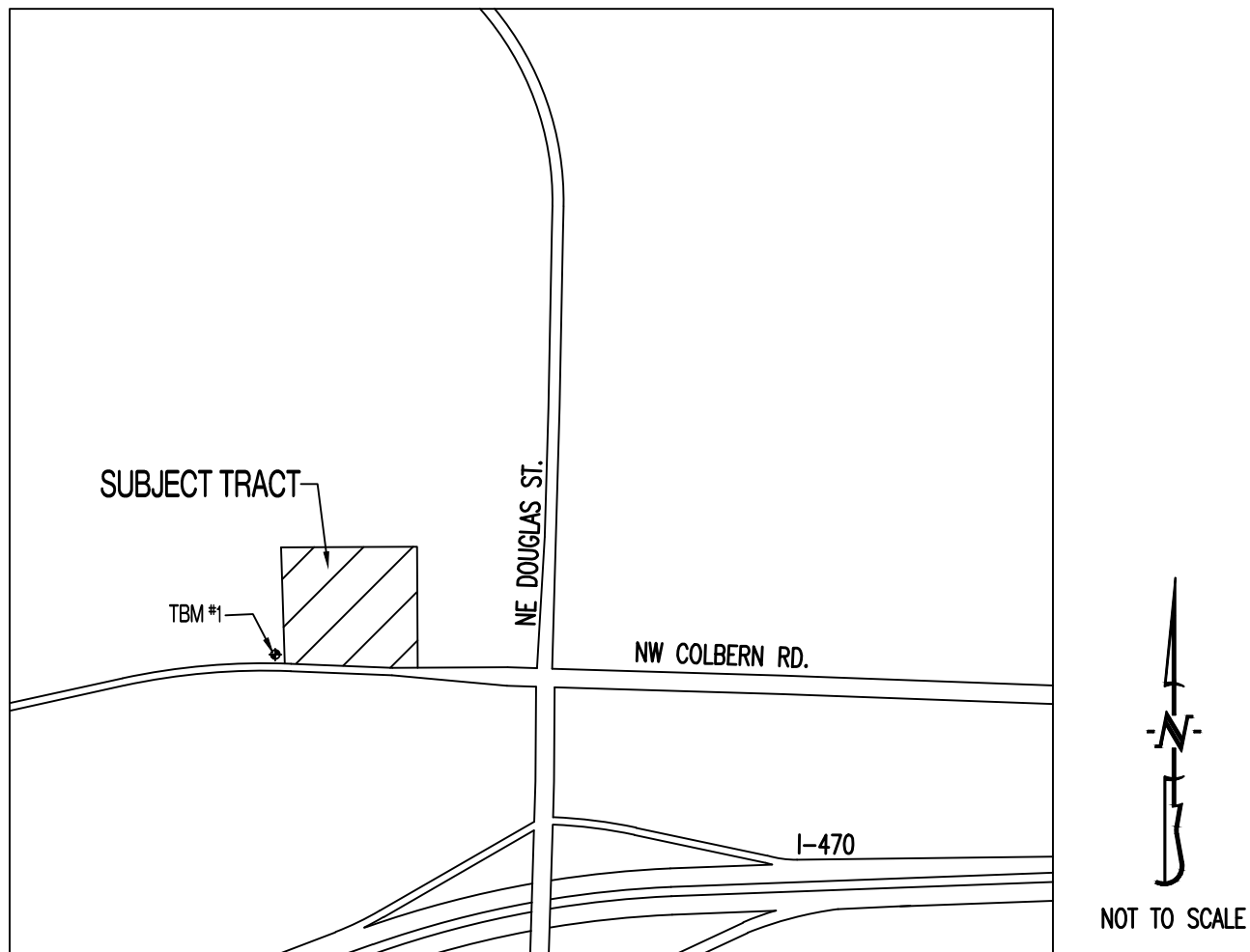


THE VILLAGE AT DISCOVERY LOTS 5-8

LOCATION MAP



PROJECT BENCHMARK:

TBM #1 – CONTROL POINT #50 SET BY OLSSON. 1/2" IMBEDDED CAP ON NORTH SIDE OF NW COLBERN RD. LOCATED AT 1ST FIELD ENTRANCE.
NORTHING = 1012389.819
EASTING = 2822108.784
ELEVATION = 990.810
REFER TO "PRIVATE SITE DEVELOPMENT PLANS FOR THE VILLAGE AT DISCOVERY PARK ZONE 1" PLANS BY OLSSON DATED 10/18/2023 FOR MORE INFORMATION.

FLOOD PLAIN STATEMENT:

THIS LOT IS LOCATED IN ZONE X UNSHADED – AREAS DETERMINED TO BE OUTSIDE THE 1% ANNUAL CHANCE FLOOD AS SHOWN ON THE FEMA F.I.R.M. PANEL #290950C04096, DATED JANUARY 20, 2017.

LEGAL DESCRIPTION:

VILLAGE AT DISCOVERY PARK, LOTS 5, 6, 7, & 8. A SUBDIVISION IN JACKSON COUNTY, LEE'S SUMMIT, MISSOURI.

UTILITY COMPANIES:

LOCATES:

MISSOURI ONE CALL INC.
10222 B NORTHEAST DRIVE
JEFFERSON CITY, MO 65109
1-800-344-7483



ELECTRIC:

EVERGY
816-524-3223

WATER/SANITARY SEWER:

CITY OF LEE'S SUMMIT
WATER UTILITIES DEPARTMENT
1200 S HAMLEN RD
LEE'S SUMMIT, MO 64081
816-969-1900

NATURAL GAS:

SPIRE
314-342-0500

FIBER:

GOOGLE FIBER
877-454-6959

CABLE TELEVISION:

SPECTRUM
877-772-2253

GENERAL NOTES:

ALL STREET, STORM DRAIN, AND SANITARY SEWER CONSTRUCTION TO BE IN ACCORDANCE WITH THE CITY OF LEE'S SUMMIT "DESIGN AND CONSTRUCTION MANUAL" (CURRENT EDITION).

ANY CITY DETAILS SHOWN ON THIS SET OF PLANS ARE FOR REFERENCE ONLY. CONTRACTOR TO HAVE A COPY OF THE CITY'S LATEST EDITION OF SPECIFICATIONS AND STANDARDS FOR ALL STREET, STORM, AND SANITARY CONSTRUCTION ON SITE AT ALL TIMES DURING CONSTRUCTION. REFER TO <https://cityofls.net/development-services/design/design-criteria/design-construction-manual-infrastructure>

CONTRACTOR WILL BE RESPONSIBLE FOR PLACEMENT AND MAINTENANCE OF TRAFFIC CONTROL DEVICES NECESSARY TO COMPLETE THEIR PORTION OF WORK. THE DEVICES AND METHODS EMPLOYED WILL COMPLY WITH THE CURRENT VERSION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

ALL CONCRETE MATERIALS SHALL CONFORM TO KCMMB STANDARDS AND SPECIFICATIONS.

THIS PLAT CONTAINS APPROXIMATELY 4.83 ACRES.

THIS TRACT IS ZONED PMIX.

THE STORM SEWER NETWORK DESIGN FOR THIS PROJECT IS BASED ON OPEN CHANNEL FLOW; THEREFORE THE HYDRAULIC GRADE LINE IS AT OR LESS THAN THE CROWN OF THE PIPE.

EXISTING UTILITIES SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL COORDINATE LOCATES (HORIZONTAL AND VERTICAL) PRIOR TO ANY EXCAVATION.

ALL EXCAVATION TO BE IN ACCORDANCE WITH SECTIONS 319.010-319.050, REVISED STATUTES OF THE STATE OF MISSOURI. SUCH COMPLIANCE SHALL NOT, HOWEVER, EXCUSE ANY PERSON MAKING ANY EXCAVATION FROM DOING SO IN A CAREFUL AND PRUDENT MANNER, NOR SHALL IT EXCUSE SUCH PERSON FROM LIABILITY FOR ANY DAMAGE OR INJURY TO UNDERGROUND UTILITIES RESULTING FROM THE EXCAVATION.

A GEOTECHNICAL EVALUATION OF THE SUBSURFACE SOIL, GROUNDWATER CONDITIONS, AND A SLOPE STABILITY ANALYSIS HAS NOT BEEN PERFORMED BY THIS ENGINEER. THE OWNER SHALL SATISFY THEMSELVES OF ALL GEOTECHNICAL CONDITIONS PRIOR TO ANY CONSTRUCTION.

ALL LAND DISTURBANCE ACTIVITIES SHALL BE IN ACCORDANCE WITH THE CITY OF LEE'S SUMMIT CODE OF ORDINANCES. REFER TO STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR NARRATIVE REPORT AND BMP DESCRIPTIONS AND DETAILS.

ALL SLOPES ARE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.

IT IS THE INTENT OF THESE PLANS TO COMPLY WITH THE REQUIREMENTS OF THE MOENR CLEAN WATER COMMISSION.

ALL DISTURBED AREAS WITHIN THE "LIMITS OF DISTURBANCE" SHALL BE FINE GRADED, SEEDED, AND MULCHED.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL DEVICES AND REMOVING THEM ONCE THE SITE IS STABILIZED.

ALL HDPE PIPE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. REFER TO DETAIL FOR PIPE BEDDING REQUIREMENTS.

IN ORDER TO TERMINATE A STATE OPERATING PERMIT THE MISSOURI DEPARTMENT OF NATURAL RESOURCES (MDNR) REQUIRES THAT THE PERMITTEE SUBMIT A COMPLETED FORM H (INCLUDED WITH THE APPROVAL PERMIT) TO THE MDNR. A PERMIT IS ELIGIBLE FOR TERMINATION WHEN EITHER PERENNIAL VEGETATION, PAVEMENT, BUILDINGS, OR STRUCTURES USING PERMANENT MATERIALS COVER ALL AREAS THAT HAVE BEEN DISTURBED. VEGETATIVE COVER SHALL BE AT LEAST 70% OF FULLY ESTABLISHED PLANT DENSITY OVER 100% OF THE DISTURBED AREA. A COPY OF FORM H SHOULD BE SUBMITTED TO THE CITY AT WHICH TIME THE CITY WILL REMOVE THE PROJECT FROM ITS INSPECTION SCHEDULE.

LAND DISTURBANCE SITES SHOULD BE INSPECTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 48 HOURS AFTER ANY STORM EVENT EQUAL TO OR GREATER THAN A 2-YEAR, 24-HOUR STORM HAS CEASED DURING A NORMAL WORK DAY OR WITHIN 72 HOURS IF THE RAIN EVENT CEASES DURING A NON-WORK DAY SUCH AS A WEEKEND OR HOLIDAY. ANY DEFICIENCIES SHALL BE NOTED IN A WEEKLY REPORT OF THE INSPECTION AND CORRECTED WITHIN SEVEN CALENDAR DAYS OF THE REPORT. CONTRACTORS ARE REQUIRED TO SUBMIT TO CITY INSPECTION STAFF COPIES OF THEIR INSPECTION REPORTS REQUIRED BY THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) ON A MONTHLY BASIS IF REQUESTED.

NO OIL AND GAS WELLS EXIST ON THIS TRACT ACCORDING TO THE MISSOURI DEPARTMENT OF NATURAL RESOURCES OIL AND GAS PERMIT DATABASE.

THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH A FIELD ENGINEERING INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200.

TOTAL DISTURBED AREA ON SITE = 4.61 AC.

MISSOURI DNR LAND DISTURBANCE PERMIT NUMBER TBD.

DEVELOPER :

DISCOVERY PARK LEE'S SUMMIT, LLC.
4220 PHILLIPS FARM RD.
COLUMBIA, MO 65201
573-615-2252

SHEET LIST TABLE

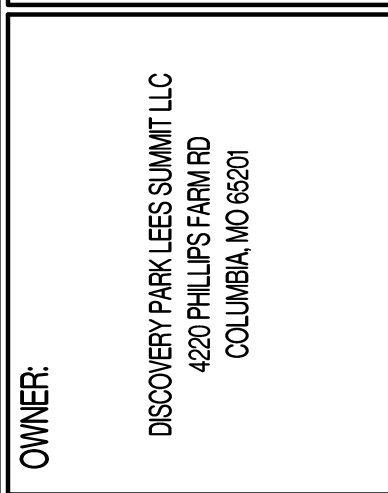
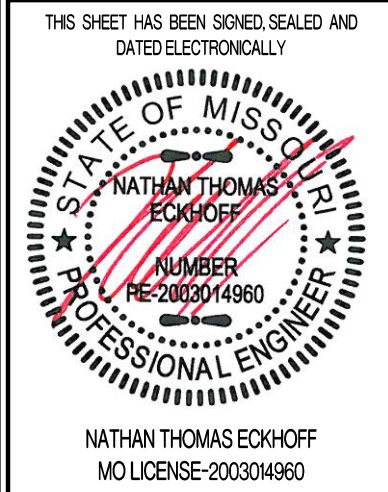
SHEET NUMBER	SHEET TITLE	ORIGINAL 05/22/24
CE 10	COVER SHEET	X
CE 11	CIVIL SPECIFICATIONS	X
CE 2.1	EROSION CONTROL PLAN	X
CE 3.0	OVERALL GRADING PLAN	X
CE 3.1	GRADING PLAN SHEET 1	X
CE 3.2	GRADING PLAN SHEET 2	X
CE 3.3	GRADING PLAN SHEET 3	X
CE 3.4	GRADING PLAN SHEET 4	X
CE 3.5	GRADING PLAN SHEET 5	X
CE 3.6	GRADING PLAN SHEET 6	X
CE 4.1	UTILITY PLAN SHEET 1	X
CE 4.2	UTILITY PLAN SHEET 2	X
CE 5.1	SANITARY PLAN & PROFILE & SANITARY DETAILS	X
CE 6.1	STORM PROFILE - LINES 1-6	X
CE 6.2	STORM PROFILE - LINES 7-9 & STORM DETAILS	X
CE 6.3	STORM DETAILS	X
CE 6.4	25-YR STORM CALCULATIONS	X
CE 6.5	100-YR STORM CALCULATIONS	X
CE 7.1	SITE PLAN SHEET 1	X
CE 7.2	SITE PLAN SHEET 2	X
CE 8.1	SITE DETAILS SHEET 1	X
CE 8.2	SITE DETAILS SHEET 2	X
CE 8.3	LEE'S SUMMIT SITE DETAILS	X
CE 8.4	LEE'S SUMMIT UTILITY DETAILS	X
CE 9.1	LANDSCAPING PLAN	X

LEGEND OF SYMBOLS:

----	EXISTING CURB	FF=XXXX	FINISHED FLOOR OF STRUCTURE
=====	PROPOSED CURB	XXXX.XX TC	PROPOSED TOP OF CURB ELEVATION
	RIP RAP	XXXX.XX TP	PROPOSED TOP OF PAVEMENT ELEVATION
	EXISTING STRUCTURE	XXXX.XX FG	PROPOSED FINISHED GRADE ELEVATION
	EXISTING TREELINE	XXXX.XX TW	PROPOSED TOP OF WALL
=====	PROPOSED TREELINE	XX	LOT NUMBER
—o—o—o—	EDGE OF WATERWAY	X	STORM SEWER STRUCTURE LABEL
— W —	EXISTING WATERLINE	X	SANITARY SEWER STRUCTURE LABEL
— W —	PROPOSED WATERLINE	HP.	HIGH POINT
— G —	EXISTING GAS LINE	LP.	LOW POINT
— G —	PROPOSED GAS LINE	—	EXISTING SIGNS
— T —	EXISTING TELEPHONE	Ø	EXISTING POWER POLE
— FO —	EXISTING FIBER OPTIC		EXISTING GAS VALVE
— OE —	EXISTING OVERHEAD ELECTRIC		EXISTING WATER VALVE
— UE —	EXISTING UNDERGROUND ELECTRIC		EXISTING GAS METER
— UE —	PROPOSED UNDERGROUND ELECTRIC		EXISTING WATER METER
— OETV —	EXISTING OVERHEAD ELEC. & TV		EXISTING FIRE HYDRANT
— OETV —	EXISTING OVERHEAD ELEC., TV & TELE.		MANHOLE
— S —	EXISTING SANITARY SEWER		EXISTING SANITARY SEWER LATERAL
— S —	PROPOSED SANITARY SEWER		PROPOSED SANITARY SEWER LATERAL
.....XXX.....	EXISTING MINOR CONTOUR		PROPOSED TRACER WIRE TEST STATION BOX
— --XXX-- --	EXISTING MAJOR CONTOUR		EXISTING AIR CONDITIONER
—XXX—	PROPOSED MINOR CONTOUR		EXISTING TELEPHONE PEDESTAL
—XXX—	PROPOSED MAJOR CONTOUR		EXISTING ELECTRICAL TRANSFORMER
	100 YEAR FLOOD PLAIN		EXISTING ELECTRIC METER
	FLOODWAY		EXISTING LIGHT POLE
— . . —	ORDINARY HIGH WATER MARK		EXISTING GUY WIRE
— . . —	STREAM SIDE BUFFER		
-----	OUTER STREAM BUFFER		

REVISIONS:

NO.	DATE
ORIGINAL	05/22/2024



THE VILLAGE AT DISCOVERY LOTS 5-8 LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

DRAWING INCLUDES:

COVER SHEET

DESIGNED: NTE

DRAWN: NMD

PROJECT NO.: 230286

SHEET:

CE 10

SITE CLEARING & DEMOLITION:

IT IS THE INTENT THAT THE DEMOLITION BE COMPLETE AND ADEQUATE FOR THE INTENDED PURPOSE. THIS WORK SHALL INCLUDE THE REMOVAL OF ALL ITEMS, WHETHER IN VIEW OR HIDDEN UNDERNEATH THE SURFACE OF THE GROUND, REGARDLESS OF WHETHER SHOWN ON THE DRAWINGS OR ENCOUNTERED DURING CONSTRUCTION.

CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS REGARDING MATERIALS, METHODS OF WORK, AND DISPOSAL OF EXCESS WASTE MATERIALS.

ERECT BARRIERS TO PROTECT PERSONNEL, STRUCTURES AND UTILITIES REMAINING INTACT.

PROTECT ALL EXISTING OBJECTS INTENDED TO REMAIN. IN CASE OF DAMAGE, MAKE REPAIRS OR REPLACEMENTS NECESSARY AT NO ADDITIONAL COST TO THE OWNER.

MINIMIZE INTERFERENCE WITH ROADS, STREETS, DRIVEWAYS, SIDEWALKS, AND ADJACENT FACILITIES.

DO NOT CLOSE OR OBSTRUCT STREETS, SIDEWALKS, ALLEYS OR PASSAGEWAYS WITHOUT PERMISSION FROM AUTHORITIES HAVING JURISDICTION.

IF CLOSURE IS PERMITTED, PROVIDE SIGNAGE INDICATING CLOSURE AND SIGNAGE TO DIRECT TRAFFIC TO ALTERNATE ROUTE.

MOISTEN SURFACES AS REQUIRED TO PREVENT DUST FROM BEING A NUISANCE TO THE PUBLIC, NEIGHBORS, AND CONCURRENT PERFORMANCE OF OTHER WORK ON THE SITE.

PROVIDE THE OWNER'S REPRESENTATIVE A MINIMUM OF TWO BUSINESS DAYS' NOTICE PRIOR TO COMMENCING WORK OF THIS SECTION.

THE CONTRACTOR SHALL LOCATE EXISTING UTILITY LINES AND SERVICES TRaversING THE SITE AND DETERMINE THE REQUIREMENTS FOR THEIR PROTECTION. THE CONTRACTOR SHALL PRESERVE ACTIVE UTILITIES ON THE SITE THAT ARE DESIGNATED TO REMAIN.

BEFORE STARTING SITE OPERATIONS, THE CONTRACTOR SHALL DISCONNECT OR ARRANGE FOR THE DISCONNECTION OF ALL UTILITY SERVICES DESIGNATED TO BE REMOVED. THE CONTRACTOR SHALL PERFORM ALL SUCH WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY COMPANY OR AGENCY INVOLVED.

IN REMOVING PAVEMENT, CURB AND GUTTER, SIDEWALKS, ETC., WHERE A PORTION IS LEFT IN PLACE, REMOVAL SHALL BE TO AN EXISTING JOINT OR TO A JOINT SAWN TO A MINIMUM DEPTH OF 2" WITH A TRUE SAW LINE AND A VERTICAL FACE. REMOVE SUFFICIENT PAVEMENT TO PROVIDE FOR PROPER GRADE AND CONNECTIONS IN THE NEW WORK REGARDLESS OF ANY LIMITS INDICATED ON THE DRAWINGS.

EXISTING CASTINGS AND CULVERTS, IF SALVAGEABLE AND REMOVED INTACT, REMAIN THE PROPERTY OF THE CONTRACTOR.

ALL SEWERS AND DRAINAGE PIPES, WHICH HAVE BEEN OR ARE TO BE ABANDONED, SHALL BE PERMANENTLY SEALED AT THE ENDS WITH BULKHEADS CONSTRUCTED OF CONCRETE, HAVING A MINIMUM THICKNESS OF 8".

ABANDON STORM OR SANITARY SEWER STRUCTURES BY BREAKING THE CONCRETE BOTTOM OF THE STRUCTURE INTO PIECES NO LARGER THAN 12" IN ANY DIRECTION AND REMOVING THE TOP OF THE STRUCTURE TO 3' BELOW FINISHED GRADE. PLUG ALL PIPES WITH CONCRETE AND FILL STRUCTURE WITH 1" CLEAN GRAVEL.

ALL DEBRIS SHALL BE DISPOSED OF OFF-SITE.

DO NOT STORE OR BURN MATERIALS ON-SITE UNLESS PERMITTED BY THE GOVERNING JURISDICTION.

ALL ASPHALT OR CONCRETE MATERIALS SHALL BE DISPOSED OF OFF-SITE.

MATERIAL ACQUIRED THROUGH DEMOLITION, OTHER THAN THOSE REQUIRED TO COMPLETE THE CONSTRUCTION PROJECT AND DESIGNATED FOR RETURN TO OWNER, WILL BECOME THE PROPERTY OF THE CONTRACTOR AND WILL BE REMOVED FROM THE SITE. THE MATERIAL WILL BE DISPOSED OF IN A LEGAL MANNER.

THE CONTRACTOR'S OPERATIONS SHALL BE RESTRICTED TO THOSE AREAS INSIDE THE CONSTRUCTION LIMITS INDICATED ON THE DRAWINGS. IF LIMITS ARE NOT INDICATED, RESTRICT WORK TO THE OWNER'S PROPERTY, EASEMENT, OR PUBLIC RIGHTS-OF-WAY.

COMPLETE WORK WITHIN PUBLIC RIGHTS-OF-WAY UNDER THE PERMISSION OF THE GOVERNING AGENCY.

IF ITEMS OUTSIDE THE LIMITS OF DISTURBANCE GET DAMAGED, OWNER COMPLETES THE REQUIRED REPAIRS AND CHARGES THE CONTRACTOR.

THE CONTRACTOR IS RESPONSIBLE FOR THE ADJUSTMENT OF ALL MANHOLES, CASTINGS, WATER VALVES IRRIGATION BOXES, CLEAN OUTS AND ETC. WITHIN THE GRADING LIMITS TO MATCH THE FINISHED SURFACE. ADJUSTMENTS SHALL BE COORDINATED WITH THE UTILITY COMPANIES AND THE COST FOR ALL ADJUSTMENTS SHALL BE INCIDENTAL TO CONSTRUCTION UNLESS NOTED AS A BID ITEM. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO UTILITY STRUCTURES AND APPURTENANCES THAT OCCURS DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.

EARTHMOVING:

CONTRACTOR TO SUBMIT MANUFACTURER'S PRODUCT DATA AND INSTALLATION INSTRUCTIONS FOR EACH MATERIAL AND PRODUCT USED.

TEST REPORTS: SUBMIT FOR APPROVAL TEST REPORTS, LIST OF MATERIALS AND GRADATIONS PROPOSED FOR USE. OBTAIN SAMPLES OF ANY PROPOSED FILL MATERIAL AND CONTRACTOR TO PROVIDE STANDARD PROCTOR TEST REPORTS TO ENGINEER.

COMPACTION REQUIREMENTS ARE AS FOLLOWS:

- UNDER STEPS, PAVEMENTS, AND WALKWAYS, 95 PERCENT STANDARD PROCTOR MINIMUM DENSITY, ASTM D 698.
- UNDER LAWNS OR UNPAVED AREAS, 85 PERCENT, ASTM D 698.

GRADING TOLERANCES OUTSIDE BUILDING LINES ARE AS FOLLOWS:

- LAWNS, UNPAVED AREAS, AND WALKS, PLUS OR MINUS 1 INCH.
- PAVEMENTS, PLUS OR MINUS 1/2 INCH.
- ALL ADA ROUTES AND PARKING ARE TO MEET ADA REQUIREMENTS AT ALL TIMES.

ALL ACTIVITIES WILL BE CONTAINED WITHIN CONSTRUCTION BOUNDARIES INDICATED ON SITE PLAN. SPECIFIED EXCAVATION REQUIREMENTS, PRECAUTIONS, AND PROTECTIVE SYSTEMS WILL BE OBSERVED AT ALL TIMES.

MOVEMENT OF TRUCKS AND EQUIPMENT ON OWNER'S PROPERTY WILL BE IN ACCORDANCE WITH OWNER'S INSTRUCTIONS.

TOPSOIL WILL BE STRIPPED FROM THE CONSTRUCTION SITE AND WILL BE DISPOSED OF LEGALLY OFF SITE.

TRENCHES WILL NOT BE BACKFILLED UNTIL ALL REQUIRED TESTS ARE COMPLETED AND THE UTILITY SYSTEMS, AS INSTALLED, CONFORM TO REQUIREMENTS SPECIFIED BY THE CONTRACT DOCUMENTS.

EXCAVATION IS UNCLASSIFIED AND INCLUDES EXCAVATION TO SUBGRADE REGARDLESS OF MATERIALS ENCOUNTERED. REPAIR EXCAVATIONS BEYOND ELEVATIONS AND DIMENSIONS INDICATED AS FOLLOWS:

- AT STRUCTURE: CONCRETE OR COMPACTED STRUCTURAL FILL.
- ELSEWHERE: BACKFILL AND COMPACT AS DIRECTED.

MAINTAIN STABILITY OF EXCAVATIONS; CONTRACTOR TO BE RESPONSIBLE FOR DESIGN AND COORDINATION OF SHORING AND BRACING AS REQUIRED. PREVENT SURFACE AND SUBSURFACE WATER FROM ACCUMULATING IN EXCAVATIONS. STOCKPILE SATISFACTORY MATERIALS FOR REUSE, ALLOW FOR PROPER DRAINAGE AND DO NOT STOCKPILE MATERIALS WITHIN DRIP LINE OF TREES TO REMAIN.

COMPACT MATERIALS AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D 698 BY AERATION OR WETTING TO THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY:

- STRUCTURE, PAVEMENT, WALKWAYS: SUBGRADE AND EACH FILL LAYER TO 95% (-2%+4%) OF STANDARD PROCTOR MAXIMUM DRY DENSITY TO SUITABLE DEPTH. COMPACTION TESTING SHALL BE PERFORMED IMMEDIATELY PRIOR TO THE PLACEMENT OF REINFORCING STEEL AND NEW PAVING MATERIALS. CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING TESTING WITH OWNERS DESIGNATED TESTING AGENCY.
- UNPAVED AREAS: TOP 6" OF SUBGRADE AND EACH FILL LAYER TO 90% MAXIMUM DRY DENSITY.
- A PROOF-ROLL SHALL BE REQUIRED OF THE SUBGRADE PRIOR TO PLACEMENT OF THE BASE COURSE. PROOF ROLLING SHALL CONSIST OF PASSING A LOADED, 20-TON, TANDEM DUMP TRUCK OVER THE PREPARED SUBGRADE SOIL WITH A MAXIMUM ALLOWABLE DISPLACEMENT OF 1". ANY AREAS THAT DISPLACE MORE THAN 1" SHALL BE COMPACTED UNTIL THIS CRITERION IS MET, OR THOSE AREAS MAY BE EXCAVATED AND BACKFILLED WITH COMPACTED TYPE 1 AGGREGATE USED FOR BASE MATERIAL. ALL PROOF ROLLING SHALL BE PERFORMED IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE.
- CUT AREAS UNDER PROPOSED ASPHALT OR CONCRETE PAVEMENTS SHALL BE CUT AND COMPACTED. AFTER GRADING TO SUBGRADE ELEVATION, SCARIFY THE TOP SIX INCHES OF THE SUB-BASE AND COMPACT AS OUTLINED ABOVE.

PLACE ACCEPTABLE MATERIALS IN LAYERS NOT MORE THAN 8" LOOSE DEPTH FOR MATERIALS COMPACTED BY HEAVY EQUIPMENT AND NOT MORE THAN 4" LOOSE DEPTH FOR MATERIALS COMPACTED BY HAND EQUIPMENT TO SUBGRADES INDICATED AS FOLLOWS:

- STRUCTURAL FILL: USE UNDER FOUNDATIONS, SLABS ON GRADE IN LAYERS AS INDICATED.
- DRAINAGE FILL: USE UNDER DESIGNATED BUILDING SLABS, AT FOUNDATION DRAINAGE AND ELSEWHERE AS INDICATED.
- LANDSCAPE AREA FILL:
 - ALL SUB-GRADE AREAS SHALL BE "DIPPED" TO A MINIMUM 6" DEEP AND A MAXIMUM OF 12" APART IN OPPOSITE DIRECTIONS WITH MINIMAL TIRE TRAFFIC TO FOLLOW.
 - CONTRACTOR TO LEAVE AREAS 6" OR 18" (PLANTER AREAS) BELOW FINISH GRADE, OWNER TO PLACE TOPSOIL AND ALL PLANTINGS.
- ANY FILL SOIL WITHIN 36" OF FINISHED GRADE IN LAWN AND FINISHED AREAS SHALL BE CHESIVE SOILS IN SOIL CLASSIFICATIONS GROUPS M_L, CL, CH OR A COMBINATION THEREOF, FREE OF ROCK OR GRAVEL LARGER THAN 1" IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIAL, VEGETATION AND OTHER DELETERIOUS MATER.
- SUB-BASE MATERIAL: USE UNDER PAVEMENT, WALKS, STEPS, PIPING AND CONDUIT.

GRADE TO WITHIN 1/2" ABOVE OR BELOW REQUIRED SUBGRADE AND WITHIN A TOLERANCE OF 1/2" IN 10'.

PROTECT NEWLY GRADED AREAS FROM TRAFFIC AND EROSION. RECOMPACT AND REGRADE SETTLED, DISTURBED AND DAMAGED AREAS AS NECESSARY TO RESTORE QUALITY, APPEARANCE, AND CONDITION OF WORK.

CONTROL EROSION TO PREVENT RUNOFF INTO SEWERS OR DAMAGE TO SLOPED OR SURFACED AREAS.

CONTROL DUST TO PREVENT HAZARDS TO ADJACENT PROPERTIES AND VEHICLES. IMMEDIATELY REPAIR OR REMEDY DAMAGE CAUSED BY DUST INCLUDING AIR FILTERS IN EQUIPMENT AND VEHICLES. CLEAN SOILED SURFACES.

DISPOSAL OF EXCAVATION WASTE AND UNSUITABLE MATERIALS SHALL BE THE RESPONSIBILITY OF THE SITE WORK CONTRACTOR. NO SPECIFIC OR PRE-APPROVED LOCATION IS BEING PROVIDED BY THE OWNER.

CONCRETE:

CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF THE CURRENT ACI 301, SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS, ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ACI 305 SPECIFICATIONS FOR HOT WATER CONCRETE, AND ACI 306 SPECIFICATIONS FOR COLD WEATHER CONCRETE, WITH THE FOLLOWING ADDITIONAL REQUIREMENTS:

- CONCRETE SHALL DEVELOP THE FOLLOWING 28-DAY MINIMUM COMPRESSIVE STRENGTH:

FOUNDATIONS	-	3,000 PSI
CAST-IN-PLACE WALLS	-	3,500 PSI
FLOOR SLAB	-	4,000 PSI
EXTERIOR SLABS, WALLS AND CURBS	-	4,000 PSI
- ALL FOOTINGS SHALL BEAR ON UNDISTURBED SOIL OR ENGINEERED FILL.
- CHLORIDE- BASED ADMIXTURES ARE PROHIBITED IN ALL CONCRETE.
- REINFORCING STEEL SHALL CONFORM TO ASTM A615, A616, OR A617, GRADE 60.
- ALL CONTINUOUS REINFORCING STEEL THAT MEETS AT A CORNER SHALL BE TIED TOGETHER WITH A CORNER BAR THAT HAS SUFFICIENT LAP DISTANCE IN EACH DIRECTION.
- CONTINUOUS REINFORCING BARS LAP LENGTH SHALL BE A MINIMUM OF 48 BAR DIAMETERS UNLESS NOTED OTHERWISE.
- CONCRETE SLUMP SHALL BE A MAXIMUM OF 4 +/- 1" (ASTM C- 143) AS DELIVERED IN THE FIELD. CONTRACTOR MAY USE CHEMICAL ADMIXTURES TO ACHIEVE A MAXIMUM SLUMP OF 8" FOR WORKABILITY. NO WATER MAY BE ADDED TO THE CONCRETE MIX ON SITE UNLESS WATER IS WITHHELD AT THE BATCHING FACILITY. IF WATER IS WITHHELD AT THE BATCHING FACILITY IT SHOULD BE REFLECTED ON THE LOAD TICKET. THE TOTAL AMOUNT OF WATER IN THE MIX SHALL NOT EXCEED WHAT IS NOTED ON THE APPROVED MIXED. THIS SHALL BE NOTED IN THE SPECIAL INSPECTOR'S RECORDS.
- CONCRETE EXPOSED TO WEATHER, VEHICLES, AND/OR DEICING CHEMICALS SHALL BE AIR-ENTRAINED WITH 6% (+/-) 1.5% ENTRAINED AIR BY VOLUME AT POINT OF DISCHARGE. DO NOT ALLOW AIR CONTENT OF FINISHED FINISHED FLOORS TO EXCEED 3%.
- SUBMIT CONCRETE MIX PROPORTIONS PRIOR TO START OF WORK. DO NOT BEGIN CONCRETE PRODUCTION UNTIL MIXES HAVE BEEN REVIEWED AND ARE ACCEPTABLE TO THE ENGINEER.
- READY MIX CONCRETE SHALL COMPLY WITH REQUIREMENTS OF ASTM C94.
- CONCRETE WORK EXECUTION
 - CONSTRUCT FORMS TO CORRECT SIZE, SHAPE, ALIGNMENT, ELEVATION AND POSITION; AND TO SUPPORT VERTICAL AND LATERAL LOADS.
 - POSITION, SUPPORT, AND SECURE REINFORCEMENT AGAINST DISPLACEMENT. MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL BE, UNLESS NOTED OTHERWISE, ON THE DRAWINGS:

CAST AGAINST AND EXPOSED TO EARTH.....	3 INCHES
EXPOSED TO EARTH OR WEATHER.....	2 INCHES
NOT EXPOSED TO WEATHER OR	
IN CONTACT WITH EARTH.....	1 1/2 INCHES
 - PROVIDE CONTROL JOINTS IN SLABS-ON-GRADE AT NOT GREATER THAN 15 FEET ON CENTER IN EACH DIRECTION. SAW CUT CONTROL JOINTS MINIMUM 1/4 OF SLAB DEPTH, AS SOON AFTER SLAB FINISHING WITHOUT DISLODGING AGGREGATE.
 - STEEL TROWEL FINISH ALL INTERIOR CONCRETE SLABS, BROOM FINISH ALL EXTERIOR CONCRETE SLABS.
 - CURE ALL CONCRETE IN COMPLIANCE WITH ACI 301, USING A LIQUID TYPE MEMBRANE, NON-RESIDUAL, CURING COMPOUND COMPLYING WITH ASTM C309. ASSURE COMPATIBILITY WITH FINISH FLOOR COVERING.
- FLUT AND CHERT WILL BE LIMITED TO 1% MAXIMUM, BY WEIGHT OF THE COURSE AGGREGATE, IN ALL EXPOSED CONCRETE (CAST-IN-PLACE OR PRECAST). LIGHTWEIGHT WILL BE LIMITED TO 0.5%, BY WEIGHT OF THE FINE AGGREGATE IN ALL EXPOSED CONCRETE. SOME APPLICATIONS MAY BE REQUIRED TO BE LIGHTWEIGHT FREE.

CONCRETE PAVING JOINT SEALANTS:

DELIVER MATERIALS TO PROJECT SITE IN ORIGINAL UNOPENED CONTAINERS OR BUNDLES WITH LABELS INDICATING MANUFACTURER, PRODUCT NAME AND DESIGNATION, COLOR, EXPIRATION DATE, POT LIFE, CURING TIME, AND MIXING INSTRUCTIONS FOR MULTICOMPONENT MATERIALS.

