MARKED BY CITY ENGINEERING STAFF IN FIELD.



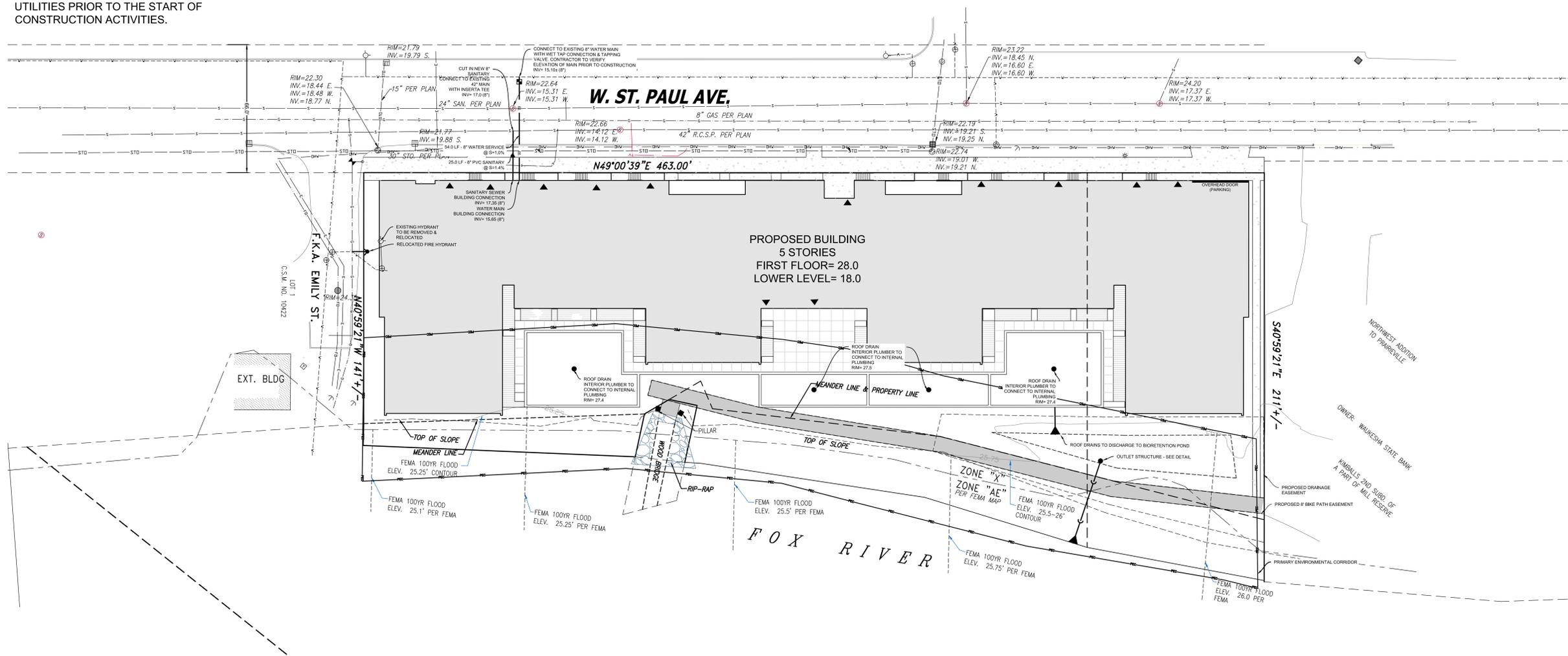
<p>PINNACLE ENGINEERING GROUP ENGINEERING NATURAL RESOURCES SURVEYING</p>	<p>PLAN I DESIGN I DELIVER www.pinnacle-engr.com</p> <p>WISCONSIN OFFICE: 20725 WATERTOWN ROAD, SUITE 100 BROOKFIELD, WI 53186 (262) 754-8888</p> <p>CHICAGO MILWAUKEE NATIONWIDE</p>	<p>ST. PAUL APARTMENTS</p> <p>WAUKESHA, WISCONSIN</p>	<p>SPOT GRADE & EROSION CONTROL PLAN</p>	<p>REVISIONS</p> <table border="1"> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> <tr> <td>1</td> <td>CITY COMMENTS</td> <td>11-18-2024</td> </tr> </table>	NO.	DESCRIPTION	DATE	1	CITY COMMENTS	11-18-2024	<p>PROJECT NO.: 1582.JBP DATE: 09/29/20 SCALE: 1" = 20'</p>	<p>SHEET C-2 C-4</p>
	NO.	DESCRIPTION	DATE									
1	CITY COMMENTS	11-18-2024										
<p>Z:\PROJECTS\2019\1687-00-W\CAD\SHETS\SPOT GRADE PLAN.DWG</p>												



