

GOVERNING SPECIFICATIONS

1. CITY OF EDINA (CITY) STANDARD SPECIFICATIONS AND REQUIREMENTS.
2. MINNESOTA DEPARTMENT OF TRANSPORTATION (MN/DOT) 'STANDARD SPECIFICATIONS FOR CONSTRUCTION' LATEST EDITION AND SUPPLEMENTS.
3. MINNESOTA PLUMBING CODE
4. APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES

GENERAL NOTES

1. UNTIL REVISION BLOCK STATES "ISSUED FOR CONSTRUCTION", THE PLAN SET IS NOT CERTIFIED FOR CONSTRUCTION AND CONTRACTOR IS BUILDING AT THEIR OWN RISK.
2. EXISTING CONDITIONS SHOWN ARE FROM A TOPOGRAPHIC SURVEY COMPLETED BY STANTEC CONSULTING SERVICES INC., DATED MAY 2023. EXISTING FEATURES MAY NOT BE EXACT TO THEIR LOCATION. CONTRACTOR RESPONSIBLE FOR VERIFYING THE CONDITIONS OF THE SITE AND MUST IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF DISCREPANCIES OR VARIATIONS FROM THE DRAWINGS.
3. SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL C. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF C/ASCE 38-2 ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA". EXACT LOCATION/DEPTH OF SUBSURFACE UTILITIES SUCH AS GAS, TELEPHONE, FIBER OPTIC, SEWER, WATER, PIPELINES, ELECTRICAL, AND CABLE TV ARE UNKNOWN AND THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. CONTRACTOR RESPONSIBLE FOR CONTACTING GOPHER STATE ONE CALL (811 OR 1-800-252-1166) A MINIMUM OF 48 HOURS IN ADVANCE (EXCLUDING HOLIDAYS AND WEEKENDS) BEFORE STARTING WORK FOR LOCATIONS OF UNDERGROUND UTILITIES.
5. QUANTITIES ARE APPROXIMATE, AND MAY VARY TO ALLOW COMPLETION OF WORK.
6. WORK AND MATERIALS MUST COMPLY WITH CITY, COUNTY, STATE, AND FEDERAL (INCLUDING OSHA) REGULATIONS AND CODES.
7. CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS TO ADJACENT PROPERTIES THROUGHOUT CONSTRUCTION.
8. CONTRACTOR SHALL COORDINATE AND MAINTAIN MAIL, GARBAGE, AND RECYCLING SERVICES TO PROPERTIES THROUGHOUT CONSTRUCTION. COORDINATE WITH LOCAL POSTMASTER, GARBAGE AND RECYCLING SERVICES.
9. CONTRACTOR SHALL COORDINATE AND MAINTAIN STORMWATER DRAINAGE CONVEYANCE THROUGHOUT CONSTRUCTION (BOTH PIPED AND OVERLAND FLOW).
10. CONTRACTOR SHALL COORDINATE AND MAINTAIN WATER AND SANITARY FLOW TO AND FROM PROPERTIES. PROVIDE BYPASS AND TEMPORARY SYSTEMS, AS NECESSARY.
11. CONTRACTOR SHALL COORDINATE AND MAINTAIN UTILITY SERVICES TO ADJACENT PROPERTIES AT ALL TIMES. UTILITY SERVICE MUST NOT BE INTERRUPTED WITHOUT APPROVAL FROM OWNER, CITY, AND ADJACENT PROPERTIES.
12. CONSTRUCTION LIMITS ARE TO PROPERTY LINE UNLESS SHOWN OR NOTED OTHERWISE. CONTRACTOR SHALL RESTRICT CONSTRUCTION ACTIVITIES TO AREAS DESIGNATED ON PLANS WITHIN THE CONSTRUCTION LIMITS.
13. CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING PAVEMENT, SITE FEATURES, UTILITIES, TREES, ETC., UNLESS NOTED OR SHOWN OTHERWISE.
14. CONTRACTOR SHALL PHOTO OR VIDEO DOCUMENT EXISTING CONDITIONS OF TREES AND PLANTINGS, ADJOINING CONSTRUCTION, SURFACES, AND SITE IMPROVEMENTS, ETC. TO REMAIN THAT MIGHT BE MISCONSTRUED AS DAMAGE CAUSED BY CONSTRUCTION OPERATIONS. SUBMIT TO ENGINEER AND OWNER BEFORE CONSTRUCTION BEGINS. USE ADEQUATELY DETAILED PHOTOGRAPHS OR VIDEO RECORDINGS. INCLUDE PLANS AND NOTATIONS TO INDICATE SPECIFIC EXISTING DAMAGE CONDITIONS OF ITEMS DESIGNATED TO REMAIN. ANY DAMAGE TO THE EXISTING PAVEMENT, CURBING, STRIPING, OR OTHER SITE FEATURE TO REMAIN MUST BE REPLACED BY THE CONTRACTOR, TO OWNER'S SATISFACTION, AT NO ADDITIONAL COST TO THE OWNER.
15. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING CONSTRUCTION AND WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES.
16. CONTRACTOR MUST IMMEDIATELY NOTIFY THE OWNER AND ENGINEER IN WRITING OF DISCREPANCIES OR CONFLICTS IN THE CONTRACT DOCUMENTS BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS ARE TO BE MADE WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO NOTIFY OWNER AND ENGINEER OF AN IDENTIFIABLE CONFLICT BEFORE PROCEEDING WITH INSTALLATION RELIEVES OWNER AND ENGINEER OF ANY OBLIGATION TO PAY FOR A RELATED CHANGE ORDER.
17. CONTRACTOR SHALL HAVE ONE COPY OF EACH REQUIRED CONSTRUCTION PERMIT AND ONE COPY OF THE MOST CURRENT AND COMPLETE SET OF CONSTRUCTION DOCUMENTS (INCLUDING PLANS, SPECIFICATIONS, GEOTECHNICAL REPORT, SPECIAL CONDITIONS AND PROVISIONS, ETC.) AVAILABLE AT THE PROJECT SITE AT ALL TIMES.
18. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR IMPLEMENTATION AND ENFORCEMENT OF SAFE WORK PRACTICES, INCLUDING BUT NOT LIMITED TO PERSONNEL MONITORING, USE OF TRENCHING, SHEETING, AND SHORING, SCAFFOLDING; MATERIALS HANDLING AND DRILLING; OPERATION OF EQUIPMENT; AND SAFETY OF PUBLIC DURING PROGRESS OF WORK.
19. CONTRACTOR SHALL PLAN FOR AND ENSURE PERSONNEL COMPLY WITH PROVISIONS OF OSHA SAFETY AND HEALTH STANDARDS (29 CFR 1910) AND GENERAL CONSTRUCTION STANDARDS (29 CFR 1926) AS APPROPRIATE.
20. CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH WORK. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS FOR SAFETY OF EMPLOYEES ON PROJECT SITE AND OTHER PERSONS AND ORGANIZATIONS WHO MAY BE AFFECTED BY THE PROJECT. CONTRACTOR'S DUTIES AND RESPONSIBILITIES FOR SAFETY IN CONNECTION WITH WORK SHALL CONTINUE UNTIL SUCH TIME AS ALL WORK IS COMPLETED, AND ENGINEER HAS ISSUED NOTICE TO CONTRACTOR THAT WORK IS COMPLETE.
21. HAZARDOUS MATERIALS, INCLUDING BUT NOT LIMITED TO OIL, GASOLINE, PAINT AND OTHER HAZARDOUS SUBSTANCES MUST BE PROPERLY STORED, BY THE CONTRACTOR, INCLUDING SECONDARY CONTAINMENTS, TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. RESTRICTED ACCESS TO STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MUST BE IN COMPLIANCE WITH LOCAL/STATE/FEDERAL REGULATIONS. CONTRACTOR SHALL REMOVE SPILL OF FUELS, OILS, OR OTHER CHEMICALS IMMEDIATELY UPON DETECTION.
22. IF CONSTRUCTION IS ANTICIPATED TO OCCUR DURING COLD WEATHER, IN THE EVENT THAT SNOWICE REMOVAL IS REQUIRED FOR SITE ACCESS AND CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL REMOVE SNOWICE AND COORDINATE WITH OWNER FOR ACCEPTABLE SNOWICE STORAGE AREAS ONSITE. SNOWICE REMOVAL AND STORAGE IS INCIDENTAL TO THE CONTRACT.
23. CONTRACTOR SHALL DOCUMENT AND MAINTAIN AS-BUILT INFORMATION AS CONSTRUCTION PROGRESSES AND IS RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE OWNER AS REQUIRED BY JURISDICTIONAL AGENCIES FOR CERTIFICATION. ALL AS-BUILT DATA MUST BE COLLECTED BY A LICENSED PROFESSIONAL LAND SURVEYOR REGISTERED IN THE PROJECT'S STATE WHOSE SERVICES ARE ENGAGED AND PAID FOR BY THE CONTRACTOR.

TRAFFIC CONTROL NOTES

1. SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
2. CONTRACTOR SHALL COORDINATE CONSTRUCTION STAGING, ON OR OFFSITE, AS NECESSARY TO COMPLETE THE WORK. IF OFFSITE STAGING AREA IS REQUIRED, CONTRACTOR IS RESPONSIBLE TO FIND, OBTAIN, AND PAY FOR NECESSARY STAGING AREA AT NO ADDITIONAL COST TO THE OWNER. SUBMIT A STAGING PLAN TO THE ENGINEER FOR REVIEW BEFORE STARTING WORK.
3. CONTRACTOR RESPONSIBLE FOR ALL TRAFFIC CONTROL. TRAFFIC CONTROL MUST BE IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE'S MUTCD, INCLUDING THE LATEST FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS. SUBMIT TRAFFIC CONTROL PLAN TO CITY OF EDINA, HENNEPIN COUNTY, AND MN/DOT AND ENGINEER FOR REVIEW BEFORE CONSTRUCTION RELATED ACTIVITIES. PLANS MUST COMPLY WITH APPLICABLE PERMIT REQUIREMENTS. TRAFFIC CONTROL ALSO INCLUDES NECESSARY SIGNAGE AND MARKINGS FOR SIDEWALKS, TRAILS, BOARDWALKS, ETC. CLOSURE. THIS MUST INCLUDE ADVANCED WARNING SIGNS AND NECESSARY FENCING AND SIGNAGE TO PREVENT PEDESTRIANS FROM ACCESSING THE PROPOSED AREA.
4. CONTRACTOR SHALL MAINTAIN TWO-WAY TRAFFIC ON ALL ADJACENT ROADWAYS AT ALL TIMES, UNLESS OTHERWISE APPROVED BY THE ROAD AUTHORITY.

REMOVAL/DEMOLITION NOTES

1. SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
2. CONTRACTOR SHALL OBTAIN PERMITS REQUIRED FOR DEMOLITION, REMOVAL AND DISPOSAL.
3. CONTRACTOR SHALL REVIEW FEATURES NOT SPECIFICALLY IDENTIFIED ON PLAN FOR SALVAGE OR REMOVAL THAT CONFLICT WITH CONSTRUCTION WITH THE ENGINEER.
4. MATERIALS REMOVED/DEMOLISHED BY CONTRACTOR BECOME PROPERTY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED. CONTRACTOR SHALL LOAD AND HAUL MATERIAL OFF-SITE AND PROPERLY DISPOSE OF MATERIALS IN ACCORDANCE WITH APPLICABLE REGULATIONS. CONTRACTOR MUST LEAVE THE SITE IN A CONDITION TO THE SATISFACTION OF THE OWNER AND ENGINEER.
5. CONTRACTOR SHALL SAWCUT FULL DEPTH AT PAVEMENT REMOVAL LIMITS AND AS NECESSARY TO CREATE A SMOOTH FIT/TRANSITION ALONG MATCHING PAVEMENT AREAS.
6. CONTRACTOR SHALL COORDINATE UTILITY REMOVAL WORK WITH APPROPRIATE UTILITY OWNER.
7. CONTRACTOR SHALL SALVAGE AND REINSTALL STREET AND TRAFFIC SIGNS IN CONFLICT WITH CONSTRUCTION ACTIVITIES AS NOTED OR AS DIRECTED BY ENGINEER. IF SIGNS ARE DAMAGED DURING CONSTRUCTION, CONTRACTOR REQUIRED TO PROVIDE NEW SIGNS AT NO ADDITIONAL COST TO THE OWNER.
8. CONTRACTOR SHALL SALVAGE AND REINSTALL FENCE IN CONFLICT WITH CONSTRUCTION ACTIVITIES AS NOTED OR AS DIRECTED BY ENGINEER. IF FENCE IS DAMAGED DURING CONSTRUCTION, CONTRACTOR REQUIRED TO PROVIDE NEW FENCE, TO OWNER'S SATISFACTION, AT NO ADDITIONAL COST TO THE OWNER.
9. IN THE EVENT THAT UNKNOWN CONTAINERS OR TANKS ARE ENCOUNTERED, THE CONTRACTOR MUST CONTACT THE ENGINEER IMMEDIATELY. ALL CONTAINERS OR TANKS MUST BE DISPOSED OF PROPERLY AT A REGULATED/PERMITTED FACILITY.
10. CONTRACTOR SHALL REVIEW ALL TREE REMOVALS WITH THE OWNER AND ENGINEER PRIOR TO REMOVAL OPERATIONS.
11. REMOVAL OF ANY EXISTING BUILDING REQUIRES COMPLETION OF A HAZARDOUS MATERIAL SURVEY IN ACCORDANCE WITH LOCAL RULES AND REGULATIONS. CONTRACTOR SHALL PROVIDE THE APPROPRIATE SURVEY AT NO ADDITIONAL COST TO THE OWNER.
12. CLEARING AND GRUBBING OPERATIONS MUST COMPLY WITH THE FOLLOWING: PROTECT ALL TREES AND PLANTS NOT DESIGNATED FOR REMOVAL; CONDUCT OPERATIONS IN SUCH A MANNER THAT DOES NOT DAMAGE PROTECTED TREES AND VEGETATION; CUT, REMOVE, AND DISPOSE OF TREES, BRUSH, SHRUBS, WINDFALLS, LOGS, STUMPS, ROOTS, FALLEN TIMBER, AND OTHER VEGETATION; BACKFILL DEPRESSIONS WITH NATIVE SOILS OR SUITABLE FILL MATERIAL AS REQUIRED BY DESIGN OR AS DIRECTED BY THE ENGINEER AND COMPACT CONTRACTOR AS DIRECTED; DISPOSE OF DEBRIS IN ACCORDANCE WITH APPLICABLE REGULATIONS; CONSIDER BENEFICIAL USE DESIGNATIONS FOR UNADULTERATED WOOD, WOOD CHIPS, BARK AND SAWDUST; NO BURYING OF CLEARED AND GRUBBED WASTE WITHIN THE CONSTRUCTION LIMITS.
13. UNLESS OTHERWISE NOTED, CONTRACTOR IS RESPONSIBLE FOR REMOVAL/DEMOLITION WITHIN ALL AREAS OF PROPOSED IMPROVEMENTS. REMOVAL LIMITS ARE IDENTIFIED ON THE DRAWINGS IN ANTICIPATED LOCATIONS. CONTRACTOR RESPONSIBLE FOR REMOVALS AS NECESSARY TO CONSTRUCT NEW IMPROVEMENTS AND CONFORM TO DESIGN REQUIREMENTS. ALL FACILITIES TO BE REMOVED MUST BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE FILL MATERIAL IN ACCORDANCE WITH THE SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.

SITE NOTES

1. SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
2. REFER TO THE ARCHITECTURAL, STRUCTURAL, LANDSCAPE, AND MEP PLANS FOR EXACT LOCATIONS OF AND DIMENSIONS OF BUILDINGS, VESTIBULES, STOOPS, OVERHANGS, COLUMNS, RAMPS, SIDEWALKS, TRASH ENCLOSURES, TRAFFIC GATES, MONUMENT SIGNS, LANDSCAPING, PLANTINGS, TREES, SITE LIGHTING, EXTERIOR ELECTRICAL, BACKFLOW PREVENTORS AND BUILDING UTILITY ENTRANCE LOCATIONS.
3. BUILDING LINES SHOWN ARE APPROXIMATE OUTSIDE LINES OF BUILDINGS AT GRADE, MAY NOT ACCOUNT FOR EXTRUSIONS (I.E. BALCONIES, OVERHANGS, LIGHTING, ETC.) ABOVE GRADE, AND ARE BASED ON INFORMATION PROVIDED TO STANTEC BY THE ARCHITECT. CONTRACTOR SHALL VERIFY FINAL BUILDING PLANS WITH ARCHITECT.
4. CONTRACTOR AND SURVEYOR SHALL FIELD VERIFY THE BUILDING FOOTPRINT/OUTLINE AND OUTER MOST EXTRUSIONS PRIOR TO CONSTRUCTION TO REVIEW POTENTIAL CONFLICTS WITH ADJACENT WORK, EXISTING SITE FEATURES, PROPERTY LINES, SETBACKS, ETC.
5. RETAINING WALL ELEVATIONS SHOWN ON GRADING PLAN. RETAINING WALL DESIGNED BY OTHERS. COORDINATE WITH PROJECT PARTNERS
6. CONCRETE GUTTER PAN TO TIP IN THE SAME DIRECTION AS THE ADJACENT PAVEMENT.
7. DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

PAVING, PAVEMENT MARKING, AND SIGNAGE NOTES

1. SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
2. CONTRACTOR SHALL MAINTAIN STREET AND TRAFFIC SIGNS AT ALL TIMES DURING CONSTRUCTION.
3. SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES MUST BE IN ACCORDANCE WITH THE STATE'S MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE APPLICABLE ROAD AUTHORITY STANDARDS.
4. THE PAVEMENT SURFACE SHALL BE CLEANED AT THE DIRECTION OF THE APPLICABLE ROAD AUTHORITY AND THE ENGINEER JUST PRIOR TO APPLICATION OF PAVEMENT MARKINGS. PAVEMENT CLEANING SHALL CONSIST OF AT LEAST BRUSHING WITH A ROTARY BROOM (NON-METALLIC) OR AS RECOMMENDED BY THE MATERIALS MANUFACTURER AND ACCEPTABLE TO THE APPLICABLE ROAD AUTHORITY AND THE ENGINEER.
5. THE PAVEMENT MARKING APPLICATION SHALL IMMEDIATELY FOLLOW THE PAVEMENT CLEANING.
6. PAVEMENT MARKING EDGE LINES ARE TO BE BROKEN ONLY AT INTERSECTION WITH PUBLIC ROADS AND PRIVATE ENTRANCES IF THEY ARE CONTROLLED BY A YIELD SIGN, STOP SIGN OR TRAFFIC SIGNAL. THE BREAK POINT IS TO BE AT THE START OF THE RADIUS FOR THE INTERSECTION OR AT MARKED STOP LINES.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAVEMENT MARKING RELATED ACTIVITIES, SUCH AS, BUT NOT LIMITED TO, COLLECTING DATA FROM IN PLACE LANE LINES, MARKING PERMANENT MARKING ALIGNMENTS, NECESSARY 'SPOTTING' AT APPROPRIATE POINTS AND TO DETERMINE NECESSARY STARTING AND CUTOFF POINTS. EXACT LOCATION OF PAVEMENT MARKINGS TO BE FIELD LOCATED BY THE CONTRACTOR.
8. THE CONTRACTOR SHALL HAVE A MINIMUM OF 2 PEOPLE WITH CURRENT ACI CONCRETE FLATWORK TECHNICIAN OR FLATWORK FINISHER CERTIFICATION, AND AT LEAST ONE OF THEM MUST BE ONSITE FOR ALL CONCRETE POURS.
9. PROTECT CONCRETE PAVING FROM DAMAGE. EXCLUDE TRAFFIC FROM PAVING FOR A MINIMUM OF 14 DAYS AFTER PLACEMENT. WHEN CONSTRUCTION TRAFFIC IS PERMITTED, MAINTAIN PAVING AS CLEAN AS POSSIBLE BY REMOVING SURFACE STAINS AND SPILLAGE OF MATERIALS AS THEY OCCUR. MAINTAIN CONCRETE FREE OF STAINS, DISCOLORATION, DIRT, AND OTHER FOREIGN MATERIALS. SWEEP PAVING NOT MORE THAN TWO DAYS BEFORE DATE SCHEDULED FOR SUBSTANTIAL COMPLETION INSPECTIONS. REPAIR OR REPLACE STAINED/DISCOLORED CONCRETE TO THE SATISFACTION OF THE OWNER AT NO COST TO THE OWNER.
10. CONSTRUCTION AND MATERIALS WITHIN PUBLIC RIGHT-OF-WAY MUST BE IN ACCORDANCE WITH APPLICABLE ROAD AUTHORITY'S SPECIFICATIONS AND STANDARDS. DOT SPECIFICATIONS AND STANDARDS APPLY IF NOT COVERED BY LOCAL OR COUNTY REGULATIONS. PAVING, PAVEMENT MARKINGS, AND SIGNAGE WITHIN THE SITE SHALL MEET THE FOLLOWING REQUIREMENTS:
 - A. BITUMINOUS: CONFORM TO MN/DOT SPEC 2360
 - 1) WEARING COURSE MIX DESIGN: SPWVEA340B
 - 2) NON-WEARING COURSE MIX DESIGN: SPNWB330B
 - 3) WEARING COURSES - 10% MAX RAP, NO RAS ALLOWED. NON-WEARING COURSES - 20% MAX RAP
 - 4) TACK COAT: MN/DOT SPEC 2357, EMULSIFIED ASPHALT, CATIONIC, CSS-1 OR CSS-1H
 - B. MAXIMUM ALLOWABLE BITUMINOUS SLIT THICKNESS SHALL NOT EXCEED 3 INCHES. MINIMUM LIFT THICKNESS SHALL BE IN ACCORDANCE WITH THE FOLLOWING: 1.5 INCHES FOR MIXES WITH 0.5 INCH MAX AGGREGATE SIZE (SP 9.5); 2. INCHES FOR MIXES WITH 0.75 INCH MAX AGGREGATE SIZE (SP 12.5); 0.75 INCHES FOR MIXES WITH 0.375 INCH MAX AGGREGATE SIZE (SP 4.75)
 - C. PLACE TACK COAT BETWEEN NEW SURFACE AND EACH NEW LIFT AT A RATE OF 0.05 GALLONS PER SQUARE YARD.
 - D. CONCRETE SIDEWALK/DRIVEWAYS/SLABS MATERIALS: MN/DOT SPEC 2461
 - 1) MANUAL PLACEMENT MIX DESIGN: MN/DOT MIX 3F52A
 - 2) FLY ASH: CLASS F
 - E. CONCRETE CURB AND GUTTER MATERIALS: MN/DOT SPEC 2461
 - 1) MANUAL PLACEMENT: MN/DOT 3F52
 - 2) SLIP FORM PLACEMENT: MN/DOT 3F32
 - F. CONCRETE METAL REINFORCEMENT:
 - 1) BAR SUPPORTS: CONFORM TO "BAR SUPPORT SPECIFICATIONS AND STANDARD NOMENCLATURE", CRSI MANUAL OF STANDARD PRACTICE.

PAVING, PAVEMENT MARKING, AND SIGNAGE NOTES CONT.