STORE AND HANDLE MATERIALS TO COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS TO PREVENT THEIR DETERIORATION OR DAMAGE DUE TO MOISTURE, HIGH OR LOW TEMPERATURES, CONTAMINANTS, OR OTHER CAUSES.

DO NOT PROCEED WITH INSTALLATION OF JOINT SEALANTS UNDER THE FOLLOWING CONDITIONS:

- WHEN AMBIENT AND SUBSTRATE TEMPERATURE CONDITIONS ARE OUTSIDE LIMITS PERMITTED BY JOINT SEALANT MANUFACTURER OR ARE BELOW 40 DEG F.
- WHEN JOINT SUBSTRATES ARE WET OR COVERED WITH FROST.
- WHERE JOINT WIDTHS ARE LESS THAN THOSE ALLOWED BY JOINT-SEALANT MANUFACTURER FOR APPLICATIONS INDICATED.
- WHERE CONTAMINANTS CAPABLE OF INTERFERING WITH ADHESION HAVE NOT YET BEEN REMOVED FROM JOINT SUBSTRATES.

PROVIDE JOINT SEALANTS, BACKING MATERIALS, AND OTHER RELATED MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH JOINT SUBSTRATES UNDER CONDITIONS OF SERVICE AND APPLICATION, AS DEMONSTRATED BY JOINT-SEALANT MANUFACTURER BASED ON TESTING AND FIELD EXPERIENCE.

COLD-APPLIED JOINT SEALANTS ARE TO BE TYPE NS SILICONE SEALANT FOR CONCRETE; SINGLE-COMPONENT, LOW-MODULUS, NEUTRAL-CURING, NONSAG SILICONE SEALANT COMPLYING WITH ASTM D 5893 FOR TYPE NS. PRODUCTS ALLOWED ARE: CRAFCO INC.; ROADSAVER SILICONE ; DOW CORNING CORPORATION; 888; PECORA NS 301, OR APPROVED EQUAL.

CONTRACTOR TO PROVIDE JOINT-SEALANT BACKER MATERIALS THAT ARE NONSTAINING; ARE COMPATIBLE WITH JOINT SUBSTRATES, SEALANTS, PRIMERS, AND OTHER JOINT FILLERS; AND ARE APPROVED FOR APPLICATIONS INDICATED BY JOINT-SEALANT MANUFACTURER BASED ON FIELD EXPERIENCE AND LABORATORY TESTING. ROUND BACKER RODS FOR COLD-APPLIED SEALANTS: ASTM D 5249, TYPE 3, OF DIAMETER AND DENSITY REQUIRED TO CONTROL SEALANT DEPTHAND PREVENT BOTTOM-SIDE ADHESION OF SEALANT.

PRIOR TO JOINT INSTALLATION, CONTRACTOR IS TO EXAMINE JOINTS INDICATED TO RECEIVE JOINT SEALANTS, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR JOINT CONFIGURATION, INSTALLATION TOLERANCES, AND OTHER CONDITIONS AFFECTING JOINT- SEALANT PERFORMANCE. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

CLEAN OUT JOINTS IMMEDIATELY BEFORE INSTALLING JOINT SEALANTS TO COMPLY WITH JOINT-SEALANT MANUFACTURER'S WRITTEN INSTRUCTIONS.

COMPLY WITH JOINT-SEALANT MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS FOR PRODUCTS AND APPLICATIONS INDICATED, UNLESS MORE STRINGENT REQUIREMENTS APPLY.

COMPLY WITH RECOMMENDATIONS IN ASTM C 1193 FOR USE OF JOINT SEALANTS AS APPLICABLE TO MATERIALS, APPLICATIONS, AND CONDITIONS INDICATED.

INSTALL BACKER MATERIALS OF TYPE INDICATED TO SUPPORT SEALANTS DURING APPLICATION AND AT POSITION REQUIRED TO PRODUCE CROSS-SECTIONAL SHAPES AND DEPTHS OF INSTALLED SEALANTS RELATIVE TO JOINT WIDTHS THAT ALLOW OPTIMUM SEALANT MOVEMENT CAPABILITY. DO NOT LEAVE GAPS BETWEEN ENDS OF BACKER MATERIALS. DO NOT STRETCH, TWIST, PUNCTURE, OR TEAR BACKER MATERIALS. REMOVE ABSORBENT BACKER MATERIALS THAT HAVE BECOME WET BEFORE SEALANT APPLICATION AND REPLACE THEM WITH DRY MATERIALS.

INSTALL SEALANTS USING PROVEN TECHNIQUES THAT COMPLY WITH THE FOLLOWING AND AT THE SAME TIME BACKING ARE INSTALLED:

- PLACE SEALANTS SO THEY DIRECTLY CONTACT AND FULLY WET JOINT SUBSTRATES.
- COMPLETELY FILL RECESSES PROVIDED FOR EACH JOINT CONFIGURATION.
- PRODUCE UNIFORM, CROSS-SECTIONAL SHAPES AND DEPTHS RELATIVE TO JOINT WIDTHS THAT ALLOW OPTIMUM SEALANT MOVEMENT CAPABILITY.

IMMEDIATELY AFTER SEALANT APPLICATION AND BEFORE SKINNING OR CURING BEGINS, TOOL SEALANTS ACCORDING TO REQUIREMENTS SPECIFIED BELOW TO FORM SMOOTH, UNIFORM BEADS OF CONFIGURATION INDICATED; TO ELIMINATE AIR POCKETS; AND TO ENSURE CONTACT AND ADHESION OF SEALANT WITH SIDES OF JOINT. REMOVE EXCESS SEALANTS FROM SURFACES ADJACENT TO JOINT.USE TOOLING AGENTS THAT ARE APPROVED IN WRITING BY JOINT-SEALANT MANUFACTURER AND THAT DO NOT DISCOLOR SEALANTS OR ADJACENT SURFACES.

PROVIDE JOINT CONFIGURATION TO COMPLY WITH JOINT-SEALANT MANUFACTURER'S WRITTEN INSTRUCTIONS, UNLESS OTHERWISE INDICATED.

PROVIDE RECESSED JOINT CONFIGURATION FOR SILICONE SEALANTS OF RECESS DEPTH AND AT LOCATIONS INDICATED.

CLEAN OFF EXCESS SEALANTS OR SEALANT SMEARS ADJACENT TO JOINTS AS THE WORK PROGRESSES BY METHODS AND WITH CLEANING MATERIALS APPROVED BY MANUFACTURERS OF JOINT SEALANTS AND OF PRODUCTS IN WHICH JOINTS OCCUR.

PROTECT JOINT SEALANTS DURING AND AFTER CURING PERIOD FROM CONTACT WITH CONTAMINATING SUBSTANCES AND FROM DAMAGE RESULTING FROM CONSTRUCTION OPERATIONS OR OTHER CAUSES SO SEALANTS ARE WITHOUT DETERIORATION OR DAMAGE AT TIME OF SUBSTANTIAL COMPLETION. IF, DESPITE SUCH PROTECTION, DAMAGE OR DETERIORATION OCCURS, CUT OUT AND REMOVE DAMAGED OR DETERIORATED JOINT SEALANTS IMMEDIATELY AND REPLACE WITH JOINT SEALANT SO INSTALLATIONS WITH REPAIRED AREAS ARE INDISTINGUISHABLE FROM THE ORIGINAL WORK.

PAVEMENT MARKING:

PANT FOR PARKING LOT STRIPING SHALL BE CHLORINATED RUBBER CONFORMING TO TT-P115F EPOXY PAVEMENT MARKING MATERIAL WITHOUT GLASS BEADS. PAINT TYPE MUST BE COMPATIBLE WITH THE SURFACES TO BE PAINTED

PANT SHALL BE APPLIED PER THE FOLLOWING COLOR CODE: WHITE FOR STANDARD PARKING SPACE LINES AND SIDEWALK CROSSINGS. BLUE FOR ACCESSIBLE PARKING STALL AND SYMBOLS AND ASSOCIATED CROSS-HATCHED AREAS

MATERIALS SHALL INCLUDE STANDARD COMMERCIAL GRADE MASKING MATERIALS, SCRAPERS, CLEANING SOLVENTS, AND OTHER MATERIALS REQUIRED FOR THE WORK. USE MATERIALS SPECIFIED BY MANUFACTURER'S DIRECTION LABEL ON CONTAINER.

DELIVER MATERIALS TO THE SITE IN ORIGINAL CONTAINERS WITH SEALS UNBROKEN AND LABELS INTACT. PROTECT ALL PAINT FROM FREEZING. DO NOT ALLOW PAINT TO SETTLE, CURE, OR THICKEN IN THE CONTAINER. READYLY STIR WITH A PADDLE TO A SMOOTH CONSISTENCY. PAINT SHALL ARRIVE ON THE JOB COLOR-MIXED EXCEPT FOR TINTING OF UNDERCOATS AND POSSIBLE THINNING.

PRIOR TO BEGINNING CLEANING OR PAINTING OPERATIONS, CONTRACTOR SHALL PROTECT ALL ITEMS OR SURFACES NOT INCLUDED IN AREA TO BE PAINTED. PROTECT VEHICLES, EQUIPMENT, STRUCTURES, OR OTHER ITEMS FROM PAINT SPATTERS, OVER SPRAY, OR DAMAGE.

CONTRACTOR SHALL PROVIDE BARRICADES AND ANY SIGNAGE NEEDED TO PROTECT ALL PAINTED AREAS FROM PEDESTRIAN AND VEHICULAR TRAFFIC UNTIL ACHIEVING SUFFICIENT DRYING TIME.

PERFORM PAINTING AS SOON AS FEASIBLE AND PRACTICAL AFTER THE FINISHING OF THE PAVEMENT OR AS DIRECTED BY THE OWNERS REPRESENTATIVE. ADEQUATE LIGHTING SHALL BE AVAILABLE AT THE TIME OF PAINTING. EXAMINE ALL SURFACES TO RECEIVE PAINT TO MAKE SURE THERE ARE NO DEFECTS IN THE SURFACE TO BE STRIPED. DO NOT PAINT OVER RUST, SCALE, GREASE, OIL, FUEL, DUST, WET PAVEMENT, OR OTHER CONDITIONS DETRIMENTAL TO PAINT ADHESION. REMOVE GREASE, OIL, OR FUEL ON ANY SURFACE BEFORE PAINTING. CORRECT ALL SURFACE DEFECTS BEFORE PAINTING. CONTRACTOR SHALL EXAMINE AREAS TO BE PAINTED. NOTIFY THE OWNERS REPRESENTATIVE IN WRITING OF CONDITIONS THAT MIGHT DELAY TIMELY COMPLETION OF THE WORK.

PAINTING SHALL NOT BE PERFORMED WHEN THE AMBIENT TEMPERATURE IS LESS THAN 55 DEGREES FAHRENHEIT, OR WHILE THE SURFACE IS DAMP. THE SURFACE MUST BE FIVE DEGREES OR MORE ABOVE THE DEW POINT TEMPERATURE DURING PAINTING OPERATIONS AND WHILE PAINT IS DRYING.

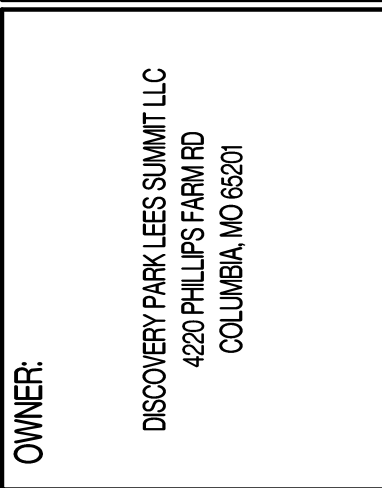
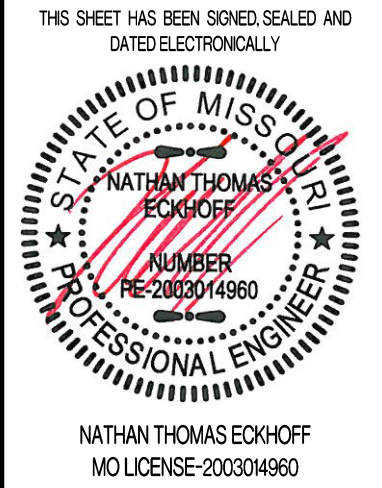
AREAS TO BE PAINTED SHALL RECEIVE ONE COAT OF PAINT NOT LESS THAN 25 MILS THICKNESS WET PER MDOOT 620.9 THROUGH 620.9.3.4.2. IN LOCATIONS REQUIRING MULTIPLE COATS, PRIOR COAT SHALL BE DRY TO MANUFACTURER'S RECOMMENDATIONS BEFORE APPLYING THE NEXT COAT.

FINISHED WORK SHALL BE UNIFORM, OF APPROVED COLOR, FREE OF RUNS, DRIPS, DEFECTIVE BRUSHING, SPRAYING, AND CLOGGING. PARKING LINES AND SYMBOLS SHALL BE NEAT AND WELL DEFINED. ONLY SKILLED APPLICATORS SHALL APPLY PAINT. OWNERS REPRESENTATIVE SHALL APPROVE APPLICATION TECHNIQUES.

REMOVE PAINT SPATTER FROM ADJACENT AREAS OR AREAS NOT DESIGNATED TO RECEIVE PAINT. CONTRACTOR SHALL REPAIR OR TOUCH UP ANY SURFACES IF EXPOSED TO VEHICULAR AND PEDESTRIAN TRAFFIC, TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE, AT NO ADDITIONAL COST TO THE OWNER. WHEN COLOR, DIRT, STAINS, EXISTING PAINT, ETC., SHOW THROUGH THE FINAL COAT, REPAINT THE SURFACE UNTIL THE FILM IS UNIFORM IN FINISH, COVERAGE, COLOR, AND APPEARANCE

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THE VILLAGE AT DISCOVERY

LOTS 5-8

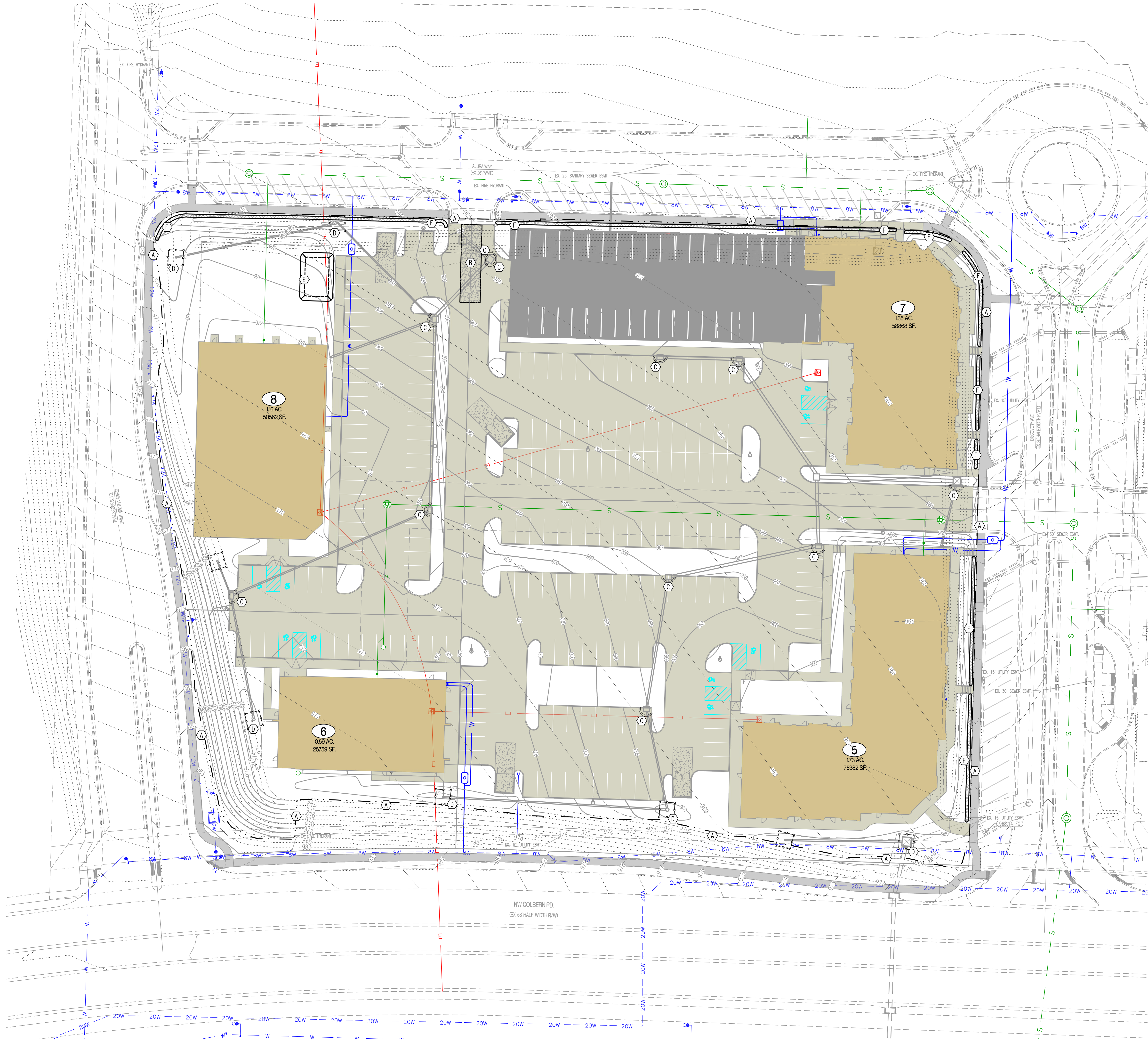
LEES SUMMIT, JACKSON COUNTY, MISSOURI

DRAWING INCLUDES:

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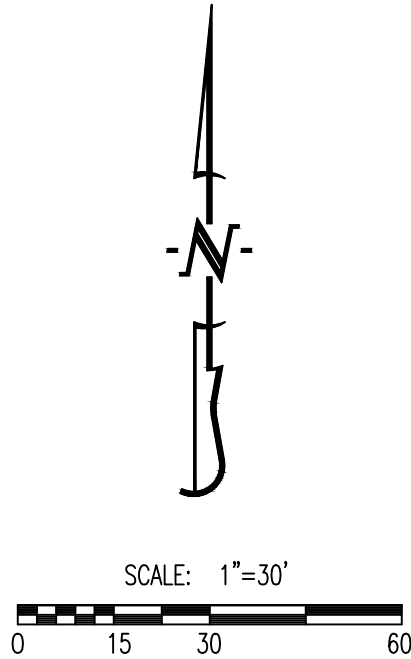
DESIGNED:	NTE
DRAWN:	NMD
PROJECT NO.:	230286
SHEET:	CE 11

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LEGEND OF LABELS:

- (A) LIMITS OF DISTURBANCE.
- (B) INSTALL CRUSHED STONE CONSTRUCTION ENTRANCE. ALL CONSTRUCTION TRAFFIC SHALL LEAVE THE SITE VIA THIS EXIT. REFER TO ESC-01 ON CE 2.2.
- (C) INSTALL INLET PROTECTION AROUND THROAT OF INLET. REFER TO ESC-07 ON CE 2.2.
- (D) INSTALL 2" X 10" BOARD WRAPPED IN SILT FENCE AT THROAT OF INLET. REPLACE BOARD WITH GUTTERBUDDY (OR APPROVED EQUAL) AT THROAT OF INLET AFTER PAVING OPERATIONS ARE COMPLETE. REFER TO ESC-06 ON CE 2.2.
- (E) 20' X 30' X 3' MIN CONCRETE WASHOUT FACILITY. THE WASHOUT FACILITY IS TO BE LINED WITH A PLASTIC LINING MATERIAL (10 MIL POLYETHYLENE SHEETING MIN.) FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COULD COMPROMISE THE IMPERMEABILITY OF THE MATERIAL. WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL. A SIGN SHALL BE INSTALLED ADJACENT TO FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES. REFER TO ESC-01 ON CE 2.2 FOR CITY REQUIREMENTS.
- (F) INSTALL STRAW WATTLE AS SHOWN. REFER TO ESC-04 ON CE 2.2.



REVISIONS:

NO.	DATE
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THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

NATHAN THOMAS ECKHOFF
MO LICENSE 200304960

PREPARED BY:

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Crockett Engineering Consultants, LLC
Missouri Certificate of Authority
#000000001

OWNER:

DISCOVERY PARK LEES SUMMIT LLC
4220 PHILLIPS FARM RD
COLUMBIA, MO 65201

THE VILLAGE AT DISCOVERY

LOTS 5-8

LEES SUMMIT, JACKSON COUNTY, MISSOURI

DRAWING INCLUDES:

EROSION CONTROL PLAN

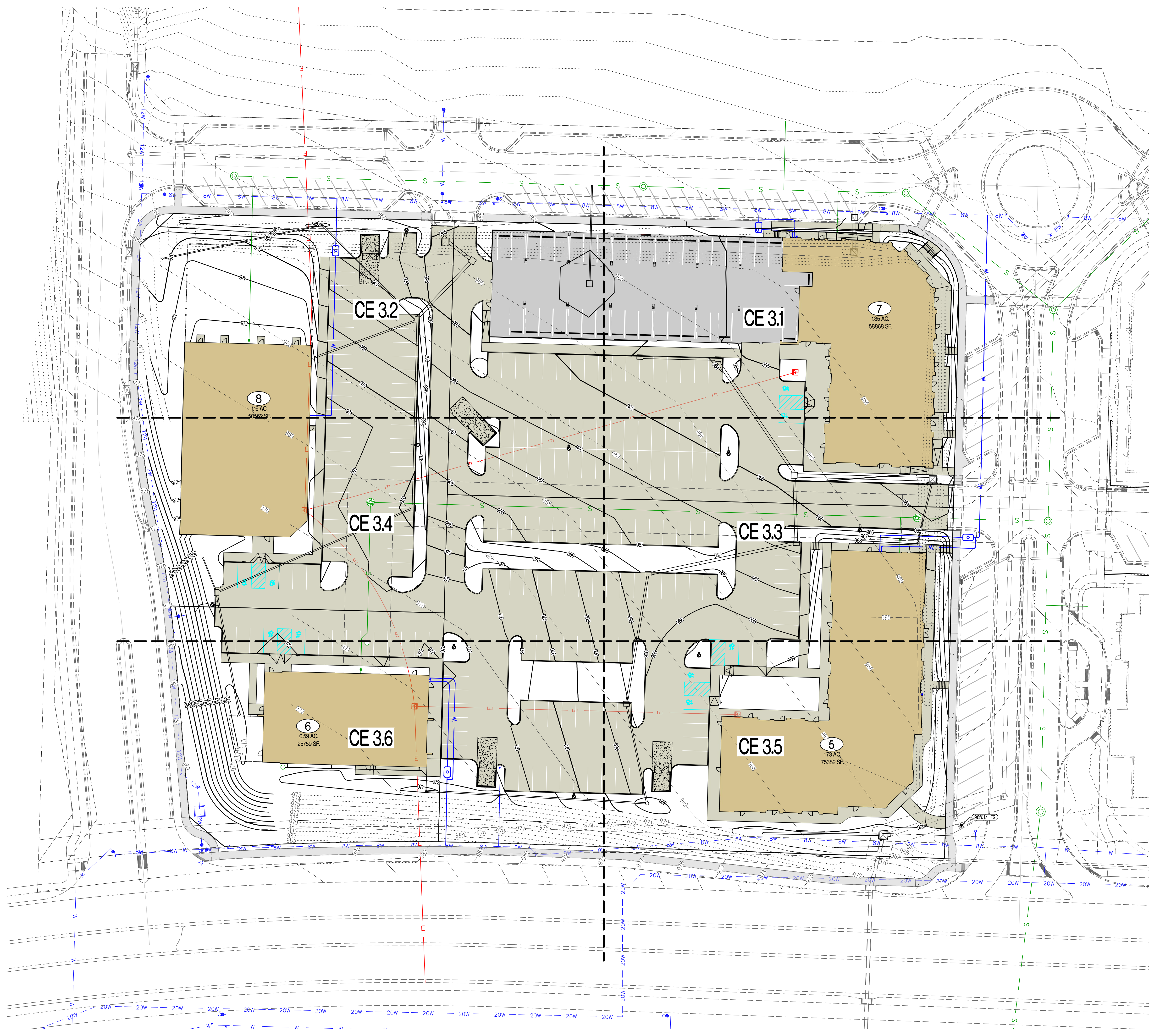
DESIGNED: NTE

DRAWN: NMD

PROJECT NO: 230286

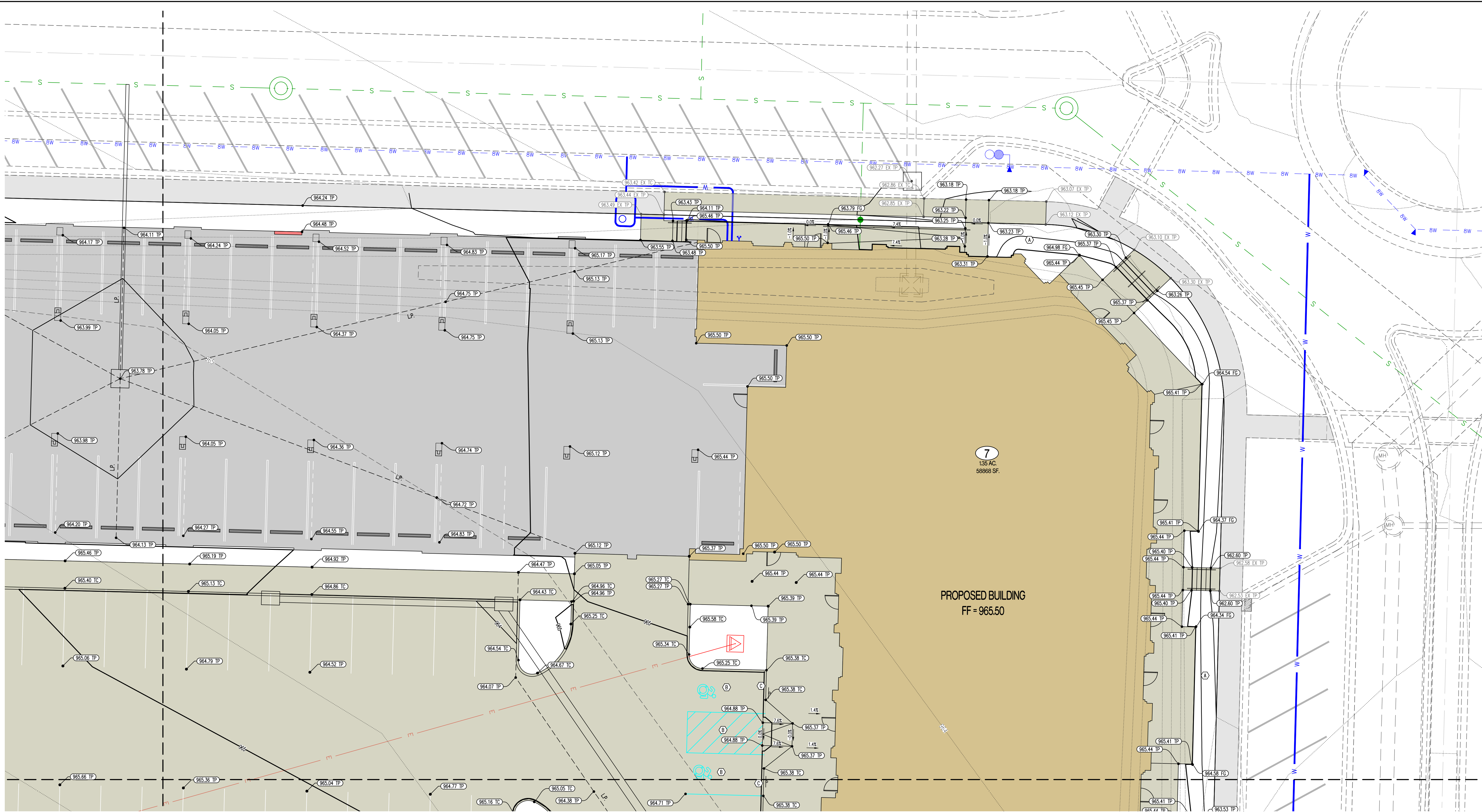
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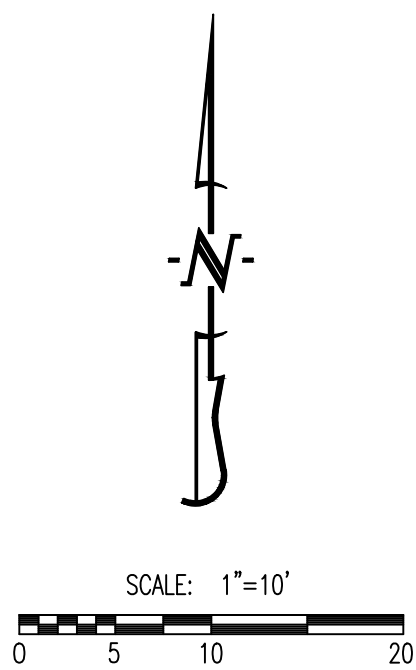
REVISIONS:	
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NATHAN THOMAS ECKHOFF MO LICENSE 200304960	
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OWNER:	DISCOVERY PARK LEES SUMMIT LLC 4020 PHILLIPS FARM RD COLUMBIA, MO 65201
THE VILLAGE AT DISCOVERY LOTS 5-8 LEES SUMMIT, JACKSON COUNTY, MISSOURI	
DRAWING INCLUDES:	
OVERALL GRADING PLAN	
DESIGNED:	NTE
DRAWN:	NMD
PROJECT NO.:	230286
SHEET:	CE 3.0

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CE 32	CE 31
CE 34	CE 33
CE 36	CE 35

SHEET KEY



LEGEND OF SYMBOLS:

- XXXX ----- EXISTING MINOR CONTOUR
- - - - - XXXX - - - - - EXISTING MAJOR CONTOUR
- XXXX ----- PROPOSED MINOR CONTOUR
- XXXX ----- PROPOSED MAJOR CONTOUR
- FF=XXXX FINISHED FLOOR OF STRUCTURE
- XXXX.XX TC PROPOSED TOP OF CURB ELEVATION
TC = (TP+6") UNLESS NOTED OTHERWISE
- XXXX.XX TP PROPOSED TOP OF PAVEMENT ELEVATION
- XXXX.XX FG PROPOSED FINISHED GRADE ELEVATION
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- XXXX.XX TW PROPOSED FINISHED GRADE AT TOP OF WALL

LEGEND OF LABELS

- (A) FINE GRADE AS SHOWN BY PROPOSED CONTOURS. PLACE MINIMUM OF 6" TOP SOIL. SEED AND MULCH ALL DISTURBED AREAS.
- (B) GRADE ACCESSIBLE PARKING STALLS AND ROUTES AS SHOWN. SLOPE OF THE PAVEMENT AT ALL ACCESSIBLE PARKING STALLS SHALL NOT EXCEED 1:50 IN ALL DIRECTIONS. ALL ACCESSIBLE ELEMENTS SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT.
- (C) 0"-6" CURB TRANSITION

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NO LICENSE 200304960

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THE VILLAGE AT DISCOVERY

LOTS 5-8

LEES SUMMIT, JACKSON COUNTY, MISSOURI

DRAWING INCLUDES:

GRADING PLAN SHEET 1

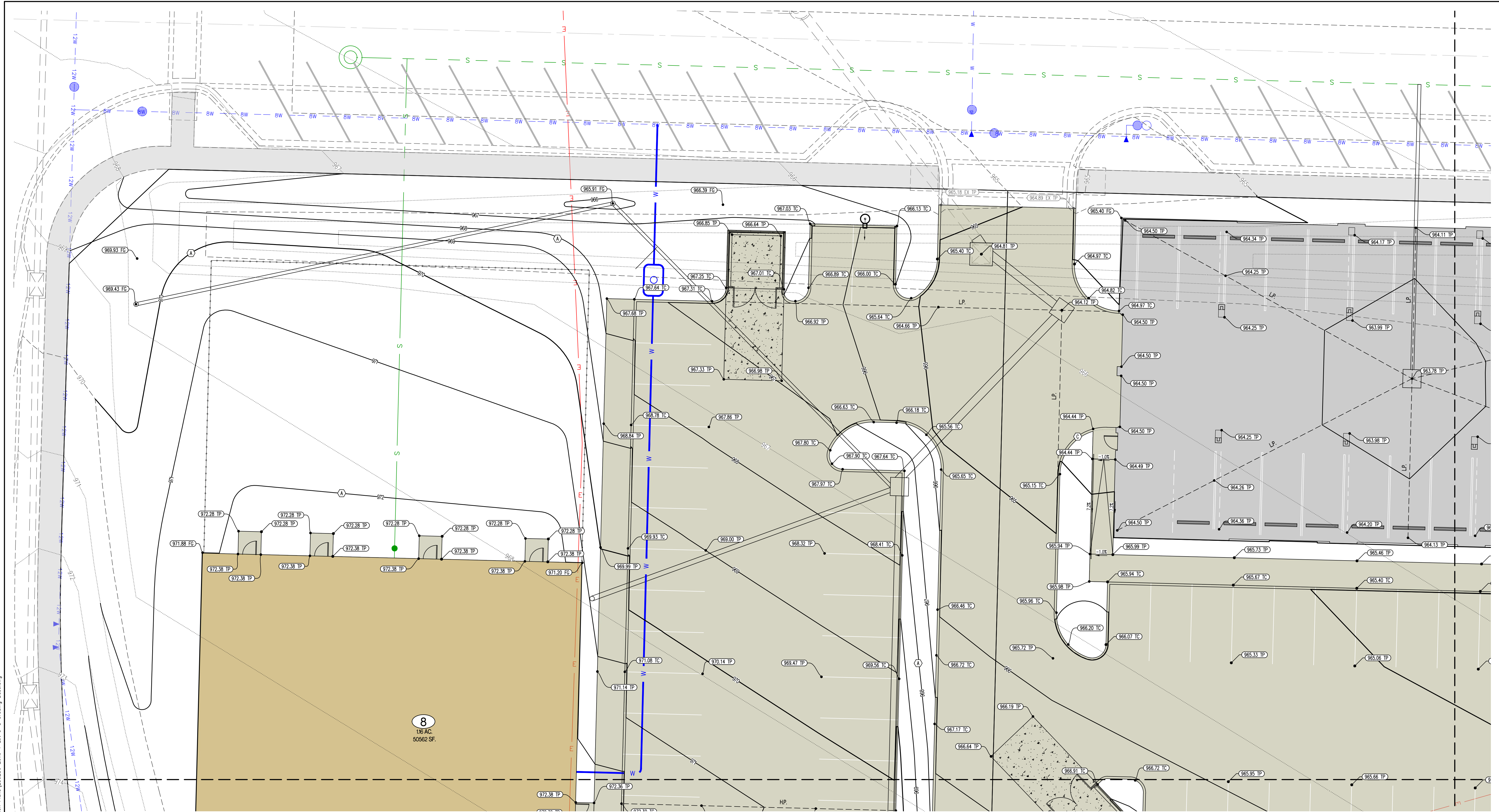
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PROJECT NO: 230286

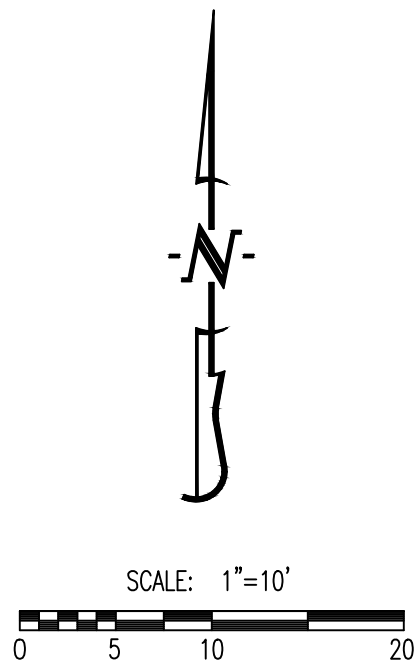
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CE 3.2	CE 3.1
CE 3.4	CE 3.3
CE 3.6	CE 3.5

SHEET KEY



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THE VILLAGE AT DISCOVERY

LOTS 5-8

LEES SUMMIT, JACKSON COUNTY, MISSOURI

DRAWING INCLUDES:

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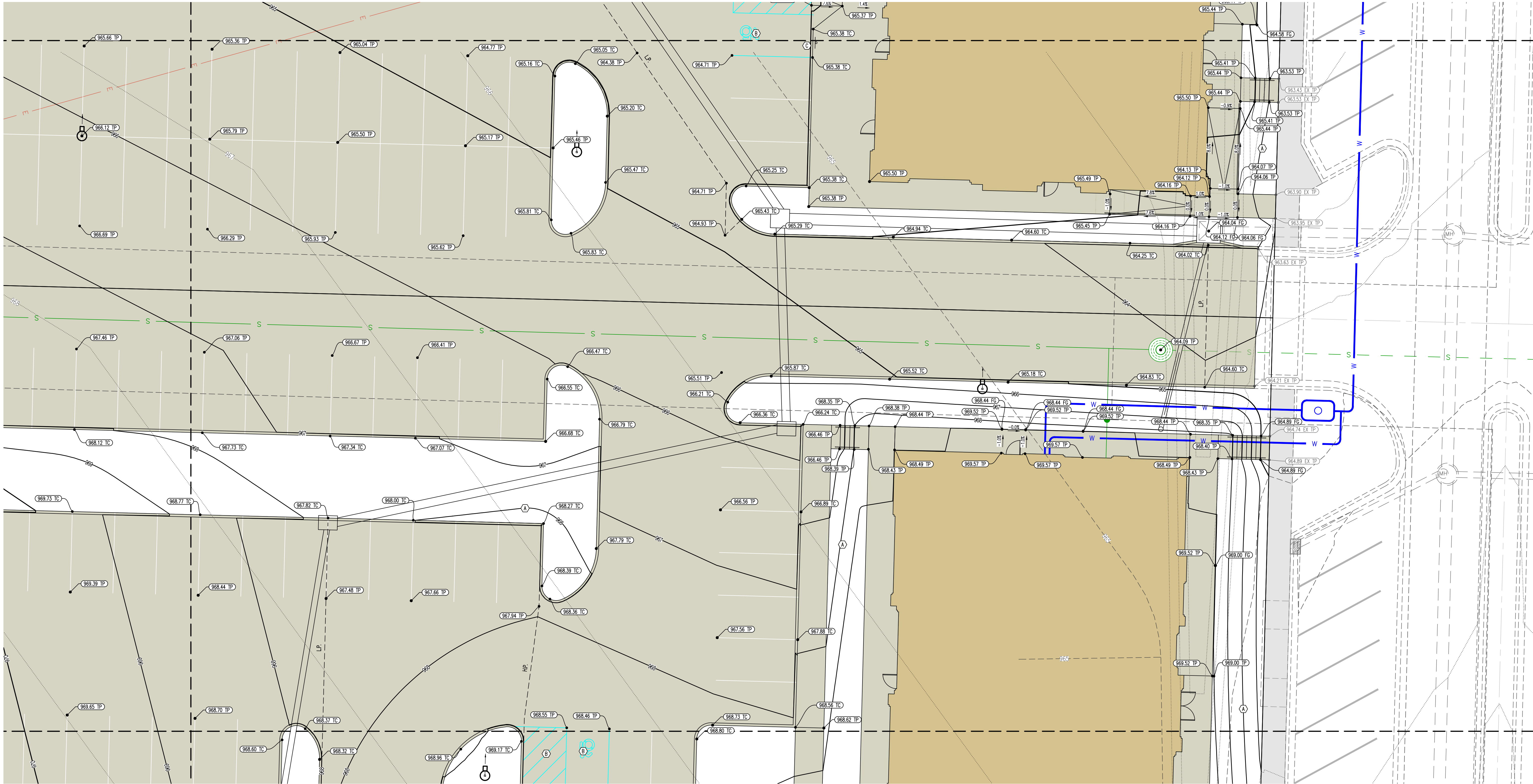
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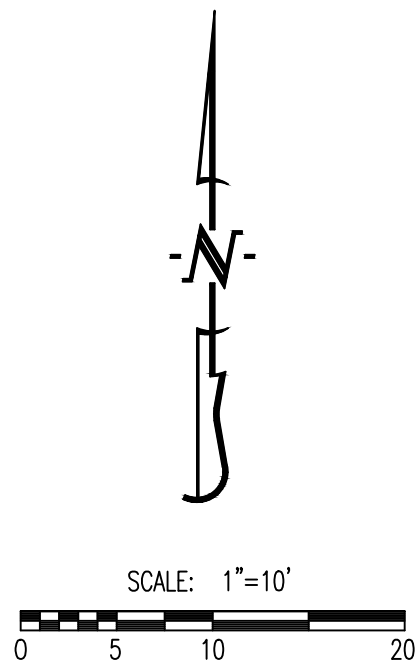
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CE 32	CE 31
CE 34	CE 33
CE 36	CE 35

SHEET KEY



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STATE OF MISSOURI

NATHAN THOMAS ECKHOFF

PROFESSIONAL ENGINEER

NUMBER: PE-2003014960

NATHAN THOMAS ECKHOFF

MO LICENSE: 200304960

PREPARED BY:

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Crockett Engineering Consultants, LLC

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4220 PHILLIPS FARM RD

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THE VILLAGE AT DISCOVERY

LOTS 5-8

LEES SUMMIT, JACKSON COUNTY, MISSOURI

DRAWING INCLUDES:

GRADING PLAN SHEET 3

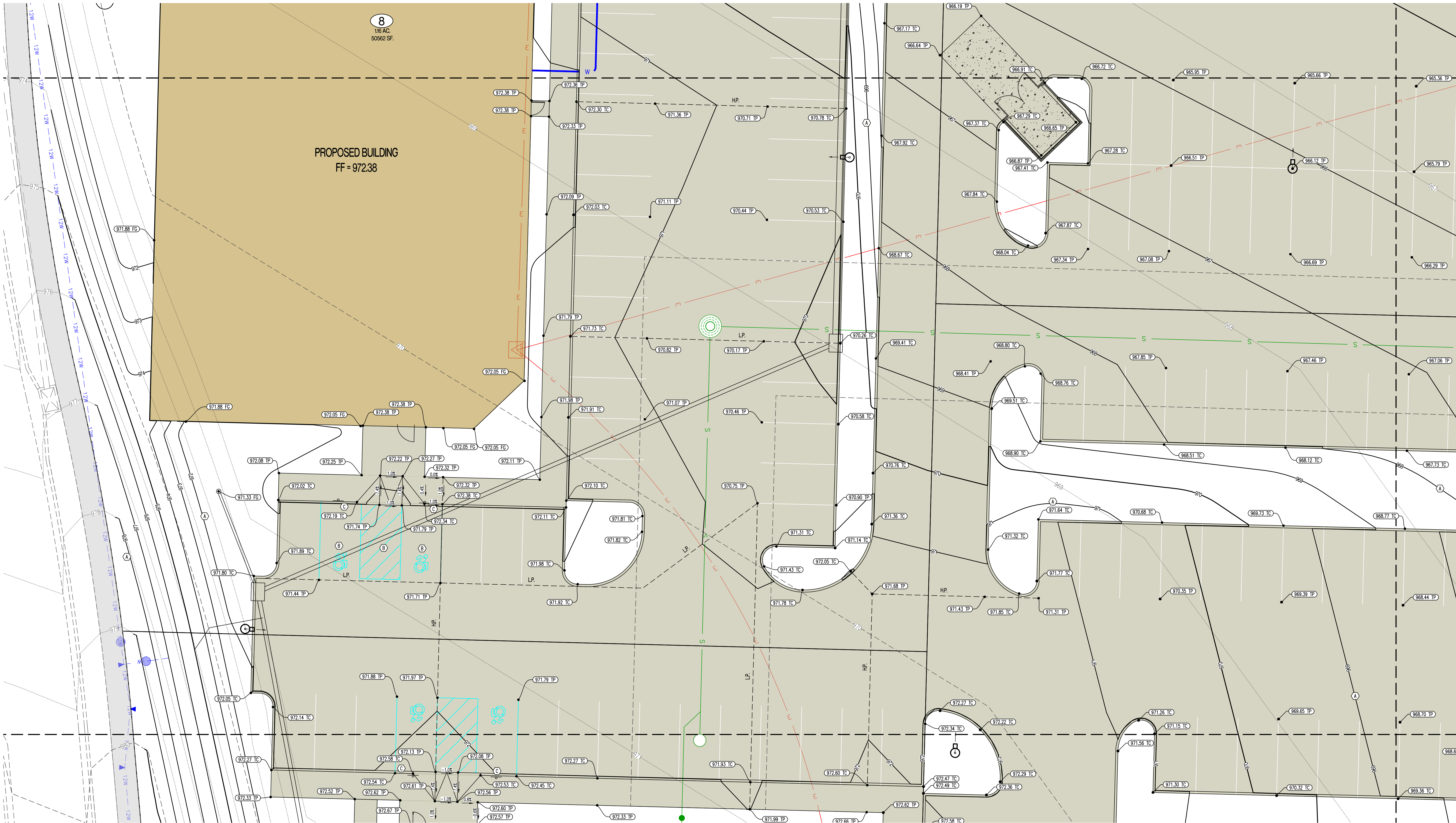
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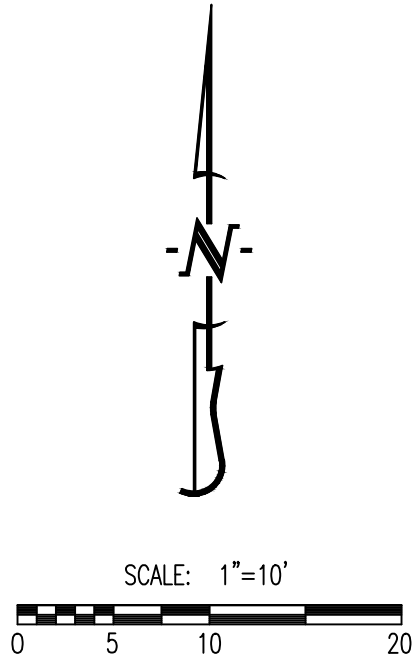
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CE 32	CE 31
CE 34	CE 33
CE 36	CE 35

SHEET KEY



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STATE OF MISSOURI

NATHAN THOMAS ECKHOFF

REGISTERED PROFESSIONAL ENGINEER

NUMBER: PE-2003014960

NATHAN THOMAS ECKHOFF
MO LICENSE: 2003014960

PREPARED BY:

CROCKETT

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THE VILLAGE AT DISCOVERY

LOTS 5-8

LEES SUMMIT, JACKSON COUNTY, MISSOURI

DRAWING INCLUDES:

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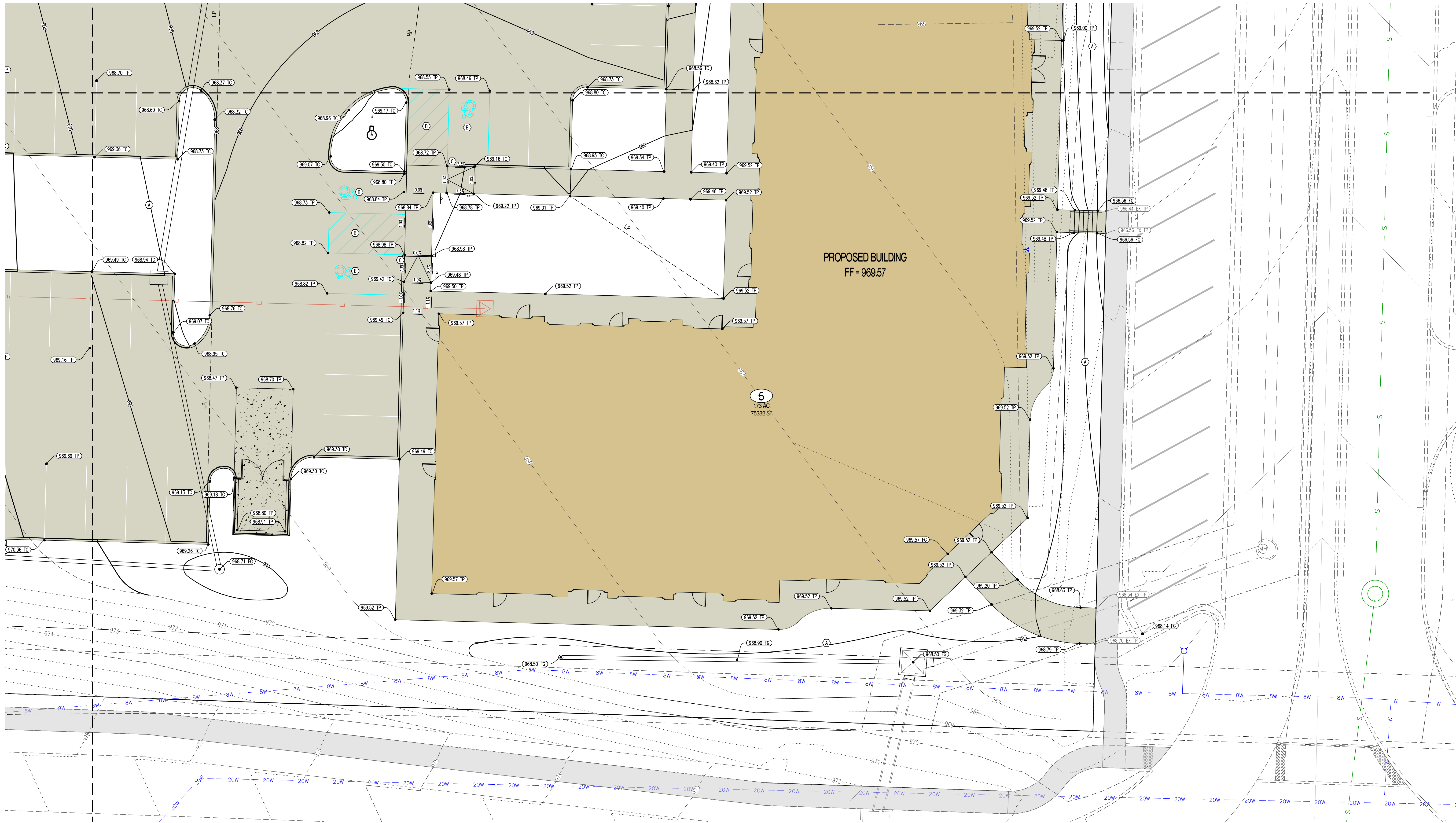
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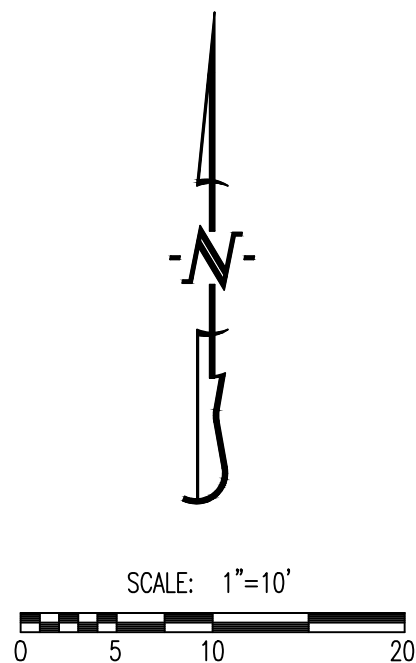
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CE 32	CE 31
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SHEET KEY



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- (XXXX TP) PROPOSED TOP OF PAVEMENT ELEVATION
- (XXXX FG) PROPOSED FINISHED GRADE ELEVATION
- (XXXX FF) PROPOSED FINISHED FLOOR AT DOOR
- (XXXX TW) PROPOSED FINISHED GRADE AT TOP OF WALL

LEGEND OF LABELS

- (A) FINE GRADE AS SHOWN BY PROPOSED CONTOURS. PLACE MINIMUM OF 6" TOP SOIL. SEED AND MULCH ALL DISTURBED AREAS.
- (B) GRADE ACCESSIBLE PARKING STALLS AND ROUTES AS SHOWN. SLOPE OF THE PAVEMENT AT ALL ACCESSIBLE PARKING STALLS SHALL NOT EXCEED 1:50 IN ALL DIRECTIONS. ALL ACCESSIBLE ELEMENTS SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT.
- (C) 0"-6" CURB TRANSITION

REVISIONS:

NO.	DATE
ORIGINAL	05/27/2024

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

STATE OF MISSOURI

NATHAN THOMAS ECKHOFF

REGISTERED PROFESSIONAL ENGINEER

NUMBER: PE-2003014960

NATHAN THOMAS ECKHOFF
MO LICENSE: 2003014960

PREPARED BY:

CROCKETT

ENGINEERS & ARCHITECTS

1000 W. Illinois Blvd., Suite 100
Columbia, Missouri 65203
(314) 487-0292

www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority
#000000001

OWNER:

DISCOVERY PARK LEES SUMMIT LLC
4220 PHILLIPS FARM RD
COLUMBIA, MO 65201

THE VILLAGE AT DISCOVERY

LOTS 5-8

LEES SUMMIT, JACKSON COUNTY, MISSOURI

DRAWING INCLUDES:

GRADING PLAN SHEET 5

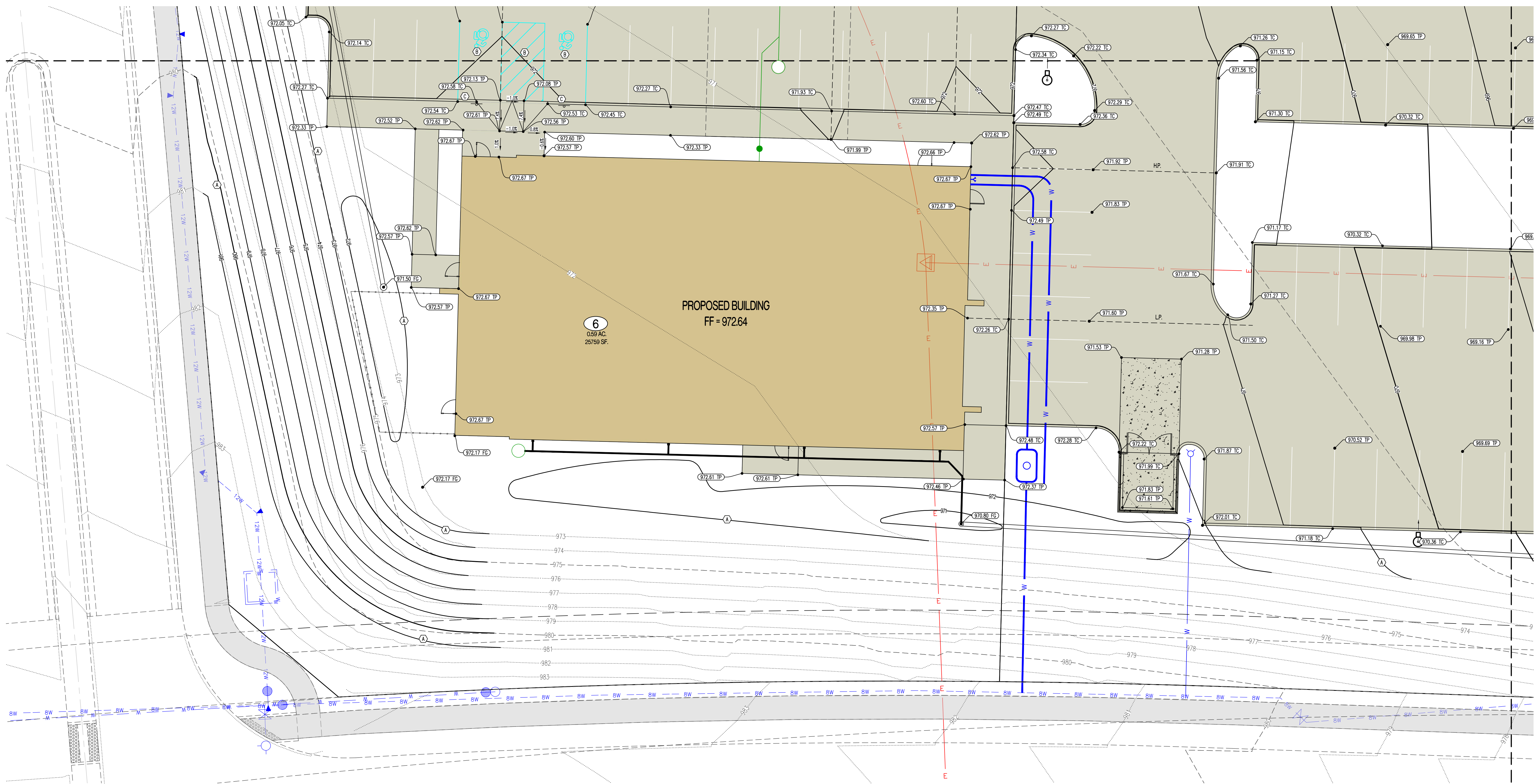
DESIGNED: NTE

DRAWN: NMD

PROJECT NO.: 230286

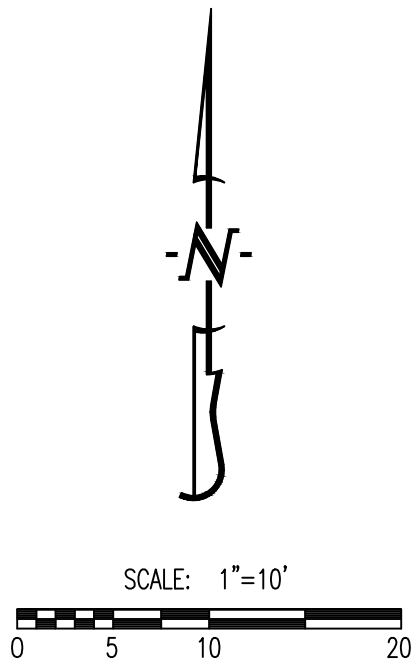
SHEET:
CE 3.5

Y:\2023\230286 - Discovery Park Lees Summit\Zone Lot 5-8\Civil\MOAD Files\Construction Plans\230286 Zone 1 Lot 5-8 Grading Base.dwg



CE 32	CE 31
CE 34	CE 33
CE 36	CE 35

SHEET KEY



LEGEND OF SYMBOLS:

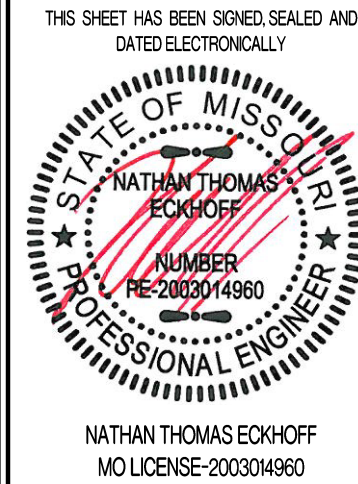
- XXX--- EXISTING MINOR CONTOUR
- - -XXX- - - EXISTING MAJOR CONTOUR
- XXX--- PROPOSED MINOR CONTOUR
- XXX--- PROPOSED MAJOR CONTOUR
- FF=XXXX FINISHED FLOOR OF STRUCTURE
- (XXX.XX TC) PROPOSED TOP OF CURB ELEVATION
TC = (TP+6") UNLESS NOTED OTHERWISE
- (XXX.XX TP) PROPOSED TOP OF PAVEMENT ELEVATION
- (XXX.XX FG) PROPOSED FINISHED GRADE ELEVATION
- (XXX.XX FP) PROPOSED FINISHED FLOOR AT DOOR
- (XXX.XX TW) PROPOSED FINISHED GRADE AT TOP OF WALL

LEGEND OF LABELS

- (A) FINE GRADE AS SHOWN BY PROPOSED CONTOURS. PLACE MINIMUM OF 6" TOP SOIL, SEED AND MULCH ALL DISTURBED AREAS.
- (B) GRADE ACCESSIBLE PARKING STALLS AND ROUTES AS SHOWN. SLOPE OF THE PAVEMENT AT ALL ACCESSIBLE PARKING STALLS SHALL NOT EXCEED 1:50 IN ALL DIRECTIONS. ALL ACCESSIBLE ELEMENTS SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT.
- (C) 0"-6" CURB TRANSITION

REVISIONS:

NO.	DATE
ORIGINAL	05/22/2024



PREPARED BY:
CROCKETT
ENGINEERS & ARCHITECTS
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(314) 487-0592
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Crockett Engineering Consultants, LLC
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#000000001

OWNER:
DISCOVERY PARK LEES SUMMIT LLC
4220 PHILLIPS FARM RD
COLUMBIA, MO 65201

THE VILLAGE AT DISCOVERY

LOTS 5-8

LEES SUMMIT, JACKSON COUNTY, MISSOURI

DRAWING INCLUDES:

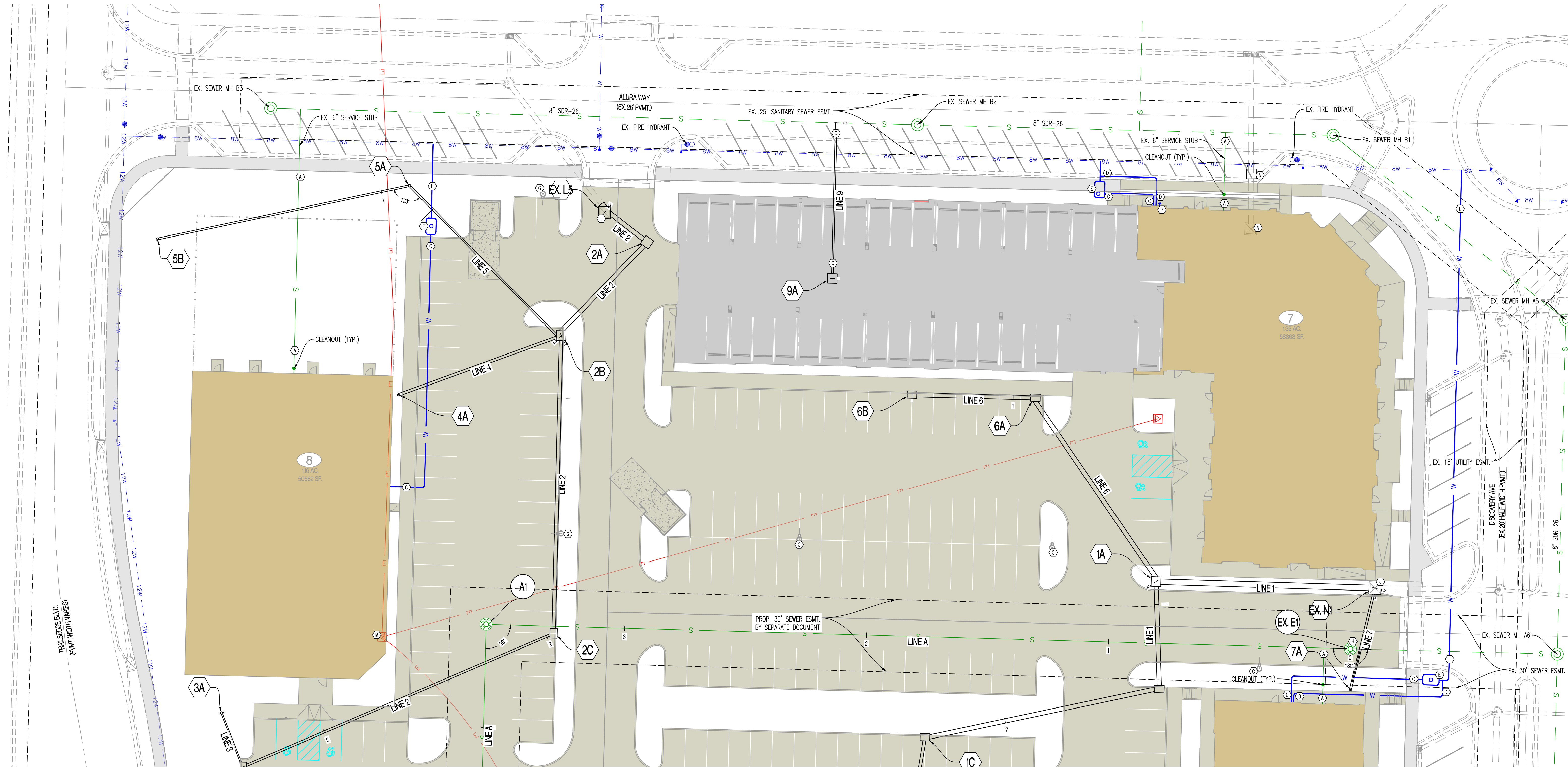
GRADING PLAN SHEET 6

DESIGNED: NTE

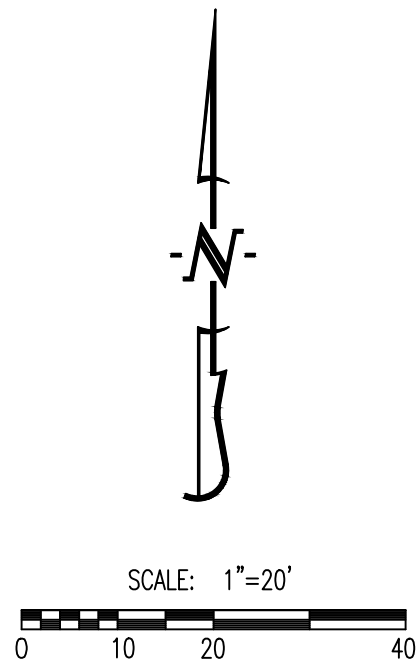
DRAWN: NMD

PROJECT NO.: 230286

SHEET:
CE 36



LEGEND OF LABELS	
(A)	INSTALL 4" SDR 26 PVC LATERAL WITH CLEANOUTS AS SHOWN. WYE INTO EXISTING SANITARY SEWER AS SHOWN. CONTRACTOR TO FIELD VERIFY DEPTH OF EXISTING SANITARY PIPE AND ROUTE AT 1% MINIMUM TO BUILDING. REFER TO M.E.P. PLANS FOR BUILDING CONNECTION. REFER TO CLEANOUT DETAIL ON CE 5.1.
(B)	PROPOSED FIRE HYDRANT. CONTRACTOR TO INSTALL 8"x6"x8" TEE AT WATER MAIN. INSTALL 6" C900 PVC WITH GATE VALVE AS SHOWN.
(C)	PROPOSED WATERLINE SERVICE. REFER TO M.E.P. PLANS FOR BUILDING CONNECTION.
(D)	PROPOSED SPRINKLER LINE. REFER TO M.E.P. PLANS FOR BUILDING CONNECTION.
(E)	PROPOSED VAULT/METER PIT. INSTALL PUMP TO DRAIN SUMP AND ROUTE 2" PVC TO STORM LINE AS SHOWN. COORDINATE PUMP SIZE AND LOCATION WITH M.E.P.
(F)	PROPOSED TRANSFORMER. COORDINATE WITH M.E.P.
(G)	PROPOSED LIGHT POLE. REFER TO M.E.P. PLANS.
(H)	CONTRACTOR TO ASBUILT TOP OF PLANNED SANITARY SEWER MANHOLE. TOP TO BE ADJUSTED TO FINAL GRADE SHOWN ON CE 3.0-CE 3.6.
(I)	CONTRACTOR TO ASBUILT TOP OF PLANNED SIDE OPENING INLET. TOP TO BE ADJUSTED TO FINAL GRADE SHOWN ON CE 3.0-CE 3.6. REPLACE SIDE OPENING INLET TOP WITH JUNCTION BOX TOP.
(J)	CONTRACTOR TO ASBUILT TOP OF PLANNED SIDE OPENING INLET. TOP TO BE ADJUSTED TO FINAL GRADE SHOWN ON CE 3.0-CE 3.6. REPLACE SIDE OPENING INLET TOP WITH CURB INLET TOP.
(K)	CONTRACTOR TO ASBUILT TOP OF PLANNED JUNCTION BOX. TOP TO BE ADJUSTED TO FINAL GRADE SHOWN ON CE 3.0-CE 3.6. REPLACE JUNCTION BOX TOP WITH EAVS636 GRATE AND FRAME.
(L)	CONTRACTOR TO TAP EXISTING WATERLINE AND INSTALL 6" WATERLINE WITH 6" GATE VALVES AND 8"x6"x8" TEE AS SHOWN TO VAULT/METER PIT. CONTRACTOR TO VERIFY SIZE AND DEPTH AND FURNISH ALL FITTINGS AS REQUIRED. REFER TO "PRIVATE SITE DEVELOPMENT PLANS" BY OLSSON DATED 10/18/2023 FOR EXISTING PLANNED WATERLINE.
(M)	PLANNED EXISTING ELECTRIC STRUCTURE TO BE RELOCATED. COORDINATE WITH UTILITY PROVIDER.
(N)	EXISTING STORM STRUCTURE TO BE REMOVED. INSTALL NEW 3"x3" JUNCTION BOX OUTSIDE OF BUILDING FOOTPRINT. CONTRACTOR MAY REUSE EXISTING STORM PIPING DURING INSTALLATION OF NEW STRUCTURE. NEW STORM STRUCTURE SHALL BE INSTALLED PRIOR TO PRIVATE STREET PAVING.
(O)	INSTALL 8" SCH. 40 PVC DRAIN AS SHOWN. WYE INTO EXISTING SANITARY SEWER. REFER TO STORM PROFILE ON CE 6.2.
(P)	PROPOSED FIRE DEPARTMENT CONNECTION (FDC). COORDINATE WITH ARCHITECT AND M.E.P.



GENERAL NOTES:
1) CONTRACTOR SHALL VERIFY EXACT LOCATION AND DEPTH OF ALL UTILITIES BEFORE ANY EXCAVATION BEGINS.

ESTIMATED SANITARY SEWER QUANTITIES	
	LOTS 5-8
8" SEWER	448 LF
STD. MANHOLE	1 EA.
STD. CLEANOUT	4 EA.
WYES	4 EA.