LEGEND	
	SANITARY SEWER MANHOLE
	STORM SEWER MANHOLE
	STORM SEWER CATCH BASIN (ROUND CASTING)
	STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
	PRECAST CONCRETE FLARED END SECTION
	CLEANOUT
	VALVE BOX
	FIRE HYDRANT
	SANITARY SEWER
	FORCE MAIN
	STORM SEWER
	DRAIN TILE
	WATER MAIN
	FIRE PROTECTION
	UTILITY CROSSING
	ELECTRICAL CABLE
	GAS MAIN
	TELEPHONE LINE
	OVERHEAD WIRES
	LIGHTING
	ELECTRICAL TRANSFORMER OR PEDESTAL
	POWER POLE
	POWER POLE WITH LIGHTS
	STREET SIGN
	UTILITY TO BE REMOVED

CONTACT DIGGERS HOTLINE TO LOCATE ANY UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.

NOTE: LIMITS OF FINAL CITY STREET PAVEMENT AND CURB AND GUTTER REPLACEMENTS TO BE MARKED BY CITY ENGINEERING STAFF IN FIELD.



ALL SANITARY SEWER TO BE INSTALLED IN ACCORDANCE WITH CITY OF WAUKESHA STANDARDS
 ALL APPLICATIONS AND FEES FOR SANITARY SEWER MUST BE COMPLETED AND PAID PRIOR TO CONNECTION TO SEWER SYSTEMS.
 ANY UTILITY WORK IN THE RIGHT OF WAY AND ALL SANITARY SEWER CONNECTIONS TO BE INSPECTED BY CITY. NOTIFY CITY 72 HOURS IN ADVANCE OF CONNECTING TO SEWER.

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 UTILITY PLAN

GENERAL SPECIFICATIONS FOR CONSTRUCTION ACTIVITIES

- 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, CHAPTERS 105.00, 105.05, AND THE LOCAL ORDINANCES AND SPECIFICATIONS.
- 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.
- THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE MUNICIPALITY FORTY-EIGHT (48) HOURS PRIOR TO THE START OF CONSTRUCTION.
- 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.
- 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.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL UTILITY INFORMATION SHOWN ON THE PLANS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL CALL DIGGERS HOTLINE AT 1-800-242-8511 TO NOTIFY THE UTILITIES OF HIS INTENTIONS, AND TO REQUEST FIELD STAKING OF EXISTING UTILITIES.
- 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 AGENCY.
- ANY ADJACENT PROPERTIES OR ROAD RIGHT-OF-WAYS WHICH ARE DAMAGED DURING CONSTRUCTION MUST BE RESTORED BY THE CONTRACTOR.
- TRASH AND DEBRIS SHALL NOT BE ALLOWED TO ACCUMULATE ON THIS SITE AND THE SITE SHALL BE CLEAN UPON COMPLETION OF WORK.
- THE OWNER SHALL HAVE THE RIGHT TO HAVE ALL MATERIALS USED IN CONSTRUCTION TESTED FOR COMPLIANCE WITH THESE SPECIFICATIONS.