- G. CONCRETE ISOLATION/EXPANSION JOINT MATERIAL: MN/DOT SPEC 3702, TYPE D-1 OR D-2 FROM MN/DOT'S APPROVED PRODUCT LIST. PROVIDE SINGLE COMPONENT, GUN GRADE POLYURETHANE JOINT SEALANT IN ACCORDANCE WITH ASTM C920, LIGHT GRAY COLOR TO MATCH CONCRETE COLOR. PROVIDE BACKER ROD AS RECOMMENDED BY JOINT MANUFACTURER.
- H. CONCRETE CURING MATERIALS: MN/DOT SPEC 3754 (POLY-AMS MEMBRANE)
- I. SILANE/SILOXANE CONCRETE SEALER: SILOXA-TEK 8500, OKON S40, ARMOR SX5000, OR APPROVED EQUAL. SHALL BE APPLIED PER MANUFACTURER INSTRUCTIONS. SHALL BE APPLIED ON A CLEAN, DRY, AND ABSORBENT SURFACE THAT HAS BEEN CURED FOR AT LEAST 28 DAYS PRIOR TO APPLICATION. SHALL BE APPLIED TO A SURFACE THAT IS ABOVE 40 DEGREES FAHRENHEIT AND WILL NOT FREEZE FOR AT LEAST 24 HOURS. APPLICATION RATE SHALL BE MONITORED AND BE GREATER THAN MANUFACTURERS RECOMMENDATIONS.
- J. CONCRETE CURING AND SEALER ALTERNATE: TK PRODUCTS ONE-STEP CURING AND SEALING PRODUCT OR EQUAL. SHALL BE APPLIED PER MANUFACTURER INSTRUCTIONS. SHALL BE APPLIED TO A SURFACE THAT IS ABOVE 40 DEGREES FAHRENHEIT AND WILL NOT FREEZE FOR AT LEAST 24 HOURS. APPLICATION RATE SHALL BE MONITORED AND BE GREATER THAN MANUFACTURERS RECOMMENDATIONS.
- K. CONCRETE PLACING, FINISHING, CURING, AND PROTECTION: CONFORM TO MN/DOT SPECS 2461, 2521, AND 2531, AND APPLICABLE ACI STANDARDS.
 - 1) FOR HOT WEATHER PLACEMENT, COMPLY WITH ACI 305 HOT WEATHER CONCRETING (LATEST EDITION).
 - 2) FOR COLD WEATHER PLACEMENT, COMPLY WITH ACI 306 COLD WEATHER CONCRETING (LATEST EDITION). DO NOT PLACE CONCRETE IN AIR TEMPERATURE LESS THAN 40 DEGREES F WITHOUT APPROVAL OF THE ENGINEER.
 - 3) PRIOR TO POURING ANY EXTERIOR CONCRETE FLATWORK/SLAB, CONTRACTOR MUST VERIFY THE PREDICTED COMBINATION OF AIR TEMPERATURE, RELATIVE HUMIDITY, CONCRETE TEMPERATURE AND WIND VELOCITY WILL NOT EXCEED AN EVAPORATION RATE OF 0.20 POUNDS PER SQUARE FOOT OF SURFACE AREA PER HOUR IN ACCORDANCE WITH ACI 305 (LATEST EDITION). THE WEATHER MUST ALSO BE LESS THAN 30% CHANCE OF PRECIPITATION FOR THE ENTIRE PLACEMENT WINDOW, AND 2 HOURS FOLLOWING EXPECTED COMPLETION. IF EITHER OF THESE CONDITIONS ARE NOT MET, THE POUR MUST BE POSTPONED UNTIL IT CAN MEET THESE REQUIREMENTS.
 - 4) INSTALLATION FORM: CONTRACTOR OR INDEPENDENT TESTING AGENCY IS REQUIRED TO FILL OUT AND SUBMIT THE ENGINEER'S EXTERIOR CONCRETE INSTALLATION FORM AT THE END OF THE DAY OF EACH POUR. CONTACT THE ENGINEER TO OBTAIN THE FORM.
 - 5) APPLY CURING COMPOUND AT A MINIMUM RATE OF 1 GALLON PER 150 SQ FT SURFACE CURING AREA OR MANUFACTURER RECOMMENDED APPLICATION RATE, WHICHEVER IS GREATER.
 - 6) CONSTRUCT TEMPORARY WIND BREAKS AS NECESSARY TO REDUCE WIND VELOCITY/DRYING/EXPOSURE.
 - 7) CONSTRUCT TEMPORARY SUNSHADES AS NECESSARY TO REDUCE CONCRETE TEMPERATURES/EXPOSURE.
 - 8) CONTRACTOR SHALL PROTECT ALL CONCRETE SLABS THROUGHOUT CONSTRUCTION FROM HEAVY EQUIPMENT, VIBRATIONS, ADJACENT WORK, ETC. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONCRETE DAMAGED DURING CONSTRUCTION AND SHALL REPLACE AT NO ADDITIONAL COST TO THE OWNER.
- L. AGGREGATE BASE: MN/DOT SPEC 3138, CLASS 5 AGGREGATE BASE
- M. PAVEMENT MARKINGS: MN/DOT SPEC 2582
 - 1) PAVEMENT STRIPES: MN/DOT SPEC 3591 (WATER-BASED TRAFFIC PAINT) WITH DROP ON GLASS BEADS IN ACCORDANCE WITH MN/DOT SPEC 3592.
 - 2) CROSSWALK: MN/DOT SPEC 3591 (WATER-BASED TRAFFIC PAINT) WITH DROP ON GLASS BEADS IN ACCORDANCE WITH MN/DOT SPEC 3592.
 - 3) INSTALLERS OF THERMOPLASTIC MUST CARRY A CARD CERTIFYING THAT THEY HAVE ATTENDED A TRAINING SESSION THAT ADDRESSES SURFACE PREPARATIONS AND ALL APPLICATION REQUIREMENTS AND TECHNIQUES NECESSARY FOR SUCCESSFUL APPLICATIONS.
 - 4) PRIOR TO APPLYING PAVEMENT MARKINGS, ALLOW NEW PAVEMENT TO CURE A MINIMUM OF 14 DAYS OR FOLLOW MANUFACTURER'S SPECIFICATION FOR PAVEMENT CURE TIME, WHICHEVER IS GREATER.
 - N. SIGNAGE: CONFORM TO MN/DOT SPECS 2564, 3352 (SIGNS, DELINEATORS, AND MARKERS), AND 3402 (SQUARE TUBULAR SIGN POSTS). ALL SIGNS/POSTS SHALL MEET CRASHWORTHY REQUIREMENTS OF MASH-16. SIGNS SHALL INCLUDE NUMBER AND SIZE OF POSTS IN ACCORDANCE WITH MN/DOT WIND LOADING CHART FOR SIGNS ON SQUARE TUBE POSTS. MOUNT SIGNS IN ACCORDANCE WITH SQUARE TUBE SIGN MOUNTING MN/DOT STANDARD PLANS AND DETAIL SHEETS. SEE MN/DOT STANDARD SIGNS MANUAL FOR PUNCHING CODE AND DETAILED DRAWINGS OF TYPE "C" AND TYPE "D" SIGNS PANELS. SEE MN/DOT MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PART II FOR DETAILS OF TRAFFIC SIGN INSTALLATION. MINIMUM VERTICAL CLEARANCE IS 7 FOOT. SEE MUTCD FOR DETAILS.
11. CONTRACTOR SHALL PROVIDE CONCRETE JOINTS AS FOLLOWS:
 - A. CONTROL JOINTS - MAINTAIN AN ASPECT RATIO (LENGTH TO WIDTH) BETWEEN CONTROL JOINTS AS CLOSE TO 1:1 AS FEASIBLE. DO NOT EXCEED ASPECT RATIO GREATER THAN 1.5:1. MATCH EXISTING PATTERN WHERE APPLICABLE, VERIFY WITH OWNER. MAXIMUM CONTROL JOINT SPACING SHALL BE 24 TIMES THE SLAB THICKNESS UP TO A MAXIMUM OF 12 FEET (I.E. 4-INCH-THICK SLAB = 96 INCH (8 FOOT) MAXIMUM CONTROL JOINT SPACING IN ANY DIRECTION, 8-INCH-THICK SLAB IS 12 FEET)
 - 1) JOINT INTERSECTION ANGLES LESS THAN 60 DEGREES WILL NOT BE ALLOWED
 - 2) PANEL WIDTHS LESS THAN 6 INCHES AT ANY POINT WILL NOT BE ALLOWED
 - 3) JOINTING MUST ACCOMMODATE IN-PAVEMENT STRUCTURES THROUGH JOINTING AND BOXOUTS
 - 4) CONTRACTOR MUST SUBMIT A JOINTING PLAN FOR ENGINEER ACCEPTANCE.
 - B. EXPANSION/ISOLATION JOINTS - PROVIDE AT THE FOLLOWING:
 - 1) JOINT INTERSECTION ANGLES LESS THAN 60 DEGREES WILL NOT BE ALLOWED
 - 2) LOCATIONS WHERE CHANGES IN WIDTH OCCUR
 - 3) LOCATIONS WHERE ADJOINING EXISTING CONCRETE
 - 4) LOCATIONS THAT ABUT THE BUILDING AND OTHER SITE FEATURES INCLUDING RAMPS, STAIRS, LANDINGS, CONCRETE APRONS, ARCHITECTURAL AND LANDSCAPE FEATURES, ETC.
 - 5) LOCATIONS IN CHANGES IN DEPTH (INCLUDING PAVEMENT ADJACENT TO CURB).
 - C. WHEREVER POSSIBLE MATCH JOINTS OF ADJACENT CONCRETE WORK.
12. FIELD QUALITY CONTROL:
 - A. AGGREGATE BASE TESTING REQUIREMENTS AND FREQUENCY: TEST ROLL SUBGRADE AND AGGREGATE BASE IN ACCORDANCE WITH MN/DOT SPECS 2211 AGGREGATE BASE AND 2111 TESTING ROLLING. TEST ROLL MUST BE WITNESSED BY THE ENGINEER OR GEOTECHNICAL ENGINEER.
 - B. CONCRETE TESTING REQUIREMENTS AND FREQUENCY: TEST CONCRETE AIR CONTENT (ASTM C231), CONCRETE SLUMP (ASTM C143), AIR AND CONCRETE TEMPERATURE, AND 7- AND 28-DAY COMPRESSIVE STRENGTH (ASTM C31, C93, AND C172). WHERE APPLICABLE, TEST IN ACCORDANCE WITH MN/DOT SCHEDULE OF MATERIALS CONTROL.
 - C. BITUMINOUS TESTING REQUIREMENTS AND FREQUENCY: ALL BITUMINOUS PAVEMENT DENSITY SHALL CONFORM TO MN/DOT SPEC 2360.3.D.2 - ORDINARY COMPACTION METHOD. CONTRACTOR SHALL ESTABLISH A ROLL PATTERN FOR EACH COURSE OF PAVING EACH DAY. TEST EXTRACTION/GRADATION/AIR VOIDS. ONE EACH PER BITUMINOUS PAVING DAY PER MIX DESIGN.
13. TOLERANCES:
 - A. BITUMINOUS PAVEMENT: CONFORM TO MN/DOT SPEC 2360.3.E, EXCEPT AS MODIFIED HEREIN: DEVIATIONS ALONG ADA ACCESSIBLE ROUTES THAT EXCEED THE MAXIMUM SLOPES WILL BE CONSIDERED UNACCEPTABLE. HORIZONTAL/LINE DEVIATIONS IN LOCATION GREATER THAN ±1 INCH WILL BE CONSIDERED UNACCEPTABLE. ANY SURFACE AREA ALLOWING ENTRAPMENT OF WATER AT A DEPTH OF 1/4 INCH OR GREATER WILL BE CONSIDERED UNACCEPTABLE. REMOVE AND REPLACE UNACCEPTABLE WORK AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
 - B. CONCRETE PAVEMENT: CONFORM TO MN/DOT SPEC 2521.3.D.3, EXCEPT AS MODIFIED HEREIN: VERTICAL DEVIATIONS IN SURFACE GREATER THAN ±3/16 INCH WILL BE CONSIDERED UNACCEPTABLE. DEVIATIONS ALONG ADA ACCESSIBLE ROUTES THAT EXCEED THE MAXIMUM SLOPES WILL BE CONSIDERED UNACCEPTABLE. HORIZONTAL/LINE DEVIATIONS IN LOCATION GREATER THAN ±1/2 INCH WILL BE CONSIDERED UNACCEPTABLE. ANY SURFACE AREA ALLOWING ENTRAPMENT OF WATER AT A DEPTH OF 1/8 INCH OR GREATER WILL BE CONSIDERED UNACCEPTABLE. RANDOM AND UNCONTROLLED CRACKING WILL BE CONSIDERED UNACCEPTABLE. REPLACE CONCRETE PAVEMENT AS DIRECTED BY ENGINEER AND OWNER. PERFORM PAVEMENT REPLACEMENT AT NO ADDITIONAL COST TO THE OWNER. REMOVE AND REPLACE UNACCEPTABLE WORK AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
 - C. CONCRETE CURB AND GUTTER: CONFORM TO MN/DOT SPEC 2531.3. DEVIATIONS ALONG ADA ACCESSIBLE ROUTES THAT EXCEED THE MAXIMUMS WILL BE CONSIDERED UNACCEPTABLE.

PAVING, PAVEMENT MARKING, AND SIGNAGE NOTES CONT.

- D. PAVEMENT MARKINGS: CONFORM TO MN/DOT SPEC 2582.3.C, EXCEPT AS MODIFIED HEREIN: LINE WIDTH DEVIATIONS LESS THAN OR EQUAL TO ±1/4 INCH FROM THE SPECIFIED WIDTH WILL BE ALLOWED FOR STRIPING PROVIDED THE VARIATION IS GRADUAL AND DOES NOT DETRACT FROM THE GENERAL APPEARANCE. BROKEN LINE SEGMENTS LESS THAN OR EQUAL TO ±1/4 FOOT FROM THE SPECIFIED LENGTHS WILL BE ALLOWED FOR STRIPING. ALIGNMENT DEVIATIONS FROM THE CONTROL GUIDE SHALL NOT EXCEED 2 INCHES. MATERIAL SHALL NOT BE APPLIED OVER LONGITUDINAL JOINTS. ESTABLISHMENT OF APPLICATION TOLERANCES SHALL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO COMPLY AS CLOSELY AS PRACTICABLE WITH THE PLANNED DIMENSIONS.
14. CONTRACTOR SHALL INSTALL A MINIMUM OF 12 INCHES AGGREGATE BASE PAST THE BACK OF CURB. SEE DETAILS.

EROSION CONTROL NOTES

1. SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
2. CONTRACTOR SHALL CONFORM TO AND CONDUCT INSPECTIONS IN ACCORDANCE WITH THE NPDES PERMIT AND SWPPP REQUIREMENTS.
3. BEFORE SITE DISTURBANCE AND AS REQUIRED AS CONSTRUCTION PROGRESSES, CONTRACTOR SHALL INSTALL, MAINTAIN, REPAIR, AND REPLACE EROSION PREVENTION MEASURES AND SEDIMENT CONTROL DEVICES (INLET PROTECTION, CONSTRUCTION ENTRANCE, SILT FENCE, EROSION CONTROL BLANKET, ETC.) IN ACCORDANCE WITH THE NPDES PERMIT, THE SWPPP, AND CITY OF EDINA.
4. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DEPENDING ON SITE CONDITIONS DURING CONSTRUCTION. COORDINATE WITH ENGINEER.
5. CONTRACTOR SHALL STABILIZE ALL EXPOSED SOIL AREAS WITHIN THE CONSTRUCTION LIMITS WITHIN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE THAT HAS TEMPORARILY (WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS) OR PERMANENTLY CEASED. STABILIZATION MUST BE INITIATED PROMPTLY. REFER TO LANDSCAPE PLANS FOR FINAL GROUND COVER MATERIALS.
6. CONTRACTOR SHALL REMOVE ANY SEDIMENT THAT HAS TRACKED ONTO PAVED SURFACES BOTH ON AND OFFSITE WITHIN 24 HOURS AND AS DIRECTED BY CITY OF EDINA, ROAD AUTHORITY, OWNER, AND ENGINEER. SWEEP STREET IN ACCORDANCE WITH CITY OF EDINA, ROAD AUTHORITY, AND NPDES PERMIT REQUIREMENTS.
7. CONTRACTOR SHALL COMPLETE CONCRETE WASH-OUT OFF-SITE OR PROVIDE SELF-CONTAINED CONCRETE READY MIX TRUCKS.
8. CONTRACTOR SHALL MINIMIZE DUST FROM CONSTRUCTION OPERATIONS BY PROVIDING WATER OR OTHER APPROVED METHOD ON A DAILY BASIS.
9. CONTRACTOR SHALL PHASE GRADING WORK TO MINIMIZE THE DURATION THAT DISTURBED SOIL IS EXPOSED.
10. CONTRACTOR SHALL PROVIDE/INSTALL DIVERSION DITCHES, SEDIMENT BASINS, AND OTHER EROSION PROTECTION/SEDIMENT CONTROL MEASURES AS NECESSARY DURING INTERIM PROJECT CONDITIONS (NOT SHOWN ON PLANS) TO MANAGE/DIVERT STORM WATER AWAY FROM SITE FEATURES AND CONTROL EROSION/SEDIMENT. CONTRACTOR SHALL ADJUST MEASURES AS NECESSARY THROUGHOUT PROJECT PHASING.
11. CONTRACTOR SHALL LOCATE SOIL STOCKPILES NO LESS THAN 50 FEET FROM ROADWAYS, STORMWATER INLETS, PONDS, WETLANDS, DRAINAGE CHANNELS, AND OTHER SURFACE WATERS. IF REMAINING FOR MORE THAN 7 DAYS STABILIZE THE STOCKPILES BY MULCHING, VEGETATED COVER, TARPS, OR OTHER MEANS IN ACCORDANCE WITH THE NPDES PERMIT. PLACE PERIMETER SEDIMENT CONTROLS AROUND STOCKPILES TO CONTROL EROSION. COVER TEMPORARY STOCKPILES LOCATED ON PAVED SURFACES IF LEFT FROM MORE THAN 24 HOURS.
12. CONTRACTOR SHALL REMOVE ALL EROSION CONTROL MEASURES AFTER SITE HAS BEEN STABILIZED AND VEGETATION IS ESTABLISHED AS DIRECTED BY ENGINEER. EROSION CONTROL MEASURES USED FOR CONSTRUCTION MUST NOT BE REMOVED UNTIL AUTHORIZED BY OWNER OR ENGINEER.
13. CONTRACTOR SHALL PROVIDE TEMPORARY SEDIMENT BASINS FOR COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH 5 OR MORE ACRES DISTURBED AT ONE TIME IF ITS LOCATED WITHIN ONE MILE OF AN IMPAIRED WATER.
14. CONTRACTOR SHALL SUBMIT THE NOTICE OF TERMINATION AT THE COMPLETION OF THE PROJECT IN ACCORDANCE WITH THE NPDES PERMIT AND SWPPP REQUIREMENTS.
15. SOIL PREPARATION: PREPARE SOIL IN ACCORDANCE WITH MN/DOT SPEC 2574, PART 3.A.3 SOIL BED PREPARATION AND PART 3.A.4 SUBSOILING.
16. EROSION CONTROL SHALL MEET THE FOLLOWING REQUIREMENTS:
 - A. SILT FENCE: MN/DOT SPECS 2573 AND 3886. TYPE MS MACHINE SLICED
 - B. SEDIMENT CONTROL LOG (BIOLOG/BIOROLL): MN/DOT SPECS 2573 AND 3897, TYPE STRAW. STRAW BIOROLLS, 8 TO 9 INCHES IN DIAMETER, MINIMUM 10 FEET LONG, FILLED WITH GRAIN STRAW, FREE OF SEED-BEARING STALKS OF NOXIOUS GRASSES OR WEEDS WITH NATURAL FIBER OUTER NETTING.
 - C. EROSION CONTROL BLANKET: MN/DOT SPECS 2575 AND 3885, CATEGORY 20 (NATURAL NETTING ONLY).
 - D. TEMPORARY SEED: MN/DOT SPECS 2575 AND 3876. STATE SEED MIX 21-111 OATS COVER CROP.
 - E. PERMANENT SEED: SEE LANDSCAPE PLAN.
 - F. MULCH: MN/DOT SPECS 2575 AND 3882, TYPE 1 FOR 2X-XXX MOUNT MIXES AND TYPE 3 FOR 3X-XXX MIXES, TWO TONS PER ACRE, DISK ANCHORED IN AREAS THAT DO NOT RECEIVE EROSION CONTROL BLANKET.
17. HYDRAULIC MULCH: MN/DOT SPECS 2575 AND 3884, HYDRAULIC BONDED FIBER MATRIX (BFM), APPLY AT A RATE OF 3500 LBS/AC.

DEWATERING NOTES

1. SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
2. CONTRACTOR MAY ENCOUNTER GROUND WATER. DEWATERING WORK NECESSARY FOR CONSTRUCTION WILL BE CONSIDERED INCIDENTAL TO OTHER WORK.
3. CONTRACTOR SHALL OBTAIN APPLICABLE REQUIRED PERMITS (INCLUDING MN DNR WATER APPROPRIATION PERMIT) AND SUBMIT DEWATERING PLAN TO CITY AND ENGINEER FOR REVIEW. DEWATERING MUST MEET PERMIT REQUIREMENTS AND BE REVIEWED BEFORE STARTING CONSTRUCTION ACTIVITIES.
4. CONTRACTOR MUST DEWATERING IN ACCORDANCE WITH THE NPDES PERMIT AND PROJECT SWPPP.
5. CONTRACTOR MUST DISCHARGE TURBID OR SEDIMENT-LADEN WATER RELATED TO DEWATERING OR BASIN DRAINING (E.G. PUMPED DISCHARGES, TRENCH/DITCH CUTS FOR DRAINAGE) TO A TEMPORARY OR PERMANENT SEDIMENTATION BASIN ON THE PROJECT SITE UNLESS INFEASIBLE. CONTRACTOR MAY DISCHARGE FROM THE TEMPORARY OR PERMANENT SEDIMENTATION BASINS TO THE SURFACE WATERS IF THE BASIN WATER HAS BEEN VISUALLY CHECKED TO ENSURE ADEQUATE TREATMENT HAS BEEN OBTAINED IN THE BASIN AND THAT NUISANCE CONDITIONS (SEE MINNESOTA RULES CHAPTER 7050.0210, SUBPART 2) WILL NOT RESULT FROM THE DISCHARGE. IF THE WATER CANNOT BE DISCHARGED TO A SEDIMENTATION BASIN PRIOR TO ENTERING THE SURFACE WATER, IT MUST BE TREATED WITH THE APPROPRIATE BMPs (E.G. SILT BAGS), SUCH THAT THE DISCHARGE DOES NOT ADVERSELY AFFECT THE RECEIVING WATER OR DOWNSTREAM PROPERTIES. IF THE CONTRACTOR MUST DISCHARGE WATER THAT CONTAINS OIL OR GREASE, THE CONTRACTOR MUST USE AN OIL-WATER SEPARATOR OR SUITABLE FILTRATION DEVICE (E.G. CARTRIDGE FILTERS, ABSORBENTS PADS) PRIOR TO DISCHARGING THE WATER. THE CONTRACTOR MUST ENSURE THAT DISCHARGE POINTS ARE ADEQUATELY PROTECTED FROM EROSION AND SCOUR. THE DISCHARGE MUST BE DISPERSED OVER NATURAL ROCK RIPRAP, SANDBAGS, PLASTIC SHEETING, OR OTHER ACCEPTED ENERGY DISSIPATION MEASURES.
6. CONTRACTOR MUST DISCHARGE WATER FROM DEWATERING OR BASIN-DRAINING ACTIVITIES IN A MANNER THAT DOES NOT CAUSE NUISANCE CONDITIONS. EROSION IN RECEIVING CHANNELS OR ON DOWN SLOPE PROPERTIES, OR INUNDATION IN WETLANDS CAUSING SIGNIFICANT ADVERSE IMPACT TO THE WETLAND.
7. IF THE CONTRACTOR IS USING FILTERS WITH BACKWASH WATER, THE CONTRACTOR MUST HAUL THE BACKWASH WATER AWAY FOR DISPOSAL. RETURN THE BACKWASH WATER TO THE BEGINNING OF THE TREATMENT PROCESS, OR INCORPORATE THE BACKWASH WATER INTO THE SITE IN A MANNER THAT DOES NOT CAUSE EROSION. THE CONTRACTOR MAY DISCHARGE BACKWASH WATER TO THE SANITARY SEWER IF PERMISSION IS GRANTED BY THE SANITARY SEWER AUTHORITY. THE CONTRACTOR MUST REPLACE AND CLEAN THE FILTER MEDIA USED IN DEWATERING DEVICES WHEN REQUIRED TO RETAIN ADEQUATE FUNCTION.