ESTIMATED ADDITIONAL FLOW	
LOT 5 (14,000 SF RETAIL/OFFICE, 40 APARTMENT UNITS)	54 PE X 100 GPCD = 5400 GPD = 3.75 GPM
LOT 6 (8,000 SF ANIMAL HOSPITAL)	8 PE X 150 GPCD = 900 GPD = 0.63 GPM
LOT 7 (8,600 SF RETAIL/OFFICE, 46 APARTMENT UNITS)	55 PE X 100 GPCD = 5500 GPD = 3.82 GPM
LOT 8 (11,500 SF PET DAYCARE CENTER)	11.5 PE X 100 GPCD = 1150 GPD = 0.80 GPM
TOTAL	12950 GPD = 8.99 GPM (35.97 GPM PEAK)

REVISIONS:

NO.	DATE
ORIGINAL	05/22/2024

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

STATE OF MISSOURI

NATHAN THOMAS ECKHOFF

REGISTERED PROFESSIONAL ENGINEER

NUMBER: PE-2003014960

EXPIRATION: 12/31/2026

NATHAN THOMAS ECKHOFF
MO LICENSE: 2003014960

PREPARED BY: **CROCKETT ENGINEERS & ARCHITECTS**

1000 W. Illinois Blvd., Suite 100
Columbia, Missouri 65203
(314) 487-0292

www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority: 0000000001

OWNER: DISCOVERY PARK LEES SUMMIT LLC
4220 PHILLIPS FARM RD
COLUMBIA, MO 65201

THE VILLAGE AT DISCOVERY

LOTS 5-8

LEES SUMMIT, JACKSON COUNTY, MISSOURI

DRAWING INCLUDES:

UTILITY PLAN SHEET 1

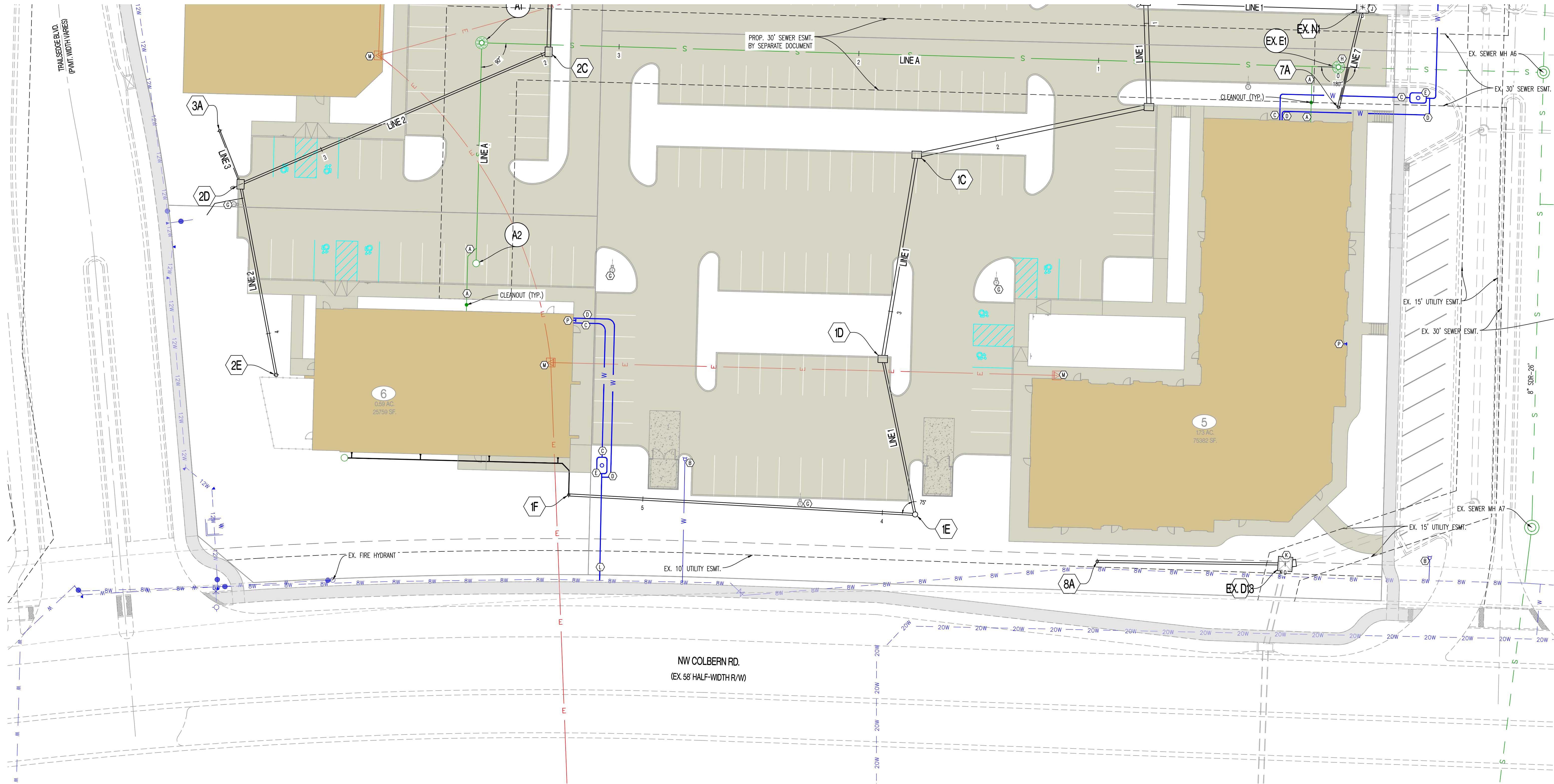
DESIGNED: NTE

DRAWN: NMD

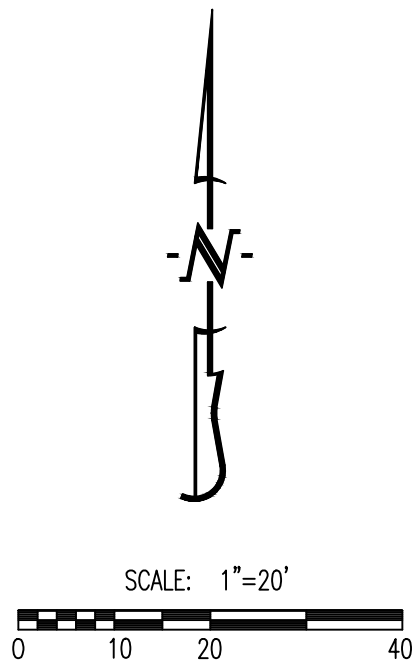
PROJECT NO.: 230286

SHEET: CE 4.1

Y:\2023\230286 - Discovery Park Lees Summit\Zone Lot 5-8\Civil\MOAD Files\Construction Plans\230286 Zone 1 Lot 5-8 Site Base.dwg



LEGEND OF LABELS	
(A)	INSTALL 4" SDR 26 PVC LATERAL WITH CLEANOUTS AS SHOWN. WYE INTO EXISTING SANITARY SEWER AS SHOWN. CONTRACTOR TO FIELD VERIFY DEPTH OF EXISTING SANITARY PIPE AND ROUTE AT 1% MINIMUM TO BUILDING. REFER TO M.E.P. PLANS FOR BUILDING CONNECTION. REFER TO CLEANOUT DETAIL ON CE 5.1.
(B)	PROPOSED FIRE HYDRANT. CONTRACTOR TO INSTALL 8"x6"x8" TEE AT WATER MAIN. INSTALL 6" C900 PVC WITH GATE VALVE AS SHOWN.
(C)	PROPOSED WATERLINE SERVICE. REFER TO M.E.P. PLANS FOR BUILDING CONNECTION.
(D)	PROPOSED SPRINKLER LINE. REFER TO M.E.P. PLANS FOR BUILDING CONNECTION.
(E)	PROPOSED VAULT/METER PIT. INSTALL PUMP TO DRAIN SUMP AND ROUTE 2" PVC TO STORM LINE AS SHOWN. COORDINATE PUMP SIZE AND LOCATION WITH M.E.P.
(F)	PROPOSED TRANSFORMER. COORDINATE WITH M.E.P.
(G)	PROPOSED LIGHT POLE. REFER TO M.E.P. PLANS.
(H)	CONTRACTOR TO ASBUILT TOP OF PLANNED SANITARY SEWER MANHOLE. TOP TO BE ADJUSTED TO FINAL GRADE SHOWN ON CE 3.0-CE 3.6.
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(K)	CONTRACTOR TO ASBUILT TOP OF PLANNED JUNCTION BOX. TOP TO BE ADJUSTED TO FINAL GRADE SHOWN ON CE 3.0-CE 3.6. REPLACE JUNCTION BOX TOP WITH EJN5636 GRATE AND FRAME.
(L)	CONTRACTOR TO TAP EXISTING WATERLINE AND INSTALL 6" WATERLINE WITH 6" GATE VALVES AND 8"x6"x8" TEE AS SHOWN TO VAULT/METER PIT. CONTRACTOR TO VERIFY SIZE AND DEPTH AND FURNISH ALL FITTINGS AS REQUIRED. REFER TO "PRIVATE SITE DEVELOPMENT PLANS" BY OLSSON DATED 10/18/2023 FOR EXISTING PLANNED WATERLINE.
(M)	PLANNED EXISTING ELECTRIC STRUCTURE TO BE RELOCATED. COORDINATE WITH UTILITY PROVIDER.
(N)	EXISTING STORM STRUCTURE TO BE REMOVED. INSTALL NEW 3'x3' JUNCTION BOX OUTSIDE OF BUILDING FOOTPRINT. CONTRACTOR MAY REUSE EXISTING STORM PIPING DURING INSTALLATION OF NEW STRUCTURE. NEW STORM STRUCTURE SHALL BE INSTALLED PRIOR TO PRIVATE STREET PAVING.
(O)	INSTALL 8" SCH. 40 PVC DRAIN AS SHOWN. WYE INTO EXISTING SANITARY SEWER. REFER TO STORM PROFILE ON CE 6.2.
(P)	PROPOSED FIRE DEPARTMENT CONNECTION (FDC). COORDINATE WITH ARCHITECT AND M.E.P.



GENERAL NOTES:
1) CONTRACTOR SHALL VERIFY EXACT LOCATION AND DEPTH OF ALL UTILITIES BEFORE ANY EXCAVATION BEGINS.

ESTIMATED SANITARY SEWER QUANTITIES	
8" SEWER	PLAT x 448 LF
STD. MANHOLE	1 EA.
STD. CLEANOUT	4 EA.
WYES	4 EA.

ESTIMATED ADDITIONAL FLOW	
LOT 5 (14,000 SF RETAIL/OFFICE, 40 APARTMENT UNITS)	54 PE X 100 GPCD = 5400 GPD = 3.75 GPM
LOT 6 (8,000 SF ANIMAL HOSPITAL)	8 PE X 150 GPCD = 900 GPD = 0.63 GPM
LOT 7 (8,600 SF RETAIL/OFFICE, 46 APARTMENT UNITS)	55 PE X 100 GPCD = 5500 GPD = 3.82 GPM
LOT 8 (11,500 SF PET DAYCARE CENTER)	11.5 PE X 100 GPCD = 1150 GPD = 0.80 GPM
TOTAL	12950 GPD = 8.99 GPM (35.97 GPM PEAK)

REVISIONS:

NO.	DATE
ORIGINAL	05/27/2024

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

NATHAN THOMAS ECKHOFF
MISSOURI LICENSE 200304960

PREPARED BY:

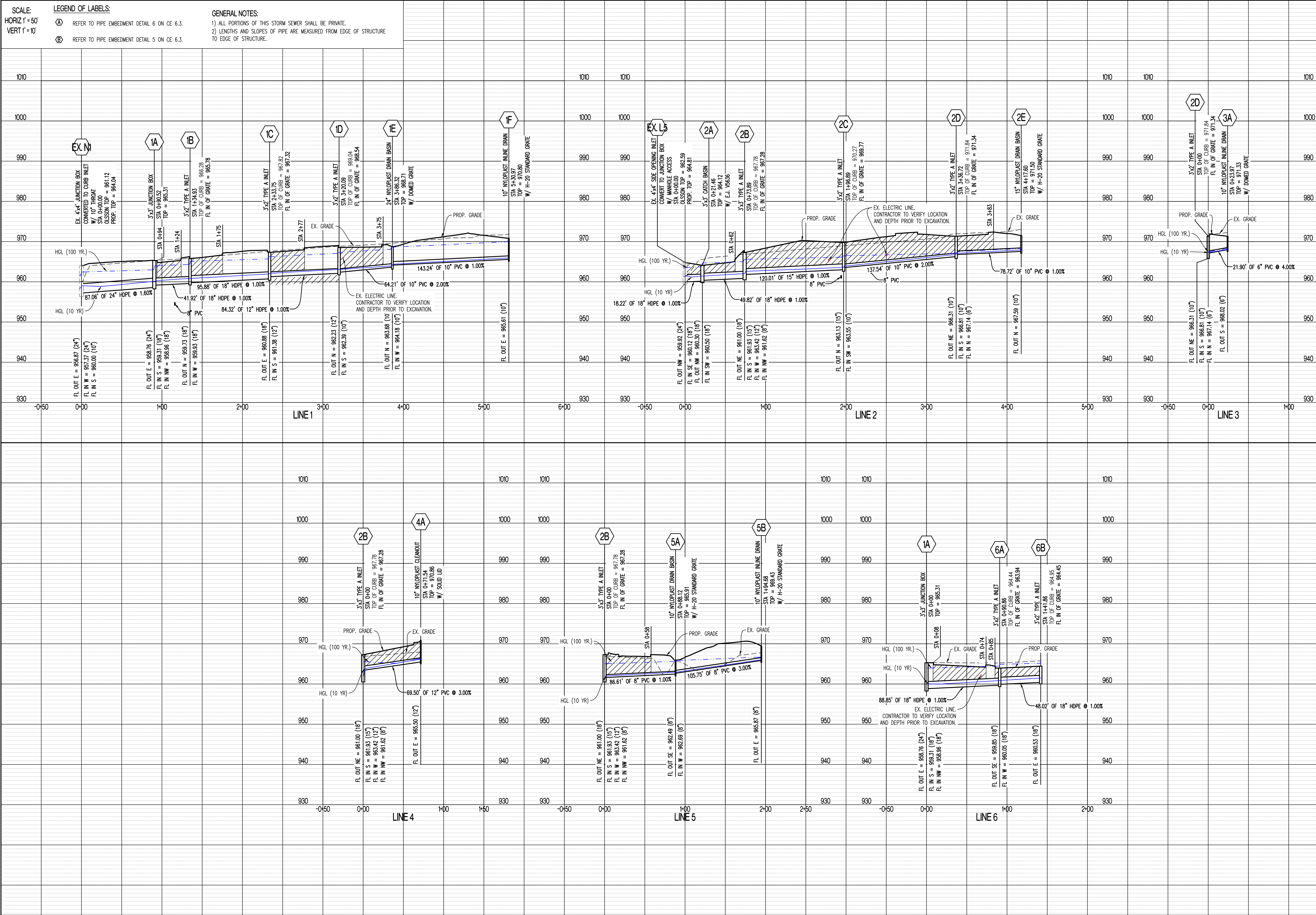
ENGINEERS & ARCHITECTS
1000 W. Illinois Blvd., Suite 100
Columbia, Missouri 65203
(314) 487-0592
www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority
#000000001

OWNER:
DISCOVERY PARK LEES SUMMIT LLC
4220 PHILLIPS FARM RD
COLUMBIA, MO 65201

THE VILLAGE AT DISCOVERY
LOTS 5-8
LEES SUMMIT, JACKSON COUNTY, MISSOURI

DRAWING INCLUDES:
UTILITY PLAN SHEET 2

DESIGNED: NTE
DRAWN: NMD
PROJECT NO.: 230286
SHEET:
CE 4.2



REVISIONS:

NO.	DATE
ORIGINAL	05/22/2024

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

STATE OF MISSOURI
NATHAN THOMAS ECKHOFF
PROFESSIONAL ENGINEER
NUMBER: PE-2003014960
MO LICENSE: 200304960

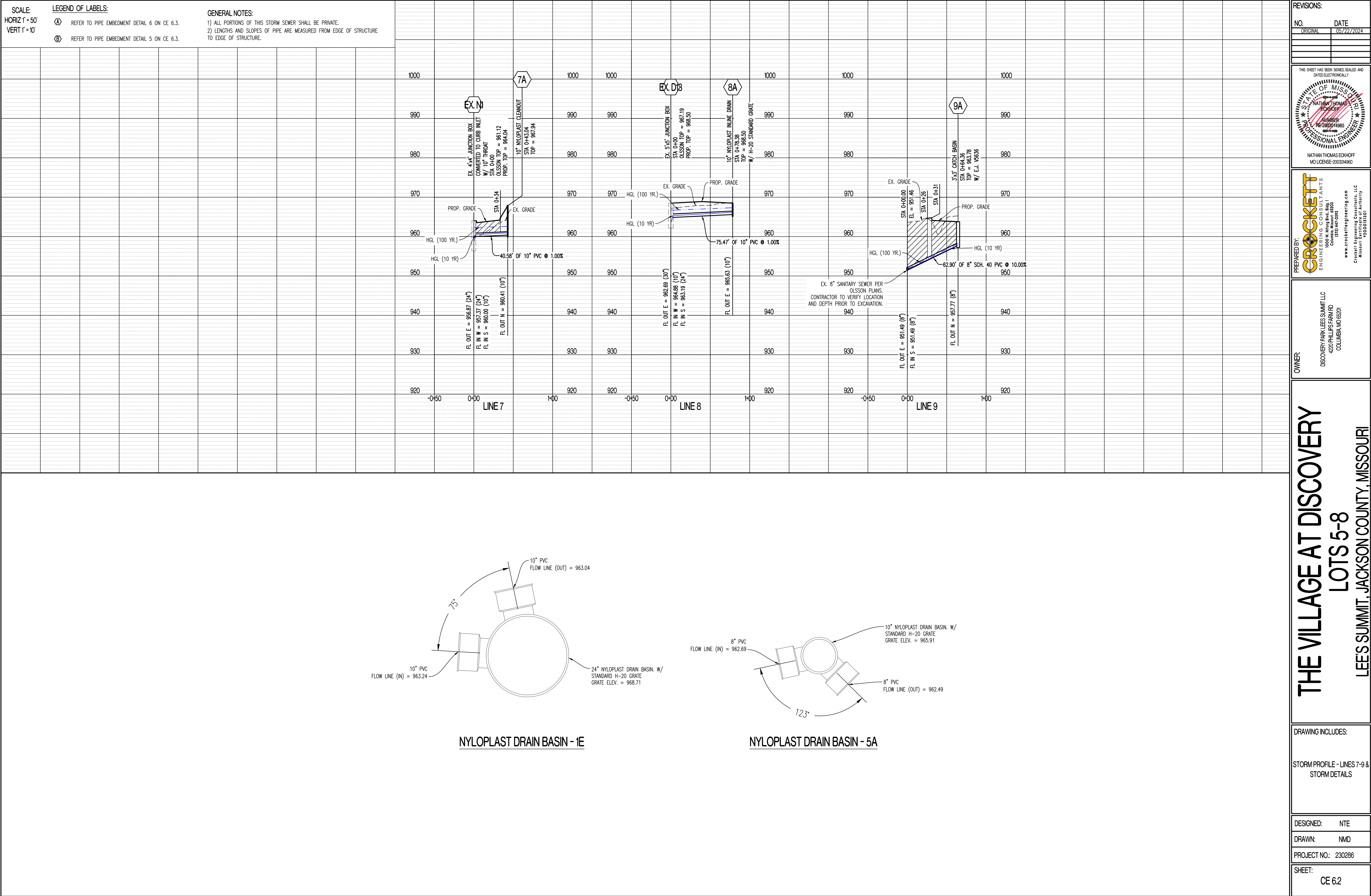
PREPARED BY:
CROCKETT ENGINEERS & PLANNERS
1000 W. Wilson Blvd.
Columbia, Missouri 65203
(314) 487-0591
www.crockettengineering.com
Missouri Certificate of Authority: 000000001

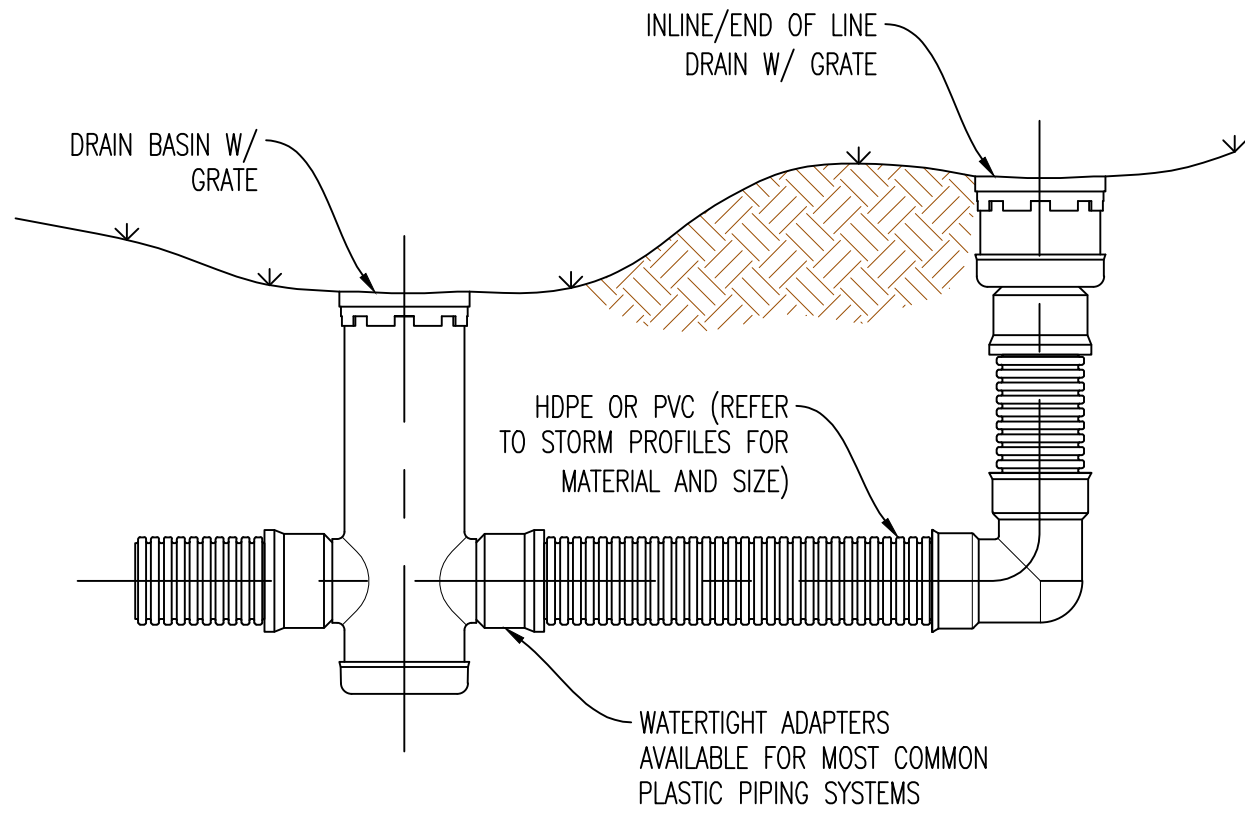
OWNER:
DISCOVERY PARK LEES SUMMIT LLC
4220 PHILLIPS FARM RD
COLUMBIA, MO 65201

THE VILLAGE AT DISCOVERY
LOTS 5-8
LEES SUMMIT, JACKSON COUNTY, MISSOURI

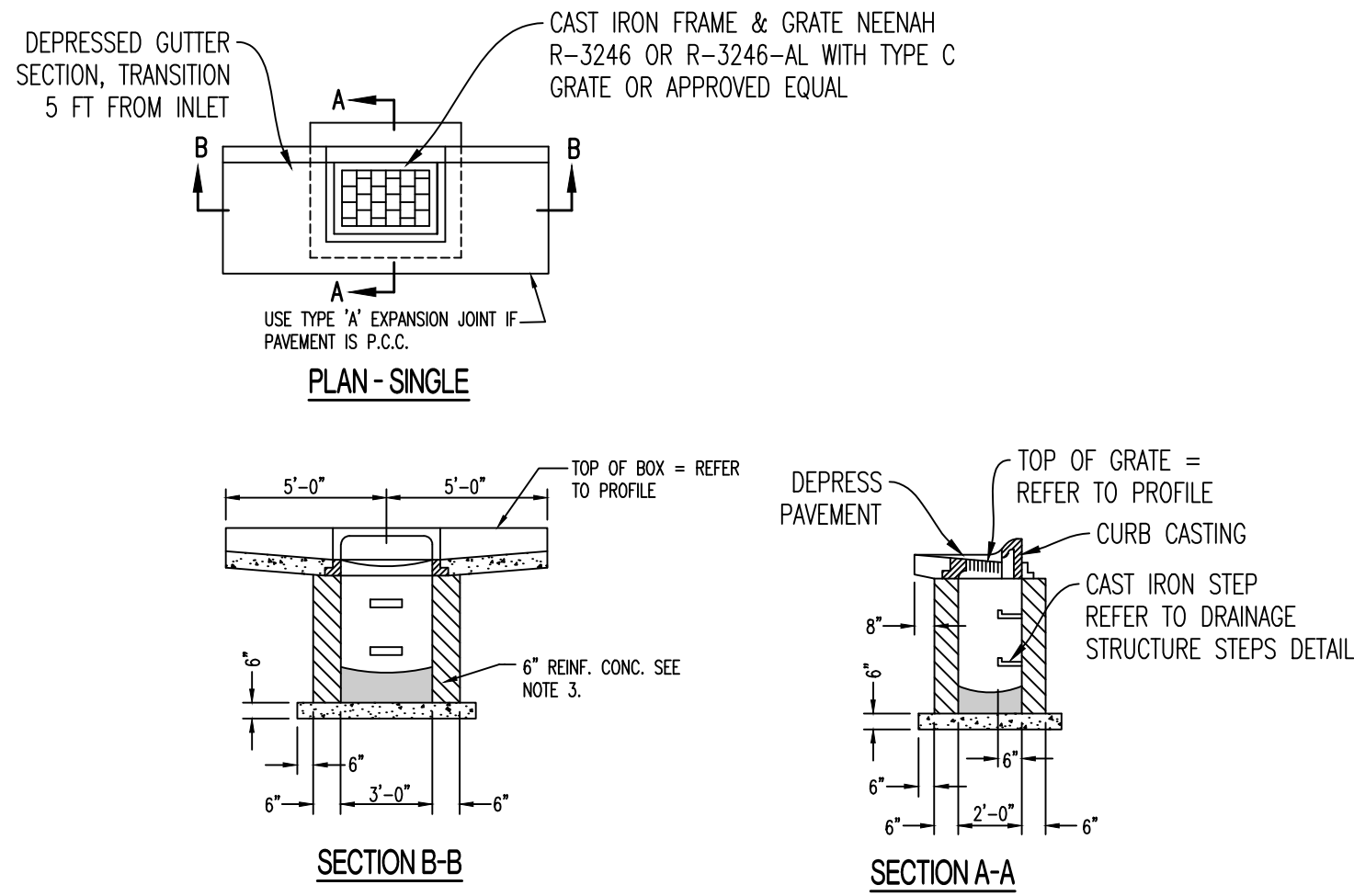
DRAWING INCLUDES:
STORM PROFILE - LINES 1-6

DESIGNED: NTE
DRAWN: NMD
PROJECT NO.: 230286
SHEET: CE 6.1



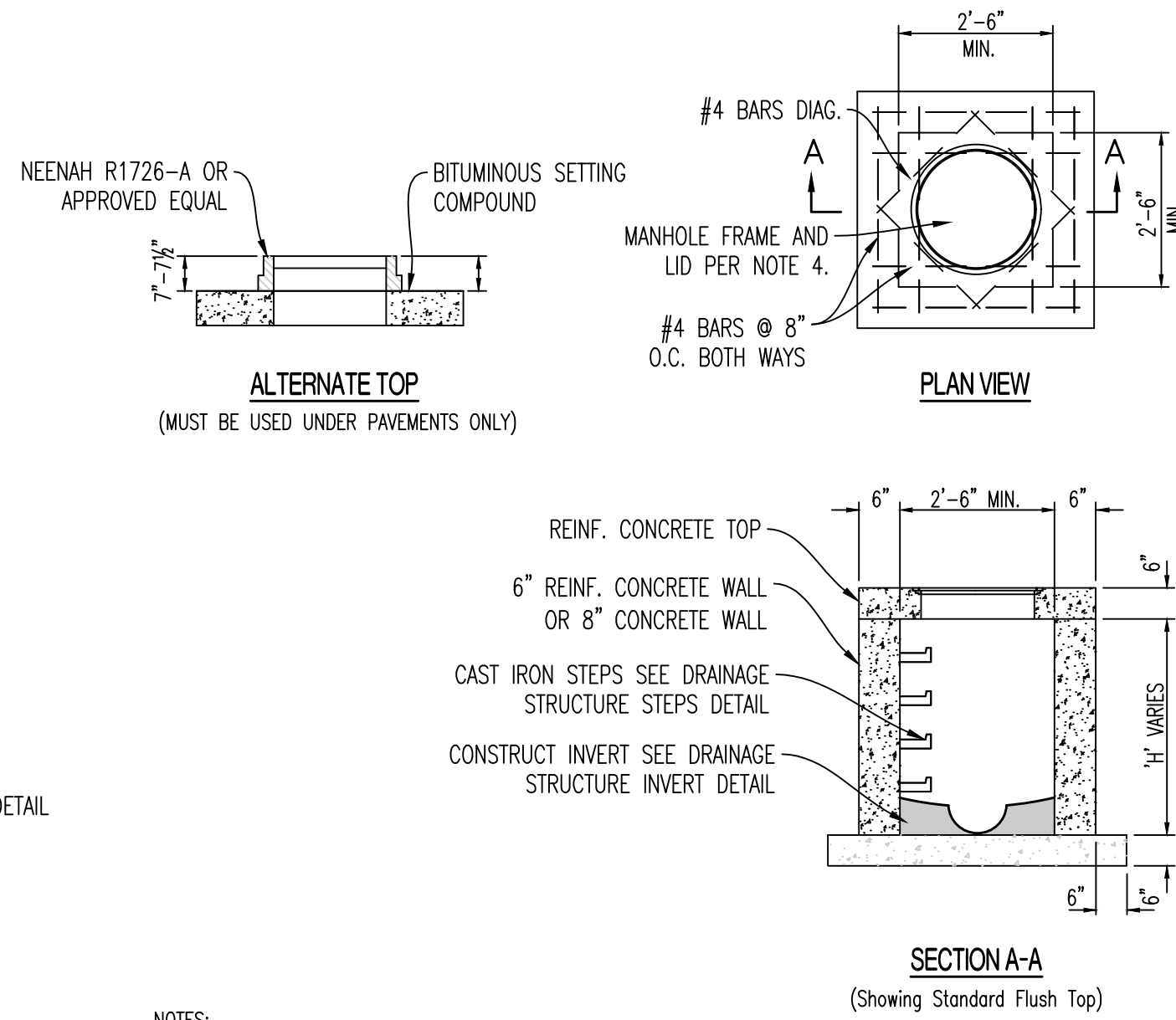


1 TYPICAL INSTALLATION OF NYLOPLAST DRAIN BASIN AND INLINE DRAIN



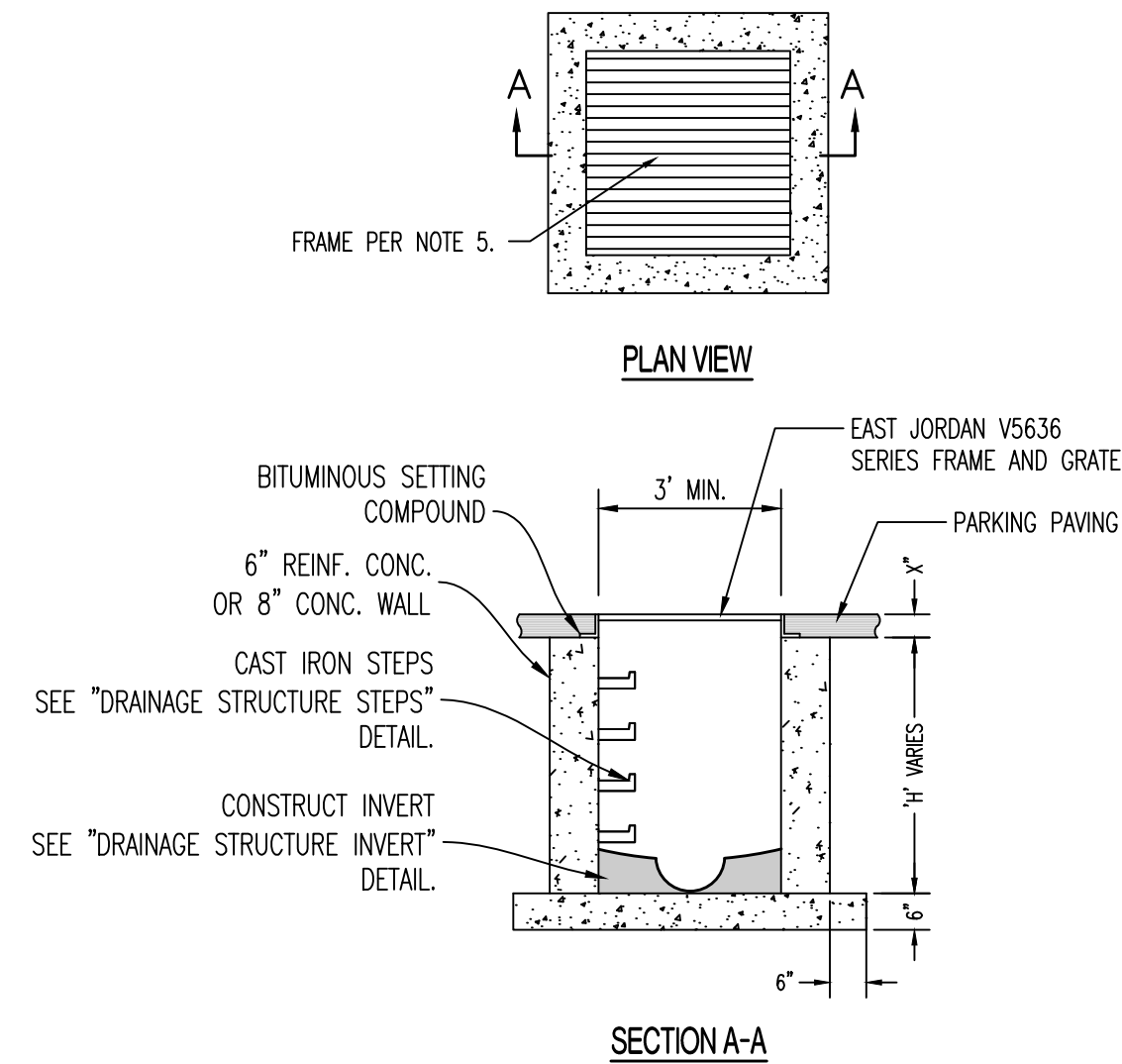
- NOTES: 1. CONCRETE SHALL CONFORM TO CONCRETE SPECIFICATIONS. REFER TO CE 1.1.
2. REINFORCING STEEL SHALL BE GRADE 60
3. #4 BARS AT 12" CTRS, BOTH WAYS AND #4 BARS DIAGONAL AT PIPE OPENINGS
4. FOR BOX SIZES LARGER THAN THE GRATE, THE GRATE IS TO BE CENTERED ON THE BOX.

2 SINGLE TYPE "A" INLET



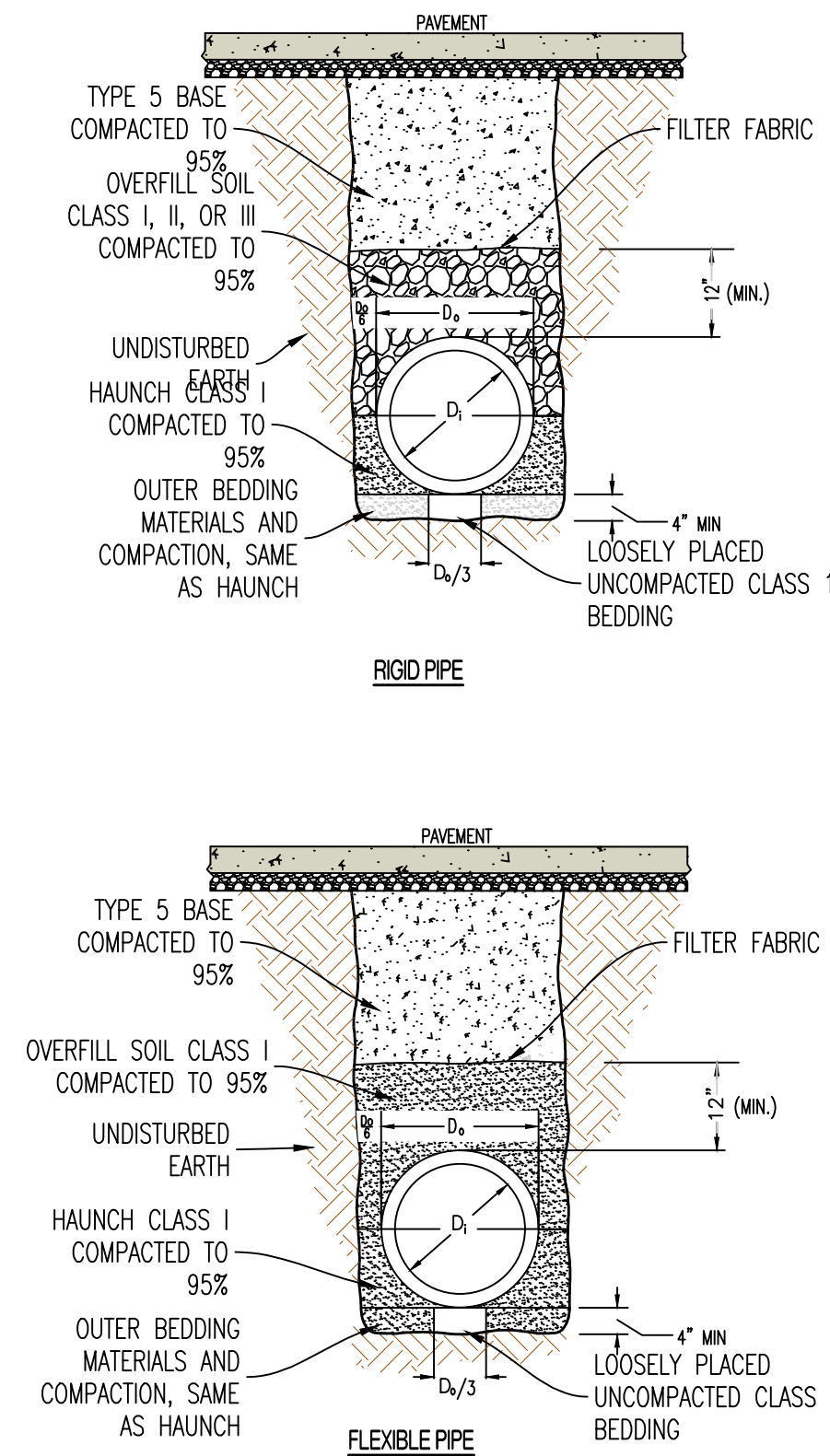
- NOTES: 1. CONCRETE SHALL BE CLASS E FOR BASES AND D FOR WALLS AND TOP.
2. REINFORCING STEEL SHALL BE GRADE 60
3. STRUCTURES WHERE H>8" SHALL BE REINFORCED CONCRETE (#4 BARS AT 12" CTRS, BOTH WAYS AND #4 BARS DIAGONAL AT PIPE OPENINGS)
4. FRAME AND LID SHALL BE NEENAH R-1960-A (TYPE C LID) OR APPROVED EQUAL.