SPECIFICATIONS FOR GRADING & EROSION CONTROL

- 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 HULL OFF SOIL. ON-SITE LOCATIONS SUITABLE FOR IMPORT OR HULL MAY BE PRESENT. COORDINATE WITH OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING SOIL CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. A GEOTECHNICAL REPORT MAY BE AVAILABLE FROM THE OWNER.
- 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. STOOPLES SHALL NOT BE LOCATED CLOSER THAN 20' TO A DRAINAGE STRUCTURE OR FEATURE AND SHALL BE SURROUNDED WITH SILT FENCE.
- THE GEOTECHNICAL ENGINEER IS RESPONSIBLE FOR VERIFYING COMPACTION AND FILL PLACEMENT IN THE FIELD. THE GEOTECHNICAL ENGINEER MAY SUPERSEDE THESE SPECIFICATIONS IF THERE IS GOOD CAUSE TO DO SO. AN EXPLANATION MUST BE SUBMITTED TO THE ENGINEER IN WRITING BEFORE ANY DEVIATIONS ARE MADE.
- 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 MATERIAL, AND INSPECTED AND APPROVED BY THE RESIDENT GEOTECHNICAL ENGINEER. PREPARATION OF THE SUBGRADE AFTER STRIPPING SHALL CONSIST OF PROFILING 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-249) OF 30 AND 10 RESPECTIVELY, UNLESS SPECIFICALLY TESTED AND FOUND TO HAVE LOW SHRINKAGE PROPERTIES AND APPROVED BY AN EXPERIENCED SOILS ENGINEER. THE TOP THREE (3) INCH PARTICLE DIAMETER AND ALL UNDERLYING STRUCTURAL FILL A MAXIMUM SIX (6) INCH PARTICLE DIAMETER UNLESS SPECIFICALLY APPROVED BY AN EXPERIENCED SOILS ENGINEER. ALL FILL MATERIAL MUST BE TESTED AND APPROVED UNDER THE DIRECTION AND SUPERVISION OF AN EXPERIENCED SOILS ENGINEER. THE TOP THREE (3) INCH PARTICLE DIAMETER AND ALL UNDERLYING 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 D2497) FOR THE MATERIAL. THE DENSITY OF THE STRUCTURAL COMPACTED FILL AND SCARIFIED SUBGRADE SHALL NOT BE LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR (ASTM D2497) FOR THE MATERIAL. THE MOISTURE CONTENT OF COMPACTED SOIL SHALL NOT VARY BY MORE THAN 1 TO 1.5 PERCENT AND GRANULAR SOIL 0.3 PERCENT OF OPTIMUM WHEN PLACED AND COMPACTED OR RECOMPACTED, UNLESS SPECIFICALLY APPROVED BY THE SOILS ENGINEER. FILLING INTO CONSTRUCTION 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. DISCUS, HARROWING OR ROLLING OPERATIONS MAY BE NECESSARY TO REDUCE THE MOISTURE CONTENT TO A SATISFACTORY VALUE, AFTER WHICH IT SHALL BE COMPACTED. THE FINISHED SUBGRADE AREAS OR THE SITE SHALL BE COMPACTED TO 100 PERCENT OF THE STANDARD PROCTOR (ASTM D-2930) MINIMUM DENSITY.
- 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 FILL IS PLACED.
- SUBGRADE TOLERANCES ARE +1" FOR LANDSCAPE AREAS AND +1/2" FOR ALL PAVEMENT AND BUILDING AREAS.
- 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 LOOSE WHEN SPREAD.
- 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.
- 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 SWEEP IMMEDIATELY AND ALL SEDIMENT REMOVED FROM CONSTRUCTION FACILITIES.