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ENCLAVE

ENCLAVE MIXED-USE
DEVELOPMENT ON FRANCE

7235 FRANCE AVE S.
EDINA, MINNESOTA 55435

PROJECT TITLE										
ISSUE NO.	1									
DESCRIPTION	CITY SUBMITAL									
DATE	04/26/2024									
CERTIFICATION: I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.										
LICENSE NO.:										
DATE:										
PROJECT NO.:	193806086									
DWN BY: MDH	CHKD BY: JRA	APPD BY: JRA								
ISSUE DATE: 04/26/2024										
ISSUE NO.: 1										
SHEET TITLE: <div>GENERAL NOTES</div>										
SHEET NO.: <div>C-002</div>										

GRADING NOTES

- SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
- PROPOSED CONTOURS ARE TO FINISHED SURFACE GRADE, UNLESS NOTED OTHERWISE.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO QUANTIFY SOIL IMPORT OR EXPORT FOR THE SITE AND PERFORM THEIR OWN QUANTITY TAKEOFFS FROM THE DRAWINGS FOR BIDDING PURPOSES. SUITABLE OFFSITE IMPORT MATERIAL MAY BE NECESSARY TO ACHIEVE THE FINAL GRADES SHOWN ON THE DRAWINGS. CONTRACTOR SHALL COORDINATE WITH ENGINEER TO VERIFY IMPORT, FROM CONTRACTOR DETERMINED SOURCE, IS SUITABLE FOR USE. EXCESS MATERIAL, UNLESS NOTED OTHERWISE, IS THE PROPERTY OF THE CONTRACTOR AND IS TO BE MOVED AND DISPOSED OF OFFSITE IN ACCORDANCE WITH APPLICABLE LAWS.
- CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND ENSURE NO PONDING IN PAVED AREAS. CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING IF GRADING DISCREPANCIES ARE FOUND IN EXISTING OR PROPOSED GRADES PRIOR TO PLACEMENT OF PAVEMENT. OBSERVE PAVEMENT AREAS FOR EVIDENCE OF PONDING BEFORE PLACEMENT OF PAVEMENT TO ENSURE DRAINAGE IS ADEQUATE TO INTENDED AREA.
- CONTRACTOR SHALL BACKFILL SUBGRADE AND TRENCH EXCAVATIONS PROMPTLY AFTER EXCAVATION FOR PUBLIC SAFETY OR ACCESS TO DRIVEWAYS.
- CONTRACTOR SHALL PROVIDE TOPSOIL, SEED/SOD, MULCH, AND FERTILIZER IN ACCORDANCE WITH THE LANDSCAPE PLAN.
- REFERENCE LANDSCAPE PLAN FOR MINIMUM TOPSOIL THICKNESS
- EXISTING TOPSOIL ON SITE VARIES IN DEPTH. CONTRACTOR SHALL REMOVE SURFACE VEGETATION AND TOPSOIL AND OTHER LOOSE, SOFT OR OTHERWISE UNSUITABLE MATERIAL FROM THE IMPERVIOUS AREAS AND OTHER AREAS AS DIRECTED BY THE ENGINEER BEFORE PLACEMENT OF SUITABLE FILL MATERIAL.
- CONTRACTOR SHALL EXCAVATE AND DISPOSE OF UNSUITABLE OR CONTAMINATED SOILS DISCOVERED ONSITE IN ACCORDANCE WITH APPLICABLE REGULATIONS AND AS DIRECTED BY THE ENGINEER.
- CONTRACTOR SHALL CONSTRUCT/GRADE SIDEWALKS AND ACCESSIBLE ROUTES INCLUDING CROSSING DRIVEWAYS IN ACCORDANCE WITH CURRENT ADA STATE AND NATIONAL STANDARDS. NOTIFY ENGINEER IN WRITING IMMEDIATELY IF ADA CRITERIA CANNOT BE MET AT ANY LOCATION.
- EXISTING SPOT ELEVATIONS AT MATCH POINTS ARE BASED ON INTERPOLATED POINT TO POINT SURVEY DATA. CONTRACTOR IS RESPONSIBLE FOR VERIFYING CONNECTION POINTS PRIOR TO INSTALLATION OF IMPROVEMENTS. CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING IMMEDIATELY OF ANY FIELD DISCREPANCIES. CONTRACTOR IS RESPONSIBLE FOR MAKING NECESSARY ADJUSTMENTS IN THE FIELD FOR CONSTRUCTABILITY, REGULATORY COMPLIANCE (ADA), POSITIVE DRAINAGE, AND TO ENSURE SMOOTH TRANSITIONS TO FIELD CONDITIONS. CONTRACTOR IS RESPONSIBLE FOR REWORK OF A DISCREPANCY THAT IS NOT COMMUNICATED TO THE ENGINEER IN WRITING AT NO ADDITIONAL COST TO THE OWNER.
- EXCAVATE, COMPACT EMBANKMENT/SUITABLE FILL AND BACKFILL IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND IN ACCORDANCE WITH MNDOT SPEC 2106 SPECIFIED DENSITY METHOD.
- CONTRACTOR SHALL MEET MOISTURE CONTENT/CONTROL REQUIREMENTS IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND MNDOT SPEC 2106 AND SITE TESTING REQUIREMENTS.
- ONSITE EMBANKMENT MATERIAL FREE OF ORGANIC SOIL AND DEBRIS MAY BE CONSIDERED FOR REUSE AS SUITABLE FILL MATERIAL IN PERVIOUS AREAS BUT MUST BE ACCEPTED BY THE ENGINEER.
- IMPORTED SUITABLE FILL MATERIAL NEEDED MAY CONSIST OF SAND (SW, SP), SILTY SAND (SM), CLAYEY SAND (SC), SANDY LEAN CLAY OR LEAN CLAY (CL), ACCORDING TO THE USCS CLASSIFICATION WITH A PLASTIC INDEX OF THESE MATERIALS NOT EXCEEDING 15 AND MUST BE ACCEPTED BY THE ENGINEER BEFORE BRINGING ON THE SITE.
- ANY EXISTING STRUCTURES (I.E. MANHOLES, VALVES, ETC.) WITHIN THE LIMITS OF DISTURBANCE SHALL HAVE RIMS ADJUSTED TO MATCH PROPOSED GRADES, UNLESS NOTED OTHERWISE. ADJUSTMENTS SHALL BE IN ACCORDANCE WITH CITY/UTILITY PROVIDER REQUIREMENTS
- CONTRACTOR SHALL PROVIDE DEWATERING MEASURES AS REQUIRED OR AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER. SEE DEWATERING NOTES FOR ADDITIONAL REQUIREMENTS.
- FIELD QUALITY CONTROL:
A. SOILS TESTING WILL BE COMPLETED BY A GEOTECHNICAL ENGINEER/INDEPENDENT TESTING AGENCY HIRED BY THE CONTRACTOR AND APPROVED BY THE OWNER. CONTRACTOR SHALL COORDINATE REQUIRED SOILS TESTS AND INSPECTIONS WITH THE ENGINEER.
B. TESTING SHALL FOLLOW THE FREQUENCY OUTLINED IN THE GEOTECHNICAL REPORT OR MNDOT SCHEDULE OF MATERIALS CONTROL. WHERE NO FREQUENCY IS PROVIDED, CONSULT THE ENGINEER FOR MINIMUM REQUIREMENTS.
- TOLERANCES:
- GRADING ELEVATIONS - CONFORM TO MNDOT SPEC 2106.3.I EXCEPT AS MODIFIED HEREIN: FINISHED GRADING OF SUBGRADE PRIOR TO PLACEMENT OF AGGREGATE BASE COURSES SHALL NOT VARY BY MORE THAN 0.05 FEET ABOVE OR BELOW THE DESIGN, OR ENGINEER ADJUSTED GRADE.

UTILITY NOTES

- SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
- CONTRACTOR SHALL COMPLY WITH THE SPECIFICATIONS AND REQUIREMENTS OF MINNESOTA PLUMBING CODE FOR MATERIALS, INSTALLATION, AND TESTING OF WATER AND SANITARY UTILITIES.
- CONTRACTOR SHALL MAINTAIN A MINIMUM OF 7 FEET 6 INCHES COVER ON ALL WATERLINES, UNLESS OTHERWISE NOTED. PROVIDE HYDRANT EXTENSIONS AND GATE VALVE NUT EXTENSIONS IF WATERLINE IS DEEPER THAN MINIMUM COVER. PROVIDE INSULATION OVER WATERMAIN AND SERVICES WITH PROPOSED ELEVATIONS LESS THAN MINIMUM BURY DEPTH PER PROJECT DETAILS AND UTILITY PROVIDER REQUIREMENTS.
- CONTRACTOR SHALL MAINTAIN A MINIMUM OF 7 FEET 6 INCHES COVER ON ALL SANITARY SEWER AND SERVICES, UNLESS OTHERWISE NOTED. PROVIDE INSULATION OVER SANITARY SEWER AND SERVICES WITH PROPOSED ELEVATIONS LESS THAN MINIMUM BURY DEPTH PER PROJECT DETAILS AND UTILITY PROVIDER REQUIREMENTS.
- CONTRACTOR SHALL PROVIDE 10 FEET MINIMUM HORIZONTAL SEPARATION (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE/STRUCTURE) BETWEEN WATER LINES AND SANITARY OR STORM LINES AND STRUCTURES
- CONTRACTOR SHALL PROVIDE 18 INCH MINIMUM VERTICAL SEPARATION (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE) BETWEEN WATER LINES AND OTHER UTILITY LINE CROSSINGS. PROVIDE INSULATION WHERE WATER, SANITARY OR STORM UTILITIES CROSS. OFFSET WATERMAIN AND SERVICES AS NECESSARY. PIPE LENGTH INDICATED BETWEEN STRUCTURES IS FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE UNLESS NOTED OTHERWISE.
- PIPE SIZES SHOWN ON THE PLANS ARE INTERNAL PIPE DIAMETER.
- CONTRACTOR SHALL INSTALL TRACER WIRE ON ALL SEWER AND WATER MAINS, LATERALS, SERVICE PIPE AND CONNECTIONS TO RISERS, CURB BOXES, MANHOLES, VALVES, HYDRANTS PER CITY/UTILITY PROVIDER REQUIREMENTS AND PROJECT DETAILS AND SPECIFICATIONS.
- IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE WATER LINE MUST INCLUDE ONE FULL LENGTH OF PIPE SO BOTH JOINTS ARE AS FAR FROM THE SEWER/UTILITY AS POSSIBLE AND SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE THRUST BLOCKING AS REQUIRED TO PROVIDE MINIMUM CLEARANCE.
- WATER SERVICES SHALL NOT HAVE ANY INTERMITTENT HIGH POINTS, EXCEPT AT HYDRANTS OR AS NOTED AT SPECIFIC LOCATIONS ON THE PLANS.
- CONTRACTOR SHALL VERIFY PIPE SIZE, MATERIAL, AND CONNECTION FOR ALL CONNECTIONS. PROVIDE APPROPRIATE PIPES AND FITTINGS REQUIRED TO MAKE ELEVATIONS TO EXISTING INFRASTRUCTURE AS VERIFIED IN THE FIELD IN ACCORDANCE WITH CITY/UTILITY PROVIDER REQUIREMENTS.
- WATER AND SANITARY SEWER SERVICES ARE SHOWN TERMINATING AT THE BUILDING FOOTPRINT BUT ARE DESIGNED TO WITHIN 5 FEET OF THE BUILDING FOOTPRINT. VERIFY WITH MEP/PLUMBING PLANS/DESIGNER FOR EXACT LOCATIONS, ELEVATIONS, AND DIMENSIONS OF BACKFLOW DEVICES (DDCV AND PRZ ASSEMBLIES), METERS, AND BUILDING UTILITY ENTRANCE LOCATIONS. SERVICE DESIGNS AND INVERTS WITHIN 5 FEET OF THE BUILDING ARE FOR ILLUSTRATIVE AND REFERENCE PURPOSES ONLY. SEE MEP/PLUMBING PLANS FOR CONTINUATION. VERIFY LOCATIONS AND INVERT ELEVATIONS WITH MEP/PLUMBING PLANS. PROVIDE A RISER PIPE AS NEEDED TO MATCH PLUMBING PIPING.
- WATER AND SANITARY SEWER SERVICE SIZES AND ALIGNMENT ARE PRELIMINARY. CONTRACTOR TO DETERMINE FINAL SIZING AND ALIGNMENT W/ MEP DESIGN. IN THE EVENT THE FINAL SIZE OR ALIGNMENT IS DIFFERENT THAN PRELIMINARY, CONTRACTOR SHALL NOTIFY THE ENGINEER AND OWNER IN WRITING IMMEDIATELY.
- LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED, AND APPROVED PRIOR TO BACKFILLING IN ACCORDANCE WITH AGENCY HAVING JURISDICTION REQUIREMENTS.
- CONTRACTOR SHALL PLACE AND COMPACT SUITABLE FILL MATERIAL BEFORE INSTALLATION OF PROPOSED UTILITIES.
- SANITARY SEWER MAIN, SERVICE PIPES, FITTINGS, AND STRUCTURES SHALL MEET THE FOLLOWING REQUIREMENTS:
A. SANITARY SERVICE PIPE: PVC SCHEDULE 40 PER ASTM D1785
B. SANITARY PIPE FITTINGS: ASTM D2665 FOR SDR AND SCH 40 PVC PIPE, INJECTION MOLDED (GRAVITY LINES ONLY)
C. SANITARY PIPE JOINTS: ASTM F856 AND D2564 FOR SCHEDULE 40 PIPE
D. SANITARY SYSTEM TRACER WIRE: CITY REQUIREMENTS
E. SANITARY PRECAST STRUCTURE: CONFORM TO THE DETAILS/STANDARD PLATES AS SHOWN ON THE DRAWINGS, INCLUDING INTEGRAL BASE SECTIONS AND RUBBER GASKETED TONGUE AND GROOVE JOINTS, UNLESS SHOWN OTHERWISE. ALL PIPE OPENINGS SHALL HAVE INTEGRAL CAST WATERTIGHT SEAL.

UTILITY NOTES CONT.

- SANITARY PRECAST STRUCTURE DESIGN: THE STRUCTURE BASE SLAB, PERIMETER WALLS, AND TOP SLAB SHALL BE DESIGNED FOR SHEAR STRENGTH, FLEXURAL STRENGTH, AND OTHER APPLICABLE STRENGTHS DUE TO HYDROSTATIC LOADING. THE DESIGN OF THE STRUCTURE SHALL CONFORM TO A MINIMUM FACTOR OF SAFETY OF 1.3 FOR BUOYANCY AND FLOTATION. THE HYDROSTATIC LOADING (WATER TABLE ELEVATIONS) SHALL BE ASSUMED FROM THE TOP OF THE STRUCTURE. THE STRUCTURE SHALL BE DESIGNED AND DETAILED PREPARED BY A PROFESSIONAL ENGINEER, EXPERIENCED IN PRECAST CONCRETE MANHOLE DESIGN, WHO IS LICENSED IN THE STATE OF MINNESOTA.
- SANITARY PIPE/STRUCTURE CONNECTION: CONTRACTOR SHALL PROVIDE AND INSTALL A FLEXIBLE COMPRESSION JOINT TO MAKE WATERTIGHT CONNECTIONS TO MANHOLES IN ACCORDANCE WITH MINNESOTA PLUMBING CODE CHAPTER 7, SECTION 719.6. RESILIENT RUBBER JOINTS MAY BE USED IF APPROVED BY AGENCY HAVING JURISDICTION.
- STRUCTURE ADJUSTMENT RINGS: CONCRETE WITH MINIMUM 3,000 PSI COMPRESSIVE STRENGTH, SINGLE HOOP 8-GAUGE STEEL WIRE REINFORCEMENT, AND 2 INCH THICKNESS EACH RING
- ADHESION MATERIAL: BETWEEN TOP SLAB AND BARREL SECTION - RAM-NEK OR APPROVED EQUAL. FOR CONCRETE RINGS, USE AIR ENTRAINED UNDERGROUND UTILITY MORTAR IN ACCORDANCE WITH ASTM C270, ASTM C387, MNDOT SPEC 2506.2.B AND MNDOT SPEC 3107.2.A.1..
- EXTERNAL/INTERNAL SEALS: IN ACCORDANCE WITH CITY REQUIREMENTS
- WATERMAIN, SERVICE PIPES AND FITTINGS TO MEET THE FOLLOWING REQUIREMENTS:
A. WATER SERVICE PIPING - 4 INCHES AND LARGER: PVC C900 DR 18 PER AWWA C 900
B. WATER SERVICE PIPE FITTINGS - 4 INCHES AND LARGER: AWWA C153, 250 PSI WORKING PRESSURE WITH INTERNAL AND EXTERNAL COATING PER AWWA C116
C. WATER SYSTEM TRACER WIRE: UTILITY PROVIDER REQUIREMENTS
D. THRUST BLOCKING: PROVIDE BLOCKING IN ACCORDANCE WITH UTILITY PROVIDER REQUIREMENTS.
E. HYDRANTS: PER UTILITY PROVIDER REQUIREMENTS
F. VALVES: PER UTILITY PROVIDER REQUIREMENTS
- CONTRACTOR SHALL INSTALL AND PROVIDE BEDDING FOR PIPING/ STRUCTURES IN ACCORDANCE WITH CEAM, ASTM D 2321 AND ASTM F 1668 (FOR GRAVITY SEWER), ASTM D 2774 (FOR PRESSURE PIPE), ASTM C 1479 (FOR RC PIPE), AWWA C600 (FOR DIP PIPE), AWWA C605 (FOR PVC), ASTM A 798 (FOR CMP), AND PROJECT/MANUFACTURER DETAILS AND SPECIFICATIONS.
- IF MANUFACTURER DETAILS SPECIFY DESIGN COMPONENTS TO BE DETERMINED BY SITE DESIGN ENGINEER, CONTRACTOR IS RESPONSIBLE FOR CONTACTING SITE DESIGN ENGINEER TO VERIFY SYSTEM REQUIREMENTS PRIOR TO CONSTRUCTION IF NOT NOTED IN THE DRAWINGS.
- CONTRACTOR SHALL COMPACT EMBANKMENT/BEDDING/BACKFILL MATERIAL IN ACCORDANCE WITH MNDOT SPEC 2106 SPECIFIED DENSITY METHOD. THE GEOTECHNICAL REPORT, AND SITE TESTING REQUIREMENTS.
- CONTRACTOR SHALL MEET MOISTURE CONTENT/CONTROL REQUIREMENTS IN ACCORDANCE WITH MNDOT SPEC 2106, THE GEOTECHNICAL REPORT, AND SITE TESTING REQUIREMENTS.
- FIELD QUALITY CONTROL. TESTING, INSPECTIONS, AND CERTIFICATIONS MUST COMPLY WITH THE FOLLOWING:
A. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES, AGENCY HAVING JURISDICTION AND UTILITY PROVIDER COMPANIES.
B. SANITARY LINES AND STRUCTURES, INCLUDING BUT NOT LIMITED TO:
1) SERVICE PIPE AND STRUCTURES TESTING: MEET MN PLUMBING CODE CHAPTER 7 SECTIONS 712 AND 723 REQUIREMENTS
2) LEAKAGE TESTING: MEET CITY/UTILITY PROVIDER/AGENCY HAVING JURISDICTION REQUIREMENTS
3) DEFLECTION TESTING: MEET CITY/UTILITY PROVIDER/AGENCY HAVING JURISDICTION REQUIREMENTS
4) TELEVISION: MEET CITY/UTILITY PROVIDER/AGENCY HAVING JURISDICTION REQUIREMENTS
5) CONDUCTIVITY/TRACING TESTING: MEET CITY/UTILITY PROVIDER/AGENCY HAVING JURISDICTION REQUIREMENTS
C. WATER LINES AND STRUCTURES, INCLUDING BUT NOT LIMITED TO:
1) SERVICE PIPE AND STRUCTURES TESTING: MEET MN PLUMBING CODE CHAPTER 6 SECTIONS 603 AND 609 REQUIREMENTS
2) HYDROSTATIC PRESSURE TESTING: MEET CITY/UTILITY PROVIDER/AGENCY HAVING JURISDICTION REQUIREMENTS
3) DISINFECTION TESTING: MEET CITY/UTILITY PROVIDER/AGENCY HAVING JURISDICTION, MN PLUMBING CODE CHAPTER 6 SECTION 609.9, AND MINNESOTA DEPARTMENT OF HEALTH REQUIREMENTS
4) CONDUCTIVITY/TRACING TESTING: MEET CITY/UTILITY PROVIDER/AGENCY HAVING JURISDICTION REQUIREMENTS
D. SERVICE TRENCH COMPACTION TESTING: IN ACCORDANCE WITH UTILITY PROVIDER REQUIREMENTS.
E. SANITARY MAIN TRENCH COMPACTION TESTING: IN ACCORDANCE WITH UTILITY PROVIDER REQUIREMENTS.
F. SANITARY STRUCTURE COMPACTION TESTING: IN ACCORDANCE WITH UTILITY PROVIDER REQUIREMENTS.
G. WATERMAIN TRENCH COMPACTION TESTING: IN ACCORDANCE WITH UTILITY PROVIDER REQUIREMENTS.
H. WATER STRUCTURE/VALVE COMPACTION TESTING: IN ACCORDANCE WITH UTILITY PROVIDER REQUIREMENTS.
I. TOLERANCES:
A. SANITARY PIPE HORIZONTAL: WITHIN 0.50 FEET OF ALIGNMENT
B. SANITARY PIPE VERTICAL: ZERO PLUS AND 0.08 FEET MINUS ELEVATION SHOWN WITH NO INTERMEDIATE HIGH POINTS, LEVEL SECTION, OR REVERSE INVERT SLOPE.
C. SANITARY PIPE JOINT DEFLECTION: NO MORE THAN 75% OF MAXIMUM ALLOWABLE, AS RECOMMENDED BY MANUFACTURERS OF PIPE AND JOINT MATERIAL
D. SANITARY STRUCTURE RIM ELEVATIONS: ZERO PLUS AND 0.08 FEET MINUS ELEVATION SHOWN
E. WATER PIPE HORIZONTAL: 0 FEET PLUS AND 0.05 FEET OF ALIGNMENT
F. WATER PIPE VERTICAL: 0 FEET PLUS AND 1 FEET MINUS ELEVATION SHOWN, WHILE MEETING THE MINIMUM SEPARATION REQUIREMENTS AT CROSSINGS.
G. WATER PIPE JOINT DEFLECTION: NO MORE THAN 75% OF MAXIMUM ALLOWABLE, AS RECOMMENDED BY MANUFACTURERS OF PIPE AND JOINT MATERIAL
H. HYDRANT/VALVE/CASTING ELEVATION: WITHIN 0.05 FEET OF FINAL ELEVATION. VALVE/TRACER WIRE BOXES, CURB STOPS, AND CASTINGS SHALL NOT EXTEND ABOVE FINAL PAVED SURFACE ELEVATION