3 JUNCTION BOX

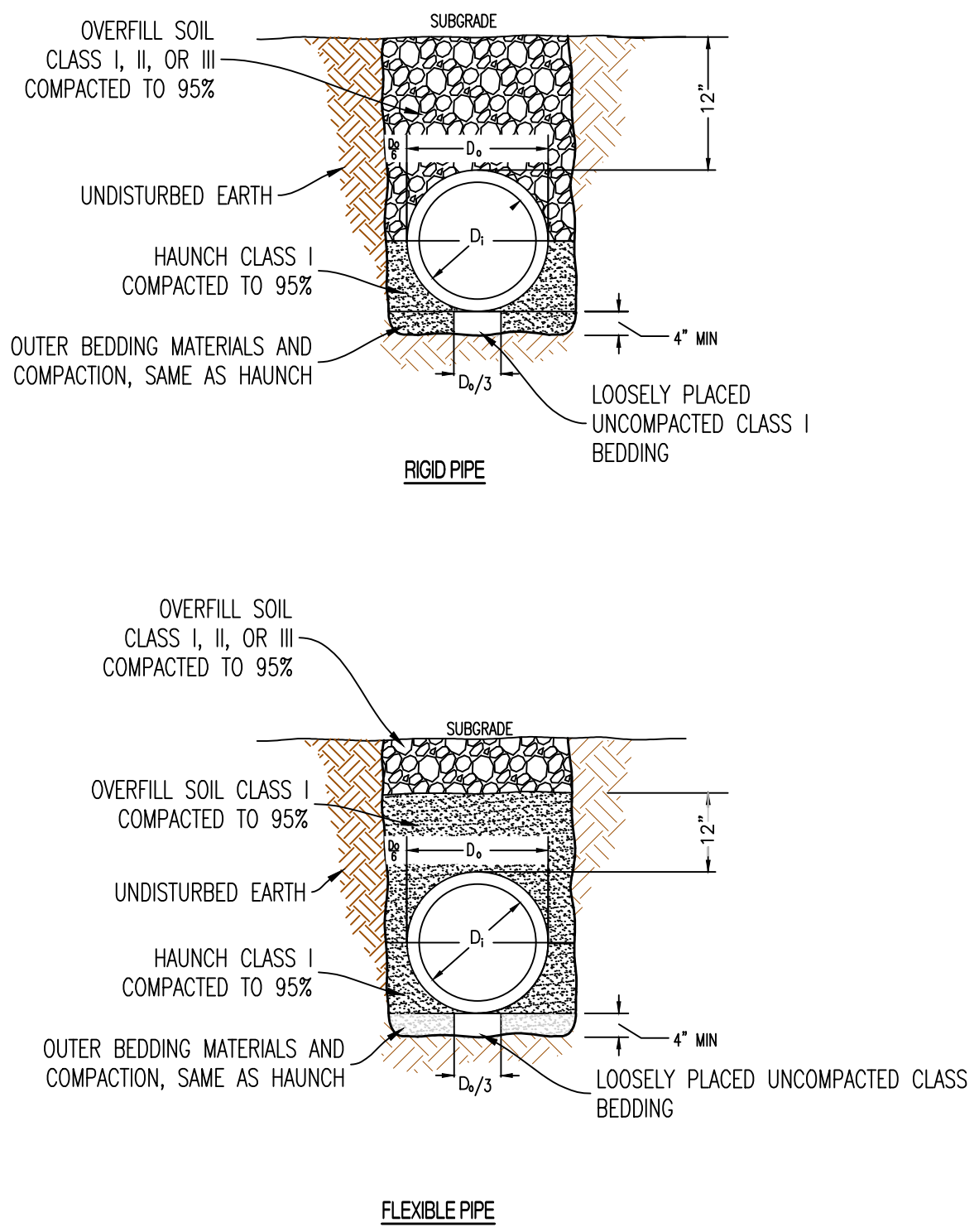


- NOTES: 1. CONCRETE SHALL BE CLASS E FOR BASE AND D FOR WALLS AND TOP.
2. REINFORCING STEEL SHALL BE GRADE 60
3. INSTALL WEEP HOLES AS PER DETAIL
4. STRUCTURES WHERE H>8" SHALL BE REINFORCED CONCRETE (#4 BARS AT 12" CTRS, BOTH WAYS AND #4 BARS DIAGONAL AT PIPE OPENINGS)
5. FRAME SHALL BE EAST JORDAN V5636 SERIES ASSEMBLY OR APPROVED EQUAL. SEE DETAIL FOR PLACEMENT. REFER TO PROFILES.

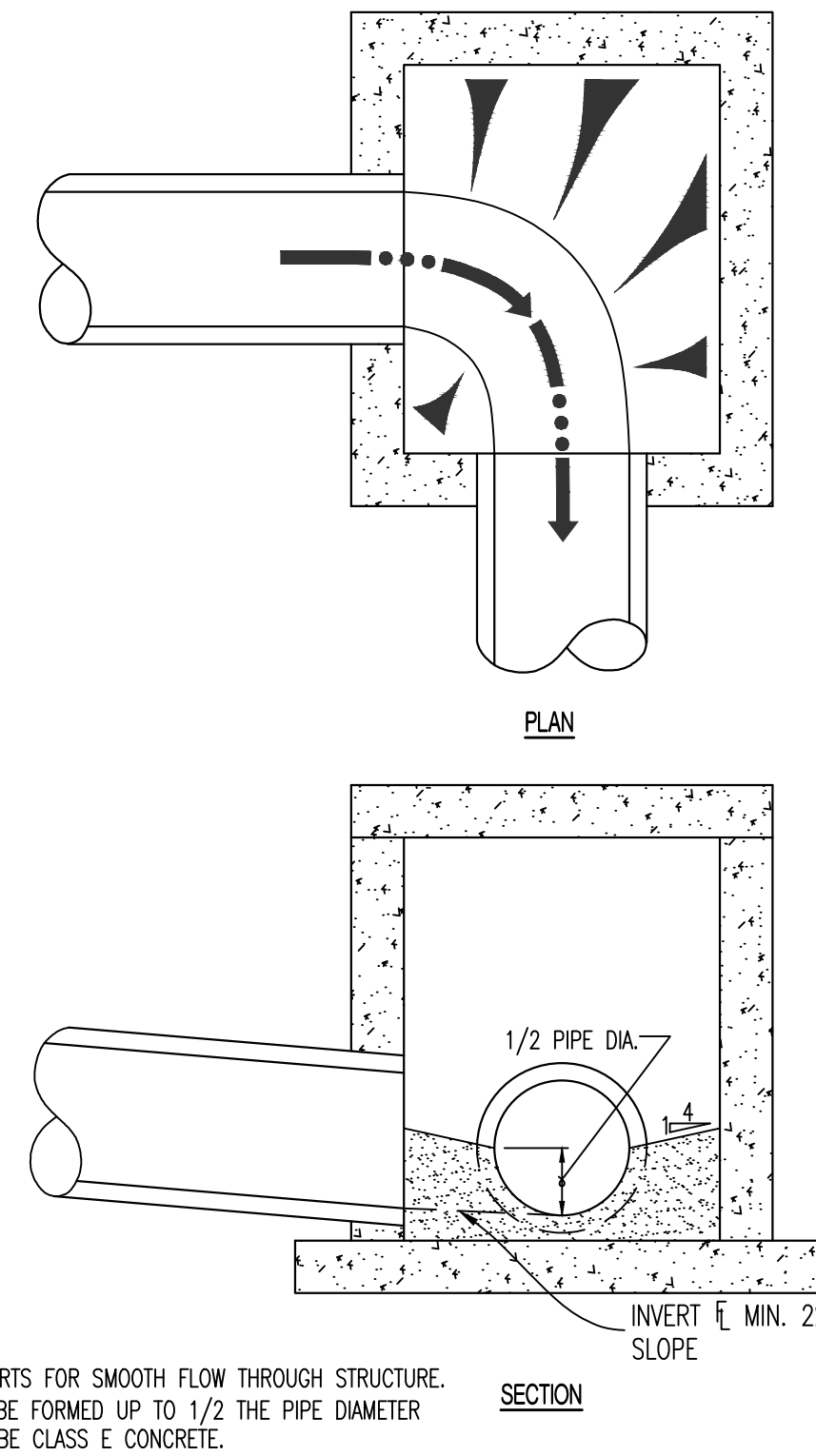
4 CATCH BASIN IN PAVEMENT



5 PIPE EMBEDMENT (UNDER PAVEMENT)

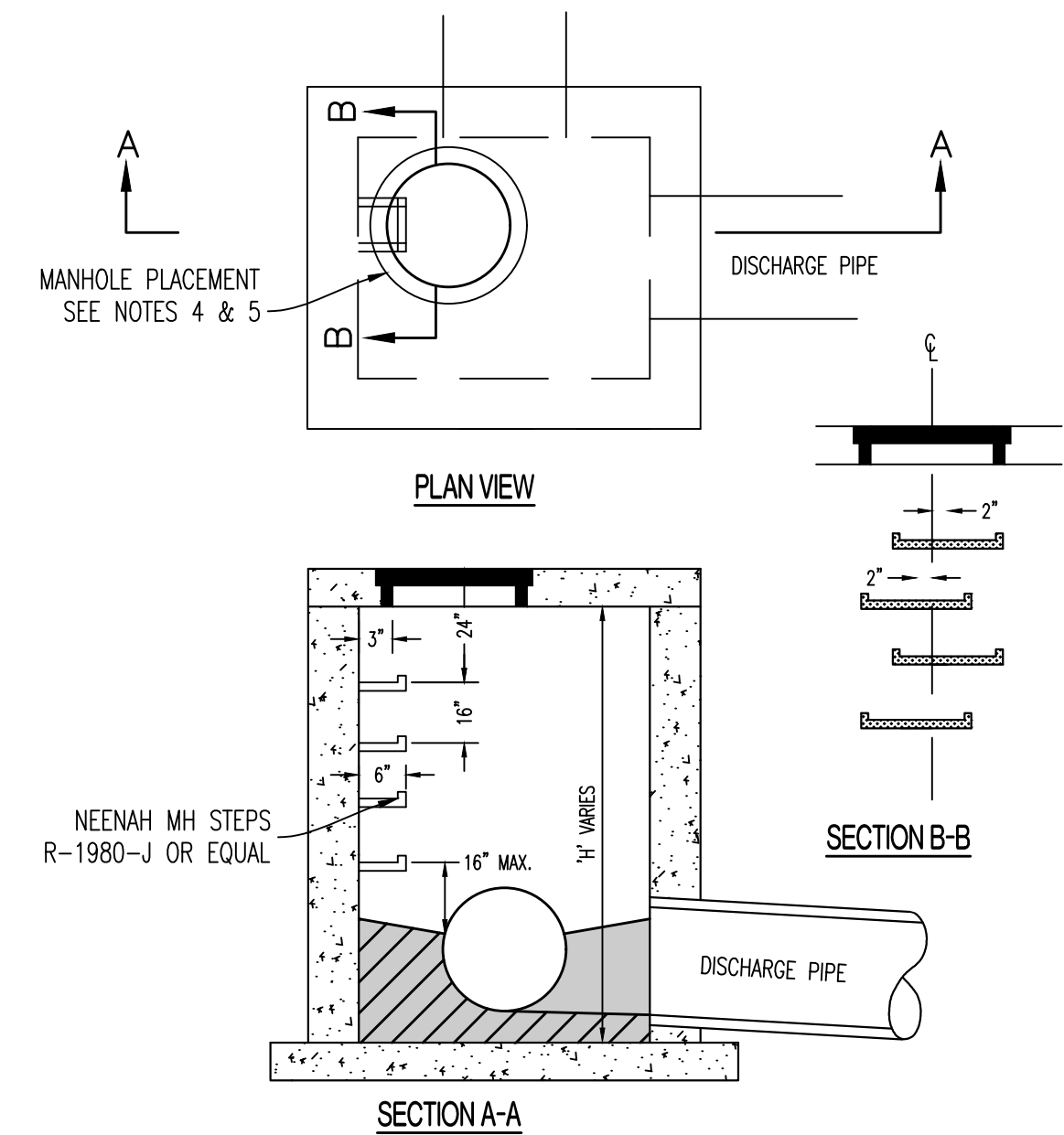


6 PIPE EMBEDMENT (NOT UNDER PAVEMENT)



- NOTES: 1. FORM ALL INVERTS FOR SMOOTH FLOW THROUGH STRUCTURE.
2. INVERT SHALL BE FORMED UP TO 1/2 THE PIPE DIAMETER
3. INVERT SHALL BE CLASS E CONCRETE.

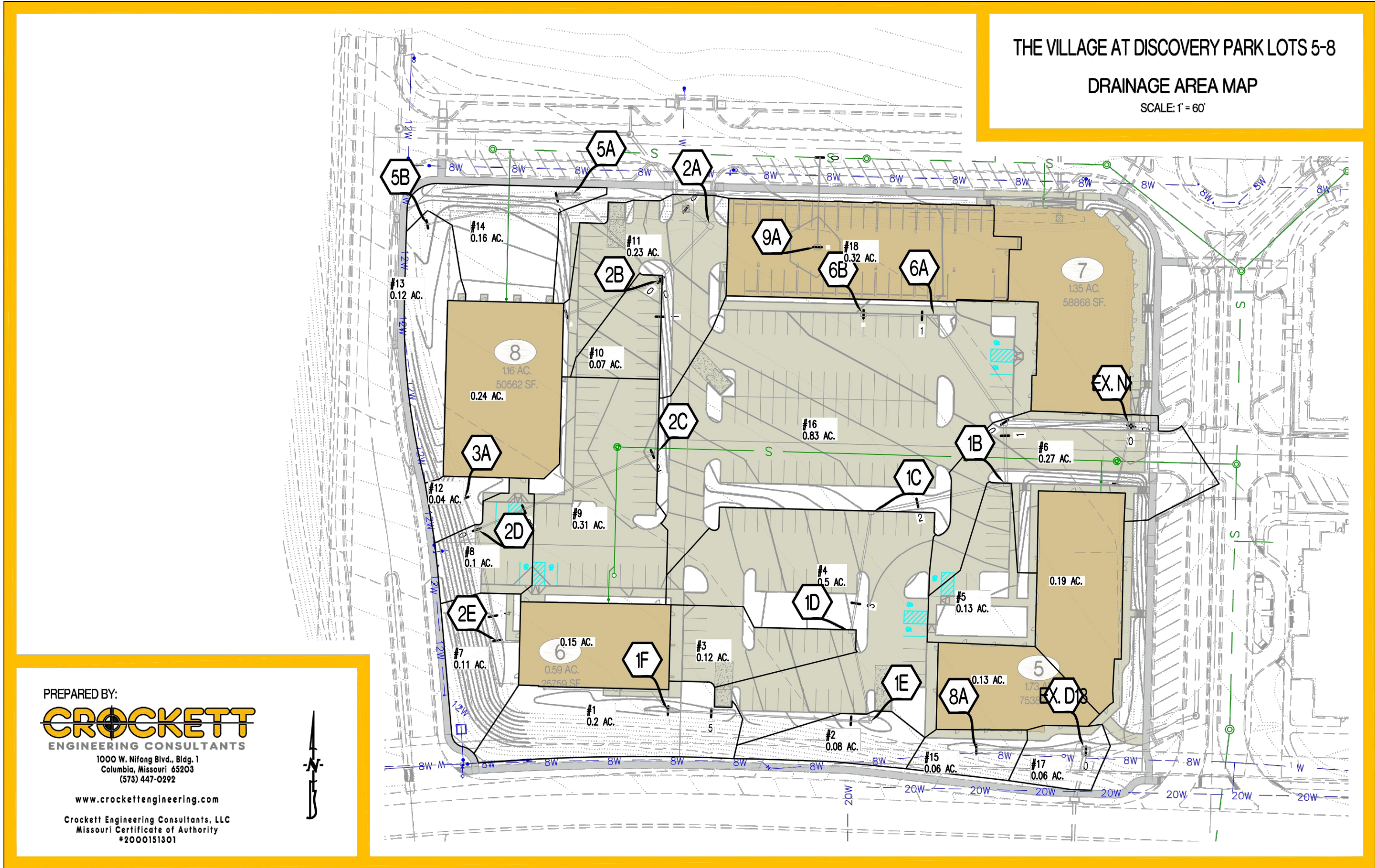
7 DRAINAGE STRUCTURE INVERT



- NOTES: 1. STEPS NOT REQUIRED WHERE H IS LESS THAN 4'.
2. CAST IRON STEPS SHALL BE AMERICAN ML-10-NOR OR EQUAL
3. STEPS SHALL BE PLACED ON VACANT WALL WHEN POSSIBLE
4. MANHOLE RING SHALL BE OFFSET TOWARD WALL WITH STEPS
5. MANHOLE RING SHALL BE CENTERED ON CENTERLINE OF STEPS
6. STAGGER STEPS 2" EACH WAY FROM CENTERLINE OF MANHOLE RING
7. TOP STEP 24" BELOW TOP OF LID
8. STEP SPACING TO BE 16", BOTTOM STEP TO BE NO HIGHER THAN 16" FROM INVERT.

8 DRAINAGE STRUCTURE STEPS

REVISIONS:	
NO.	DATE
ORIGINAL	05/22/2024
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY	
NATHAN THOMAS ECKHOFF MO LICENSE 200304960	
PREPARED BY:	DISCOVERY PARK LEES SUMMIT LLC 4220 PHILLIPS FARM RD COLUMBIA, MO 65201
ENGINEER:	CROCKETT ENGINEERING, LLC 1000 W. Illinois Blvd., Ste. 100 Columbia, Missouri 65203 (314) 487-0592 www.crockettingeering.com Missouri Certificate of Authority #00000001
OWNER:	THE VILLAGE AT DISCOVERY LOTS 5-8 LEES SUMMIT, JACKSON COUNTY, MISSOURI
DRAWING INCLUDES:	
STORM DETAILS	
DESIGNED:	NTE
DRAWN:	NMD
PROJECT NO.:	230286
SHEET:	CE 6.3



PREPARED BY:
CROCKETT
ENGINEERING CONSULTANTS
1000 W. Nifong Blvd., Bldg. 1
Columbia, Missouri 65203
(573) 447-0292
www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority
#2000151801

CROCKETT
ENGINEERING CONSULTANTS

PROJECT: The Village at Discovery Lots 5-8
CALCULATED BY: MWB CHECKED BY: NTE
DATE: 05/21/24 PROJECT NO: 230286

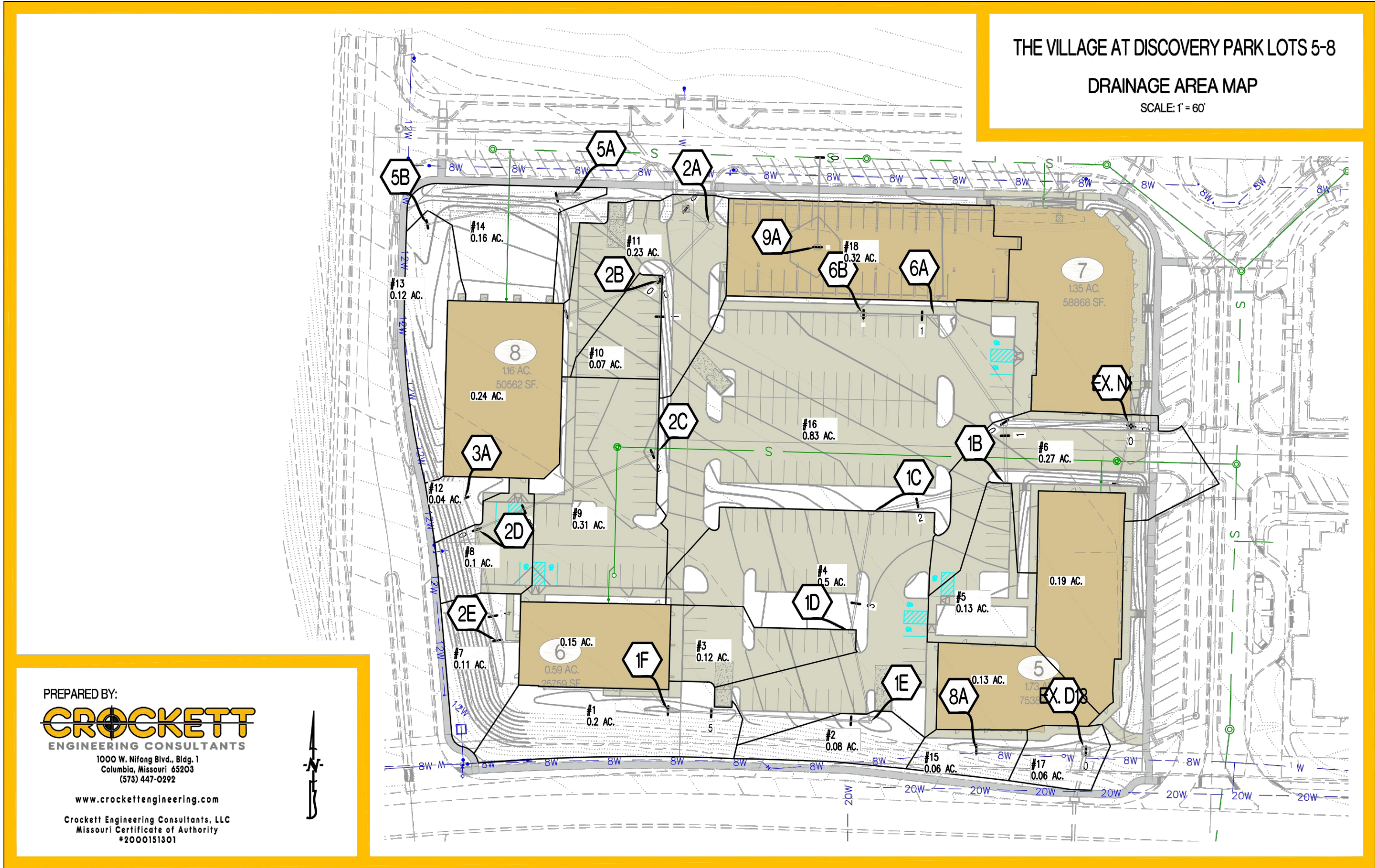
STORM HYDROLOGY / GUTTER / INLET CALCULATIONS															
DESCRIPTION		OVERLAND FLOW HYDROLOGY				GUTTER AND INLET HYDRAULICS						NOTES			
		AREA NO.	STRUCTURE LABEL	INLET TYPE	TIME OF CONCENTRATION	AREA	CA	RAINFALL INTENSITY	RUNOFF	GUTTER FLOW	GUTTER SLOPE	WIDTH OF GUTTER	DEPTH OF GUTTER	THEORETICAL INLET CAPACITY	DESIGN INLET CAPACITY
					min	acres		in/hr	cfs	cfs	ft/ft	ft	ft	cfs	cfs
1	1F	AREA			0.30	0.20	0.06	7.4	0.44					103	0.82
2	1E	AREA			0.30	0.08	0.02	7.4	0.18					0.73	0.58
3	1D	A			0.81	0.12	0.10	7.4	0.71					9.80	7.84
4	1C	A			0.81	0.50	0.41	7.4	2.98					9.80	7.84
5	1B	A			0.81	0.13	0.11	7.4	0.77					9.80	7.84
6	EX NI	CURB			0.81	0.27	0.22	7.4	1.61					8.80	7.04
7	2E	AREA			0.30	0.11	0.03	7.4	0.24					0.79	0.63
8	2D	A			0.81	0.10	0.08	7.4	0.60					9.80	7.84
9	2C	A			0.81	0.31	0.25	7.4	1.85					9.80	7.84
10	2B	A			0.81	0.07	0.06	7.4	0.42					9.80	7.84
11	2A	CB			0.91	0.23	0.19	7.4	1.37					13.40	10.72
12	3A	AREA			0.30	0.04	0.01	7.4	0.09					0.66	0.53
13	5B	AREA			0.30	0.12	0.04	7.4	0.26					0.66	0.53
14	5A	AREA			0.30	0.16	0.05	7.4	0.35					142	114
15	8A	AREA			0.30	0.06	0.02	7.4	0.13					0.66	0.53
16	6A	A			0.81	0.83	0.67	7.4	4.94					9.80	7.84
17	EX DIS	CB			0.30	0.06	0.02	7.4	0.13					4.30	3.28
18	9A	CB			0.50	0.32	0.16	7.4	1.18					13.40	10.72
					0.99	0.15	0.15	7.4	1.09						
					0.99	0.24	0.24	7.4	1.75						
					0.99	0.19	0.19	7.4	1.38						
					0.99	0.13	0.13	7.4	0.95						

CROCKETT
ENGINEERING CONSULTANTS

PROJECT: The Village at Discovery Lots 5-8
CALCULATED BY: MWB CHECKED BY: NTE
DATE: 5/21/24 PROJECT NO: 230286

STORM DRAIN PIPE SIZE													
DESCRIPTION		STORM DRAIN HYDRAULICS										NOTES	
		AREA NO.	UPSTREAM STRUCTURE LABEL	TIME OF CONCENTRATION	AREA	RAINFALL INTENSITY	RUNOFF	STORM DRAIN SLOPE	STORM DRAIN DIAMETER	STORM DRAIN VELOCITY	STORM DRAIN CAPACITY		
				min	acres	in/hr	cfs	ft/ft	in	ft/s	gpm		
LINE 1													
1+ROOF (LOT 6)	1F	-5		0.21	7.35	1.53	0.010	10	PVC	2.59	4.75		
2	1E	-5	0.02	0.23	7.35	1.71	0.020	10	PVC	3.66	6.71		
3	1D	-5	0.10	0.33	7.35	2.42	0.010	12	HDPE	3.86	4.91		
4	1C	-5	0.41	0.73	7.35	5.40	0.010	18	HDPE	11.37	6.44		
5	1B	-5	0.11	0.84	7.35	6.17	0.010	18	HDPE	11.37	6.44		
LINE 6	1A	-5	0.67	1.51	7.35	11.12	0.016	24	HDPE	30.98	9.87		
LINE 2													
7	2E	-5	0.03	0.24	7.35	0.93	0.010	10	PVC	2.59	4.75		
8+LINE 3	2D	-5	0.09	0.13	7.35	0.93	0.020	10	PVC	3.66	6.71		
9	2C	-5	0.25	0.38	7.35	2.77	0.010	15	HDPE	6.99	5.70		
10+LINES 4 & 5	2B	-5	0.38	0.76	7.35	5.55	0.010	18	HDPE	11.37	6.44		
11	2A	-5	0.19	0.94	7.35	6.92	0.010	18	HDPE	11.37	6.44		
LINE 3													
12	3A	-5	0.01	7.35	0.09	0.040	6	PVC	1.33	6.75			
LINE 4													
ROOF (LOT 8)	4A	-5	0.24	7.35	1.75	0.030	12	HDPE	6.68	8.51			
LINE 5													
13	5B	-5	0.04	7.35	0.26	0.010	8	PVC	1.43	4.09			
14	5A	-5	0.05	7.35	0.62	0.030	8	PVC	2.47	7.09			
LINE 6													
16	6A	-5	0.67	7.35	4.94	0.010	18	HDPE	11.37	6.44			
LINE 7													
1/2 ROOF (LOT 9)	7A	-5	0.19	7.35	1.38	0.010	10	PVC	2.59	4.75			
LINE 8													
1/2 ROOF (LOT 5) + 15	8A	-5	0.15	7.35	1.08	0.010	10	PVC	2.59	4.75			
LINE 8													
18	9A	-5	0.16	7.35	1.18	0.100	8	PVC	4.51	12.94			

REVISIONS:
NO. DATE
ORIGINAL 05/22/2024
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PROJECT: Village at Discovery Park Lots 5-8
CALCULATED BY: MWB CHECKED BY: NTE
DATE: 05/21/24 PROJECT NO: 230286

STORM HYDROLOGY / GUTTER / INLET CALCULATIONS														
DESCRIPTION		OVERLAND FLOW HYDROLOGY					GUTTER AND INLET HYDRAULICS					NOTES		
AREA NO.	STRUCTURE LABEL	INLET TYPE	THICK. OF CONC.	THICK. OF CONC.	THICK. OF CONC.	THICK. OF CONC.	THICK. OF CONC.	THICK. OF CONC.	THICK. OF CONC.	THICK. OF CONC.	THICK. OF CONC.	THICK. OF CONC.	THICK. OF CONC.	THICK. OF CONC.
1	1F	AREA	5	0.38	0.20	0.08	10.3	0.77				10.3	0.82	0.00
2	1E	AREA	-5	0.38	0.08	0.03	10.3	0.31				0.73	0.58	0.00
3	1D	A	-5	0.99	0.12	0.12	10.3	1.23				9.80	7.84	0.00
4	1C	A	-5	0.99	0.50	0.50	10.3	5.11				9.80	7.84	0.00
5	1B	A	-5	0.99	0.13	0.13	10.3	1.33				9.80	7.84	0.00
6	EX. NI	CURB	-5	0.99	0.27	0.27	10.3	2.76				8.80	7.04	0.00
7	2E	AREA	-5	0.38	0.11	0.04	10.3	0.43				0.79	0.63	0.00
8	2D	A	-5	0.99	0.10	0.10	10.3	1.02				9.80	7.84	0.00
9	2C	A	-5	0.99	0.31	0.31	10.3	3.17				9.80	7.84	0.00
10	2B	A	-5	0.99	0.07	0.07	10.3	0.72				9.80	7.84	0.00
11	2A	CB	-5	0.99	0.23	0.23	10.3	2.35				8.80	10.72	0.00
12	3A	AREA	-5	0.38	0.04	0.02	10.3	0.15				0.66	0.53	0.00
13	5B	AREA	-5	0.38	0.12	0.05	10.3	0.46				0.66	0.53	0.00
14	5A	AREA	-5	0.38	0.16	0.06	10.3	0.62				1.42	1.14	0.00
15	8A	AREA	-5	0.38	0.06	0.02	10.3	0.23				0.66	0.53	0.00
16	6A	A	-5	0.99	0.83	0.82	10.3	8.48				9.80	7.84	0.64
17	EX. DIS	CB	-5	0.38	0.06	0.02	10.3	0.23				4.30	3.28	0.00
18	9A	CB	-5	0.50	0.32	0.16	10.3	1.65				13.40	10.72	0.00



PROJECT: Village at Discovery Park Lots 5-8
CALCULATED BY: MWB CHECKED BY: NTE
DATE: 5/21/24 PROJECT NO: 230286

STORM DRAIN PIPE SIZE														
DESCRIPTION		STORM DRAIN HYDRAULICS										NOTES		
AREA NO.	UPSTREAM STRUCTURE LABEL	LINE OF CONC.	THICK. OF CONC.	THICK. OF CONC.	THICK. OF CONC.	THICK. OF CONC.	THICK. OF CONC.	THICK. OF CONC.	THICK. OF CONC.	THICK. OF CONC.	THICK. OF CONC.	THICK. OF CONC.	THICK. OF CONC.	THICK. OF CONC.
1	HOOF (LOT 6)	1F	-5		0.22	10.32	2.31	0.010	10	PVC	2.59	4.75		
2		1E	-5	0.03	0.25	10.32	2.62	0.020	10	PVC	3.66	6.71		
3		1D	-5	0.12	0.37	10.32	3.84	0.010	12	HDPE	3.86	4.91		
4		1C	-5	0.50	0.87	10.32	8.95	0.010	18	HDPE	11.37	6.44		
5		1B	-5	0.13	1.00	10.32	10.28	0.010	18	HDPE	11.37	6.44		
LINE 6		1A	-5	0.82	1.82	10.32	18.76	0.016	24	HDPE	30.98	9.87		
7		2E	-5		0.04	10.32	0.43	0.010	10	PVC	2.59	4.75		
8 + LINE 3		2D	-5	0.11	0.16	10.32	1.60	0.020	10	PVC	3.66	6.71		
9		2C	-5	0.31	0.46	10.32	4.77	0.010	15	HDPE	6.99	5.70		
10 + LINES 4 & 5		2B	-5	0.41	0.87	10.32	9.02	0.010	18	HDPE	11.37	6.44		
11		2A	-5	0.23	1.10	10.32	11.37	0.010	18	HDPE	11.37	6.44		
LINE 3														
12		3A	-5		0.02	10.32	0.15	0.040	6	PVC	1.33	6.75		
LINE 4														
ROOF (LOT 8)		4A	-5		0.24	10.32	2.45	0.030	10	PVC	4.48	8.22		
LINE 5														
13		5B	-5		0.05	10.32	0.46	0.010	8	PVC	1.43	4.09		
14		5A	-5	0.06	0.11	10.32	1.08	0.030	8	PVC	2.47	7.09		
LINE 6														
16		6A	-5		0.82	10.32	8.48	0.010	18	HDPE	11.37	6.44		
LINE 7														
1/2 ROOF (LOT 5)		7A	-5		0.19	10.32	1.94	0.010	10	PVC	2.59	4.75		
LINE 8														
1/2 ROOF (LOT 5) + 15		8A	-5		0.15	10.32	1.56	0.010	10	PVC	2.59	4.75		
LINE 9														
18		9A	-5		0.16	10.32	1.65	0.000	8	PVC	4.51	12.94		

REVISIONS:
NO. DATE
ORIGINAL 05/22/2024

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY
NATHAN THOMAS ECKHOFF
PROFESSIONAL ENGINEER
NATHAN THOMAS ECKHOFF
MO LICENSE 200304960

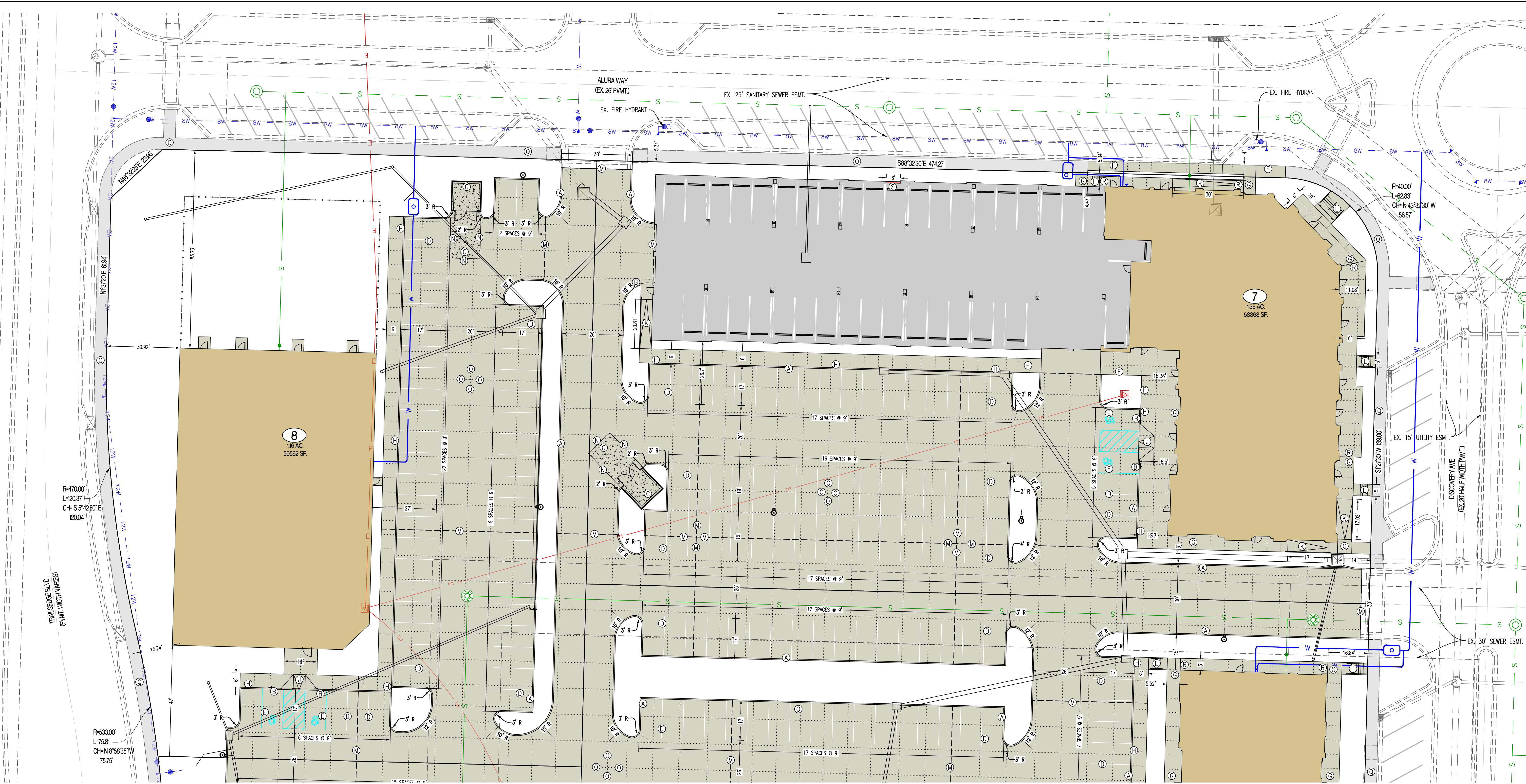
PREPARED BY:
CROCKETT
ENGINEERING CONSULTANTS
1000 W. Nifong Blvd., Bldg. 1
Columbia, Missouri 65203
(573) 447-0992
www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority
#2000151801

OWNER:
DISCOVERY PARK LEES SUMMIT LLC
4220 PHILLIPS FARM RD
COLUMBIA, MO 65201

THE VILLAGE AT DISCOVERY
LOTS 5-8
LEES SUMMIT, JACKSON COUNTY, MISSOURI

DRAWING INCLUDES:
100-YR STORM
CALCULATIONS

DESIGNED: NTE
DRAWN: NMD
PROJECT NO: 230286
SHEET:
CE 6.5



LEGEND OF LABELS

- (A) CONSTRUCT LIGHT DUTY CONCRETE W/ INTEGRAL CURB AS SHOWN. REFER TO DETAIL 1 & 2 ON CE 8.1.
- (B) TRANSITION FROM 6" CURB TO 0" CURB. REFER TO CE 3.0-CE 3.6.
- (C) DUMPSTER PAD AREA W/ INTEGRAL CURB AS SHOWN. REFER DETAIL 7 ON CE 8.1. REFER TO ARCHITECTURAL PLANS FOR PROPOSED DUMPSTER ENCLOSURE DETAILS.
- (D) PAINT 4" PARKING STALL STRIPES AS SHOWN, COLOR WHITE (TYPICAL) ALL STALLS EXCEPT ADA ACCESSIBLE STALLS. REFER TO PLAN FOR WIDTH AND DEPTH OF STALLS.
- (E) CONSTRUCT ADA ACCESSIBLE PARKING AREA WITH SIGNAGE AND ADA RAMPS. PAINT 4" STRIPE AND ACCESSIBLE SYMBOL, COLOR BLUE. PAINT HATCH AREA AS SHOWN, COLOR BLUE. SLOPE OF THE PAVEMENT AT ALL ACCESSIBLE STALLS SHALL NOT EXCEED 1:50. REFER TO DETAIL 10 ON CE 8.2.
- (F) CONSTRUCT 4" THICK, PCC WALK PER PLAN DIMENSIONS AS SHOWN (MAXIMUM LONGITUDINAL SLOPE 1:20. MAXIMUM CROSS SLOPE AT 1:50). REFER DETAIL 5 ON CE 8.1.
- (G) CONSTRUCT THICKENED EDGE SIDEWALK/PAVEMENT ABUTTING BUILDING PER PLAN DIMENSIONS AS SHOWN (MAXIMUM LONGITUDINAL SLOPE 1:20. MAXIMUM CROSS SLOPE AT 1:50). REFER TO DETAIL 4 ON CE 8.1.
- (H) CONSTRUCT THICKENED EDGE SIDEWALK WALK AT BACK OF CURB PER PLAN DIMENSIONS AS SHOWN (MAXIMUM LONGITUDINAL SLOPE 1:20. MAXIMUM CROSS SLOPE AT 1:50). REFER TO DETAIL 3 ON CE 8.1.
- (I) CONSTRUCT ADA ACCESSIBLE SIDEWALK RAMP AT BACK OF CURB. REFER TO DETAIL 8 ON CE 8.1.
- (J) CONSTRUCT ADA ACCESSIBLE SIDEWALK RAMP WITH FLARE AT BACK OF CURB. REFER TO DETAIL 9 ON CE 8.1.
- (K) CONSTRUCT ADA ACCESSIBLE SIDEWALK RAMP WITH HANDRAIL. REFER TO DETAIL 11 ON CE 8.2.
- (L) INSTALL PCC STAIRS WITH HANDRAIL IN SIDEWALK. REFER TO DETAIL 12 ON CE 8.2 REFER TO CE 3.0-CE 3.6 FOR ELEVATIONS.
- (M) INSTALL TYPE A OR TYPE A ALTERNATE EXPANSION JOINT IN PAVING. REFER TO DETAIL 6 ON CE 8.1.
- (N) INSTALL TYPE B CONSTRUCTION JOINT WHERE PROPOSED CONCRETE PAVING ABUTS EXISTING CONCRETE PAVING. REFER TO DETAIL 6 ON CE 8.1.
- (O) INSTALL TYPE C SAW JOINT IN PAVEMENT, MAXIMUM 12'X12' SQUARES (TYPICAL). REFER TO DETAIL 6 ON CE 8.1.
- (P) PROPOSED TRANSFORMER PAD. COORDINATE WITH M.E.P. FOR EXACT SIZE AND LOCATION.
- (Q) 5' STREET-SIDE SIDEWALK TO BE CONSTRUCTED. REFER TO OLSSON PLANS TITLED "PRIVATE SITE DEVELOPMENT PLANS FOR THE VILLAGE AT DISCOVERY PARK ZONE 1" DATED 10/18/2023.
- (R) CONSTRUCT THICKENED EDGE SIDEWALK WITH EXPOSED FACE ADJACENT TO BUILDING AS SHOWN. REFER TO DETAIL 13 ON CE 8.1.
- (S) CONSTRUCT 6" BLOCK OUT IN PARKING GARAGE. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION. REFER TO CE 3.1 FOR ELEVATIONS.