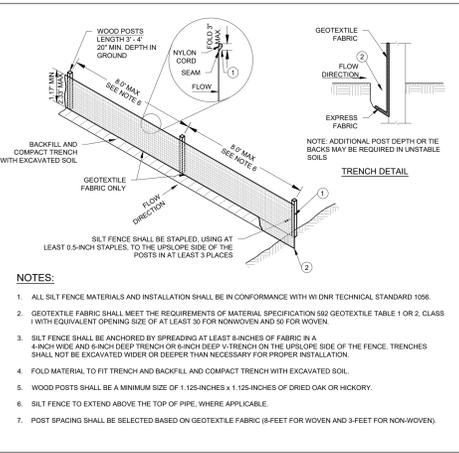
SPECIFICATIONS FOR PRIVATE UTILITIES

- 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 REVISION.
- ALL CONNECTIONS TO EXISTING PIPES AND MANHOLES SHALL BE CORDED CONNECTIONS. CONNECTIONS TO WATERMAIN SHALL BE WET TAPED WITH A STAINLESS STEEL TAPPING BLEEVE.
- 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 PLANS.
- CONTRACTOR SHALL NOT SHUT OFF WATER OR PLUG SANITARY SEWER IN MUNICIPAL LINES WITHOUT PRIOR APPROVAL.
- MATERIALS FOR STORM SEWER SHALL BE AS FOLLOWS: STORM SEWER PIPE 48" OR LESS SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) CORRUGATED PIPE WITH AN INTEGRALLY FORMED SMOOTH WATERWAY SUCH AS ADS N-12. FOR PIPE 10" OR LESS IN DIAMETER PVC, ASTM D3034, SDR35, MAY BE USED. TRENCH SECTION SHALL BE CLASS "B" FOR PVC AND HOPE AND CLASS "C" FOR CONCRETE (PER STANDARD SPECIFICATIONS). MANHOLES, INLETS AND CATCH BASINS SHALL BE PRE CAST REINFORCED CONCRETE, ASTM C-478. CASTINGS SHALL BE HEAVY DUTY CAST IRON. 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 INSERTS AND SHALL BE RESTRAINED WITH HOES.
- MATERIALS FOR SANITARY SEWER SHALL BE AS FOLLOWS: SANITARY SEWER SHALL BE PVC, ASTM D-3034, SDR-35 WITH RUBBER GASKETED JOINTS, CONFORMING TO ASTM D-3012. TRENCH SECTIONS SHALL BE CLASS "B" BEDDING (PER STANDARD SPECIFICATIONS). CRUSHED STONE CHIPS SHALL BE USED FOR BEDDING MATERIAL. CONNECTIONS SHALL BE MADE WITH AN INSERT A WYE OR EQUIVALENT. A MINIMUM OF 2" COVER IS REQUIRED FOR ALL SANITARY SEWER.
- MATERIALS FOR WATER SERVICES AND PRIVATE HYDRANTS SHALL BE AS FOLLOWS: WATER SERVICES SHALL BE PVC, HOPE, OR DI AS ALLOWED BY MUNICIPAL CODE. PVC SHALL BE ANWWA C100. DI SHALL BE ANWWA C151. CLASS 12 (OR AS REQUIRED BY LOCAL CODE). 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 2" COVER IS REQUIRED FOR ALL WATERMAIN. VALVES SHALL BE NONBURST STEEL, RESILIENT SEATED GATE VALVES COMPLYING WITH ANWWA C200 WITH A THREE PIECE CAST IRON VALVE BOX. INSTALL THRUST BLOCKS AT ALL BENDS AND TEES. DISINFECT ALL NEW LINES AND OBTAIN SAFE WATER SAMPLE PRIOR TO USE.
- EXTREME CAUTION MUST BE FOLLOWED REGARDING THE COMPACTON 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 ALLOWED.
- TRACER WIRE (NO. 2 SINGLE STRAND COPPER) AND WARNING TAPE SHALL BE INSTALLED ON ALL UTILITIES IN ACCORDANCE WITH THE LOCAL AND STATE CODES. TRACER WIRE SHALL TERMINATE IN A VALVE/VE TERMINAL BOX AT EACH END.
- MAXIMUM TESTING ON SANITARY LINES AND PRESSURE TESTING ON WATERMAIN MAY BE REQUIRED BY THE OWNER OR MUNICIPALITY.
- UPON COMPLETION OF FINAL PAVING OPERATIONS, THE UTILITY CONTRACTOR SHALL ADJUST ALL MANHOLE AND INLET RIMS AND VALVE BOXES TO FINISHED GRADE.