STORM SEWER NOTES

- SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
- CONTRACTOR SHALL COMPLY WITH THE SPECIFICATIONS OF THE CITY/UTILITY PROVIDER, CEAM, AND MINNESOTA PLUMBING CODE (MINNESOTA RULES CHAPTER 4714) FOR MATERIALS, INSTALLATION, AND TESTING OF STORM UTILITIES.
- CONTRACTOR SHALL PROVIDE 10 FEET SEPARATION (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE/STRUCTURE) BETWEEN WATER LINES AND SANITARY OR STORM LINES AND STRUCTURE.
- CONTRACTOR SHALL PROVIDE 18 INCH MINIMUM VERTICAL SEPARATION (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE/STRUCTURE) BETWEEN WATER LINES AND OTHER UTILITY LINES. PROVIDE INSULATION WHERE WATER, SANITARY, OR STORM UTILITIES CROSS. OFFSET WATERMAIN AND SERVICES AS NECESSARY.
- CONTRACTOR SHALL VERIFY PIPE SIZE, MATERIAL, AND ELEVATION FOR CONNECTIONS. PROVIDE APPROPRIATE PIPES AND FITTINGS REQUIRED TO MAKE CONNECTIONS TO EXISTING INFRASTRUCTURE AS VERIFIED IN THE FIELD.
- CONTRACTOR SHALL PLACE AND COMPACT SUITABLE FILL MATERIAL BEFORE INSTALLATION OF PROPOSED UTILITIES.
- CONTRACTOR IS RESPONSIBLE FOR PROPERLY LOCATING AND INSTALLING CATCH BASINS SO THAT THE INLET FRAME AND GRATE PROPERLY ALIGN WITH CURB AND GUTTER.
- DRAINTILE/SUBSOIL DRAIN AROUND BUILDING PERIMETER NOT SHOWN ON CIVIL DRAWINGS. CONTRACTOR SHALL VERIFY IF DRAINTILE REQUIRED WITH ARCHITECT/STRUCTURAL/MEP AND COORDINATE CONNECTION TO STORM SYSTEM WITH ENGINEER.
- INSTALL SUBSOIL DRAINS/DRAINTILE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT (LOCATIONS NOT SHOWN ON PLANS).
- LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED, AND APPROVED PRIOR TO BACKFILLING IN ACCORDANCE WITH AGENCY HAVING JURISDICTION REQUIREMENTS.
- PIPE LENGTH INDICATED BETWEEN STRUCTURES IS FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE UNLESS NOTED OTHERWISE. PIPE LENGTH INDICATED BETWEEN STRUCTURE AND FLARED END SECTION IS FROM CENTER OF STRUCTURE TO END OF FLARED END SECTION.
- PIPE SIZES SHOWN ON THE PLANS ARE INTERNAL PIPE DIAMETER.
- IF MANUFACTURER DETAILS SPECIFY DESIGN COMPONENTS TO BE DETERMINED BY SITE DESIGN ENGINEER, CONTRACTOR IS RESPONSIBLE FOR CONTACTING SITE DESIGN ENGINEER TO VERIFY SYSTEM REQUIREMENTS PRIOR TO CONSTRUCTION IF NOT NOTED IN THE DRAWINGS.

STORM SEWER NOTES CONT.

- STORM SEWER MAINS, SERVICE PIPES, FITTINGS, AND STRUCTURES TO MEET THE FOLLOWING REQUIREMENTS:
A. REINFORCED CONCRETE PIPE: REINFORCED CONCRETE (RC) PIPE CLASS PER ACPA LRFD FILL HEIGHT TABLES, TYPE 3 BEDDING, WALL B PER CEAM SPECIFICATIONS AND ASTM C76
B. PIPE JOINTS: JOINTS MUST BE CERTIFIED BY THE MANUFACTURER TO BE ABLE TO PASS THE AIR TEST OR INTERNAL HYDROSTATIC PRESSURE REQUIRED BY THE AGENCY HAVING JURISDICTION.
C. PIPE CONNECTION TO EXISTING STORM STRUCTURE: CONTRACTOR SHALL PROVIDE AND INSTALL A FLEXIBLE COMPRESSION JOINT TO MAKE WATERTIGHT CONNECTIONS TO MANHOLES IN ACCORDANCE WITH MINNESOTA PLUMBING CODE, SECTION 719.6. RESILIENT RUBBER JOINTS MEETING ASTM C923 MAY BE USED IF APPROVED BY AGENCY HAVING JURISDICTION. SEE PROJECT DETAILS.
D. SUBSOIL DRAINS/DRAINTILE: PERFORATED PVC SCH 40 OR SDR 26 IN ACCORDANCE WITH ASTM D2729 - ¼ INCH PERFORATIONS AT 3 INCHES ON CENTER, 4 HOLES PER ROW CONFORMING TO ASTM F758
E. SUBSOIL DRAIN AGGREGATE: MNDOT SPEC 3149.2.H.
F. SUBSOIL DRAIN GEOTEXTILE WRAP: MNDOT SPEC 3733, TYPE 1
G. STORM PRECAST STRUCTURES GENERAL: ASTM C478 AND DRAWING DETAILS.
H. STORM PRECAST STRUCTURE JOINTS: RUBBER O-RING GASKET MEETING ASTM C443
I. STORM PRECAST STRUCTURE STEPS: PER DETAILS
J. STORM PRECAST STRUCTURE DESIGN: DETAILED AND PREPARED BY A PROFESSIONAL ENGINEER EXPERIENCED IN PRECAST CONCRETE STRUCTURE DESIGN WHO IS LICENSED IN THE STATE OF MINNESOTA. DESIGN SHALL CONFORM TO A MINIMUM SAFETY FACTOR OF 1.3 FOR BUOYANCY AND FLOTATION WITH THE HYDROSTATIC LOADING (WATER TABLE ELEVATIONS) ASSUMED FROM THE TOP OF THE STRUCTURE. THE DESIGN OF THE BASE SLAB, WALLS, AND TOP SLAB SHALL BE DESIGNED FOR SHEAR STRENGTH, FLEXURAL STRENGTH, AND OTHER APPLICABLE STRENGTHS DUE TO HYDROSTATIC LOADING. THE DESIGN SHALL BE IN ACCORDANCE WITH THE MOST CURRENT ACI 318, AASHTO, AND MNDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, EXCEPT AS NOTED.
K. STORM PRECAST STRUCTURE MORTAR MATERIALS: MNDOT SPEC 2506.2B, ASTM C270, AND ASTM C387.
L. STORM PRECAST STRUCTURE ADJUSTMENT RINGS: SIZE TO MATCH CONE OR OPENING IN TOP SLAB. CONCRETE WITH MINIMUM 3,000 PSI COMPRESSIVE STRENGTH, SINGLE HOOP 8-GAUGE STEEL WIRE REINFORCEMENT, AND 2 INCH THICKNESS EACH RING
M. STORM PRECAST STRUCTURE ADHESION MATERIAL: BETWEEN TOP SLAB AND BARREL SECTION - RAM-NEK OR APPROVED EQUAL. FOR CONCRETE RINGS, USE MORTAR MATERIALS.
N. STORM PRECAST STRUCTURE INTERNAL/EXTERNAL SEAL: IN ACCORDANCE WITH CITY REQUIREMENTS
- STORM PIPE BEDDING: CONTRACTOR SHALL INSTALL AND PROVIDE BEDDING FOR PIPING/STORM/WATER SYSTEMS/AULTS/CHAMBERS/ STRUCTURES IN ACCORDANCE WITH CEAM, ASTM D 2321 AND ASTM F 1668 (FOR GRAVITY SEWER), ASTM D 2774 (FOR PRESSURE PIPE), ASTM C 1479 (FOR RC PIPE), AWWA C600 (FOR DIP PIPE), AWWA C605 (FOR PVC), ASTM A 798 (FOR CMP), AND PROJECT/MANUFACTURER DETAILS AND SPECIFICATIONS.
- STORM SYSTEM TRACER WIRE: MEET AUTHORITY HAVING JURISDICTION REQUIREMENTS
- CONTRACTOR SHALL COMPACT EMBANKMENT/BEDDING/BACKFILL MATERIAL IN ACCORDANCE WITH MNDOT SPEC 2106 SPECIFIED DENSITY METHOD, IN ACCORDANCE WITH THE GEOTECHNICAL REPORT, AND SITE TESTING REQUIREMENTS.
- CONTRACTOR SHALL MEET MOISTURE CONTENT/CONTROL REQUIREMENTS IN ACCORDANCE WITH MNDOT SPEC 2106, THE GEOTECHNICAL REPORT, AND SITE TESTING REQUIREMENTS.
- FIELD QUALITY CONTROL. TESTING, INSPECTIONS, AND CERTIFICATIONS MUST COMPLY WITH THE FOLLOWING:
A. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES, AGENCY HAVING JURISDICTION AND UTILITY SERVICE COMPANIES.
B. STORM LINES AND STRUCTURES, INCLUDING BUT NOT LIMITED TO:
1) SERVICE PIPE AND ROOF DRAIN LEADERS TESTING TO COMPLY WITH MN PLUMBING CODE CHAPTER 7 SECTION 712 AND CHAPTER 11 SECTION 1107
2) ALL PORTIONS OF SYSTEM (PIPE AND STRUCTURES) THAT PASS WITHIN 10 FEET OF A WATER LINE, WITHIN 10 FEET OF A BUILDING, WITHIN 50 FEET OF WATER WELLS, OR THAT PASS THROUGH SOIL OR WATER IDENTIFIED AS BEING CONTAMINATED MUST BE TESTED IN ACCORDANCE WITH MN PLUMBING CODE CHAPTER 11 SECTION 1107
3) STORM PIPE DEFLECTION TESTING: CEAM 2621.3.F AND AS REQUIRED BY THE MN PLUMBING CODE. 5-PERCENT DEFLECTION ALLOWANCE OF PIPES INTERNAL DIAMETER.
4) STORM PIPE LEAKAGE TESTING: CEAM 2621.3.E AND AS REQUIRED BY THE MN MN PLUMBING CODE.
5) STORM PIPE LAMPING: VERIFY INSTALLATION IS TRUE TO LINE AND GRADE. VERIFY INSTALLED PIPE IS STRUCTURALLY SOUND. VERIFY THERE ARE NO BROKEN OR DEFLECTIVE PIPES. VERIFY THAT JOINTS ARE ALL PUSHED HOME. VERIFY STRUCTURES CONFORM TO SPECIFIED REQUIREMENTS. PROVIDE VERIFICATION OF THE ABOVE IN WRITING TO THE OWNER AND ENGINEER.
6) STORM PIPE CONTINUITY TESTING: IN ACCORDANCE WITH CEAM 2611.3.F AND THE AUTHORITY HAVING JURISDICTION.
7) TELEVISION: MEET CITY/UTILITY PROVIDER/AGENCY HAVING JURISDICTION REQUIREMENTS
8) STORM PIPE TRENCH COMPACTION TESTING: IN ACCORDANCE WITH THE CITY/UTILITY PROVIDER/AGENCY HAVING JURISDICTION
9) STORM STRUCTURE COMPACTION TESTING: IN ACCORDANCE WITH CITY/UTILITY PROVIDER/AGENCY HAVING JURISDICTION
10) BASIN INFILTRATION TESTING: IN ACCORDANCE WITH CITY/AGENCY HAVING JURISDICTION
C. A COPY OF THE TEST RESULTS MUST BE PROVIDED TO THE OWNER, ENGINEER, UTILITY PROVIDER, AND AGENCY HAVING JURISDICTION.
- CONTRACTOR SHALL CLEAN STRUCTURES AND PIPING OF DEBRIS AND SEDIMENT DURING AND AT THE END OF CONSTRUCTION UNTIL ACCEPTED BY THE OWNER AND ENGINEER.
- TOLERANCES:
A. STORM PIPE HORIZONTAL TOLERANCE: WITHIN 0.50 FEET OF ALIGNMENT
B. STORM PIPE VERTICAL TOLERANCE: ZERO PLUS AND 0.08 FEET MINUS ELEVATION SHOWN WITH NO INTERMEDIATE HIGH POINTS, LEVEL SECTION, OR REVERSE INVERT SLOPE.
C. STORM PIPE JOINT DEFLECTION TOLERANCE: NO MORE THAN 75% OF MAXIMUM ALLOWABLE, AS RECOMMENDED BY MANUFACTURERS OF PIPE AND JOINT MATERIAL
D. STORM STRUCTURE RIM ELEVATION TOLERANCE: ZERO PLUS AND 0.08 FEET MINUS ELEVATION SHOWN

TREE PRESERVATION NOTES

- SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
- CONTRACTOR SHALL PROTECT EXISTING TREES THAT ARE NOT TO BE REMOVED. INSTALL ORANGE MESH FENCING, 4 FEET HIGH, WITH STAKES EVERY 10 FEET, 5 FEET OUTSIDE OF THE DRIP LINE OF PRESERVED TREES, OR AT THE CONSTRUCTION LIMITS. DO NOT PERFORM ACTIONS WITHIN THE PROTECTED AREA THAT MAY HARM THE TREE AND COMPACT THE SOIL, INCLUDING EXCAVATION, STORING MATERIALS, PARKING AND TRAFFIC DURING CONSTRUCTION. WHERE CONSTRUCTION REQUIRES DISTURBANCE WITHIN THE PROTECTED AREAS, DISTURB THE ROOT ZONE AS LITTLE AS POSSIBLE.
- TREE PROTECTION MEASURES/FENCING MUST BE IN PLACE PRIOR TO BEGINNING CONSTRUCTION AND MUST BE REVIEWED BY OWNER AND ENGINEER BEFORE STARTING CONSTRUCTION.
- WHEN TREE ROOTS ARE ENCOUNTERED THAT MUST BE REMOVED, CONTRACTOR SHALL CUT ROOTS CLEANLY AS FAR FROM THE TREE AS POSSIBLE AND IMMEDIATELY WATER AND BACKFILL OVER THE ROOTS TO PREVENT DRYING.

TEST REPORTS REQUIRED

- SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
- COPIES OF COMPACTION/MOISTURE, CONCRETE, AND OTHER TEST RESULTS ARE TO BE SENT TO THE OWNER DIRECTLY FROM THE INDEPENDENT TESTING LABORATORY.
- ONSITE/INPLACE GEOTECHNICAL/CONCRETE TESTING MUST BE COMPLETED BY THE CONTRACTOR'S INDEPENDENT TESTING LABORATORY. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL REQUIRED IN-PLACE TESTS AND INSPECTIONS WITH THE ENGINEER/INDEPENDENT TESTING LABORATORY.
- TEST REPORTS REQUIRED MAY INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO: DENSITY TESTS OF SOIL AND PAVEMENT COMPACTION, CONCRETE COMPRESSION, AIR, AND SLUMP TESTS, BACTERIOLOGICAL TESTS OF WATER SYSTEM, MANDREL TESTS OF SANITARY AND STORM SYSTEM, PRESSURE/LEAK TESTS OF WATER/SANITARY/STORM SYSTEM, AND OTHER TESTING REQUIRED BY AGENCY/MUNICIPALITY HAVING JURISDICTION.
- RE-WORK/RE-TESTING DUE TO FIELD TEST FAILURE ARE AT NO ADDITIONAL COST TO THE OWNER.

INFILTRATION SYSTEM NOTES

- CONTRACTOR SHALL STAGE CONSTRUCTION APPROPRIATELY AND INSTALL NECESSARY EROSION CONTROL TO PREVENT SEDIMENT WASHING INTO THE INFILTRATION SYSTEM.
- CONTRACTOR SHALL STAGE CONSTRUCTION APPROPRIATELY TO MINIMIZE COMPACTION OF THE SOILS IN THE INFILTRATION AREA. CONTRACTOR SHALL ACCOMPLISH FINAL GRADING OF THE INFILTRATION SYSTEM LOW-IMPACT (WIDE TRACKED) EARTH MOVING EQUIPMENT TO PREVENT COMPACTION.
- CONTRACTOR SHALL STAKE OFF AND MARK THE PROJECT AREA TO KEEP CONSTRUCTION TRAFFIC, EQUIPMENT AND MATERIAL STOCKPILES OUT OF THE PROPOSED INFILTRATION SYSTEM AREAS.
- CONTRACTOR SHALL STAGE CONSTRUCTION APPROPRIATELY AND INSTALL NECESSARY EROSION CONTROL TO PREVENT SEDIMENT AND TOPSOIL FROM WASHING INTO THE INFILTRATION AREA. IN THE EVENT THAT SEDIMENT IS INTRODUCED INTO THE INFILTRATION AREA, THE CONTRACTOR SHALL REMOVE THE MATERIAL BEFORE PROCEEDING WITH CONSTRUCTION
- CONTRACTOR SHALL NOT EXCAVATE INFILTRATION AREA UNTIL THE CONTRIBUTING DRAINAGE AREAS WITH EXPOSED SOIL HAVE BEEN STABILIZED AND BITUMINOUS BASE COURSE INSTALLED ON CONTRIBUTING PAVEMENT AREAS. DIVERT UPLAND DRAINAGE AREAS TO PREVENT RUNOFF FROM ENTERING THE EXCAVATED SYSTEM OR INTO THE WORK AREA. DO NOT USE INFILTRATION SYSTEM AS TEMPORARY SEDIMENT BASINS OR ALLOW CONSTRUCTION RUNOFF INTO THE CELLS, WHEN ALTERNATE DRAINAGE ROUTES ARE FEASIBLE.
- CONTRACTOR SHALL ACCOMPLISH FINAL GRADING OF THE SYSTEM TO PREVENT COMPACTION. EXCAVATION SHOULD BE PERFORMED WITH A BACKHOE FROM THE SIDES AND OUTSIDE THE FOOTPRINT OF THE INFILTRATION AREA. IF REQUIRED TO WORK WITHIN THE FILTRATION FOOTPRINT, ONLY LOW GROUND PRESSURE TRACKED EQUIPMENT SHALL BE ALLOWED. RUBBER TIRE EQUIPMENT IS PROHIBITED WITHIN THE INFILTRATION AREA.
- DE-COMPACT SUBSOIL WITHIN INFILTRATION AREAS WITH BACKHOE RIPPER ATTACHMENT OR OTHER APPROVED METHOD TO A DEPTH OF AT LEAST 18 INCHES BELOW SUBGRADE IN ALL LOCATIONS INDICATED ON THE DRAWINGS AND AS DIRECTED BY ENGINEER.
- CONTRACTOR SHALL GENTLY MIX THE FIRST LIFT OF INFILTRATION SOILS WITH THE LOOSENED UNDERLYING SOILS TO AVOID STRATIFICATION AND PROMOTE PERMEABILITY. USE EXCAVATOR BUCKET TO PLACE MATERIALS. LEVELING AND FINAL GRADING WITHIN THE CELL MUST BE COMPLETED BY HAND OR OTHER METHOD APPROVED BY THE ENGINEER.
- CONTRACTOR SHALL AVOID CONTAMINATION OF INFILTRATION SYSTEM SOILS WITH SEDIMENT, IN-SITU OR TOPSOIL DURING AND AFTER INSTALLATION. MATERIALS MUST BE SEGREGATED. INSTALLATION WITH DRY SOIL CONDITIONS IS CRITICAL TO PREVENT SMEARING AND COMPACTION.
- IN THE EVENT THAT SEDIMENT IS INTRODUCED INTO THE INFILTRATION SYSTEM, THE CONTRACTOR SHALL REMOVE THE MATERIAL BEFORE PROCEEDING WITH CONSTRUCTION.
- CONTRACTOR SHALL KEEP INFILTRATION SYSTEMS OFF-LINE BY RESTRICTING STORM WATER INFLOW UNTIL DIRECTED BY THE ENGINEER. THIS WILL INCLUDE A TEMPORARY BULKHEAD OF THE PIPE LEADING TO THE AREA. CONTRACTOR SHALL ADJUST MEASURES AS NECESSARY THROUGHOUT PROJECT PHASING. SUBMIT OFF-LINE RESTRICTION PLAN TO ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION OF THE SYSTEMS. COSTS ASSOCIATED WITH TEMPORARILY KEEPING THE SYSTEMS OFFLINE IS INCIDENTAL TO THE PROJECT AND NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL ENSURE INFILTRATION SYSTEM IS FREE AND CLEAR OF SEDIMENT UPON FINAL COMPLETION OF CONSTRUCTION.

HORIZONTAL AND VERTICAL CONTROL NOTES

- SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
- THE HORIZONTAL CONTROL FOR THIS PLAN IS NAD 83 RAMSEY COUNTY COORDINATES SYSTEM, US SURVEY FOOT
- THE VERTICAL CONTROL FOR THE PLAN IS NAVD88

TYPEL PROJECT OBSERVATIONS

- SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
- CONTRACTOR MUST NOTIFY OWNER, ENGINEER, AND CITY IN WRITING A MINIMUM OF 3 BUSINESS DAYS IN ADVANCE OF THE FOLLOWING ACTIVITIES FOR ATTENDANCE AND OBSERVATION: PRE-CONSTRUCTION MEETING, UNDERGROUND PIPING AND UTILITIES INSTALLATION, UTILITY TESTING, STRUCTURES AND APPURTENANCES INSTALLATION, SUBGRADE PREPARATION, BASE INSTALLATION, CURB INSTALLATION, AND PAVEMENT INSTALLATION.