GENERAL NOTES:

- 1) ALL ACCESSIBLE PARKING SHALL COMPLY WITH THE REQUIREMENTS OF THE FEDERAL AMERICANS WITH DISABILITIES ACT.
- 2) THE PAVEMENT JOINTS SHOWN ARE A GRAPHICAL REPRESENTATION OF A POSSIBLE JOINT CONTRACTOR TO PROVIDE SHOP DRAWINGS WITH JOINT LAYOUT FOR APPROVAL BY ENGINEER PRIOR TO POURING OF PAVEMENT.
- 3) REFER TO ARCHITECTURAL PLANS FOR PARKING GARAGE LAYOUT. PARKING GARAGE PAVEMENT SHALL MATCH CROSS SECTION OF EXTERIOR PARKING LOTS.



SCALE: 1"=20'

0 10 20 40

CALCULATIONS: LOT 7

LAND AREA:		
TOTAL LAND AREA:		1.35 AC
BUILDING DETAILS:		
1ST FLOOR:	9,845 SQ.FT.	
2ND FLOOR:	24,285 SQ.FT.	
3RD FLOOR:	24,285 SQ.FT.	
TOTAL S.F. (3-STORIES)	58,415 SQ.FT.	
LOT COVERAGES:		
NET LAND AREA:	58,868 SQ.FT.	100%
TOTAL IMPERVIOUS SURFACE AREA:	47,873 SQ.FT.	81%
TOTAL OPEN SPACE:	10,995 SQ.FT.	19%
FLOOR AREA RATIO:		99%

CALCULATIONS: LOT 8

LAND AREA:		
TOTAL LAND AREA:		1.16 AC
BUILDING DETAILS:		
1ST FLOOR:	10,356 SQ.FT.	
TOTAL S.F. (1-STORY)	10,356 SQ.FT.	
LOT COVERAGES:		
NET LAND AREA:	50,562 SQ.FT.	100%
TOTAL IMPERVIOUS SURFACE AREA:	31,540 SQ.FT.	62%
TOTAL OPEN SPACE:	19,022 SQ.FT.	38%
FLOOR AREA RATIO:		20%

REVISIONS:

NO.	DATE
ORIGINAL	05/22/2024

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY



NATHAN THOMAS ECKHOFF
MO LICENSE 200304960

PREPARED BY:
CROCKETT
ENGINEERS & ARCHITECTS
1000 W. Kings Blvd., Suite 100
Columbia, Missouri 65203
(314) 487-0592
www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority
#000000001

OWNER:
DISCOVERY PARK LEES SUMMIT LLC
4220 PHILLIPS FARM RD
COLUMBIA, MO 65201

THE VILLAGE AT DISCOVERY
LOTS 5-8
LEES SUMMIT, JACKSON COUNTY, MISSOURI

DRAWING INCLUDES:

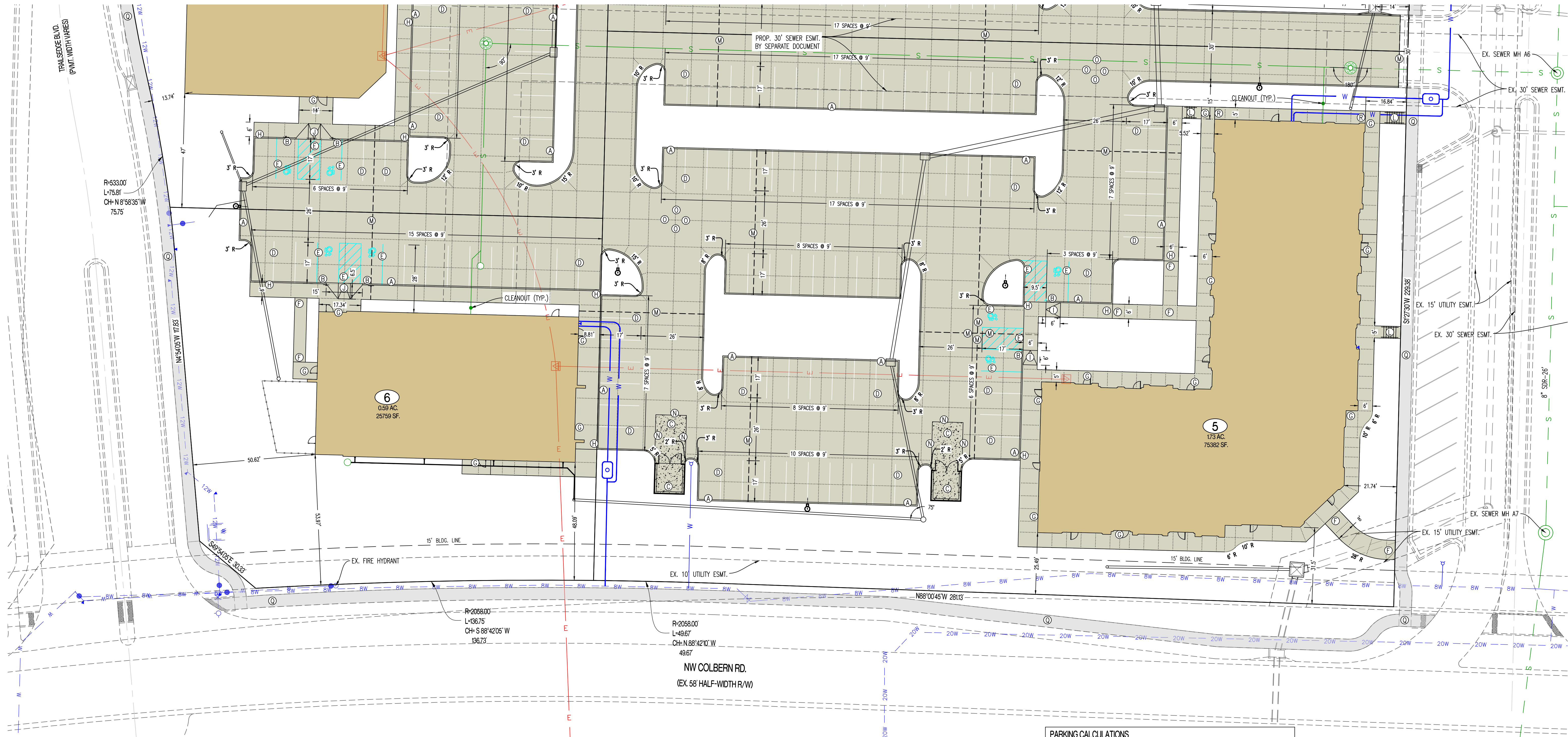
SITE PLAN SHEET 1

DESIGNED: NTE

DRAWN: NMD

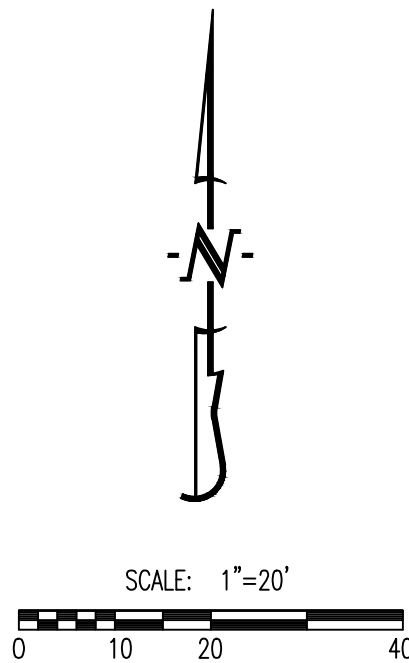
PROJECT NO.: 230286

SHEET:
CE 7.1



LEGEND OF LABELS	
(A) CONSTRUCT LIGHT DUTY CONCRETE W/ INTEGRAL CURB AS SHOWN. REFER TO DETAIL 1 & 2 ON CE 8.1.	(J) CONSTRUCT ADA ACCESSIBLE SIDEWALK RAMP WITH FLARE AT BACK OF CURB. REFER TO DETAIL 9 ON CE 8.1.
(B) TRANSITION FROM 6" CURB TO 0" CURB. REFER TO CE 3.0-CE 3.6.	(K) CONSTRUCT ADA ACCESSIBLE SIDEWALK RAMP WITH HANDRAIL. REFER TO DETAIL 11 ON CE 8.2.
(C) DUMPSTER PAD AREA W/ INTEGRAL CURB AS SHOWN. REFER DETAIL 7 ON CE 8.1. REFER TO ARCHITECTURAL PLANS FOR PROPOSED DUMPSTER ENCLOSURE DETAILS.	(L) INSTALL PCC STAIRS WITH HANDRAIL IN SIDEWALK. REFER TO DETAIL 12 ON CE 8.2 REFER TO CE 3.0-CE 3.6 FOR ELEVATIONS.
(D) PAINT 4" PARKING STALL STRIPES AS SHOWN, COLOR WHITE (TYPICAL) ALL STALLS EXCEPT ADA ACCESSIBLE STALLS. REFER TO PLAN FOR WIDTH AND DEPTH OF STALLS.	(M) INSTALL TYPE A OR TYPE A ALTERNATE EXPANSION JOINT IN PAVING. REFER TO DETAIL 6 ON CE 8.1.
(E) CONSTRUCT ADA ACCESSIBLE PARKING AREA WITH SIGNAGE AND ADA RAMPS. PAINT 4" STRIPE AND ACCESSIBLE SYMBOL, COLOR BLUE. PAINT HATCH AREA AS SHOWN, COLOR BLUE. SLOPE OF THE PAVEMENT AT ALL ACCESSIBLE STALLS SHALL NOT EXCEED 1:50. REFER TO DETAIL 10 ON CE 8.2.	(N) INSTALL TYPE B CONSTRUCTION JOINT WHERE PROPOSED CONCRETE PAVING ABUTS EXISTING CONCRETE PAVING. REFER TO DETAIL 6 ON CE 8.1.
(F) CONSTRUCT 4" THICK, PCC WALK PER PLAN DIMENSIONS AS SHOWN (MAXIMUM LONGITUDINAL SLOPE 1:20. MAXIMUM CROSS SLOPE AT 1:50). REFER DETAIL 5 ON CE 8.1.	(O) INSTALL TYPE C SAW JOINT IN PAVEMENT, MAXIMUM 12"x12" SQUARES (TYPICAL). REFER TO DETAIL 6 ON CE 8.1.
(G) CONSTRUCT THICKENED EDGE SIDEWALK/PAVEMENT ABUTTING BUILDING PER PLAN DIMENSIONS AS SHOWN (MAXIMUM LONGITUDINAL SLOPE 1:20. MAXIMUM CROSS SLOPE AT 1:50). REFER TO DETAIL 4 ON CE 8.1.	(P) PROPOSED TRANSFORMER PAD. COORDINATE WITH M.E.P. FOR EXACT SIZE AND LOCATION.
(H) CONSTRUCT THICKENED EDGE SIDEWALK WALK AT BACK OF CURB PER PLAN DIMENSIONS AS SHOWN (MAXIMUM LONGITUDINAL SLOPE 1:20. MAXIMUM CROSS SLOPE AT 1:50). REFER TO DETAIL 3 ON CE 8.1.	(Q) 5' STREET-SIDE SIDEWALK TO BE CONSTRUCTED. REFER TO OLSSON PLANS TITLED "PRIVATE SITE DEVELOPMENT PLANS FOR THE VILLAGE AT DISCOVERY PARK ZONE 1" DATED 10/18/2023.
(I) CONSTRUCT ADA ACCESSIBLE SIDEWALK RAMP AT BACK OF CURB. REFER TO DETAIL 8 ON CE 8.1.	(R) CONSTRUCT THICKENED EDGE SIDEWALK WITH EXPOSED FACE ADJACENT TO BUILDING AS SHOWN. REFER TO DETAIL 13 ON CE 8.1.
	(S) CONSTRUCT 6" BLOCK OUT IN PARKING GARAGE. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION. REFER TO CE 3.1 FOR ELEVATIONS.

- GENERAL NOTES:
- ALL ACCESSIBLE PARKING SHALL COMPLY WITH THE REQUIREMENTS OF THE FEDERAL AMERICANS WITH DISABILITIES ACT.
 - THE PAVEMENT JOINTS SHOWN ARE A GRAPHICAL REPRESENTATION OF A POSSIBLE JOINT. CONTRACTOR TO PROVIDE SHOP DRAWINGS WITH JOINT LAYOUT FOR APPROVAL BY ENGINEER PRIOR TO POURING OF PAVEMENT.
 - REFER TO ARCHITECTURAL PLANS FOR PARKING GARAGE LAYOUT. PARKING GARAGE PAVEMENT SHALL MATCH CROSS SECTION OF EXTERIOR PARKING LOTS.



PARKING CALCULATIONS	
PARKING SUMMARY (LOT 5):	
SPACES REQUIRED:	
COMMERCIAL:	
OFFICES	
- 4 PER 1,000 SQ. FT. (NOT MEDICAL, DENTAL, OR VETERINARY) (9,000 SQ. FT.)	36 SPACES
- 5 PER 1,000 SQ. FT. (MEDICAL OR DENTAL) (4,580 SQ. FT.)	23 SPACES
RESIDENTIAL (36 UNITS):	
- 1.5 PER 1 OR 2 BR UNIT	54 SPACES
PARKING SUMMARY (LOT 6):	
SPACES REQUIRED:	
COMMERCIAL:	
ANIMAL SERVICES	
- 2.5 PER 1,000 SQ. FT. (6,441 SQ. FT.)	16 SPACES
PARKING SUMMARY (LOT 7):	
SPACES REQUIRED:	
COMMERCIAL (9,845 SQ. FT.):	
OFFICES	
- 4 PER 1,000 SQ. FT. (NOT MEDICAL, DENTAL, OR VETERINARY) (6,000 SQ. FT.)	24 SPACES
- 5 PER 1,000 SQ. FT. (MEDICAL OR DENTAL) (3,845 SQ. FT.)	19 SPACES
RESIDENTIAL (46 UNITS):	
- 1.5 PER 1 OR 2 BR UNIT	69 SPACES
PARKING SUMMARY (LOT 8):	
SPACES REQUIRED:	
COMMERCIAL:	
ANIMAL SERVICES	
- 2.5 PER 1,000 SQ. FT. (10,356 SQ. FT.)	26 SPACES
STANDARD SPACES REQUIRED:	
HANDICAP SPACES REQUIRED:	267 SPACES
7 SPACES	
SPACES PROVIDED:	
STANDARD SPACES PROVIDED:	238 SPACES
HANDICAP SPACES PROVIDED:	9 SPACES
EXISTING ADJACENT SPACES (TRACT B) PROVIDED:	54 SPACES
TOTAL SPACES PROVIDED:	
	292 SPACES

CALCULATIONS: LOT 5	
LAND AREA:	
TOTAL LAND AREA:	1.73 AC
BUILDING DETAILS:	
1ST FLOOR:	13,580 SQ.FT.
2ND FLOOR:	13,330 SQ.FT.
3RD FLOOR:	13,330 SQ.FT.
TOTAL S.F. (3-STORIES)	40,240 SQ.FT.
LOT COVERAGES:	
NET LAND AREA:	75,382 SQ.FT. 76%
TOTAL IMPERVIOUS SURFACE AREA:	57,124 SQ.FT. 24%
TOTAL OPEN SPACE:	18,258 SQ.FT. 19%
FLOOR AREA RATIO:	
	53%

CALCULATIONS: LOT 6	
LAND AREA:	
TOTAL LAND AREA:	0.59 AC
BUILDING DETAILS:	
1ST FLOOR:	6,442 SQ.FT.
TOTAL S.F. (1-STORY)	6,442 SQ.FT.
LOT COVERAGES:	
NET LAND AREA:	25,759 SQ.FT. 100%
TOTAL IMPERVIOUS SURFACE AREA:	12,931 SQ.FT. 50%
TOTAL OPEN SPACE:	12,828 SQ.FT. 50%
FLOOR AREA RATIO:	
	25%

REVISIONS:

NO.	DATE
ORIGINAL	05/27/2024

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NATHAN THOMAS ECKHOFF
MISSOURI CERTIFICATE OF AUTHORITY
NO LICENSE 200304960

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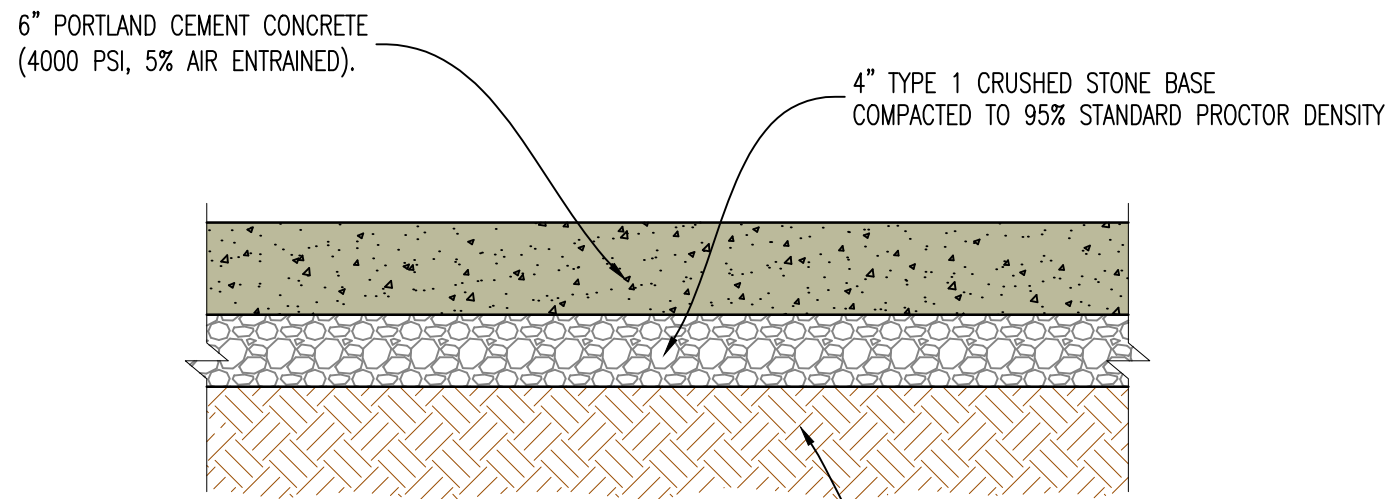
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SITE PLAN SHEET 2

DESIGNED: NTE

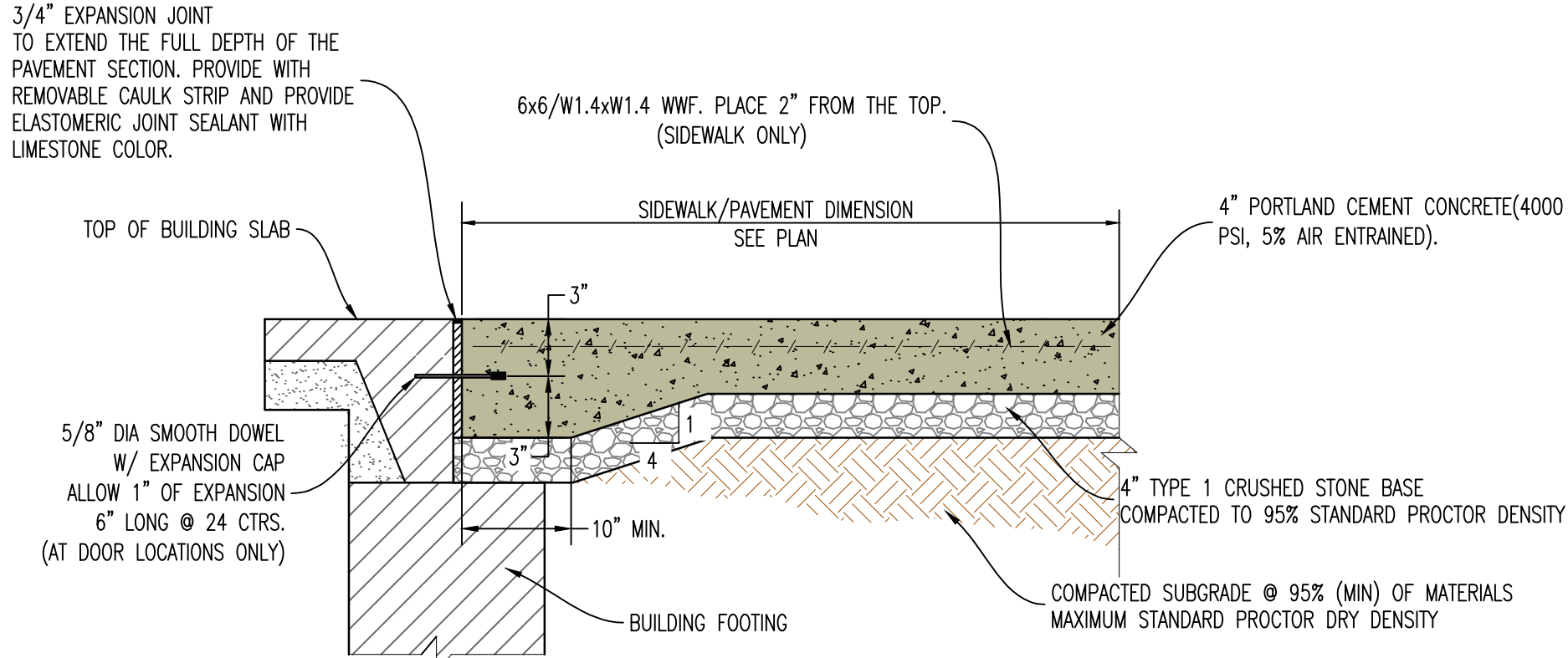
DRAWN: NMD

PROJECT NO.: 230286

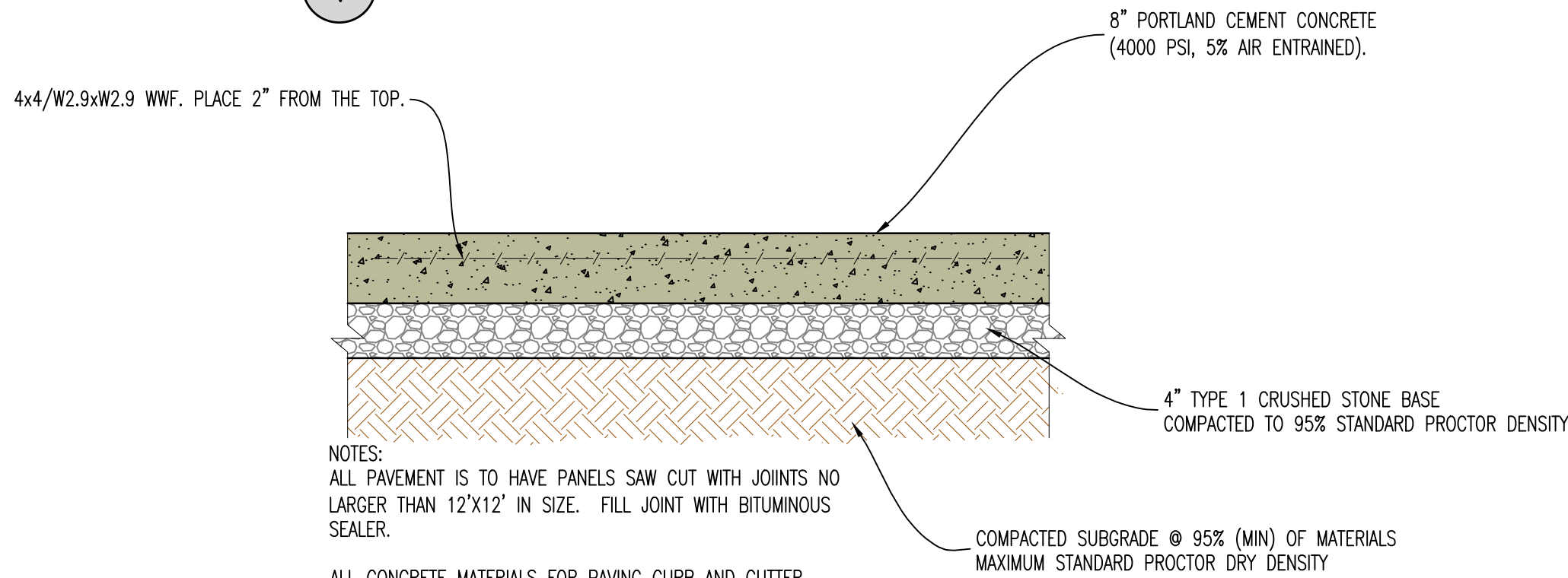
SHEET:
CE 7.2



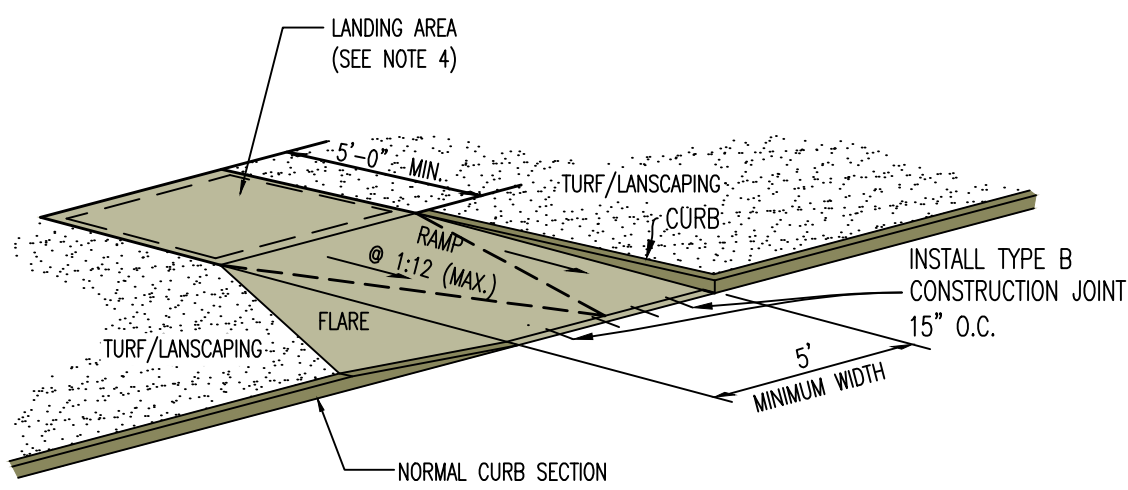
1 LIGHT DUTY CONCRETE PAVEMENT CROSS-SECTION



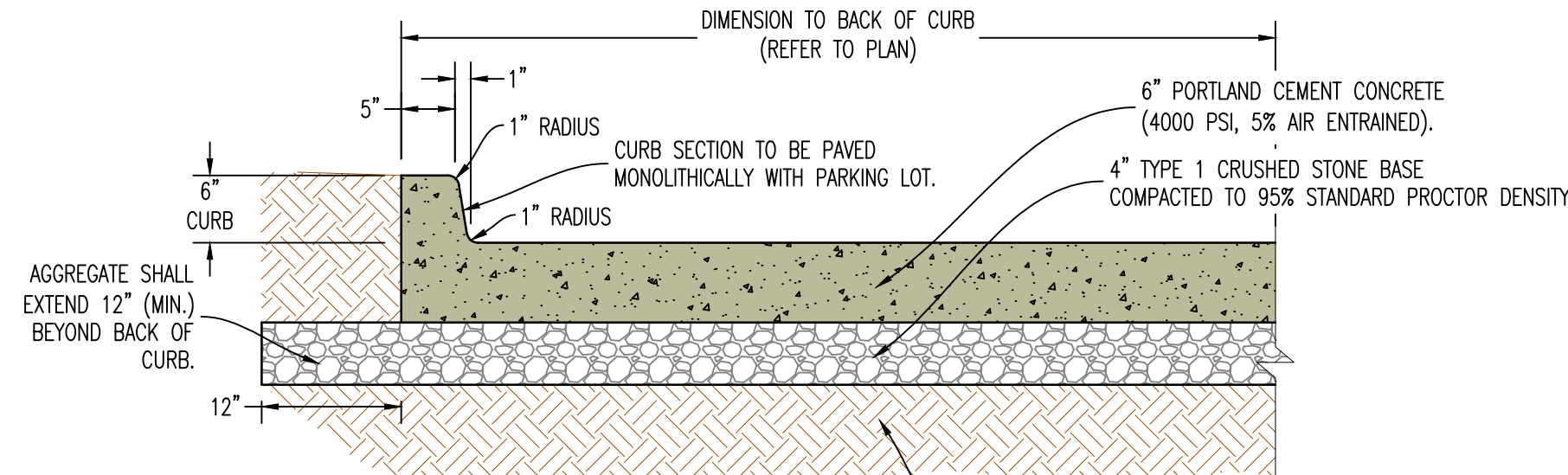
4 SIDEWALK/PAVEMENT ABUTTING BUILDING



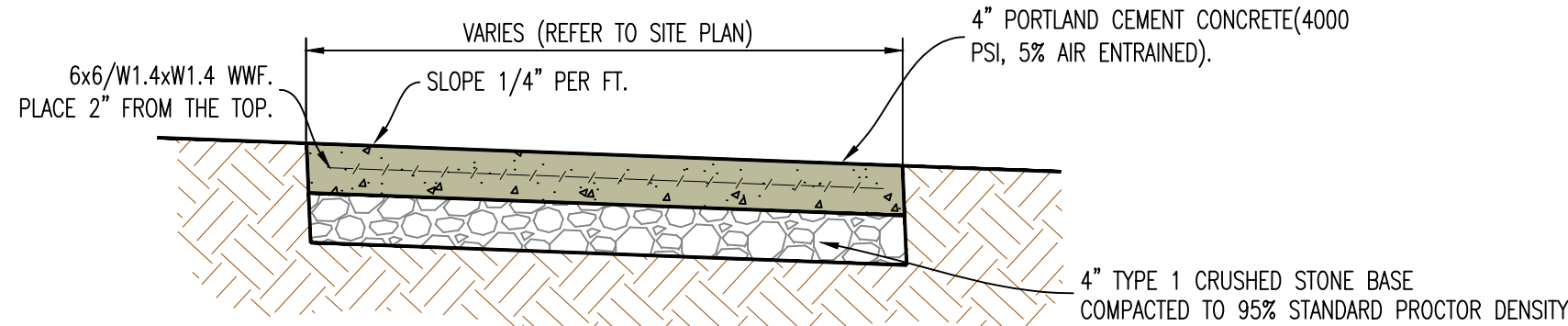
7 HEAVY DUTY CONCRETE PAVEMENT CROSS-SECTION (REINFORCED)



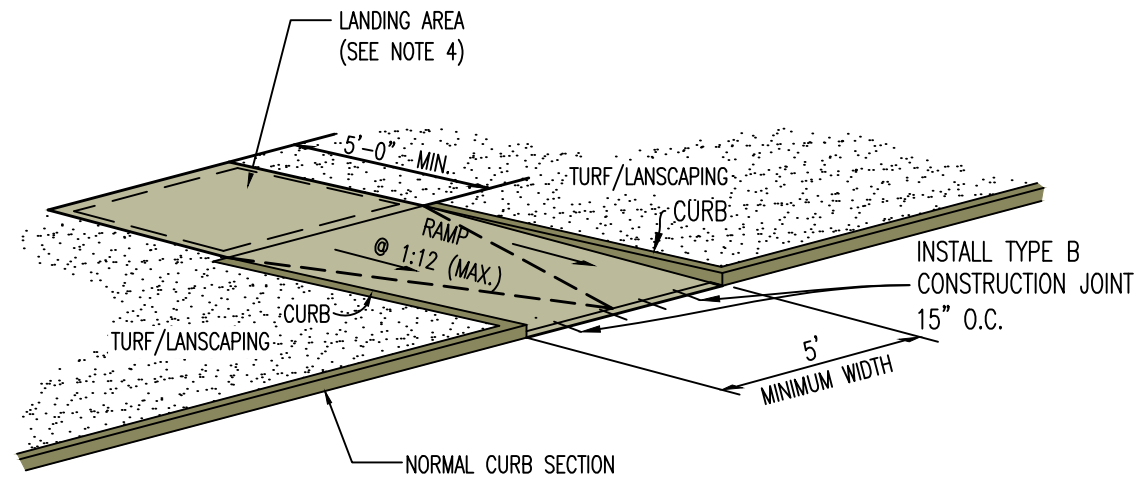
9 SIDEWALK RAMP WITH CURB AND FLARE



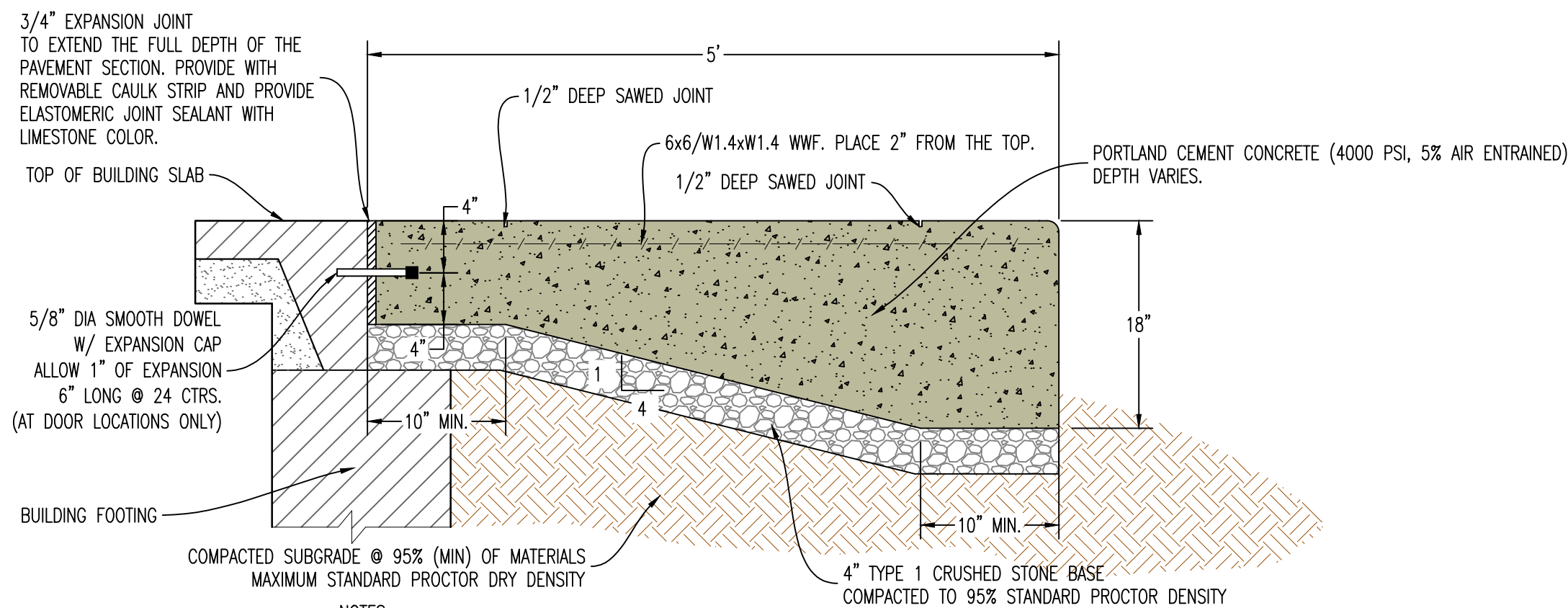
2 6 inch CONCRETE BARRIER CURB CROSS-SECTION