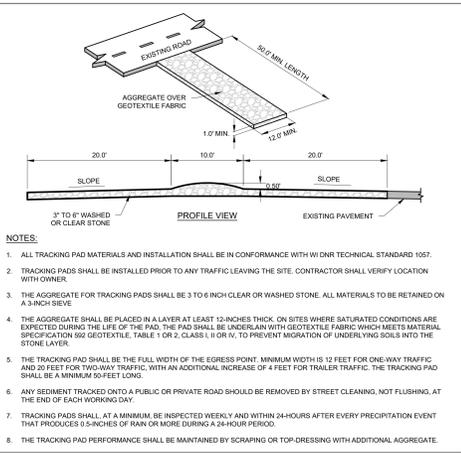
SPECIFICATIONS FOR PAVING

- 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 1 1/2" INCH DIAMETER LIMESTONE TRAFFIC BOND AGGREGATE BASE COURSE UNLESS NOTED OTHERWISE. SUBSTITUTION AND/OR RECYCLED MATERIALS MAY BE ALLOWED WITH APPROVAL FROM THE OWNER.
- SUBGRADE SHALL BE PROOF-ROLLED 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 SPECIFICATIONS.
- EXISTING PAVEMENT SHALL BE EXCAVATED TO NEAR 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 EXISTING. MUNICIPAL STANDARDS MAY REQUIRE ADDITIONAL WORK.
- APPROVAL FOR PAVING AREAS AND THE PRIVATE ROAD SHALL BE PER THE DETAILS MATERIALS AND PLACEMENT SHALL CONFORM TO THE DOT STANDARD SPECIFICATIONS, SECTION 400 AND 490 LT 54-28.5 IS REQUIRED UNLESS NOTED OTHERWISE. A COMMERCIAL GRADE MIX MAY BE SUBSTITUTED ONLY WITH APPROVAL FROM THE OWNER.
- CONCRETE FOR CURB, DRIVEWAY, WALKS AND NON-FLOOR SLABS SHALL CONFORM TO SECTION 401 OF THE STANDARD SPECIFICATIONS. GRADE A, ASTM C64, 8" BAY MIX WITH A MINIMUM 8 DAY COMPRESSIVE STRENGTH OF 5800 PSI. JOINTING SHALL BE PER SECTION 415.3.7, 602.2.3, AND 601.1.4.C. OF THE STANDARD SPECIFICATIONS. CONSTRUCTION JOINTS SHALL BE SPACED NOT FURTHER THAN 10' FOR PAVEMENT, 10' FOR SIDEWALKS OR THE WIDTH OF THE WALK AND 15' FOR CURB. EXPANSION JOINTS SHALL BE SPACED NO FURTHER THAN 90' FOR PAVEMENT, 30' 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.

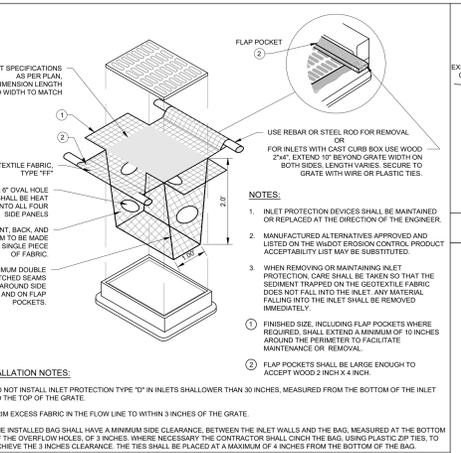
CONTACT DIGGERS HOTLINE TO LOCATE ANY UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.