733 MARQUETTE AVE
SUITE 1000
MINNEAPOLIS, MN 55402
PHONE: 612-712-2000
WWW.STANTEC.COM



ENCLAVE



ENCLAVE MIXED-USE
DEVELOPMENT ON FRANCE

7235 FRANCE AVE S.
EDINA, MINNESOTA 55435

PROJECT TITLE

ISSUE NO.:	1								
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DESCRIPTION:

CITY SUBMITAL									
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CERTIFICATION:

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

LICENSE NO.:

DATE:

PROJECT NO.:

193806086

DWN BY:

MDH

CHKD BY:

JRA

APPD BY:

JRA

ISSUE DATE:

04/26/2024

ISSUE NO.:

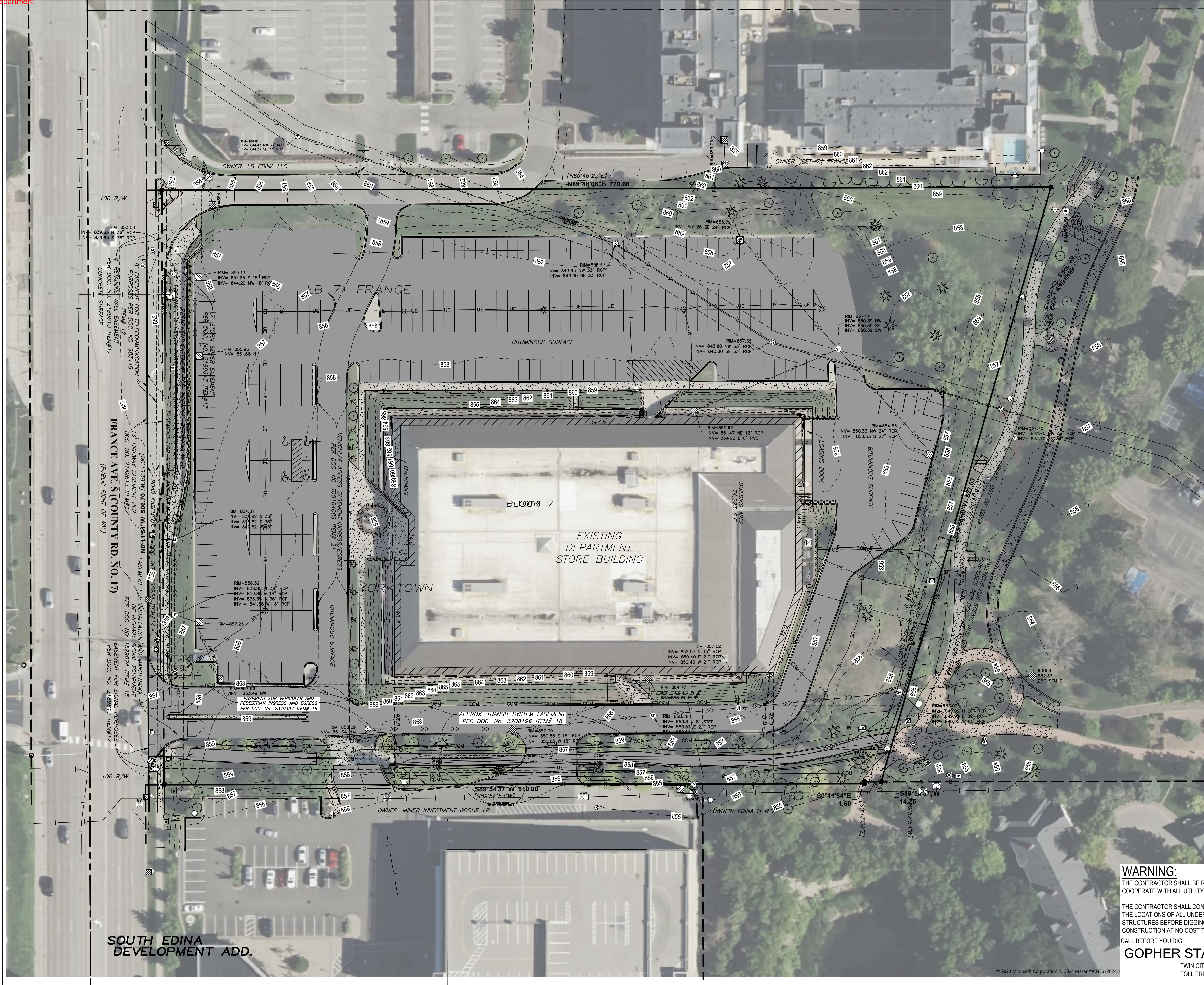
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SHEET TITLE:

GENERAL NOTES

SHEET NO.:

C-003



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PROJECT TITLE	ISSUE NO.	DESCRIPTION	DATE
	1	CITY SUBMITTAL	04/26/2024

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DATE: _____

PROJECT NO.: 193806086

DWN BY: MDH CHKD BY: JRA APPD BY: JRA

ISSUE DATE: 04/26/2024

ISSUE NO.: 1

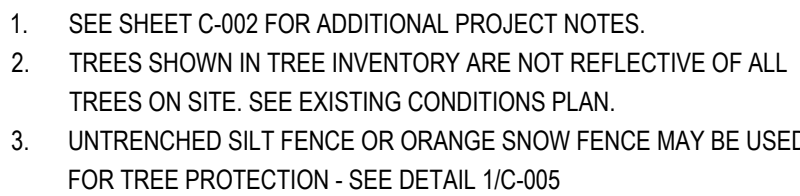
SHEET TITLE: EXISTING CONDITIONS

SHEET NO.: C-004



1 TREE PROTECTION
C-005 NOT TO SCALE

TWIN CITY AREA: 651-454-0002
TOLL FREE 1-800-252-1166



KEYNOTES

- 1.1. SAWCUT PAVEMENT
- 1.2. REMOVE BITUMINOUS PAVEMENT
- 1.3. REMOVE CONCRETE SIDEWALK AND PAVEMENT
- 1.4. REMOVE CURB AND GUTTER
- 1.5. CLEAR AND GRUB AREA
- 1.6. REMOVE TREE
- 1.7. REMOVE GAS METER, GAS LINE, AND SERVICE - COORDINATE WITH UTILITY SERVICE PROVIDER
- 1.8. REMOVE ELECTRIC METER AND SERVICE - COORDINATE WITH UTILITY SERVICE PROVIDER
- 1.9. REMOVE TRANSFORMER - COORDINATE WITH UTILITY SERVICE PROVIDER
- 1.10. REMOVE LIGHT POLE
- 1.11. REMOVE EXISTING BUILDING/STRUCTURE AND

- 1.12. FOUNDATIONS
- 1.13. REMOVE RETAINING WALL
- 1.14. REMOVE WATER MAIN, SERVICES, STRUCTURES, AND ALL APPURTENANCES
- 1.15. REMOVE SIGN
- 1.16. REMOVE AND RELOCATE COMMUNICATION SERVICE - COORDINATE WITH UTILITY SERVICE PROVIDER
- 1.17. REMOVE SANITARY PIPE, SERVICES, STRUCTURES, AND ALL APPURTENANCES
- 1.18. REMOVE STORM PIPE, SERVICES, STRUCTURES AND ALL APPURTENANCES
- 1.19. REMOVE AND REPLACE UNDERGROUND ELECTRIC AND SERVICE - COORDINATE WITH UTILITY SERVICE PROVIDER
- 1.20. REMOVE TRUNCATED DOMES
- 1.21. REMOVE FENCE

- 1.21. REMOVE CONCRETE MEDIAN ON FRANCE AVE
- 1.22. CONTRACTOR TO REPLACE AND SALVAGE STREET SIGNS
2. PROTECT ITEMS
- 2.1. PROTECT EXISTING WATER MAIN, SERVICES, STRUCTURES, AND ALL APPURTENANCES
- 2.2. PROTECT TRANSFORMER
- 2.3. PROTECT BENCH
- 2.4. PROTECT UNDERGROUND ELECTRIC LINE AND APPURTENANCES
- 2.5. PROTECT EXISTING CURB AND GUTTER
- 2.6. PROTECT EXISTING SIGN
- 2.7. PROTECT EXISTING RETAINING WALL
- 2.8. PROTECT EXISTING STORM PIPE, SERVICES, AND APPURTENANCES

- 2.9. PROTECT EXISTING SANITARY PIPE, SERVICES, STRUCTURES, AND APPURTENANCES
- 2.10. PROTECT EXISTING TRUNCATED DOMES
- 2.11. PROTECT EXISTING TREE
- 2.12. PROTECT EXISTING LIGHT POLE
- 2.13. PROTECT EXISTING COMMUNICATION MANHOLE, SERVICES, AND APPURTENANCES
- 2.14. PROTECT EXISTING GAS LINE AND APPURTENANCES
- 2.15. PROTECT EXISTING CONCRETE SIDEWALK AND PAVEMENT
- 2.16. PROTECT EXISTING BITUMINOUS TRAIL
- 2.17. PROTECT EXISTING TRAFFIC SIGNAL
- 2.18. SALVAGE EXISTING STATUE - COORDINATE WITH OWNER

3. EROSION CONTROL ITEMS
- 3.1. INLET PROTECTION - SEE DETAIL 4/C-801
- 3.2. BIOROLL - SEE DETAIL 5/C-801
- 3.3. SILT FENCE - SEE DETAIL 1/C-801
- 3.4. ROCK CONSTRUCTION ENTRANCE - SEE DETAIL 3/C-801
- 3.5. TREE PROTECTION - SEE NOTE 3, THIS SHEET

WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

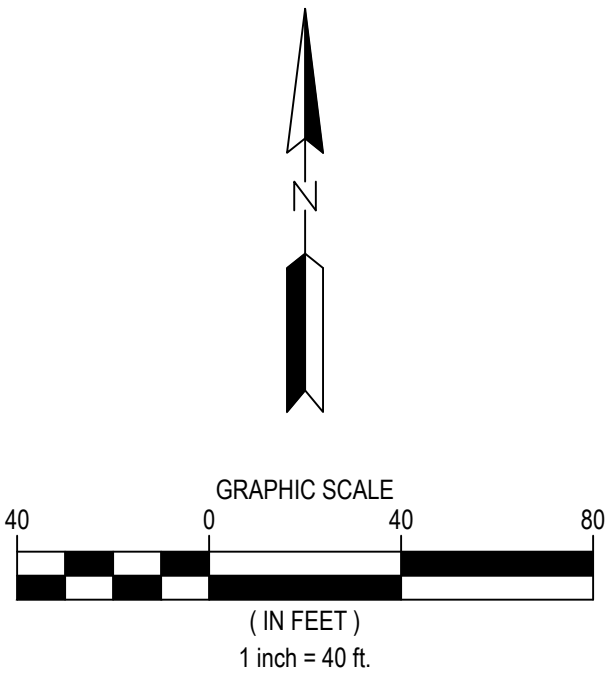
CALL BEFORE YOU DIG

GOPHER STATE ONE CALL

TWIN CITY AREA: 651-454-0002
TOLL FREE 1-800-252-1166

NOTES

1. SEE SHEET C-002 FOR ADDITIONAL PROJECT NOTES.
2. CONSTRUCTION SITE SHALL HAVE STABILIZED EXIT AT ALL TIMES THROUGHOUT THE DURATION OF THE PROJECT. CONTRACTOR IS ULTIMATELY RESPONSIBLE TO PROTECT DOWNSTREAM WATERS FROM CONSTRUCTION RUNOFF.
3. UNTRENCHED SILT FENCE OR ORANGE SNOW FENCE MAY BE USED FOR TREE PROTECTION.
4. CONSTRUCTION LIMITS AND SILT FENCE ARE SHOWN OFFSET FROM PROPERTY LINE FOR CLARITY, WHERE APPLICABLE.
5. CLEAR AND GRUB AS NEEDED WITHIN LIMITS OF DISTURBANCE.
6. EXISTING UTILITY SERVICE LINES MAY NOT BE SHOWN IN THEIR ENTIRETY ON PLANS. CONTRACTOR TO VERIFY LOCATIONS OF EXISTING UTILITY SERVICE LINES WITHIN THE LIMITS OF DISTURBANCE AND REMOVE EXISTING INFRASTRUCTURE AS NECESSARY TO INSTALL PROPOSED IMPROVEMENTS.



LEGEND

- PROPERTY BOUNDARY
- EASEMENT LINE
- SETBACK LINE
- RIGHT OF WAY LINE
- SECTION LINE
- QUARTER LINE
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- CONSTRUCTION LIMITS
- REMOVE RETAINING WALL
- REMOVE STORM SEWER
- REMOVE SANITARY SEWER
- REMOVE UNDERGROUND GAS LINE
- REMOVE UNDERGROUND COMMUNICATION LINE
- REMOVE OVERHEAD UTILITY LINE
- REMOVE BITUMINOUS PAVEMENT
- REMOVE CONCRETE PAVEMENT
- REMOVE BUILDING
- CLEAR AND GRUB AREA
- REMOVE TREE
- REMOVE CURB AND GUTTER
- SAWCUT PAVEMENT
- REMOVE SANITARY MANHOLE
- REMOVE STORM SEWER MANHOLE
- REMOVE STORM SEWER INLET
- REMOVE STORM SEWER INLET
- REMOVE HYDRANT
- REMOVE AUTO SPRINKLER
- REMOVE POST INDICATOR VALVE
- REMOVE GAS METER
- REMOVE ELECTRICAL PEDESTAL
- REMOVE TRANSFORMER
- REMOVE LIGHT POLE
- ROCK CONSTRUCTION ENTRANCE
- SILT FENCE
- BIOROLL
- INLET PROTECTION
- TREE PROTECTION

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PROJECT TITLE	ISSUE NO.	DATE	DESCRIPTION
ENCLAVE MIXED-USE DEVELOPMENT ON FRANCE	1	04/26/2024	CITY SUBMITTAL

CERTIFICATION:

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

LICENSE NO.:

DATE:

PROJECT NO.:

193806086

DWN BY:

MDH

CHKD BY:

JRA

APPD BY:

JRA

ISSUE DATE:

04/26/2024

ISSUE NO.:

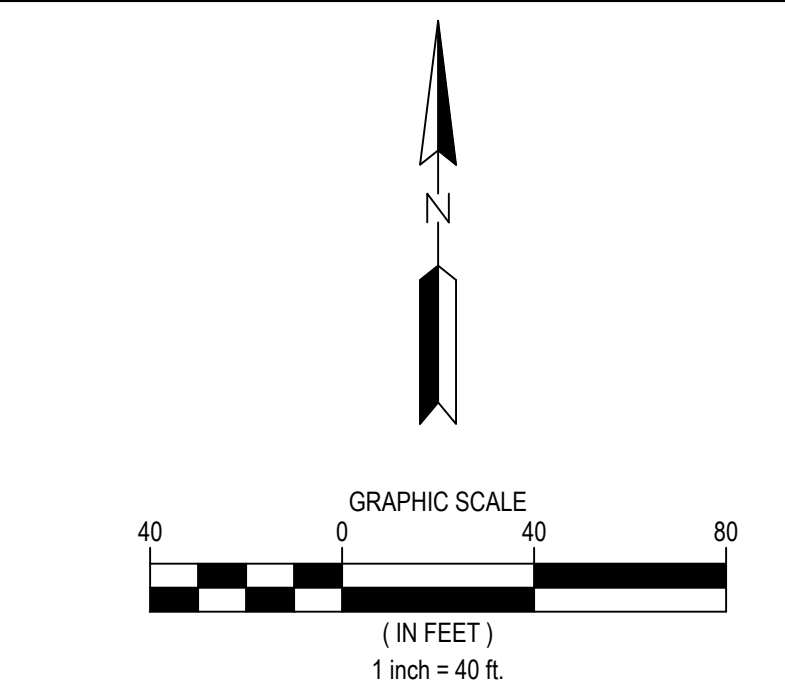
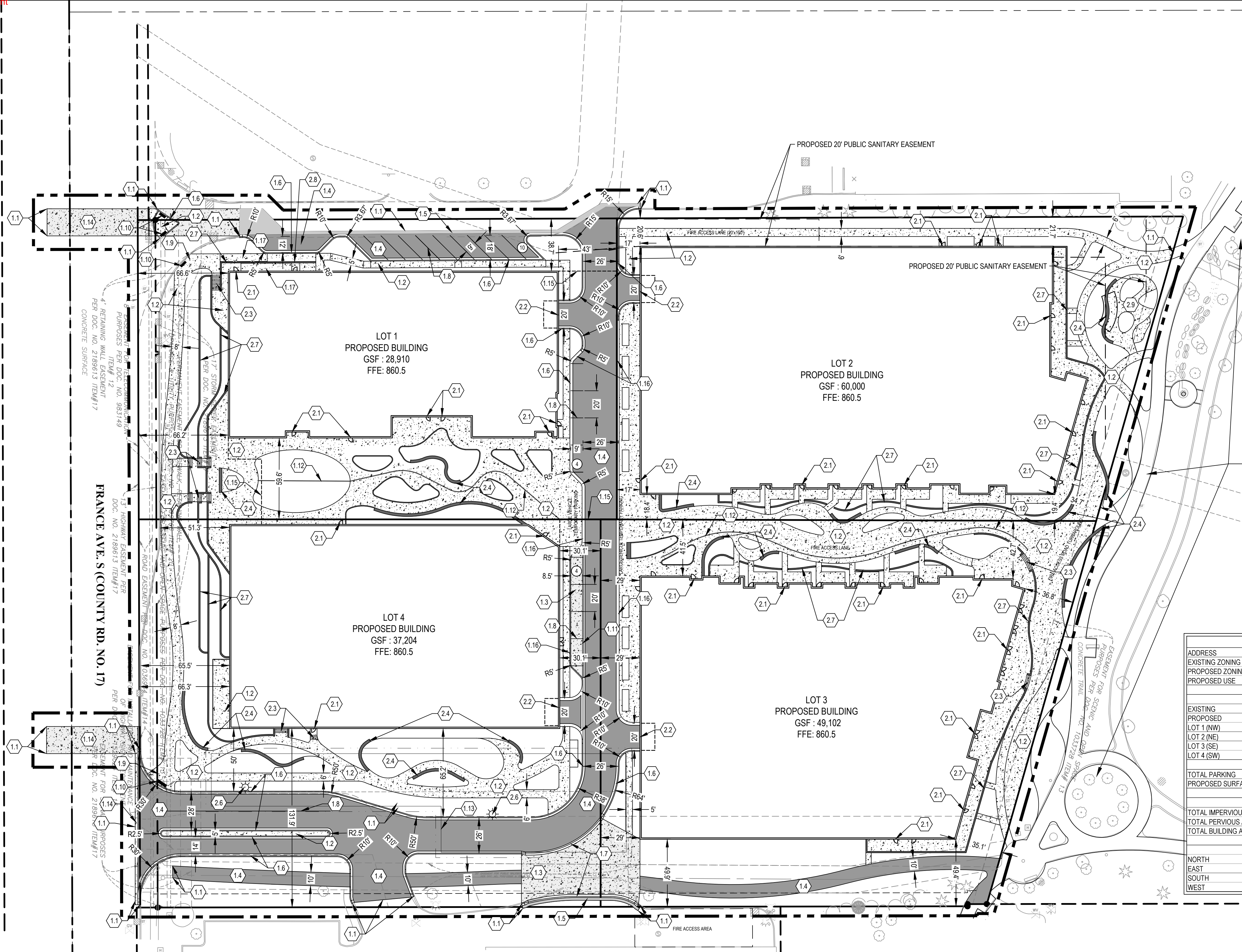
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SHEET TITLE:

REMOVALS AND
PRECONSTRUCTION
EROSION CONTROL PLAN

SHEET NO.:

C-006



- LEGEND**
- PROPERTY BOUNDARY
 - EASEMENT LINE
 - SETBACK LINE
 - RIGHT OF WAY LINE
 - SECTION LINE
 - QUARTER LINE
 - EXISTING PROPERTY LINE
 - CURB AND GUTTER
 - BITUMINOUS PAVEMENT
 - 2" BITUMINOUS PAVEMENT PATCH
 - CONCRETE PAVEMENT
 - CONCRETE SIDEWALK
 - SEATING WALL [BY OTHERS]
 - RETAINING WALL [BY OTHERS]
 - FENCE
 - PROPOSED PARKING COUNT
- NOTES**
- SEE SHEET C-002 FOR ADDITIONAL PROJECT NOTES.
 - ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
 - DESIGN BY OTHERS ITEMS SHOWN FOR REFERENCE ONLY. EXACT LOCATION, DETAIL, AND DESIGN BY OTHERS. COORDINATE WITH PROJECT PARTNERS TO OBTAIN RELATED CONSTRUCTION DOCUMENTS/DRAWINGS.

SITE ANALYSIS TABLE				
ADDRESS	7235 FRANCE AVE S, EDINA, MINNESOTA 55435			
EXISTING ZONING	PCD-3: PLANNED COMMERCIAL			
PROPOSED ZONING	PUD: PLANNED UNIT DEVELOPMENT			
PROPOSED USE	RESIDENTIAL AND MIXED-USE			
LOT AREA SUMMARY				
	TOTAL AREA (AC.)	IMPERVIOUS AREA (AC.)	PERVIOUS AREA (AC.)	
EXISTING	8.12	5.54	2.58	
PROPOSED	8.12	6.46	1.66	
LOT 1 (NW)	1.79	1.44	0.35	
LOT 2 (NE)	1.98	1.63	0.35	
LOT 3 (SE)	2.12	1.74	0.38	
LOT 4 (SW)	2.23	1.65	0.58	
PARKING SUMMARY				
TOTAL PARKING	PROPOSED			
PROPOSED SURFACE STALLS	18			
GREENSPACE SUMMARY				
	PROPOSED			
TOTAL IMPERVIOUS AREA (INCL. BLDG.)	79%			
TOTAL PERVIOUS AREA	21%			
TOTAL BUILDING AREA	49%			
BUILDING SETBACK SUMMARY				
	LOT 1 (NW)	LOT 2 (NE)	LOT 3 (SE)	LOT 4 (SW)
NORTH	38.7'	20.6'	41.6'	3.7'
EAST	43'	34.7'	36.8'	30.2'
SOUTH	59.6'	18.4'	49.4'	131.9'
WEST	66.2'	17'	29'	66.3'

- KEYNOTES**
- STANTEC DESIGN ITEMS
 - MATCH EXISTING
 - CONCRETE SIDEWALK - SEE STANDARD PLATE 420/C-801
 - CONCRETE PAVEMENT - SEE DETAIL 7/C-801
 - BITUMINOUS PAVEMENT - SEE DETAIL 6/C-801
 - 2" BITUMINOUS PAVEMENT PATCH - MATCH EXISTING SECTION
 - B618 CURB AND GUTTER - SEE STANDARD PLATE 500/C-801
 - SURMOUNTABLE CURB AND GUTTER - SEE STANDARD PLATE 500/C-801
 - 4" WHITE PAINT STRIPE (TYP.) - SEE DETAIL 1/C-802
 - ADA ACCESSIBLE PEDESTRIAN CURB RAMP - SEE SHEETS C-803/C-804
 - TRUNCATED DOMES - SEE SHEETS C-803/C-804
 - TRENCH DRAIN - SEE DETAIL 3/C-802
 - DURA TRENCH RADIUSSED TRENCH DRAIN, OR APPROVED EQUAL - SEE DETAIL 4/C-802
 - UNDERGROUND STORMWATER SYSTEM - SEE SHEET C-501
 - CONCRETE PAVEMENT PATCH - MATCH EXISTING SECTION
 - UNDERGROUND PARKING EXTENTS
 - RIBBON CURB - SEE DETAIL 5/C-802
 - ADA ACCESSIBLE PEDESTRIAN RAMP W/ HANDRAIL
- DESIGN BY OTHERS ITEMS - SEE NOTE 3
 - DOOR/STRUCTURAL STOOP (TYP.) - SEE ARCHITECTURAL/STRUCTURAL PLANS
 - UNDERGROUND GARAGE ACCESS - SEE ARCHITECTURAL/STRUCTURAL PLANS
 - STAIRS - SEE ARCHITECTURAL/STRUCTURAL PLANS
 - SEATING WALL (TYP.) - SEE LANDSCAPE PLANS
 - FENCE - SEE ARCHITECTURAL/STRUCTURAL PLANS
 - LIGHTS - SEE PHOTOMETRIC PLAN
 - RETAINING WALL (TYP.) - SEE LANDSCAPE PLANS
 - RAILING - SEE ARCHITECTURAL PLANS
 - PUBLIC DOG PARK - SEE LANDSCAPE PLAN

WARNING:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

CALL BEFORE YOU DIG
GOPHER STATE ONE CALL
TWIN CITY AREA: 651-454-0002
TOLL FREE 1-800-252-1166

733 MARQUETTE AVE
SUITE 1000
MINNEAPOLIS, MN 55402
PHONE: 612-712-2000
WWW.STANTEC.COM

ENCLAVE

ENCLAVE MIXED-USE
DEVELOPMENT ON FRANCE

7235 FRANCE AVE S.
EDINA, MINNESOTA 55435

PROJECT TITLE

ISSUE NO.:	1
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DESCRIPTION:

CITY SUBMITAL

DATE:

04/26/2024

CERTIFICATION:

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE JOINT ACT OF THE STATE OF MINNESOTA.

LICENSE NO.:

DATE:

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193806086

DWN BY: MDH

CHKD BY: JRA

APPD BY: JRA

ISSUE DATE: 04/26/2024

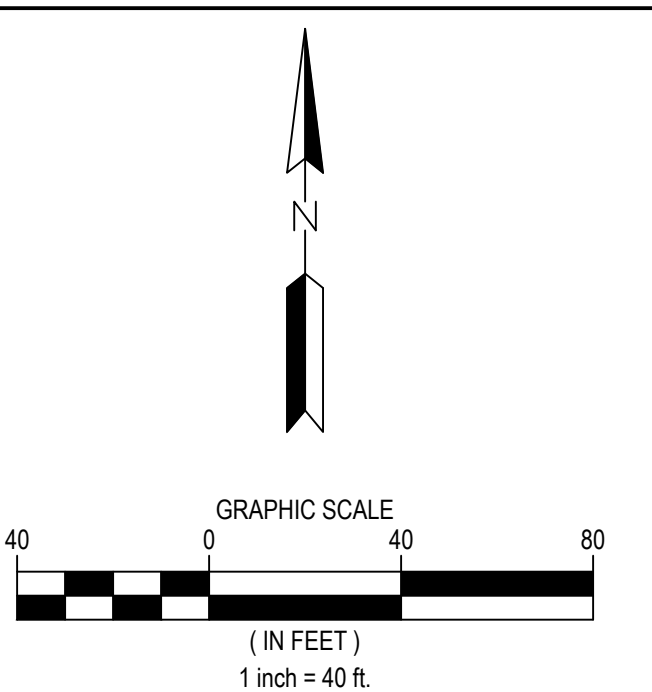
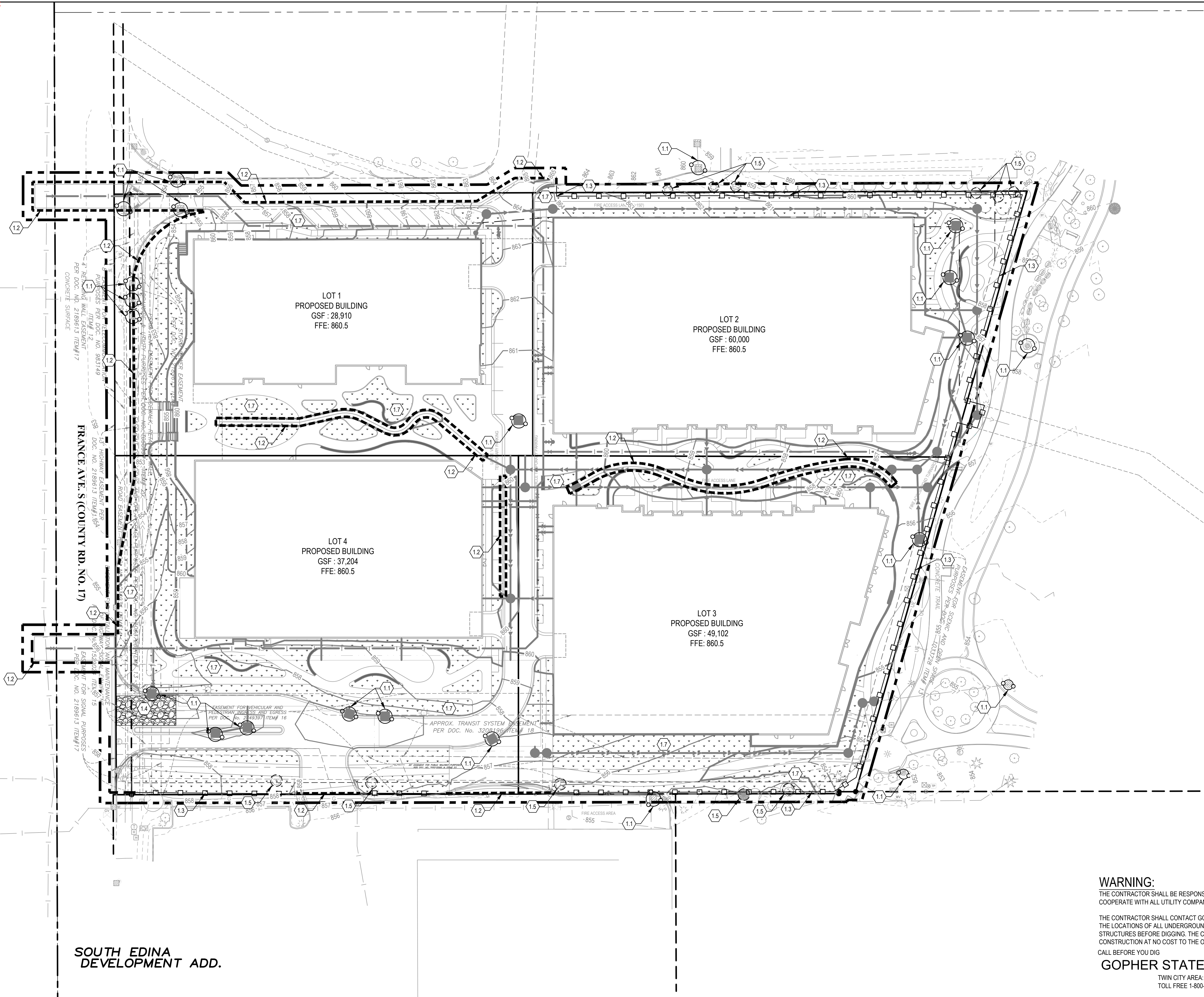
ISSUE NO.: 1

SHEET TITLE:

SITE PLAN

SHEET NO.:

C-101



- LEGEND**
- PROPERTY BOUNDARY
 - EASEMENT LINE
 - SETBACK LINE
 - RIGHT OF WAY LINE
 - SECTION LINE
 - QUARTER LINE
 - EXISTING MINOR CONTOUR
 - EXISTING MAJOR CONTOUR
 - EXISTING STORM SEWER
 - EXISTING SANITARY SEWER
 - EXISTING WATERMAIN
 - PROPOSED MINOR CONTOUR
 - PROPOSED MAJOR CONTOUR
 - CONSTRUCTION LIMITS
 - STORM SEWER
 - SANITARY SEWER
 - WATERMAIN
 - STORM MANHOLE
 - STORM CATCH BASIN
 - SANITARY MANHOLE
 - CLEANOUT
 - HYDRANT
 - GATE VALVE
 - ROCK CONSTRUCTION EXIT
 - EROSION CONTROL BLANKET
 - PERMANENT STABILIZATION
 - SILT FENCE
 - BIOROLL
 - INLET PROTECTION
 - TREE PROTECTION

- NOTES**
- SEE SHEET C-002 FOR ADDITIONAL PROJECT NOTES.
 - CONSTRUCTION SHALL HAVE A ROCK CONSTRUCTION ENTRANCE AT ALL TIME THROUGHOUT THE DURATION OF THE PROJECT. CONTRACTOR IS ULTIMATELY RESPONSIBLE TO PROTECT DOWNSTREAM WATERS FROM CONSTRUCTION RUNOFF.
 - CONSTRUCTION LIMITS AND SILT FENCE ARE SHOWN OFFSET TO THE PROPERTY LINE FOR CLARITY, WHERE APPLICABLE. CLEAR AND GRUB AS NEEDED WITHIN LIMITS OF DISTURBANCE.
 - EROSION CONTROL BLANKET SHALL BE INSTALLED ON ALL SLOPES 4H:1V OR STEEPER.
 - UNTRENCHED SILT FENCE OR ORANGE SNOW FENCE MAY BE USED FOR TREE PROTECTION.

- KEYNOTES**
- INLET PROTECTION - SEE DETAIL 4/C-801
 - BIOROLL - SEE DETAIL 5/C-801
 - SILT FENCE - SEE DETAIL 1/C-801
 - ROCK CONSTRUCTION ENTRANCE - SEE DETAIL 3/C-801
 - TREE PROTECTION - SEE NOTE 3, THIS SHEET
 - EROSION CONTROL BLANKET - SEE DETAIL 2/C-801
 - PERMANENT STABILIZATION (TYP.) - SEE LANDSCAPE PLAN

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ENCLAVE

ENCLAVE MIXED-USE
DEVELOPMENT ON FRANCE

7235 FRANCE AVE S.
EDINA, MINNESOTA 55435

PROJECT TITLE	ISSUE NO.	DESCRIPTION	DATE
ENCLAVE MIXED-USE DEVELOPMENT ON FRANCE	1	CITY SUBMITAL	04/26/2024

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LICENSE NO.:
DATE:

PROJECT NO.: 193806086

DWN BY: MDH CHKD BY: JRA APPD BY: JRA

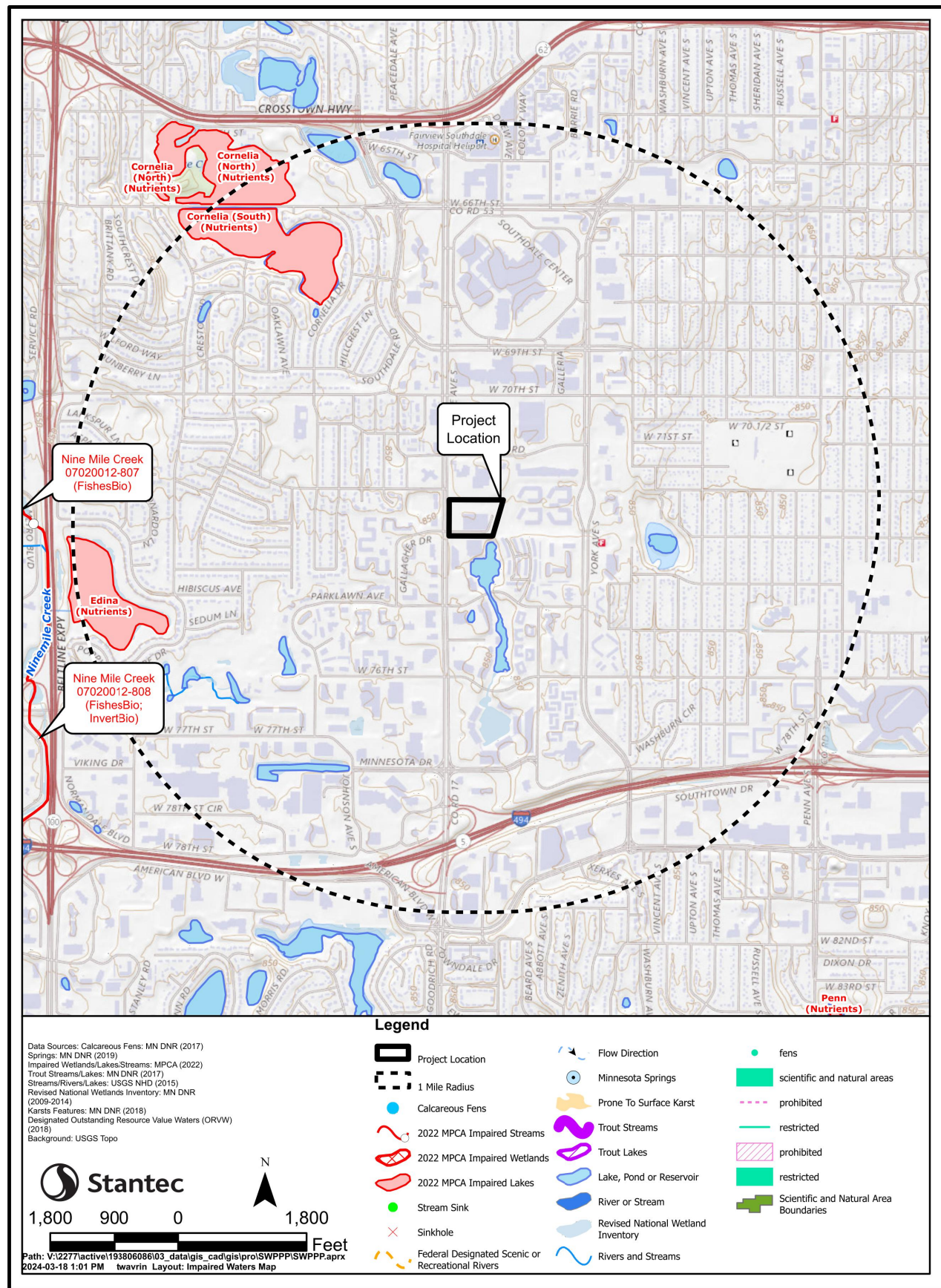
ISSUE DATE: 04/26/2024

ISSUE NO.: 1

SHEET TITLE:
POST CONSTRUCTION STABILIZATION PLAN

SHEET NO.:
C-201

IMPAIRED WATERS MAP



SOIL MAP



PROJECT INFORMATION

PROJECT NAME: EDINA MACY'S IMPROVEMENTS
PROJECT LOCATION: 7235 FRANCE AVE S, EDINA MINNESOTA 55435
PROJECT TYPE: RESIDENTIAL AND MIXED-USE DEVELOPMENT WITH STORM AND UTILITY IMPROVEMENTS
TOTAL AREA DISTURBED BY CONSTRUCTION: APPROXIMATELY 7.93 ACRES. THE TOTAL SITE AREA IS APPROXIMATELY 8.12 ACRES.

ESTIMATED CONSTRUCTION DATES: FALLS 2024 - FALL 2025
CUMULATIVE IMPERVIOUS SURFACE/PERMANENT STORMWATER MANAGEMENT REQUIREMENTS:
THE PROPOSED PROJECT RESULTS IN A ± 0.90 ACRE NET INCREASE IN IMPERVIOUS SURFACE WITHIN THE LIMITS OF DISTURBANCE.

THE SITE ULTIMATELY DRAINS TO, AND IS WITHIN 1 MILE OF, LAKE EDINA, NORTH CORNELIA LAKE, AND SOUTH CORNELIA LAKE, WHICH ARE ALL LISTED AS IMPAIRED WATERS FOR NUTRIENTS. THERE ARE CURRENT APPROVED TMDLS FOR THE LISTED BODIES OF WATER FOR NUTRIENTS.

A PRIVATE ONSITE STORM SEWER SYSTEM THAT CONVEYS RUNOFF TO AN UNDERGROUND INFILTRATION SYSTEM THAT IS SIZED TO MEET CITY AND WATERSHED STORMWATER REQUIREMENTS. A STORM LIFT STATION IS UTILIZED FOR DISCHARGE TO THE PUBLIC STORM INFRASTRUCTURE TO THE EAST OF THE SITE.

PARTY RESPONSIBLE FOR LONG TERM OPERATION AND MAINTENANCE OF THE SITE (OWNER): ENCLAVE COMPANIES
CONTACT: PATRICK BRAMA
CONTACT PHONE: 763-412-7809
CONTACT EMAIL: PATRICK.BRAMA@ENCLAVECOMPANIES.COM
PARTY RESPONSIBLE FOR IMPLEMENTATION OF THE SWPPP (CONTRACTOR): TBD
CONTRACTOR: TBD
CONTRACTOR PHONE: TBD
CONTRACTOR EMAIL: TBD

CONTRACTOR SHALL PROVIDE A CHAIN OF RESPONSIBILITY WITH ALL OPERATORS ON THE SITE FOR INCORPORATION INTO THIS SWPPP DOCUMENT TO ENSURE THAT THE SWPPP WILL BE IMPLEMENTED AND STAY IN EFFECT UNTIL THE CONSTRUCTION PROJECT IS COMPLETE (THROUGH FINAL STABILIZATION AND NOT SUBMITTAL). CONTRACTOR SHALL ALSO PROVIDE DOCUMENTATION OF PERSONNEL TRAINING IN ACCORDANCE WITH THE PERMIT FOR INCORPORATION INTO THIS SWPPP DOCUMENT AS SOON AS THE PERSONNEL FOR THE PROJECT HAVE BEEN DETERMINED. CONTRACTOR IS RESPONSIBLE FOR KEEPING A FINAL SWPPP DOCUMENT, CONTAINING THE INFORMATION REQUIRED ABOVE, AT THE CONSTRUCTION SITE FOR THE DURATION OF THE PROJECT.

SWPPP DOCUMENTS

THE SWPPP IS COMPOSED OF, BUT NOT LIMITED TO, THE BELOW PROJECT DOCUMENTS. THESE DOCUMENTS SHALL BE KEPT ON THE PROJECT SITE AT ALL TIMES THROUGHOUT CONSTRUCTION. THE SWPPP SHALL BE AMENDED BY THE PERSON RESPONSIBLE TO INCLUDE ANY DOCUMENTS NECESSARY TO ENSURE ADHERENCE TO THE GENERAL PERMIT.

EDINA MACY'S IMPROVEMENTS CIVIL CONSTRUCTION DRAWINGS BY STANTEC DATED APRIL, 2024
EDINA MACY'S IMPROVEMENTS STORMWATER MANAGEMENT PLAN BY STANTEC DATED APRIL, 2024

RECORD RETENTION - THE SWPPP, ALL CHANGES TO IT, AND INSPECTION AND MAINTENANCE RECORDS MUST BE KEPT ON-SITE DURING CONSTRUCTION. THE CONSTRUCTION DRAWINGS ARE INCORPORATED HEREIN BY REFERENCE, AND A COPY OF THE PLAN SET SHOULD BE KEPT ON-SITE WITH THE SWPPP RECORDS. THE OWNER MUST RETAIN A COPY OF THE SWPPP ALONG WITH THE FOLLOWING RECORDS FOR THREE (3) YEARS AFTER SUBMITTAL OF THE NOTICE OF TERMINATION:

1. ANY OTHER PERMITS REQUIRED FOR THE PROJECT;
2. RECORDS OF ALL INSPECTION AND MAINTENANCE CONDUCTED DURING CONSTRUCTION;
3. ALL PERMANENT OPERATIONS AND MAINTENANCE AGREEMENTS THAT HAVE BEEN IMPLEMENTED, INCLUDING ALL RIGHT OF WAY, CONTRACT, COVENANTS AND OTHER BINDING REQUIREMENTS REGARDING PERPETUAL MAINTENANCE; AND
4. ALL REQUIRED CALCULATIONS FOR DESIGN OF THE TEMPORARY AND PERMANENT STORMWATER MANAGEMENT SYSTEMS.

INSPECTIONS

THE INSPECTION LOG WILL BE COMPLETED BY THE CONTRACTOR FOR THE CONSTRUCTION SITE. INSPECTOR(S): TBD - TRAINING DOCUMENTATION (PER SECTION 21.2 OF THE PERMIT) WILL BE INCORPORATED INTO THIS SWPPP AS SOON AS THE PERSONNEL FOR THE PROJECT HAVE BEEN DETERMINED. THE CONTRACTOR WILL MAKE CORRECTIONS OR REPAIRS REQUIRED TO COMPLY WITH THE PERMIT.

INSPECTIONS AT THE SITE WILL BE COMPLETED IN ACCORDANCE WITH THE PERMIT AS FOLLOWS:
ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND
WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS.

1. THE INDIVIDUAL PERFORMING INSPECTIONS MUST BE TRAINED AS REQUIRED BY SECTION 21.3 OF THE PERMIT. TRAINING DOCUMENTATION SHALL BE PROVIDED BY THE CONTRACTOR FOR INCORPORATION INTO THE SWPPP. INSPECTIONS MUST INCLUDE STABILIZED AREAS, EROSION PREVENTION AND SEDIMENT CONTROL BMPs, AND INFILTRATION AREAS. CORRECTIVE ACTIONS MUST BE IDENTIFIED AND DATE OF CORRECTION MUST BE NOTED AS IDENTIFIED IN SECTION 11.11 OF THE PERMIT. ANY OFFSITE DISCHARGE MUST BE DOCUMENTED AS IDENTIFIED IN SECTION 11.11 OF THE PERMIT. ANY AMENDMENTS TO THE SWPPP PROPOSED AS A RESULT OF THE INSPECTION MUST BE DOCUMENTED WITHIN SEVEN (7) CALENDAR DAYS. AN INSPECTION LOG IS ALSO ATTACHED; THE INSPECTION LOG AND SWPPP MUST BE KEPT ON-SITE FOR THE DURATION OF THE CONSTRUCTION PROJECT.

AT A MINIMUM, THE FOLLOWING SHALL BE COMPLETED DURING EACH INSPECTION:
-RECORD DATE AND TIME OF INSPECTION.
-RECORD RAINFALL RECORDS SINCE THE MOST RECENT INSPECTION.
-INSPECT THE SITE FOR EXCESS EROSION AND SEDIMENTATION.
-INSPECT THE SITE FOR DEBRIS, TRASH, AND SPILLS.
-INSPECT TEMPORARY EROSION AND SEDIMENTATION CONTROL DEVICES.
-INSPECT CONSTRUCTION ENTRANCES FOR SEDIMENT TRACKING ONTO PUBLIC STREETS.
-RECORD RECOMMENDED REPAIRS AND MODIFICATIONS TO EROSION AND SEDIMENT CONTROLS.
-RECOMMEND ANY NECESSARY CHANGES TO THIS SWPPP.
-RECORD REPAIRS AND MODIFICATIONS IMPLEMENTED SINCE PREVIOUS INSPECTIONS.
-INSPECT THE ADJACENT STREETS AND CURB AND GUTTER FOR SEDIMENT, LITTER, AND CONSTRUCTION DEBRIS.