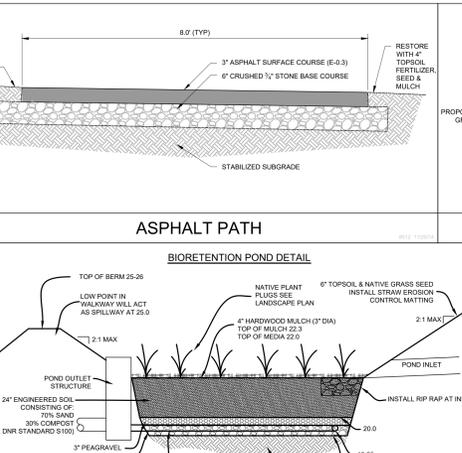
SILT FENCE



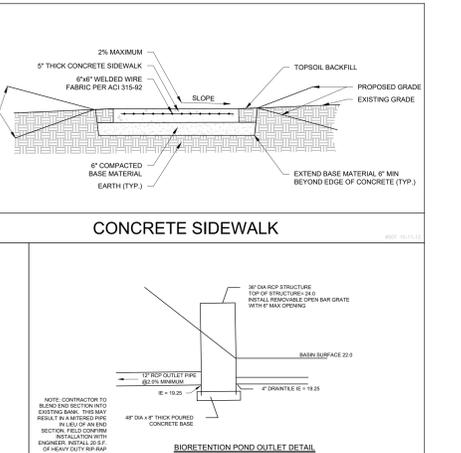
CONSTRUCTION ENTRANCE



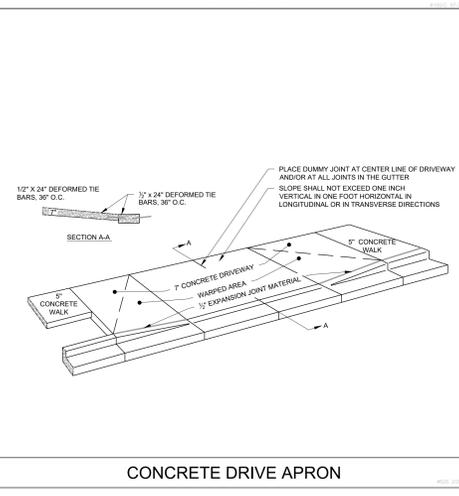
INLET PROTECTION



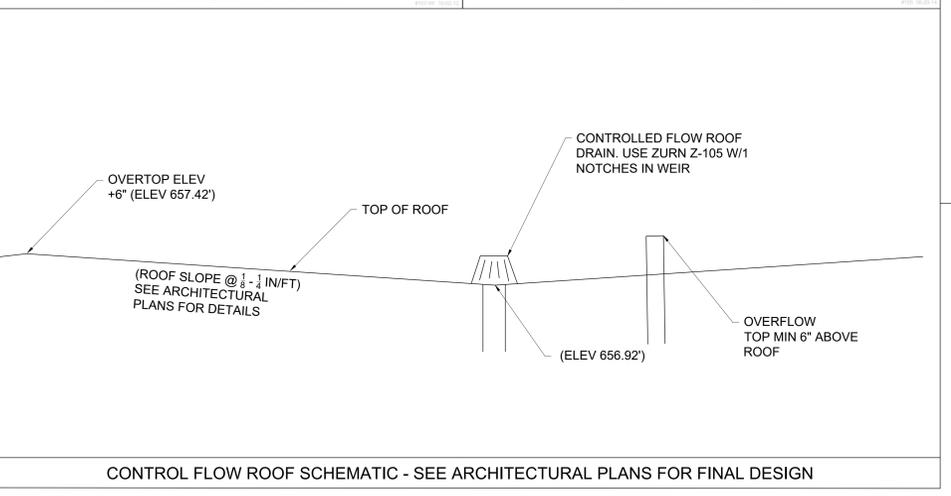
ASPHALT PATH



CONCRETE SIDEWALK



CONCRETE DRIVE APRON



CONTROL FLOW ROOF SCHEMATIC - SEE ARCHITECTURAL PLANS FOR FINAL DESIGN



BIORETENTION POND SPECIFICATIONS:

- DO NOT USE HEAVY EQUIPMENT IN THE BASIN.
- BASIN SHALL BE EXCAVATED TO 1 FOOT ABOVE THE FINISH GRADE, AND LEAVE THE FINAL 1 FOOT TO BE CUT LATER.
- DO NOT PLACE TOPSOIL, MEDIA, MULCH, OR PLANTS UNTIL AFTER THE PAVING OPERATION IS COMPLETE AND THE SITE IS STABILIZED.
- PRIOR TO COMPLETING THE BASIN, REMOVE ANY SEDIMENT THAT HAS ACCUMULATED AND REMOVE FINAL FOOT AND COMPACT BOTTOM SOIL PRIOR TO PLACEMENT OF ANY FINISH MATERIALS.
- ONCE THE ENGINEERED SOIL OR TOPSOIL IS PLACED, THE SURFACE SHALL BE COVERED WITH VARIOUS AREAS OF PLANTING AND/OR SEEDING AS SPECIFIED ON THE LANDSCAPE PLAN. HARDWOOD MULCH MAY NOT BE USED WITHIN 30' OF THE OUTLET TO AVOID WASHOUTS. DECORATIVE 6" STONE SHALL BE USED INSTEAD.
- CONTRACTOR TO PROVIDE A COPY OF ALL GEOTECHNICAL REPORTS AND DATA PERTAINING TO THE PONDS TO THE ENGINEER FOR APPROVAL. ENGINEER SHALL SUBMIT COPIES TO THE CITY FOR APPROVAL ALONG WITH THE RECORD DRAWINGS.



PROJECT: 2024-001; SHEET: 001 OF 001; DATE: 11/18/2024; SCALE: AS SHOWN; DRAWN BY: JLD; CHECKED BY: JLD; APPROVED BY: JLD

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