THE GENERAL CONTRACTOR MUST UPDATE THE SWPPP, INCLUDING THE JOBSITE BINDER AND SITE MAPS, TO REFLECT THE PROGRESS OF CONSTRUCTION ACTIVITIES AND GENERAL CHANGES TO THE PROJECT SITE. UPDATES SHALL BE MADE DAILY TO TRACK PROGRESS WHEN ANY OF THE FOLLOWING ACTIVITIES OCCUR: BMP INSTALLATION, MODIFICATION OR REMOVAL, CONSTRUCTION ACTIVITIES (E.G. PAVING, SEWER INSTALLATION, ETC), CLEARING, GRUBBING, GRADING, OR TEMPORARY AND PERMANENT STABILIZATION.

THE CONTRACTOR MAY UPDATE OR MODIFY THE SWPPP WITHOUT ENGINEER APPROVAL IN AN EMERGENCY SITUATION TO PREVENT SEDIMENT DISCHARGE OR PROTECT WATER QUALITY. THE CONTRACTOR IS ULTIMATELY RESPONSIBLE TO ENSURE COMPLIANCE WITH THE PERMIT AND PROTECTION OF DOWNSTREAM WATER QUALITY.

EROSION AND SEDIMENT CONTROL

PRIOR TO ANY SITE DISTURBANCE, AND AS REQUIRED AS CONSTRUCTION PROGRESSES, ANY PERMIT REQUIRED EROSION PREVENTION MEASURES AND THE SEDIMENT CONTROL DEVICES (INLET PROTECTION, CONSTRUCTION ENTRANCE, SILT FENCE, EROSION CONTROL BLANKET, BIOROLL) SHOWN ON THE CONSTRUCTION DRAWINGS WILL BE INSTALLED AT THE SITE.

ALL EXPOSED SOIL AREAS WITHIN THE CONSTRUCTION LIMITS WILL BE STABILIZED WITHIN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY (WILL NOT RESUME FOR A PERIOD EXCEEDING 7 CALENDAR DAYS) OR PERMANENTLY CEASED. STABILIZATION WILL BE INITIATED IMMEDIATELY. EXPOSED SOIL AREAS MUST HAVE TEMPORARY EROSION PROTECTION (SLASH MULCH, EROSION CONTROL BLANKET, SEED) OR PERMANENT COVER YEAR ROUND.

CONTRACTOR SHALL IMPLEMENT APPROPRIATE CONSTRUCTION PHASING, VEGETATIVE BUFFER STRIPS, HORIZONTAL SLOPE GRADING, AND OTHER CONSTRUCTION PRACTICES THAT MINIMIZE EROSION WHEN PRACTICAL. THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH THAT DRAINS WATER FROM A CONSTRUCTION SITE, OR DIVERTS WATER AROUND A SITE, MUST BE STABILIZED WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE TO ANY SURFACE WATER. STABILIZATION MUST BE COMPLETED WITHIN 24 HOURS OF CONNECTING TO A SURFACE WATER. PIPE OUTLETS MUST BE PROVIDED WITH TEMPORARY OR PERMANENT ENERGY DISSIPATION WITHIN 24 HOURS OF CONNECTION TO A SURFACE WATER.

- SWPPP IMPLEMENTATION, PHASING, AND SEQUENCE OF CONSTRUCTION:
BMP AND EROSION CONTROL INSTALLATION SEQUENCE SHALL BE AS FOLLOWS:
1. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE, CONCRETE WASHOUT PIT, AND INSTALL SILT FENCE.
 2. INSTALL INLET PROTECTION AT EXISTING STORMWATER CULVERTS AND INLETS.
 3. PREPARE TEMPORARY STORAGE, PARKING, AND PHASING AREAS.
 4. CONSTRUCT AND STABILIZE DIVERSIONS AND TEMPORARY SEDIMENT TRAPS/BASINS.
 5. PERFORM CLEARING AND GRUBBING OF THE SITE, IF APPLICABLE.
 6. PERFORM MASS GRADING, ROUGH GRADE TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
 7. BEGIN EXCAVATION OF PERMANENT STORMWATER BASIN AREAS. SEE SEQUENCING BELOW FOR ADDITIONAL INFORMATION.
 8. START CONSTRUCTION OF THE BUILDING PAD AND STRUCTURES.
 9. INSTALL SMALL UTILITIES (GAS, ELECTRIC, PHONE, CABLE, ETC.).
 10. PAVE CURB AND GUTTER, SIDEWALK, AND PARKING LOT/ DRIVEWAYS.
 11. TEMPORARILY SEED WITH PURE LIVE SEED THROUGHOUT CONSTRUCTION. DISTURBED AREAS THAT WILL BE INACTIVE FOR 14 DAYS OR MORE AS REQUIRED BY NPDES OR PERMIT.

SEDIMENT CONTROL PRACTICES MUST MINIMIZE SEDIMENT FROM ENTERING SURFACE WATERS, INCLUDING CURB AND GUTTER SYSTEMS AND STORM SEWER INLETS. THE FOLLOWING MEASURES WILL BE TAKEN AS SEDIMENT CONTROL PRACTICES IN ORDER TO MINIMIZE SEDIMENTS FROM ENTERING SURFACE WATERS:

1. INSTALLATION OF SEDIMENT CONTROL PRACTICES ON ALL DOWN GRADIENT PERIMETERS PRIOR TO LAND DISTURBING ACTIVITIES.
2. SILT FENCING, BIOLOGS, OR OTHER SEDIMENT CONTROL SURROUNDING TEMPORARY SOIL STOCKPILES.
3. VEHICLE TRACKING BMP AT CONSTRUCTION SITE ENTRANCE/EXIT. STREET SWEEPING SHALL BE PERFORMED IF VEHICLE TRACKING BMPs ARE NOT ADEQUATE TO PREVENT SEDIMENT TRACKING. TRACKED SEDIMENT MUST BE REMOVED FROM ALL PAVED SURFACES BOTH ON AND OFFSITE WITHIN 24 HOURS OF DISCOVERY PER THE PERMIT.
4. STREET SWEEPING IS NOT TO BE USED AS A PRIMARY BMP FOR SEDIMENT TRACKING. IF SEDIMENT IS TRACKED OFFSITE, WORK WILL CEASE UNTIL PROPER EROSION CONTROL AND SEDIMENT CONTROL DEVICES ARE INSTALLED AND/OR BEING MAINTAINED TO PREVENT TRACKING BEYOND THE SITE'S PERIMETER (CONTAINMENT AREA). ALL STREET SWEEPING MUST BE PERFORMED UTILIZING A PICK-UP SWEEPER. IF NECESSARY WATER WILL ALSO BE USED TO CLEAN UP THE STREETS PRIOR TO BEING SWEEPED TO ENSURE THEY ARE FULLY CLEANED.

THE FOLLOWING GUIDELINES WILL BE USED TO DETERMINE IF POLLUTION CONTROL DEVICES REQUIRE MAINTENANCE, REPAIR, OR REPLACEMENT:
-IF SEDIMENT CONTROL DEVICES SUCH AS SILT FENCE ARE FILLED TO 1/3 THE HEIGHT OF THE FENCE, REMOVE ALL SEDIMENT WITHIN 24 HOURS OF DETECTION OR NOTIFICATION.
-IF INLET PROTECTION DEVICES APPEAR PLUGGED WITH SEDIMENT, ARE FILLED TO 1/3 CAPACITY, OR HAVE STANDING WATER AROUND THEM, REMOVE THE SEDIMENT AND CLEAN OR REPLACE THE FILTER WITHIN 24 HOURS OF DETECTION OR NOTIFICATION.
-IF THE GRAVEL CONSTRUCTION ENTRANCE(S) ARE FILLED WITH SEDIMENT EITHER REPLACE THE ENTRANCE OR ADD ADDITIONAL GRAVEL WITH 24 HOURS OF DETECTION OR NOTIFICATION.
-IF SEDIMENT FROM THE SITE IS OBSERVED ON ADJACENT STREETS OR OTHER PROPERTIES, THE INSPECTOR SHALL IDENTIFY THE SOURCE AND DISCHARGE LOCATION OF THE SEDIMENT AND INSTRUCT TO IMPLEMENT ADDITIONAL EROSION AND SEDIMENT CONTROLS AT THOSE LOCATIONS TO PREVENT FUTURE DISCHARGES.
-IF BUILDING MATERIALS, CHEMICALS, OR GENERAL REFUSE IS BEING USED, STORED, DISPOSED OF, OR OTHERWISE MANAGED INAPPROPRIATELY, CORRECT SUCH DEFECTS WITHIN 24 HOURS OF DETECTION OR NOTIFICATION.
-IF EXCESSIVE SEDIMENTS OR DEBRIS ARE OBSERVED AT THE FLARED END SECTION OUTFALLS, THE INSPECTOR SHALL DETERMINE THE SOURCE AND DISCHARGE LOCATIONS OF SUCH MATERIALS. IF THE DISCHARGE HAS OCCURRED ON THE PROPERTY, REMOVE THE SEDIMENTS AND DEBRIS WITHIN 24 HOURS OF NOTIFICATION AND CORRECT THE SOURCE OF SUCH MATERIALS AS DIRECTED BY THE INSPECTOR

POLLUTION PREVENTION MEASURES

SOLID WASTE:
SOLID WASTE, INCLUDING BUT NOT LIMITED TO, COLLECTED ASPHALT AND CONCRETE MILLINGS, FLOATING DEBRIS, PAPER, PLASTIC, FABRIC, CONSTRUCTION AND DEMOLITION DEBRIS AND OTHER WASTE, INCLUDING ALL TRASH ONSITE, MUST BE REGULARLY DISPOSED OF PROPERLY AND MUST COMPLY WITH MPCA DISPOSAL REQUIREMENTS.

HAZARDOUS MATERIALS:
HAZARDOUS MATERIALS, INCLUDING BUT NOT LIMITED TO OIL, GASOLINE, PAINT AND ANY HAZARDOUS SUBSTANCE MUST BE PROPERLY STORED INCLUDING SECONDARY CONTAINMENTS, TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. RESTRICTED ACCESS TO STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MUST BE IN COMPLIANCE WITH MPCA REGULATIONS.

CONSTRUCTION EQUIPMENT/VEHICLES:
EXTERNAL WASHING OF TRUCKS AND OTHER CONSTRUCTION VEHICLES MUST BE LIMITED TO A DEFINED AREA OF THE SITE. RUNOFF MUST BE CONTAINED AND WASTE PROPERLY DISPOSED OF. NO ENGINE DEGREASING IS ALLOWED ON SITE. REASONABLE STEPS TO PREVENT THE DISCHARGE OF SPILLED OR LEAKED CHEMICALS SHALL BE TAKEN. ADEQUATE SUPPLIES MUST BE AVAILABLE AT ALL TIMES TO CLEAN UP DISCHARGED MATERIALS; CONDUCT FUELING IN A CONTAINED AREA UNLESS INFEASIBLE.

CONCRETE WASHOUT AREA:
CONCRETE WASHOUT WILL BE PERMITTED ON-SITE; CONTRACTOR SHALL FOLLOW ALL PERMIT REQUIREMENTS FOR CONCRETE WASHOUT. THE CONTRACTOR SHALL PROVIDE EFFECTIVE CONTAINMENT FOR ALL LIQUID AND SOLID WASTES GENERATED BY WASHOUT OPERATIONS. LIQUID AND SOLID WASHOUT WASTES MUST NOT CONTACT THE GROUND AND THE CONTAINMENT MUST BE DESIGNED TO PROHIBIT RUNOFF FROM THE WASHOUT OPERATIONS/AREAS. LIQUID AND SOLID WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA RULES. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY THAT REQUIRES SITE PERSONNEL TO UTILIZE THE PROPER FACILITIES FOR CONCRETE WASHOUT AND DISPOSAL OF WASHOUT WASTES. CONTRACTOR SHALL REVISE SWPPP TO INDICATE WASHOUT LOCATION ONCE THE LOCATION HAS BEEN DETERMINED.

FERTILIZERS AND LANDSCAPE MATERIALS MUST BE UNDER COVER TO PREVENT THE DISCHARGE OF POLLUTANTS OR PROTECTED BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER.

PORTABLE TOILETS MUST BE POSITIONED SO THAT THEY ARE SECURE AND WILL NOT BE TIPPED OR KNOCKED OVER. SANITARY WASTE MUST BE DISPOSED OF PROPERLY.

GENERAL SWPPP NOTES

DEWATERING IS ANTICIPATED TO BE REQUIRED DURING TRENCHING FOR UTILITY CONSTRUCTION. CONTRACTOR SHALL COMPLY WITH PERMIT SECTION 10.1 REQUIREMENTS FOR DEWATERING.

THIS SWPPP SHALL BE AMENDED BY THE CONTRACTOR IN ACCORDANCE WITH THE PERMIT AS NECESSARY TO INCLUDE ADDITIONAL REQUIREMENTS, TO CORRECT PROBLEMS IDENTIFIED, OR TO ADDRESS SITUATIONS PER SECTION 6.1 OF THE PERMIT.

THIS SWPPP SHALL BE AMENDED BY THE CONTRACTOR IN ACCORDANCE WITH THE GENERAL PERMIT TO INCLUDE TEMPORARY SEDIMENTATION BASINS, IF THEY BECOME NECESSARY. BASINS, IF DESIGNED BY THE CONTRACTOR, SHALL ACCOMMODATE NO LESS THAN 3,600 CUBIC FEET OF LIVE STORAGE PER ACRE OF CONTRIBUTING DRAINAGE AREA. BASIN OUTLETS SHALL BE DESIGNED TO WITHDRAW WATER FROM THE SURFACE OF THE BASIN, PREVENT SHORT-CIRCUITING AND THE DISCHARGE OF FLOATING DEBRIS. BASINS SHALL HAVE A STABILIZED EMERGENCY OVERFLOW LOCATION AND BE DESIGNED TO PREVENT THE DISCHARGE OF POLLUTANTS TO THE EXTENT PRACTICAL.

FINAL STABILIZATION:
ALL PVIOUS AREAS DISTURBED BY CONSTRUCTION AS DESIGNATED WILL RECEIVE VEGETATIVE COVER ACCORDING TO THE PLANS AND SPECIFICATIONS AND WITHIN THE SPECIFIED VEGETATIVE TIME SCHEDULE. FINAL STABILIZATION WILL OCCUR WHEN THE SITE HAS A UNIFORM VEGETATIVE COVER WITH A DENSITY OF 70% OVER THE RESTORED PVIOUS AREAS. ALL TEMPORARY SYNTHETIC EROSION PREVENTION AND SEDIMENT CONTROL BMPs (SUCH AS SILT FENCE) MUST BE REMOVED AS PART OF THE SITE FINAL STABILIZATION. ALL SEDIMENT MUST BE CLEANED OUT OF CONVEYANCES AND TEMPORARY SEDIMENTATION BASINS IF APPLICABLE. NOTICE OF TERMINATION (NOT) MUST BE SUBMITTED WITHIN 30 DAYS OF FINAL STABILIZATION.

IMPAIRED WATERS, SPECIAL WATERS, AND WETLANDS

THIS PROJECT IS LOCATED WITHIN ONE MILE OF, AND ULTIMATELY DISCHARGES TO, LAKE EDINA, NORTH CORNELIA LAKE, AND SOUTH CORNELIA LAKE. IMPAIRED BODIES OF WATER, LAKE EDINA IS LOCATED WEST OF THE PROJECT LOCATION AND IS LISTED AS IMPAIRED FOR NUTRIENTS. NORTH AND SOUTH CORNELIA LAKE IS LOCATED NORTHWEST OF THE PROJECT LOCATION AND IS LISTED AS IMPAIRED FOR NUTRIENTS. DISCHARGE TO AN IMPAIRED WATER REQUIRES IMPLEMENTATION OF SECTION 23.1 OF THE PERMIT AS INCORPORATED INTO THIS SWPPP DOCUMENT.

THE PROJECT SITE DISCHARGES TO AN INFILTRATION BASIN FOR STORMWATER MANAGEMENT PRIOR TO THE ULTIMATE DISCHARGE POINT ONSITE. THE PROJECT WILL NOT IMPACT WETLANDS.

SITE SOILS - SITE SOILS ARE SHOWN ON THIS SHEET. THIS PROJECT IS NOT LOCATED IN A KARST AREA.

ESTIMATED BMP QUANTITIES AND INSTALLATION SCHEDULE

THE ADJACENT TABLE INDICATES THE ESTIMATED MATERIAL QUANTITIES NECESSARY TO IMPLEMENT THE TEMPORARY AND PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL BMPs IDENTIFIED IN THIS SWPPP AND ON THE CONSTRUCTION DRAWINGS. TEMPORARY AND PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL BMPs WILL BE INSTALLED/CONSTRUCTED WHEN NECESSARY AS CONSTRUCTION ACTIVITIES PROGRESS AND IN ACCORDANCE WITH THE NPDES PERMIT REQUIREMENTS.

MAINTAIN AND REPLACE BMPs DURING THE EXECUTION OF THE PROJECT AS REQUIRED TO CONTINUE SWPPP COVERAGE DURING CONSTRUCTION

ESTIMATED BMP QUANTITIES		
ITEM	QUANTITY	UNIT
INLET PROTECTION	20	EA
TREE PROTECTION	11	EA
TURF ESTABLISHMENT	1.06	AC
EROSION CONTROL BLANKET	455	SY
SILT FENCE	1900	LF
BIOROLL	2000	LF
CONSTRUCTION EXIT	1	EA

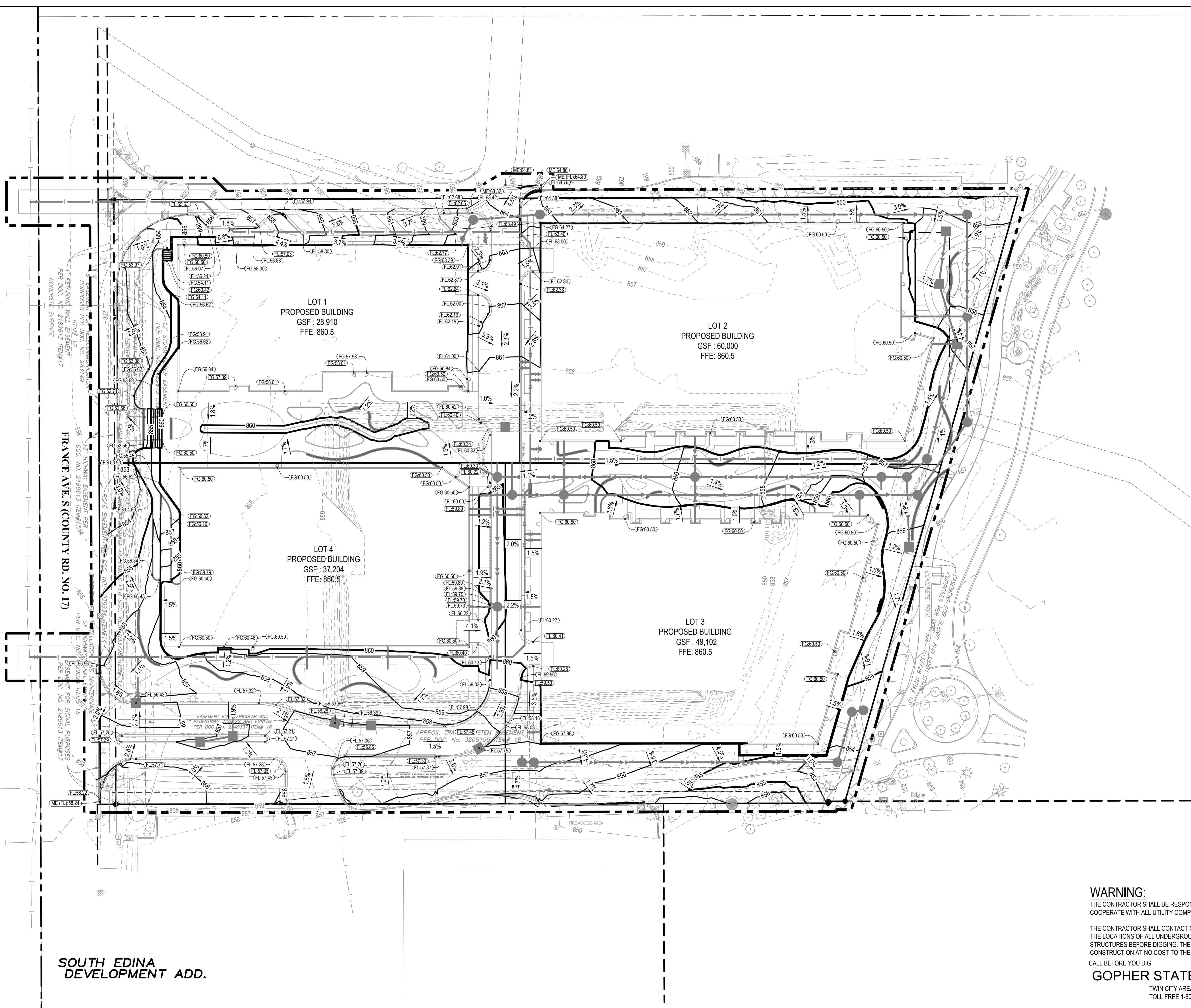
NOTE: QUANTITIES ON PLAN SUPERCEDES LIST QUANTITIES IN A DISCREPANCY

CERTIFICATION

IN ACCORDANCE WITH SECTION 21 OF THE GENERAL PERMIT AUTHORIZATION TO DISCHARGE STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NPDES, THE PREPARER OF THIS DOCUMENT WAS TRAINED UNDER THE UNIVERSITY OF MINNESOTA EROSION AND SEDIMENT CONTROL CERTIFICATION PROGRAM. MICHAEL HIMMERICH CERTIFICATION IN DESIGN OF SWPPP IS VALID THROUGH MAY 31ST, 2027.

Michael Himmerich

SOUTH EDINA
DEVELOPMENT ADD.



LEGEND

- PROPERTY BOUNDARY
- LOT LINE
- EASEMENT LINE
- SETBACK LINE
- RIGHT OF WAY LINE
- SECTION LINE
- QUARTER LINE
- EXISTING EASEMENT LINE
- EXISTING PROPERTY LINE
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- GRADING LIMITS
- CONSTRUCTION LIMITS
- SURFACE GRADE & FLOW DIRECTION
- SURFACE SLOPE (H-V) & FLOW DIRECTION
- FLOW LINE ELEVATION
- FINISHED GRADE ELEVATION

NOTES

- SEE SHEET C-002 FOR ADDITIONAL PROJECT NOTES.
- EXISTING SPOT ELEVATIONS AT MATCH POINTS ARE BASED ON INTERPOLATED POINT TO POINT SURVEY DATA. CONTRACTOR IS RESPONSIBLE FOR VERIFYING CONNECTION POINTS PRIOR TO INSTALLATION OF IMPROVEMENTS. CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING IMMEDIATELY OF ANY FIELD DISCREPANCIES. CONTRACTOR IS RESPONSIBLE FOR MAKING NECESSARY ADJUSTMENTS IN THE FIELD FOR CONSTRUCTIBILITY, REGULATORY COMPLIANCE (ADA), POSITIVE DRAINAGE, AND TO ENSURE SMOOTH TRANSITIONS TO FIELD CONDITIONS. CONTRACTOR IS RESPONSIBLE FOR REWORK OF A DISCREPANCY THAT IS NOT COMMUNICATED TO THE ENGINEER IN WRITING.
- CONTRACTOR MUST IMMEDIATELY NOTIFY THE OWNER AND ENGINEER OF DISCREPANCIES OR CONFLICTS IN THE CONTRACT DOCUMENTS BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS ARE TO BE MADE WITHOUT PRIOR WRITTEN APPROVAL FROM ENGINEER. FAILURE TO NOTIFY OWNER AND ENGINEER OF AN IDENTIFIABLE CONFLICT BEFORE PROCEEDING WITH INSTALLATION RELIEVES OWNER AND ENGINEER OF ANY OBLIGATION TO PAY FOR A RELATED CHANGE ORDER.

WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

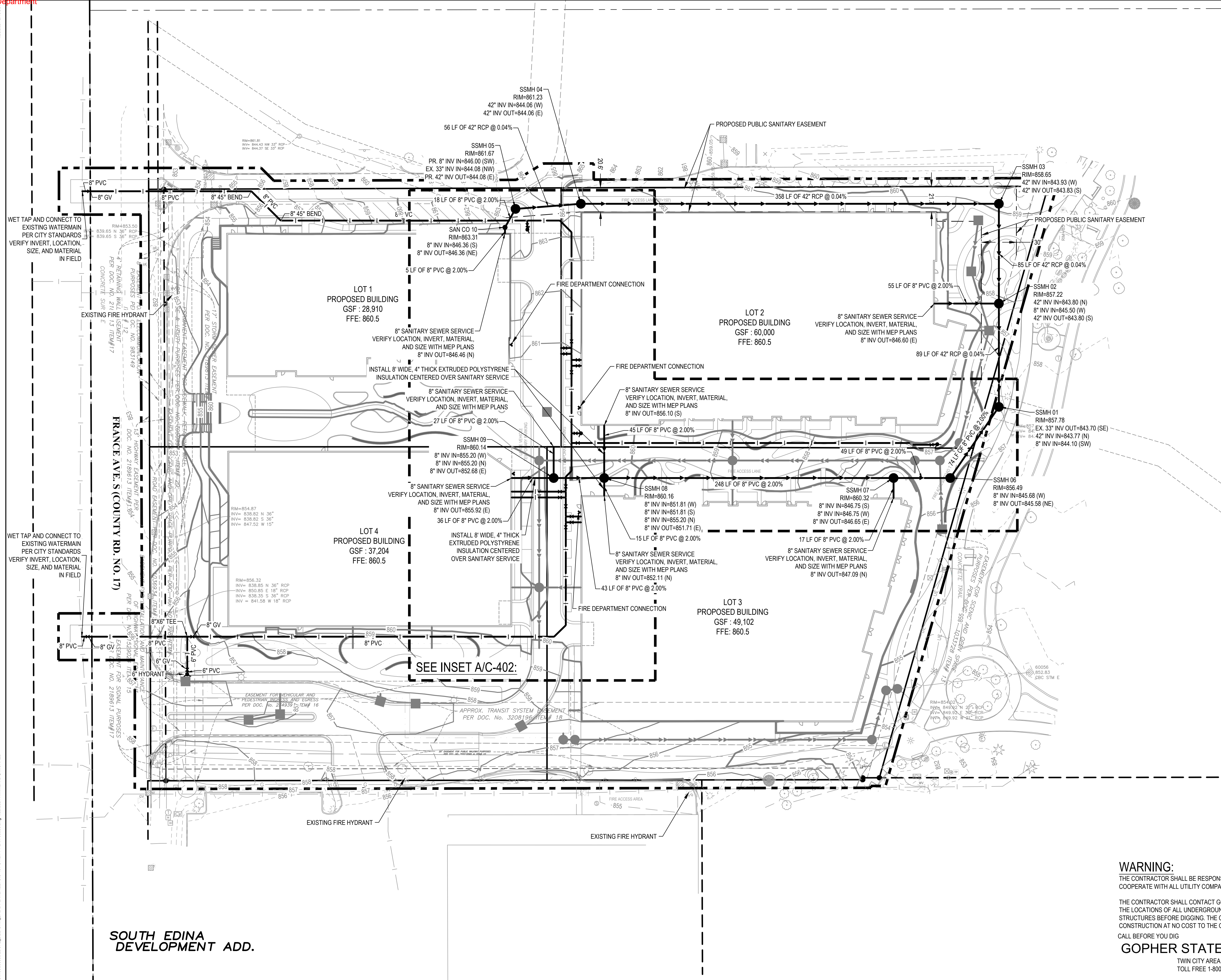
THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

CALL BEFORE YOU DIG

GOPHER STATE ONE CALL

TWIN CITY AREA: 651-454-0002
TOLL FREE 1-800-252-1166

PROJECT TITLE	ENCLAVE MIXED-USE DEVELOPMENT ON FRANCE
ISSUE NO.	1
DESCRIPTION	CITY SUBMITAL
DATE	04/26/2024
CERTIFICATION	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PROJECT NO.	193806086
DWN BY	MDH
CHKD BY	JRA
APPD BY	JRA
ISSUE DATE	04/26/2024
ISSUE NO.	1
SHEET TITLE	GRADING PLAN
SHEET NO.	C-301



**SOUTH EDINA
DEVELOPMENT ADD.**

WARNING:

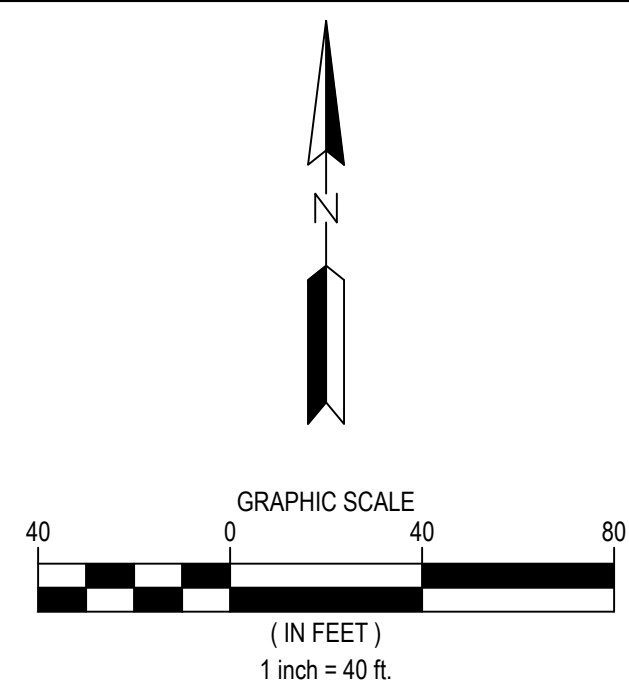
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CALL BEFORE YOU DIG

GOPHER STATE ONE CALL

TWIN CITY AREA: 651-454-0002
TOLL FREE 1-800-252-1166



LEGEND

- PROPERTY BOUNDARY
- EASEMENT LINE
- SETBACK LINE
- RIGHT OF WAY LINE
- SECTION LINE
- QUARTER LINE
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATERMAIN
- EXISTING SANITARY MANHOLE
- EXISTING HYDRANT
- EXISTING WATER VALVE
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- CONSTRUCTION LIMITS
- STORM SEWER
- SANITARY SEWER
- WATERMAIN
- STORM MANHOLE
- STORM CATCH BASIN
- SANITARY MANHOLE
- CLEANOUT
- HYDRANT
- GATE VALVE
- FIRE DEPARTMENT CONNECTION - SEE PLUMBING PLANS FOR DESIGN AND EXACT LOCATION

NOTES

- SEE SHEET C-002 FOR ADDITIONAL PROJECT NOTES.
- CONTRACTOR SHALL VERIFY LOCATION, SIZE, INVERT, AND MATERIAL OF ALL UTILITY CONNECTIONS TO UTILITY MAIN, STUBS, AND BUILDING SYSTEMS PRIOR TO CONSTRUCTION.
- MAINTAIN 18" VERTICAL SEPARATION AT ALL UTILITY CROSSINGS.

SANITARY STRUCTURE SCHEDULE			
STRUCTURE ID	SIZE ^A	CASTING ^A	DETAIL
SSMH 01	84" Ø	R-1642B	STANDARD PLATE 200/C-805
SSMH 02	60" Ø	R-1642B	STANDARD PLATE 200/C-805
SSMH 03	60" Ø	R-1642B	STANDARD PLATE 200/C-805
SSMH 04	60" Ø	R-1642B	STANDARD PLATE 200/C-805
SSMH 05	60" Ø	R-1642B	STANDARD PLATE 200/C-805
SSMH 06	48" Ø	R-1642B	STANDARD PLATE 200/C-805
SSMH 07	48" Ø	R-1642B	STANDARD PLATE 200/C-805
SSMH 08	48" Ø	R-1642B	STANDARD PLATE 200/C-805
SSMH 09	48" Ø	R-1642B	STANDARD PLATE 200/C-805
SAN CO 10	6" Ø	SOLID	STANDARD PLATE 305/C-805

^A STRUCTURE SIZES ARE APPROXIMATE. PRECAST MANUFACTURER TO CONFIRM SIZES AND ADJUST AS NECESSARY, PRIOR TO BID OPENING
^{*} NEENAH OR APPROVED EQUAL

733 MARQUETTE AVE
SUITE 1000
MINNEAPOLIS, MN 55402
PHONE: 612-712-2000
WWW.STANTEC.COM

ENCLAVE

**ENCLAVE MIXED-USE
DEVELOPMENT ON FRANCE**

7235 FRANCE AVE S.
EDINA, MINNESOTA 55435

PROJECT TITLE

ISSUE NO.: 1

DATE: 04/26/2024

DESCRIPTION: CITY SUBMITAL

CERTIFICATION:

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

LICENSE NO.: 19380686

DATE: 04/26/2024

PROJECT NO.: 19380686

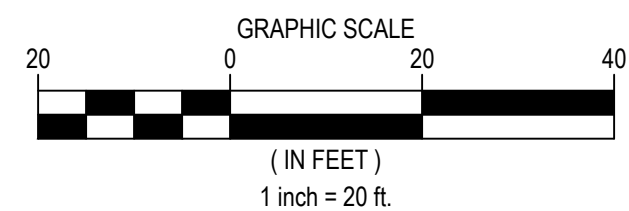
DWN BY: MDH
CHKD BY: JRA
APPD BY: JRA

ISSUE DATE: 04/26/2024

ISSUE NO.: 1

SHEET TITLE: UTILITY PLAN

SHEET NO.: C-401



LEGEND

- | | |
|--|---|
| | PROPERTY BOUNDARY |
| | EASEMENT LINE |
| | SETBACK LINE |
| | RIGHT OF WAY LINE |
| | SECTION LINE |
| | QUARTER LINE |
| | EXISTING MINOR CONTOUR |
| | EXISTING MAJOR CONTOUR |
| | EXISTING STORM SEWER |
| | EXISTING SANITARY SEWER |
| | EXISTING WATERMAIN |
| | EXISTING SANITARY MANHOLE |
| | EXISTING HYDRANT |
| | EXISTING WATER VALVE |
| | PROPOSED MINOR CONTOUR |
| | PROPOSED MAJOR CONTOUR |
| | CONSTRUCTION LIMITS |
| | STORM SEWER |
| | SANITARY SEWER |
| | WATERMAIN |
| | STORM MANHOLE |
| | STORM CATCH BASIN |
| | SANITARY MANHOLE |
| | CLEANOUT |
| | HYDRANT |
| | GATE VALVE |
| | FIRE DEPARTMENT CONNECTION - SEE PLUMBING PLANS FOR DESIGN AND EXACT LOCATION |

NOTES

1. SEE SHEET C-002 FOR ADDITIONAL PROJECT NOTES.
2. CONTRACTOR SHALL VERIFY LOCATION, SIZE, INVERT, AND MATERIAL OF ALL UTILITY CONNECTIONS TO UTILITY MAIN, STUBS, AND BUILDING SYSTEMS PRIOR TO CONSTRUCTION.
3. MAINTAIN 18" VERTICAL SEPARATION AT ALL UTILITY CROSSINGS.

SANITARY STRUCTURE SCHEDULE			
STRUCTURE ID	SIZE*	CASTING*	DETAIL
SSMH 01	84" Ø	R-1642B	STANDARD PLATE 200/C-805
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SSMH 08	48" Ø	R-1642B	STANDARD PLATE 200/C-805
SSMH 09	48" Ø	R-1642B	STANDARD PLATE 200/C-805
SAN CO 10	6" Ø	SOLID	STANDARD PLATE 305/C-805

* STRUCTURE SIZES ARE APPROXIMATE. PRECAST MANUFACTURER TO CONFIRM SIZES AND ADJUST AS NECESSARY, PRIOR TO BID OPENING

* NEENAH OR APPROVED EQUAL

WARNING:

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CALL BEFORE YOU DIG

GOPHER STATE ONE CALL

TWIN CITY AREA: 651-454-0002
TOLL FREE 1-800-252-1166



ENCLAVE

ENCLAVE MIXED-USE
DEVELOPMENT ON FRANCE

7235 FRANCE AVE S.
EDINA, MINNESOTA 55435

[illegible]

CERTIFICATION:

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LICENSE NO.:

PROJECT NO.:	193806086
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DWN BY: MDH	CHK'D BY: JRA	APP'D BY: JRA
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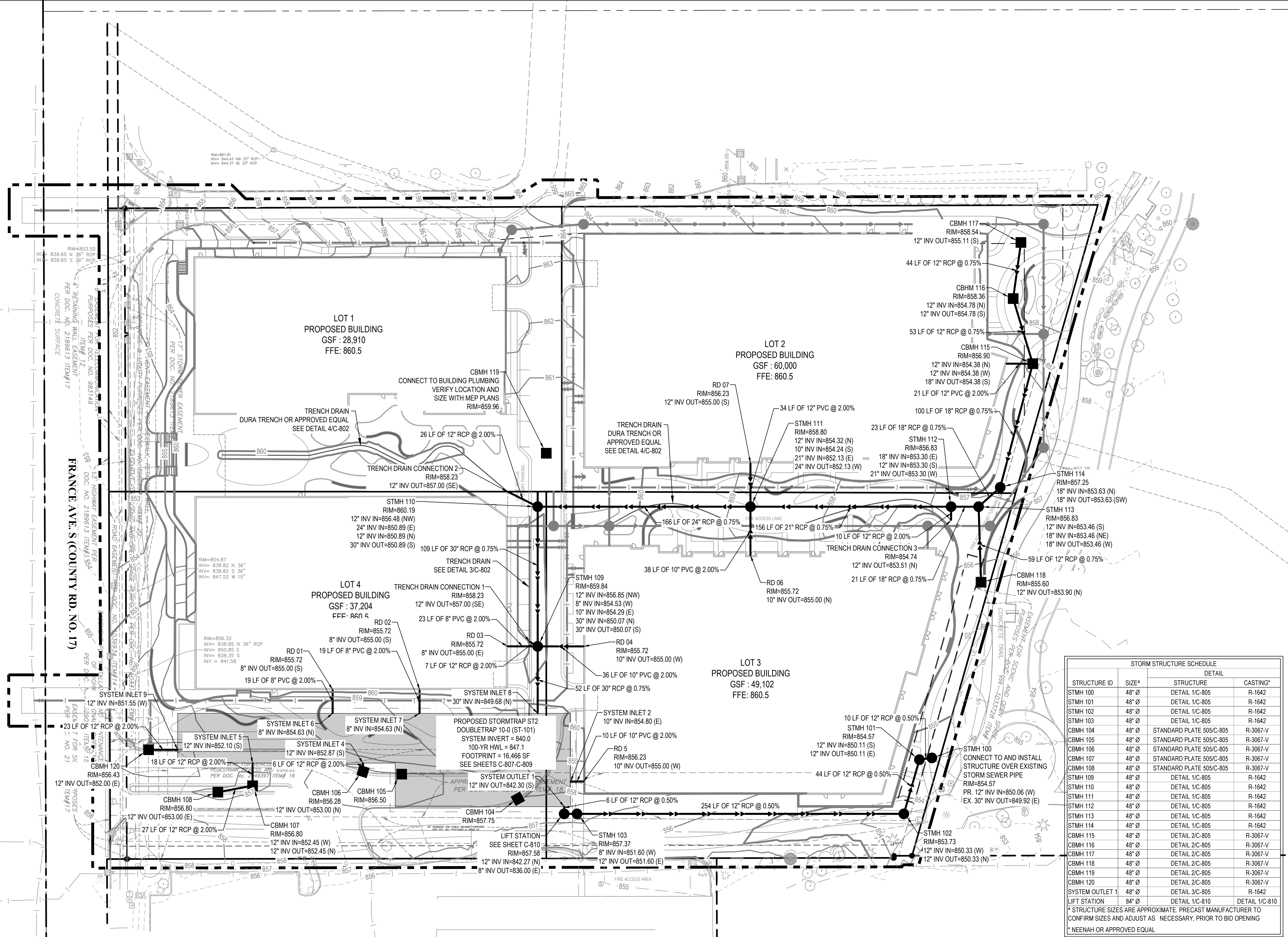
ISSUE DATE: 04/26/2024

SHEET TITLE:

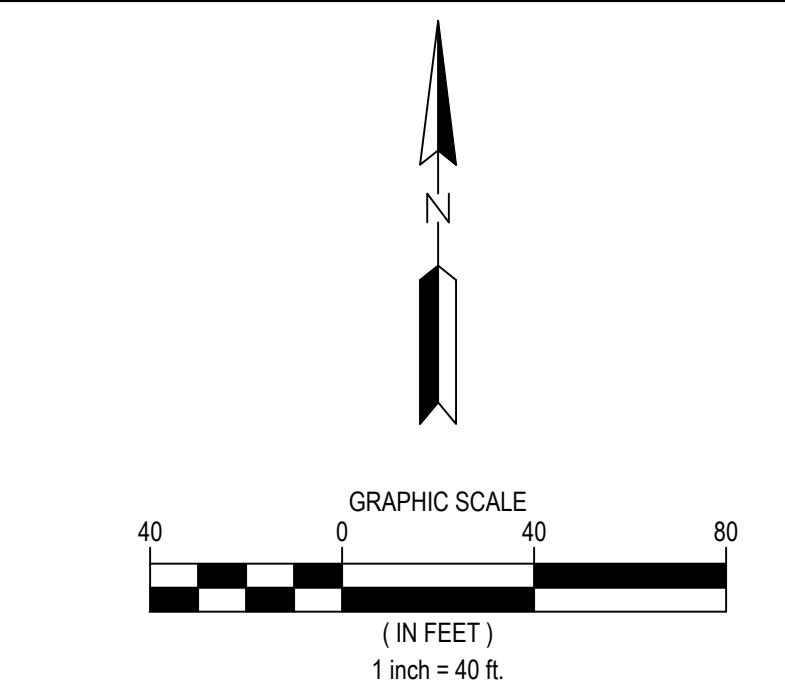
WATERMAIN INSET

SHEET NO.:

C-402



UNDERGROUND INFILTRATION SYSTEM SUMMARY TABLE						
BMP	AREA (SF)	WQV REQUIRED (CF)	WQV PROVIDED (CF)	TOTAL INTERNAL SYSTEM VOLUME (CF)	TOTAL SYSTEM SIZE (CF)	SYSTEM INVERT 100-YR HWL
STORMTRAP ST2 DOUBLETRAP 10-0 (ST-101)	16,466	25,799	31,334	164,660	181,126	847.1
NOTE: AREA AND INTERNAL SYSTEM VOLUME CALCULATED USING FOOTPRINT OF SYSTEM SHOWN ON PLANS AND INTERNAL HEIGHT OF 10-FEET.						



LEGEND	
	PROPERTY BOUNDARY
	EASEMENT LINE
	SETBACK LINE
	RIGHT OF WAY LINE
	SECTION LINE
	QUARTER LINE
	EXISTING MINOR CONTOUR
	EXISTING MAJOR CONTOUR
	EXISTING STORM SEWER
	EXISTING SANITARY SEWER
	EXISTING WATERMAIN
	EXISTING STORM SEWER MANHOLE
	EXISTING STORM SEWER INLET
	EXISTING STORM SEWER INLET
	PROPOSED MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	GRADING LIMITS
	STORM SEWER
	SANITARY SEWER
	WATERMAIN
	STORM MANHOLE
	SANITARY CATCH BASIN
	SANITARY MANHOLE
	CLEANOUT
	HYDRANT
	GATE VALVE
	UNDERGROUND STORMWATER SYSTEM

- NOTES**
- SEE SHEET C-002 FOR ADDITIONAL PROJECT NOTES.
 - CONTRACTOR TO PROVIDE 6" PERFORATED DRAINTILE 1.5" BELOW BASE STONE INVERT FOR ALL UNDERGROUND SYSTEMS. DRAINTILE TO BE SPACED AT 10' O.C.

STORM STRUCTURE SCHEDULE		
STRUCTURE ID	SIZE*	DETAIL
		CASTING*
STMH 100	48" Ø	DETAIL 1/C-805 R-1642
STMH 101	48" Ø	DETAIL 1/C-805 R-1642
STMH 102	48" Ø	DETAIL 1/C-805 R-1642
STMH 103	48" Ø	DETAIL 1/C-805 R-1642
CBMH 104	48" Ø	STANDARD PLATE 505/C-805 R-3067-V
CBMH 105	48" Ø	STANDARD PLATE 505/C-805 R-3067-V
CBMH 106	48" Ø	STANDARD PLATE 505/C-805 R-3067-V
CBMH 107	48" Ø	STANDARD PLATE 505/C-805 R-3067-V
CBMH 108	48" Ø	STANDARD PLATE 505/C-805 R-3067-V
STMH 109	48" Ø	DETAIL 1/C-805 R-1642
STMH 110	48" Ø	DETAIL 1/C-805 R-1642
STMH 111	48" Ø	DETAIL 1/C-805 R-1642
STMH 112	48" Ø	DETAIL 1/C-805 R-1642
STMH 113	48" Ø	DETAIL 1/C-805 R-1642
STMH 114	48" Ø	DETAIL 1/C-805 R-1642
CBMH 115	48" Ø	DETAIL 2/C-805 R-3067-V
CBMH 116	48" Ø	DETAIL 2/C-805 R-3067-V
CBMH 117	48" Ø	DETAIL 2/C-805 R-3067-V
CBMH 118	48" Ø	DETAIL 2/C-805 R-3067-V
CBMH 119	48" Ø	DETAIL 2/C-805 R-3067-V
CBMH 120	48" Ø	DETAIL 2/C-805 R-3067-V
SYSTEM OUTLET 1	48" Ø	DETAIL 3/C-805 R-1642
LIFT STATION	84" Ø	DETAIL 1/C-810 R-1642

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* NEENAH OR APPROVED EQUAL

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ENCLAVE

ENCLAVE MIXED-USE
DEVELOPMENT ON FRANCE

7235 FRANCE AVE S.
EDINA, MINNESOTA 55435

PROJECT TITLE:

ISSUE NO.: 1

DESCRIPTION: CITY SUBMITAL

DATE: 04/26/2024

CERTIFICATION:

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

LICENSE NO.:

DATE:

PROJECT NO.: 193806086

DWN BY: MDH
CHKD BY: JRA
APPD BY: JRA

ISSUE DATE: 04/26/2024

ISSUE NO.: 1

SHEET TITLE:

STORM SEWER PLAN

SHEET NO.:

C-501