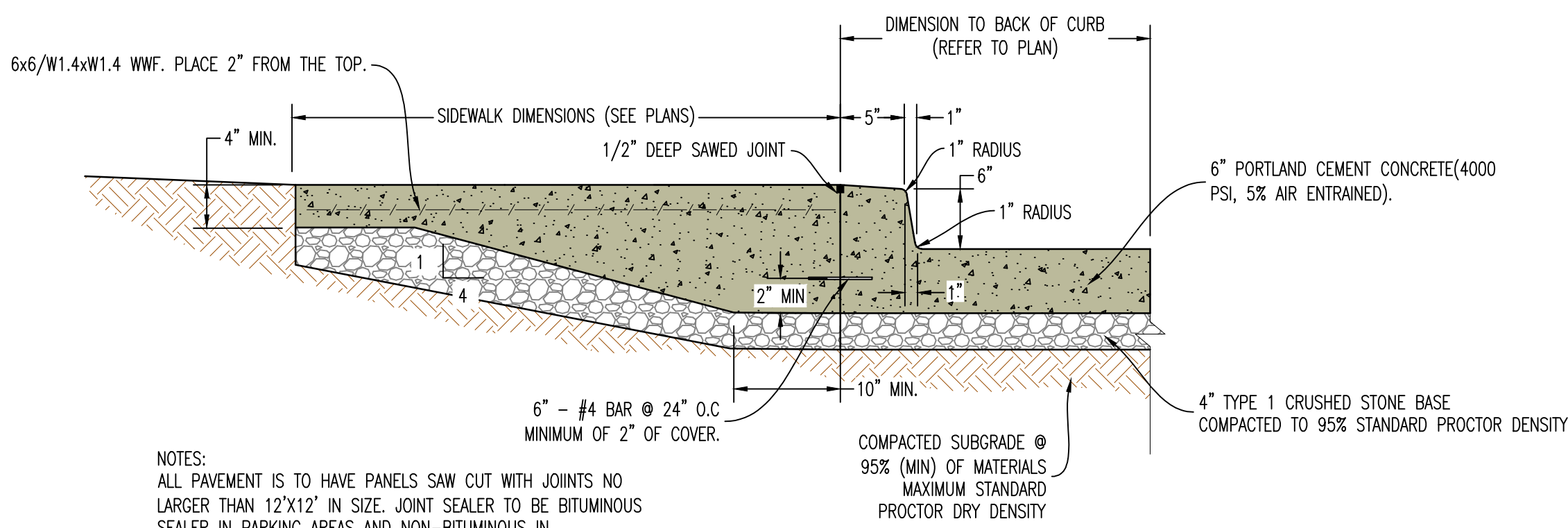
5 TYPICAL CONCRETE SIDEWALK



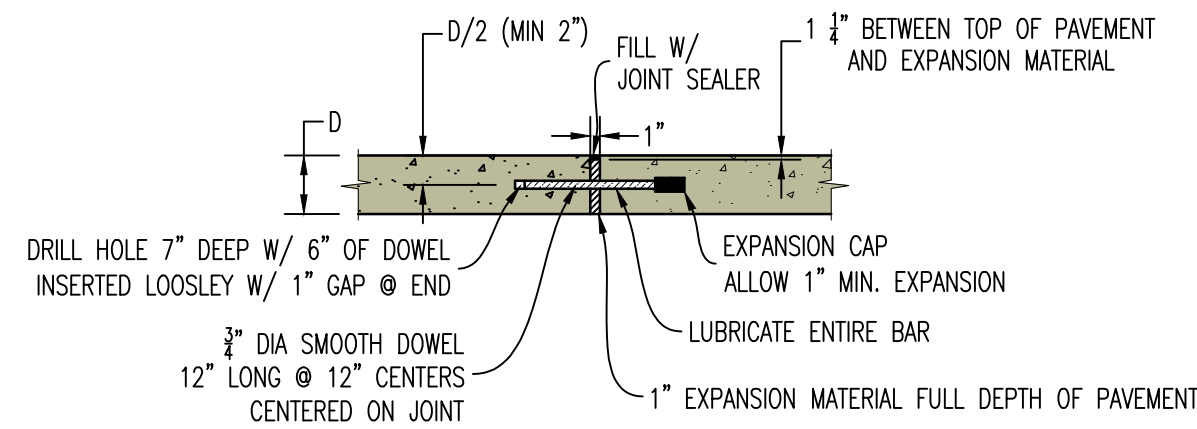
8 SIDEWALK RAMP WITH CURB



13 THICKENED EDGE SIDEWALK/PAVEMENT WITH EXPOSED FACE ABUTTING BUILDING



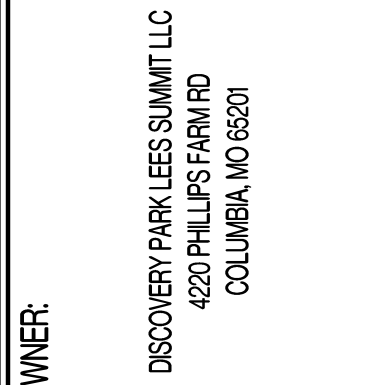
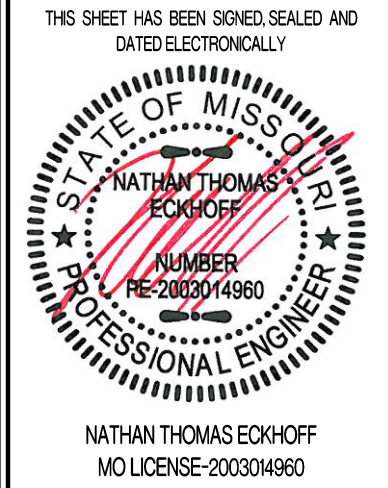
3 THICKENED EDGE SIDEWALK WITH INTEGRAL CURB & GUTTER



6 CONCRETE PAVEMENT JOINT DETAILS

REVISIONS:

NO.	DATE
ORIGINAL	05/22/2024



THE VILLAGE AT DISCOVERY
LOTS 5-8
LEES SUMMIT, JACKSON COUNTY, MISSOURI

DRAWING INCLUDES:

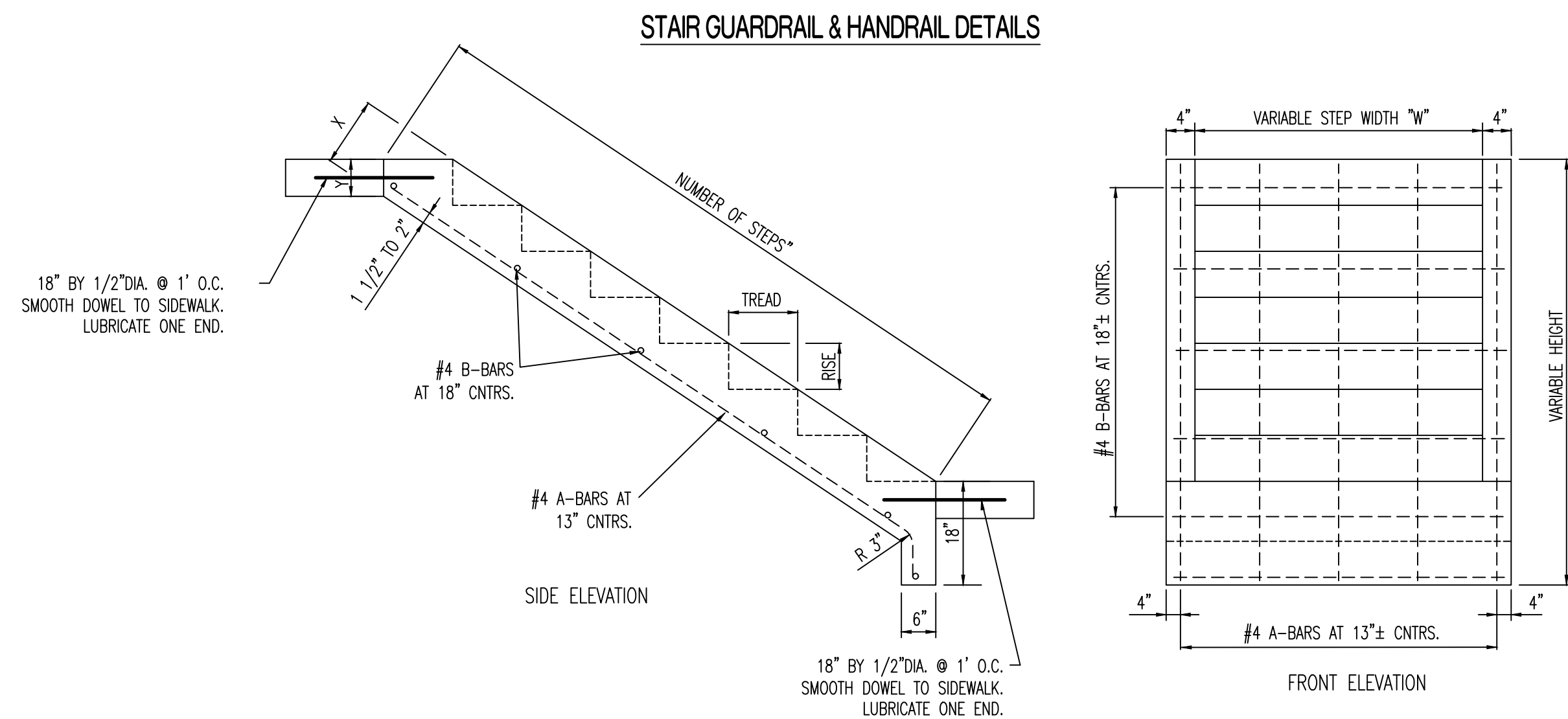
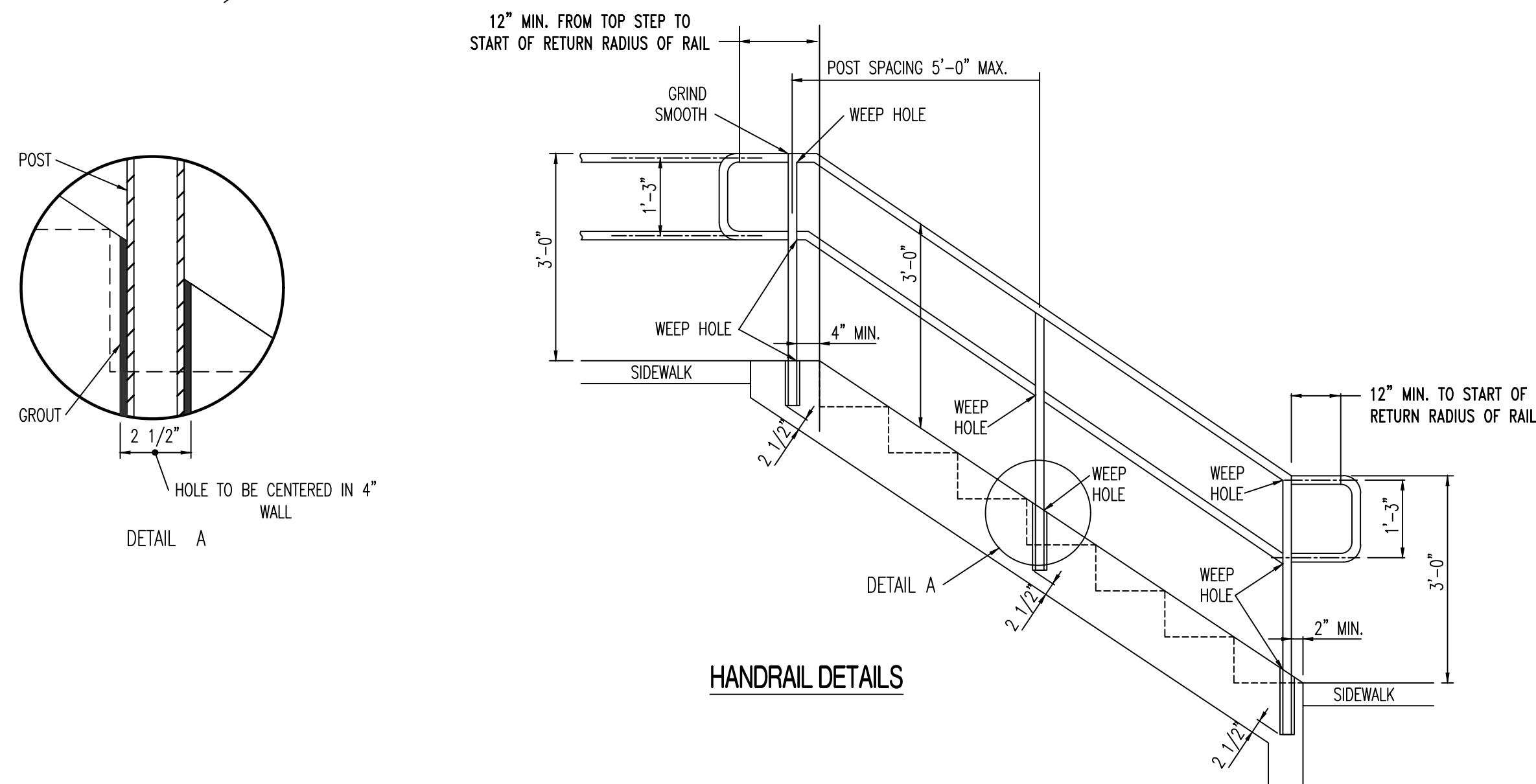
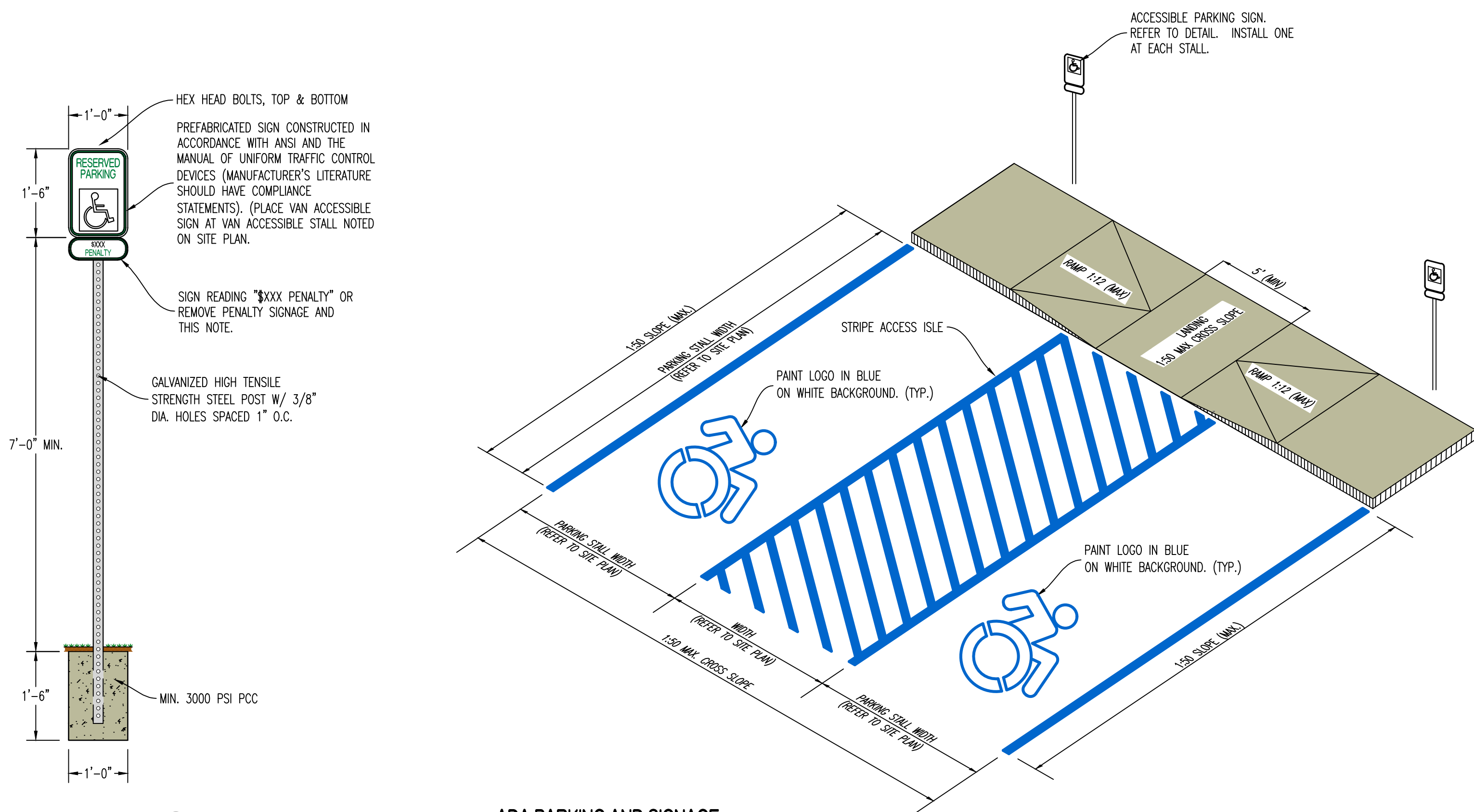
SITE DETAILS SHEET 1

DESIGNED: NTE

DRAWN: NMD

PROJECT NO.: 230286

SHEET:
CE 8.1



GENERAL NOTES:

STAIRWAY SHALL HAVE HANDRAILS AS SHOWN ON PLAN VIEW.

RAILINGS AND POSTS SHALL BE 1 1/2" ROUND STEEL OF GOOD COMMERCIAL WELDABLE QUALITY.

STEEL RAILINGS AND POSTS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH AASHTO M111.

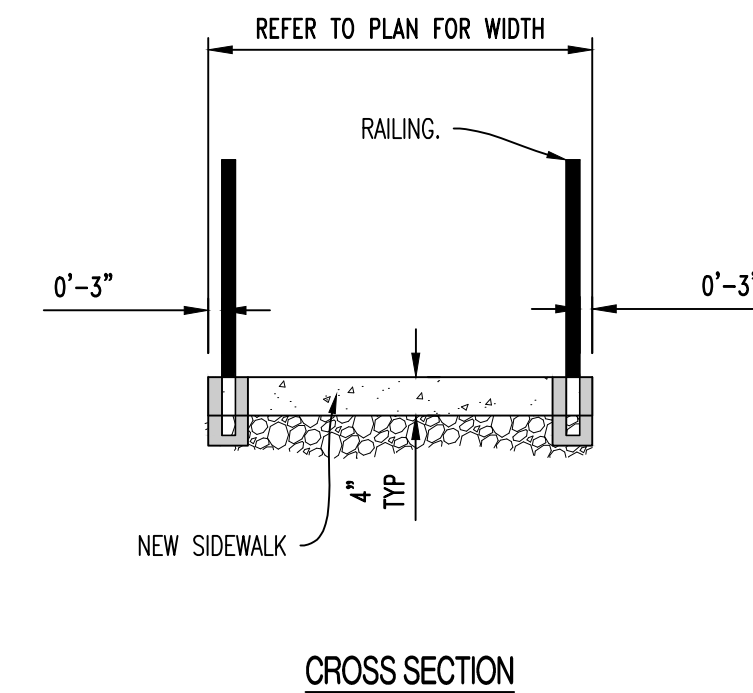
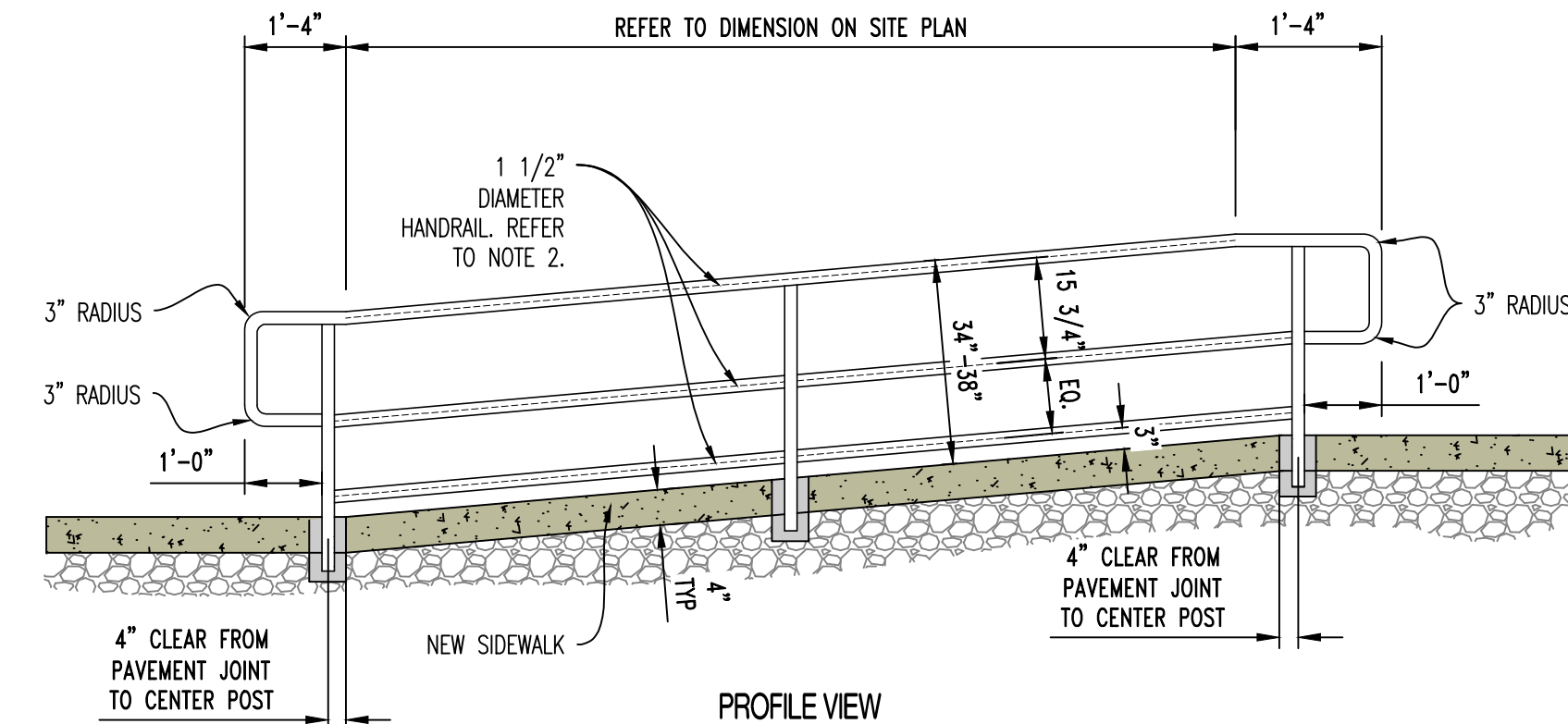
ALL JOINTS SHALL BE CONTINUOUS WELDED.

VERIFY EXACT RAILING REQUIREMENTS AND STYLE WITH OWNER
PRIOR TO FABRICATION. SUBMIT SHOP DRAWINGS TO ENGINEER FOR
REVIEW PRIOR TO FABRICATION.

RAILING TO BE 36" TALL.

ALL STEPS ON A FLIGHT OF STAIRS SHALL HAVE UNIFORM RISER HEIGHTS AND UNIFORM TREAD DEPTHS. RISERS SHALL BE 4 INCHES HIGH MINIMUM AND 7 INCHES HIGH MAXIMUM. TREADS SHALL BE 11 INCHES DEEP MINIMUM.

REFER TO GRADING SHEETS FOR RISE.



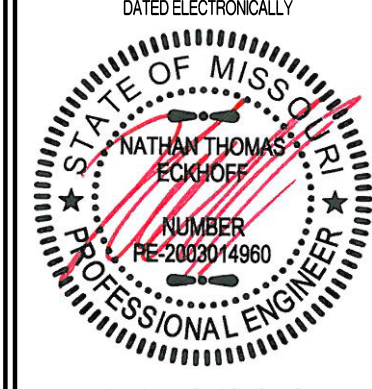
METAL RAILING SPECIFICATIONS

1. PROVIDE SHOP DRAWINGS TO ENGINEER FOR REVIEW PRIOR TO FABRICATION OR INSTALLATION.
2. RAILINGS AND POSTS SHALL BE 1-1/2" DIAMETER ROUND STEEL PIPING IN COMPLIANCE WITH ASTM A53, TYPE F OR TYPE S, GRADE A SCHEDULE 40 PIPING.
3. RAILINGS SHALL BE 34"-38" TALL FROM FINISH PAVEMENT GRADE (OR STAIR NOSING) TO THE TOP OF THE TOP RAIL.
4. MAIN RAILS AND POSTS SHALL RESIST 50 POUNDS PER LINEAL FOOT Laterally AT THE TOP RAIL, AND 200 POUNDS OF CONCENTRATED LOAD Laterally.
5. INTERMEDIATE RAILS SHALL RESIST A CONCENTRATED LOAD OF 50 POUNDS Laterally.
6. CUT, DRILL, AND PUNCH METALS CLEANLY AND ACCURATELY. REMOVE BURRS AND EASE EDGES TO A MINIMUM RADIUS OF $\frac{1}{32}$ ", UNLESS OTHERWISE INDICATED. REMOVE SHARP OR ROUGH AREAS ON EXPOSED SURFACES.
7. COPE COMPONENTS AT CONNECTIONS TO PROVIDE CLOSE FIT, OR USE FITTINGS DESIGNED FOR THIS PURPOSE. WELD ALL AROUND AT CONNECTIONS, INCLUDING FITTINGS.
8. PROVIDE CHANGES IN RAILING DIRECTION BY USING PREFABRICATED ELBOW AND RADIUS FITTINGS.
9. PROVIDE WEEP HOLES AT THE BASE OF ALL POSTS AND ANYWHERE WATER OR CONDENSATION MAY ACCUMULATE INSIDE RAILING SECTIONS
10. PROVIDE SHOP PRIMER FORMULATED FOR GALVANIZED STEEL. PROVIDE HOT-DIP GALVANIZED FINISH IN COMPLIANCE WITH ASTM A123. FOR ALL COMPONENTS. POWDER COATED BLACK WITH HIGH GLOSS ENAMEL PAINT. VERIFY FINAL COLOR WITH OWNER PRIOR TO PAINTING.
11. CLEAN FIELD WELDS AND REPAIR GALVANIZING TO COMPLY WITH ASTM A780.
12. POSTS SHALL BE SET PLUMB WITH A TOLERANCE OF $\frac{1}{16}"$ IN 3 FEET. ALIGN RAILS 50 VARIATIONS FROM LEVEL FOR HORIZONTAL MEMBERS AND VARIATIONS FROM PARALLEL WITH RAKE OF STEPS AND RAMPS FOR SLOPING MEMBERS DO NOT EXCEED $\frac{1}{4}"$ INCH IN 12 FEET.
13. PROVIDE 4" SLEEVES OR CORE DRILL CONCRETE, MINIMUM 4" RAIL EMBEDMENT BELOW PAVEMENT SECTIONS SHOWN TO RECEIVE POSTS. GROUT AROUND AROUND POSTS WITH NON-SHRINK GROUT. MIN 2" OF GROUT BELOW BOTTOM OF POST. SLOPE TOP OF GROUT OF DRAIN.
14. CAULK JOINT BETWEEN GROUT AND METAL POST WITH APPROVE JOINT SEALANT. COORDINATE COLOR WITH OWNER.

ADA RAMP HANDRAIL DETAIL

NO.	DATE
ORIGINAL	05/22/2024

THIS SHEET HAS BEEN SIGNED, SEALED AND



NATHAN THOMAS ECKHOFF
MO LICENSE-2003014960

PREPARED BY:

CROCKETT
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#00000000000000000000000000000000

OWNER:

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THE VILLAGE AT DISCOVERY
LOTS 5-8
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

DRAWING INCLUDES:

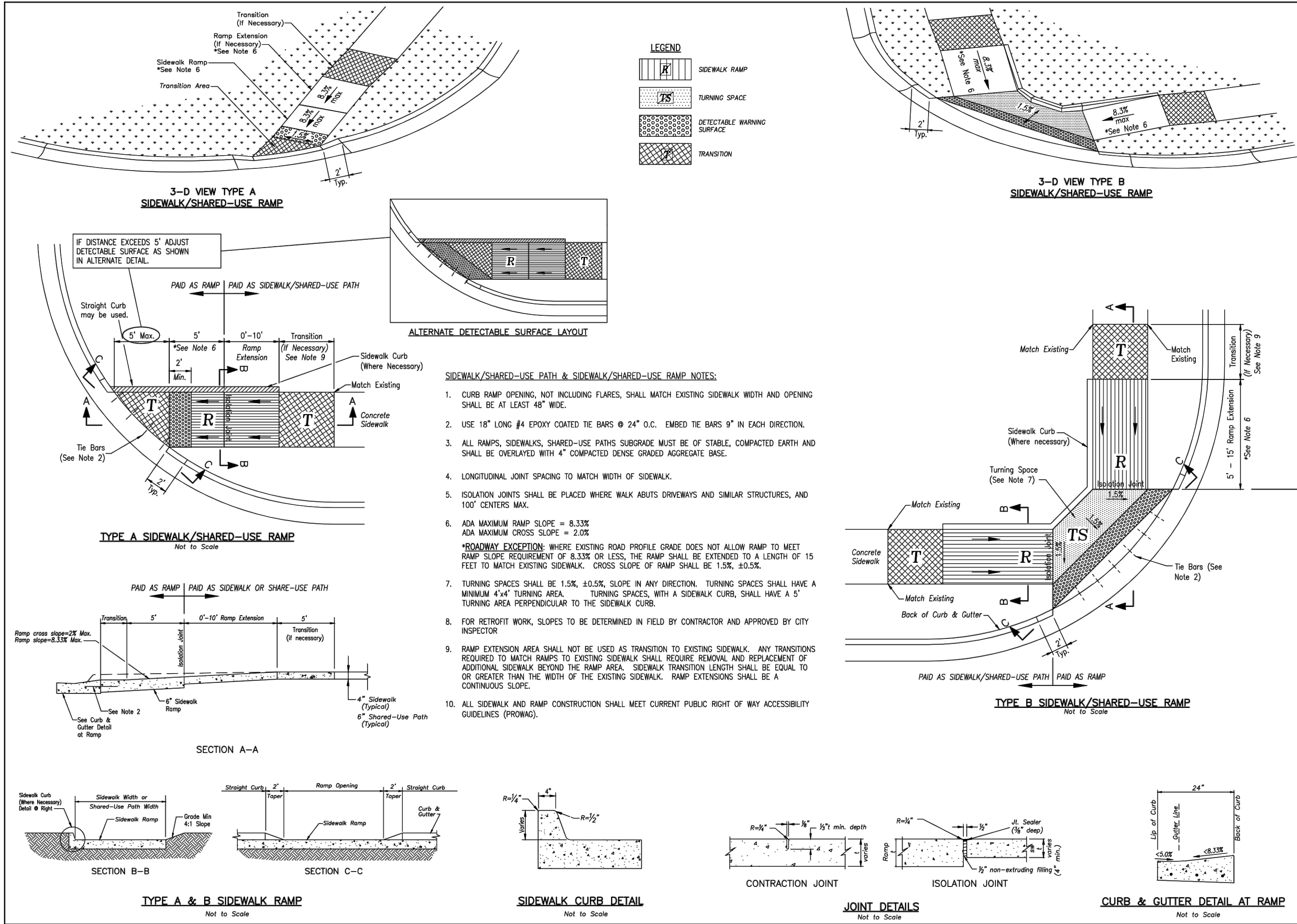
SITE DETAILS SHEET 2

DESIGNED: NTE

DRAWN: NMD

PROJECT NO.: 230286

SHEET: CE 8.2



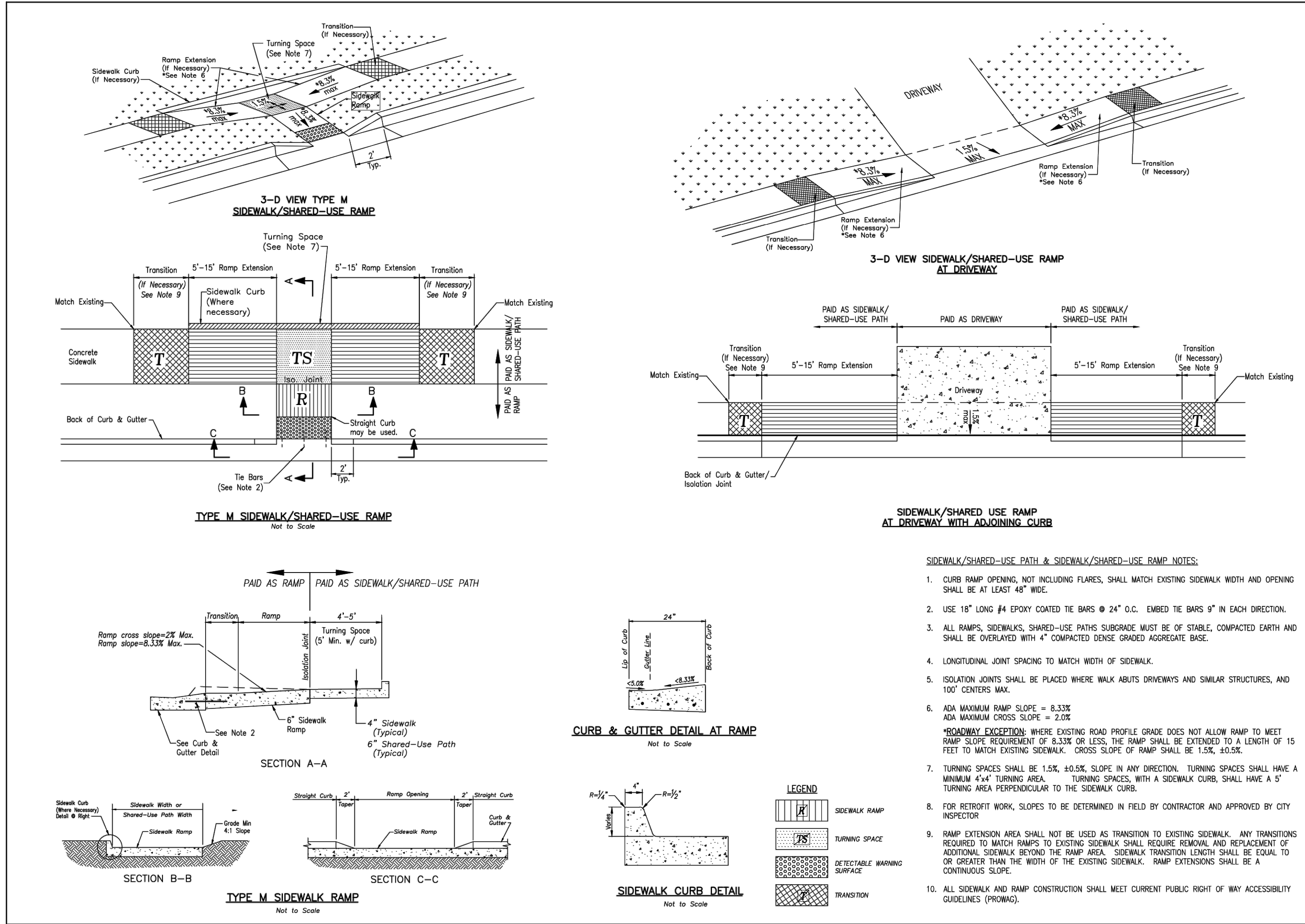
IS LEE'S SUMMIT MISSOURI

PUBLIC WORKS ENGINEERING DIVISION | 1202 S. GREEN STREET | LEE'S SUMMIT, MO 64063

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

ADA RAMP RETROFIT DETAIL

Drawn By: MAF
Checked By: DL
Date: 08/2023
Proj. #: GEN-3A



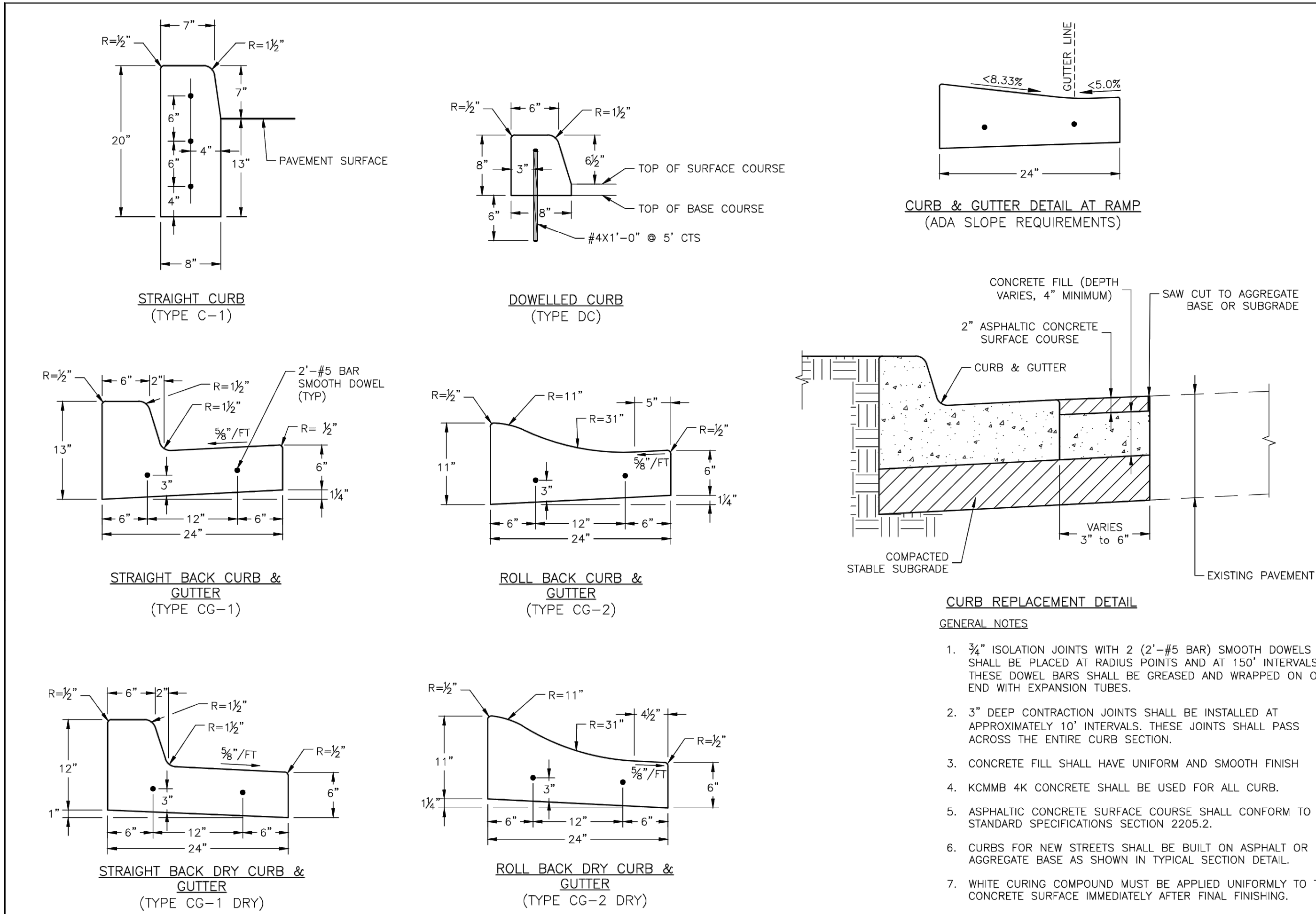
IS LEE'S SUMMIT MISSOURI

PUBLIC WORKS ENGINEERING DIVISION | 1202 S. GREEN STREET | LEE'S SUMMIT, MO 64063

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

ADA RAMP RETROFIT DETAIL

Drawn By: MAF
Checked By: DL
Date: 08/2023
Proj. #: GEN-3B



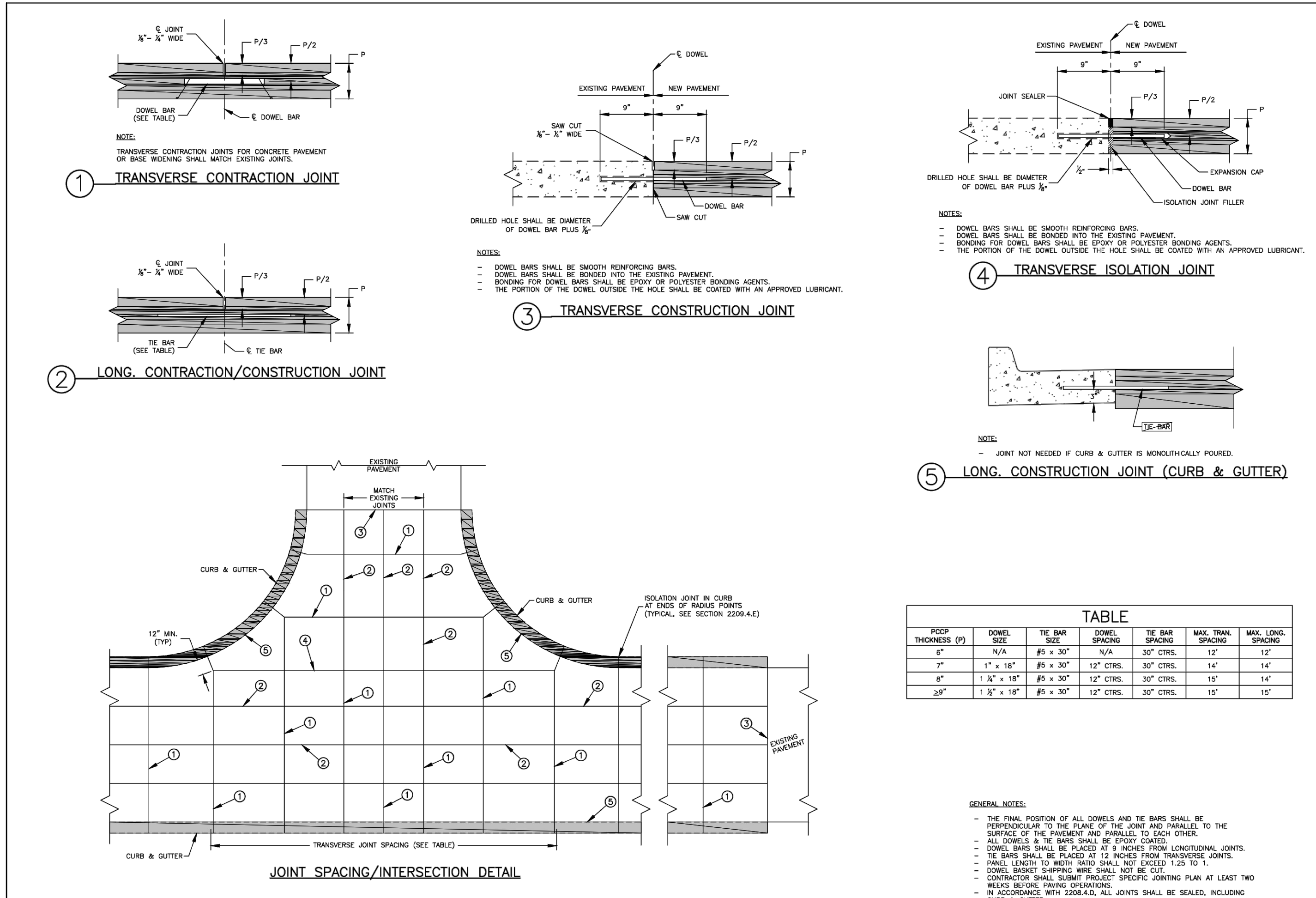
IS LEE'S SUMMIT MISSOURI

PUBLIC WORKS ENGINEERING DIVISION | 1202 S. GREEN STREET | LEE'S SUMMIT, MO 64063

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

CURB & GUTTER DETAIL

Drawn By: MAF
Checked By: DL
Date: 08/2023
Proj. #: GEN-4



IS LEE'S SUMMIT MISSOURI

PUBLIC WORKS ENGINEERING DIVISION | 1202 S. GREEN STREET | LEE'S SUMMIT, MO 64063

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

TYPICAL PAVEMENT JOINT DETAILS

Drawn By: MAF
Checked By: GMB
Date: 08/2023
Proj. #: GEN-10

REVISIONS:

NO.	DATE
ORIGINAL	05/27/2024

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

NATHAN THOMAS ECKHOFF
PROFESSIONAL ENGINEER
NUMBER: PE-2003014960
MO LICENSE: 200304960

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www.crockettingeering.com
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THE VILLAGE AT DISCOVERY
LOTS 5-8
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

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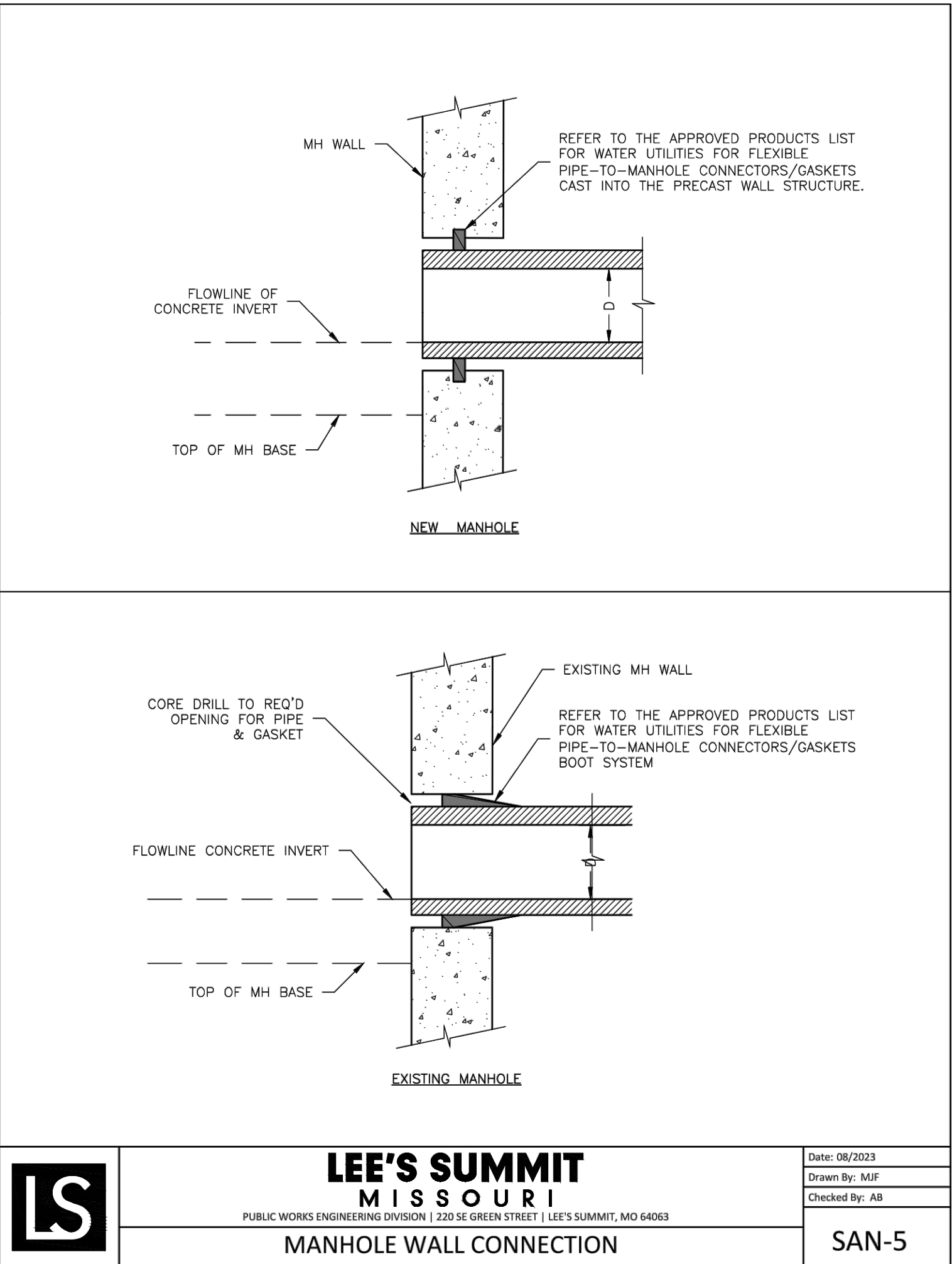
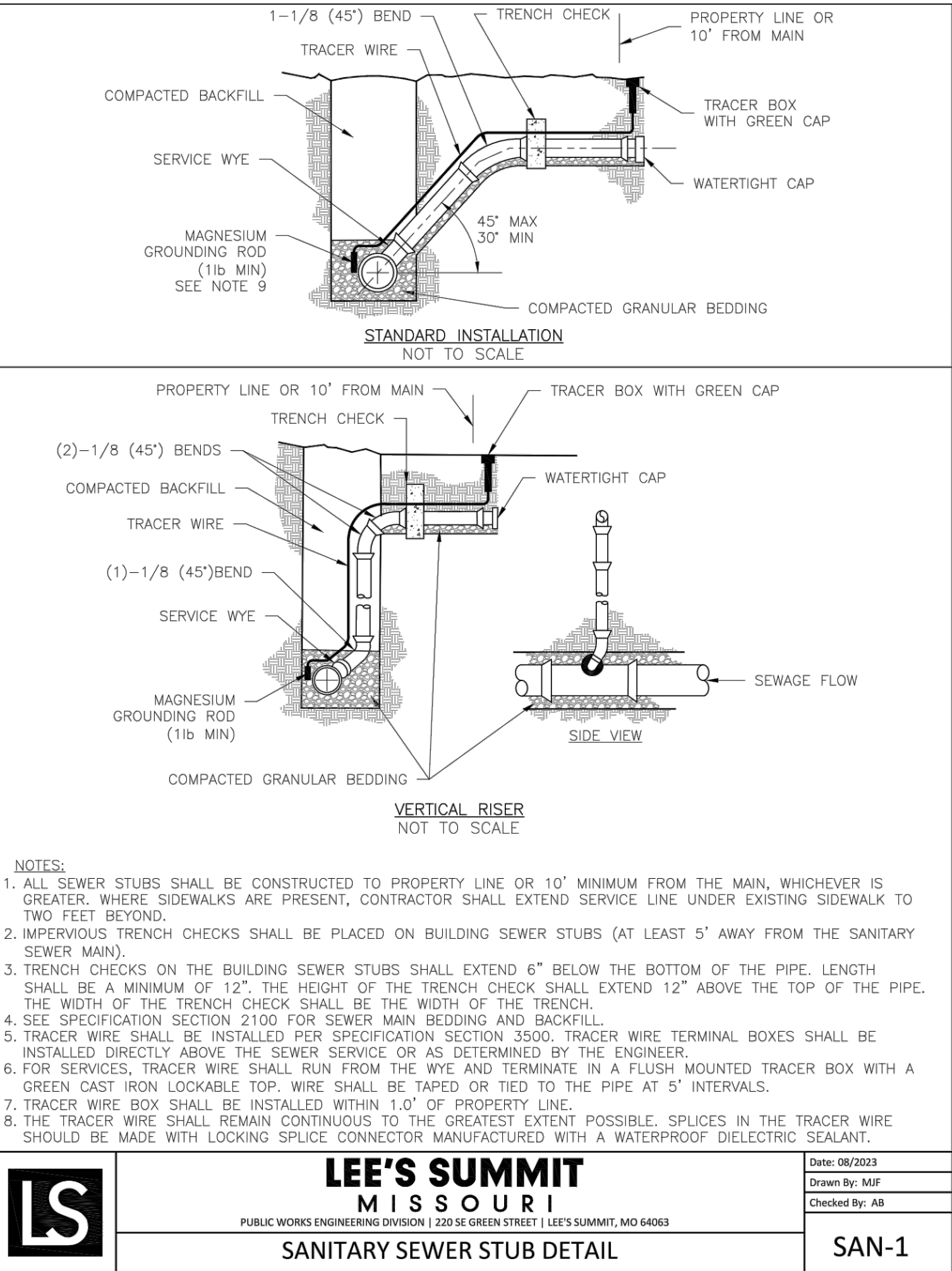
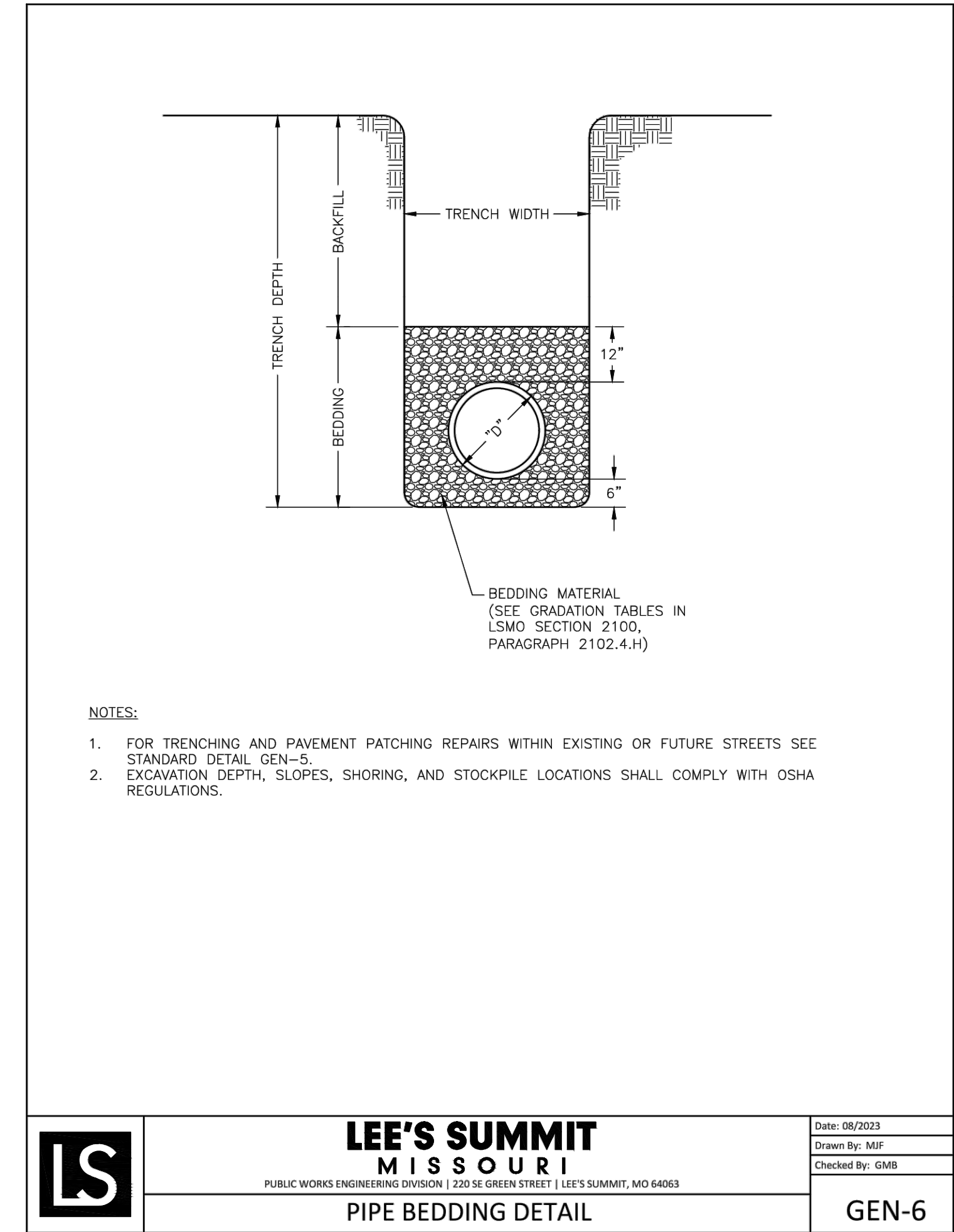
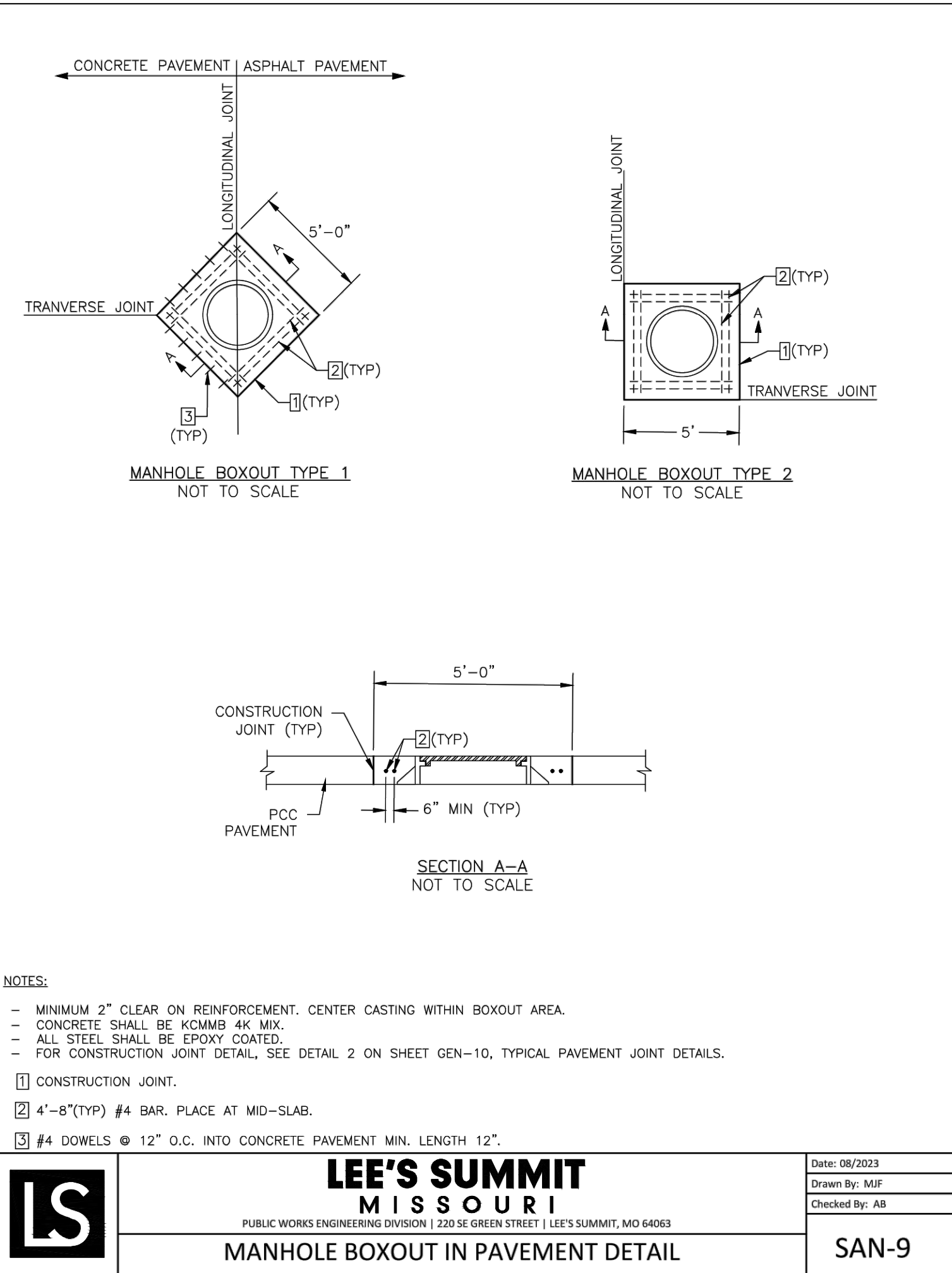
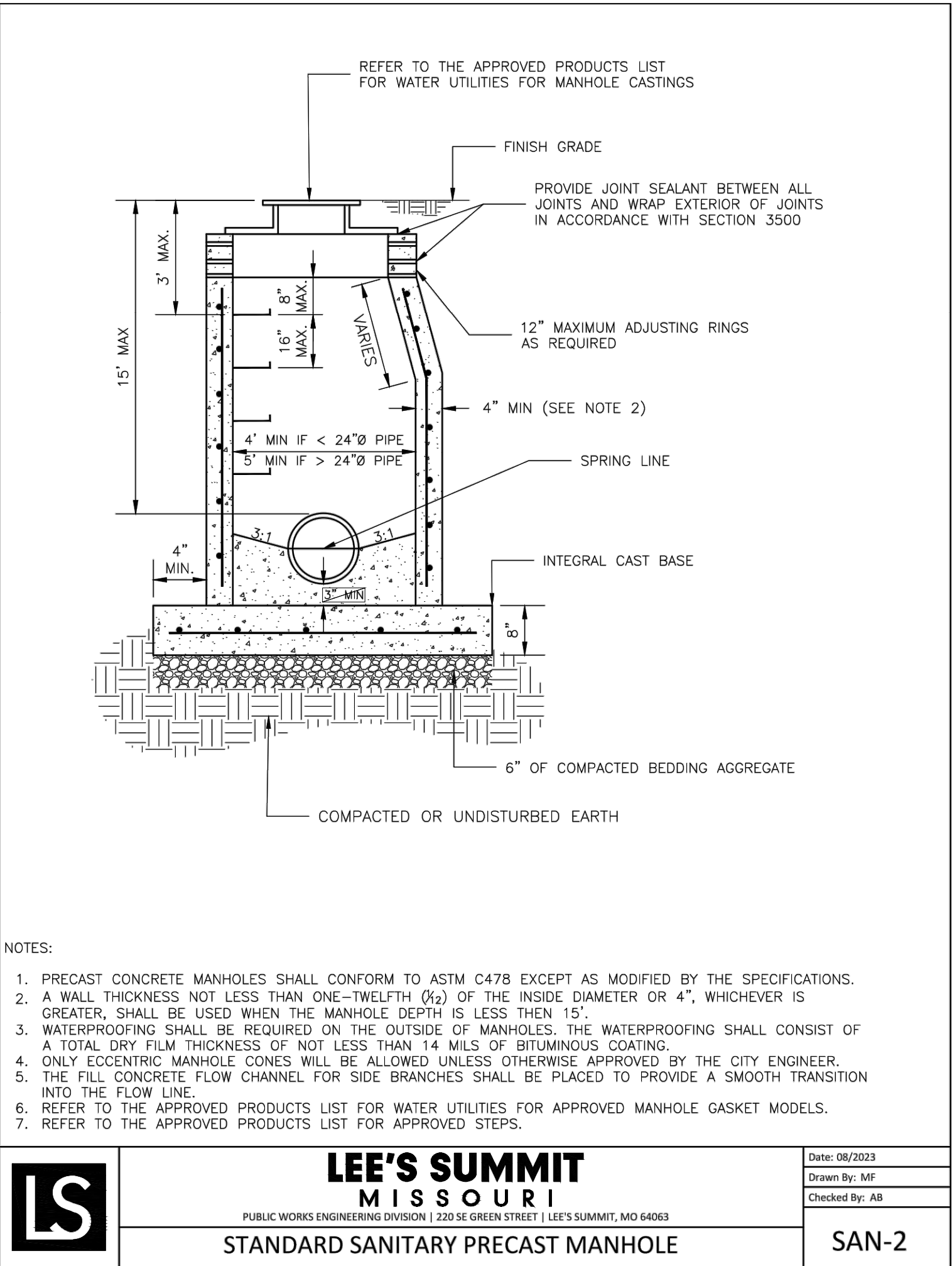
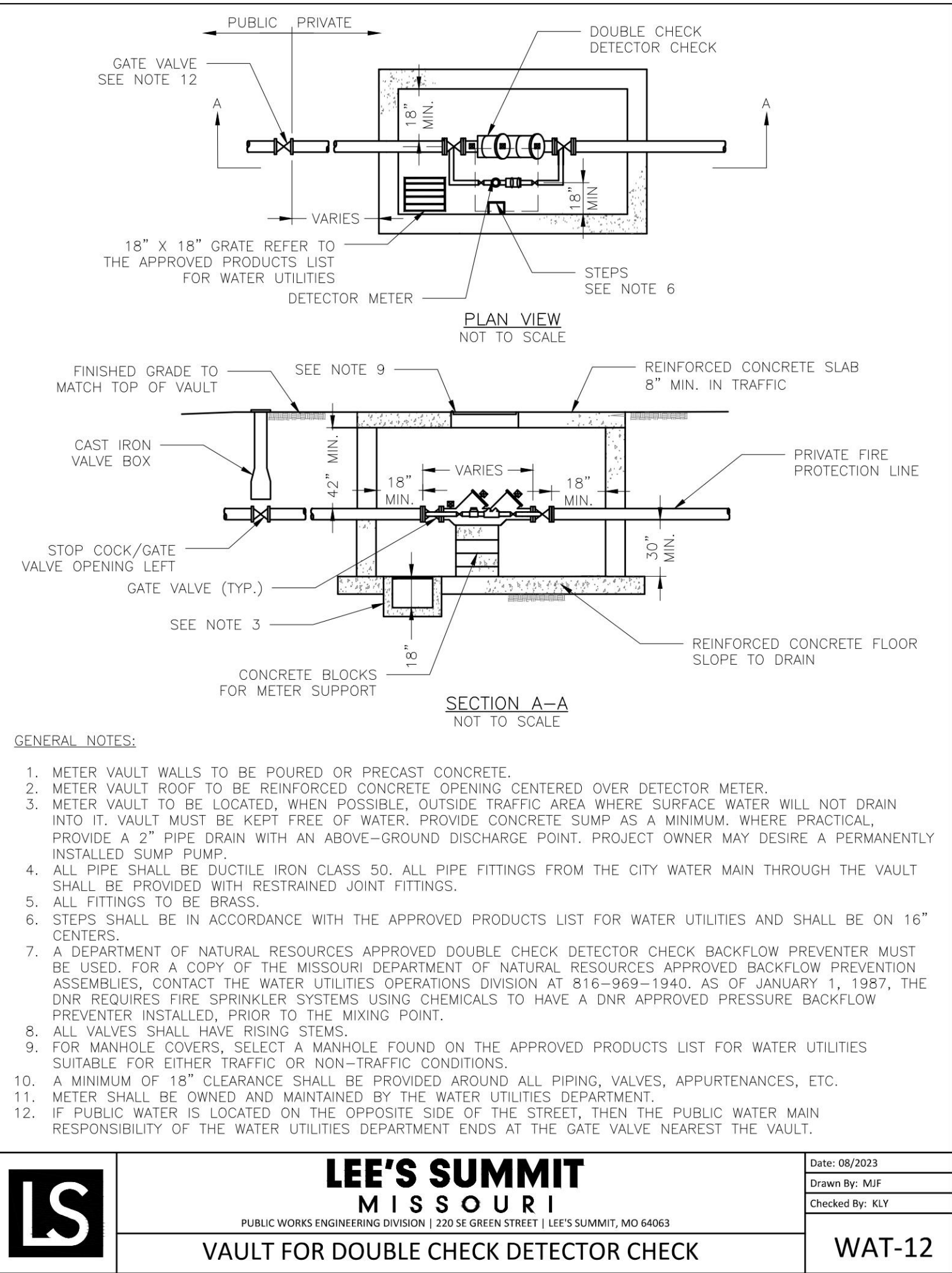
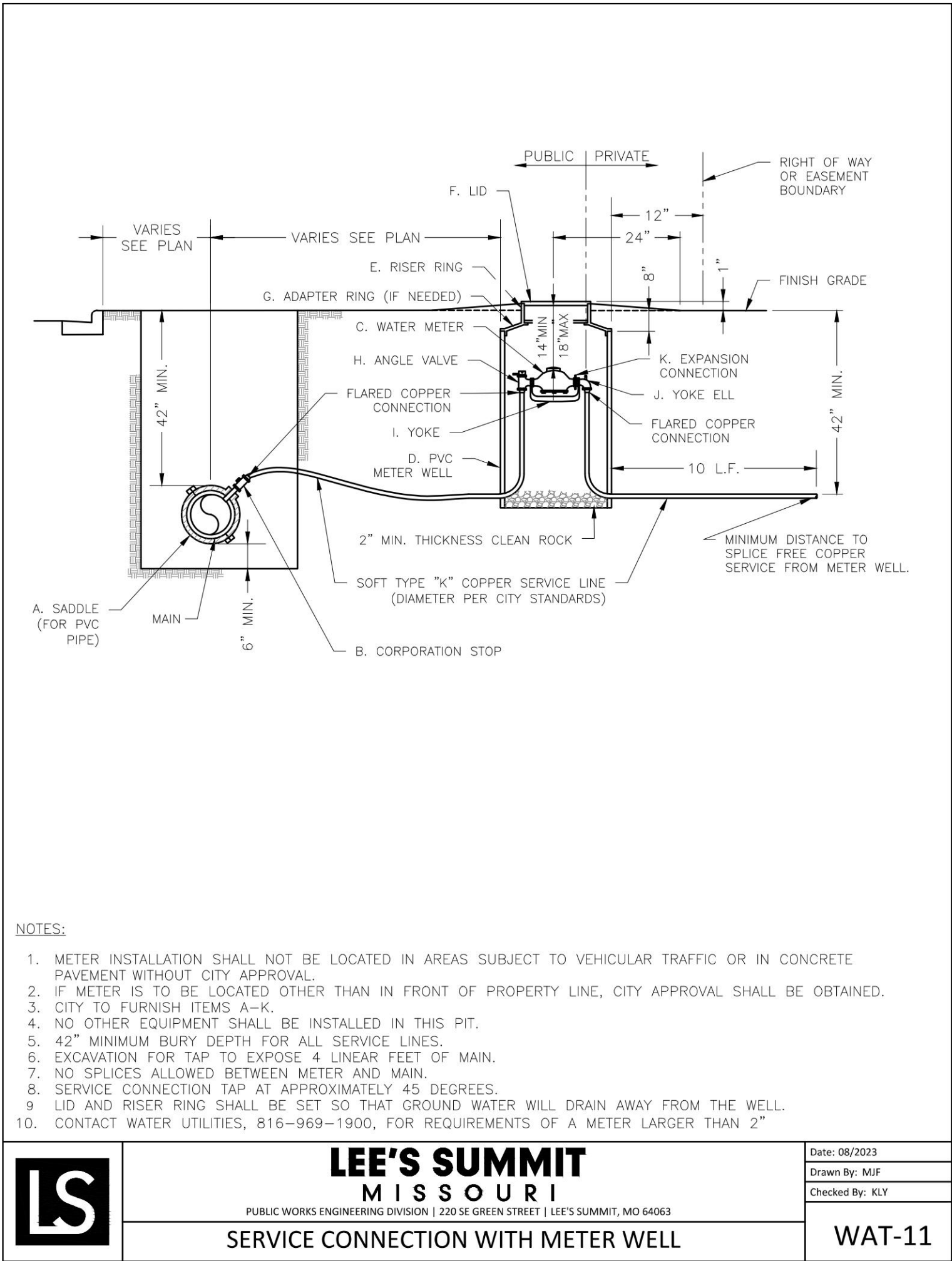
LEE'S SUMMIT SITE DETAILS

DESIGNED: NTE

DRAWN: NMD

PROJECT NO.: 230286

SHEET: CE 8.3



REVISIONS:

NO.	DATE
ORIGINAL	05/27/2024

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STATE OF MISSOURI

NATHAN THOMAS ECKHOFF

PROFESSIONAL ENGINEER

NUMBER: PE-2003014960

MO LICENSE: 200304960

PREPARED BY:

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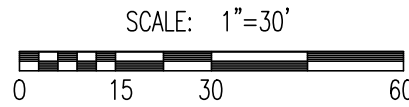
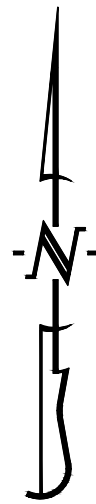
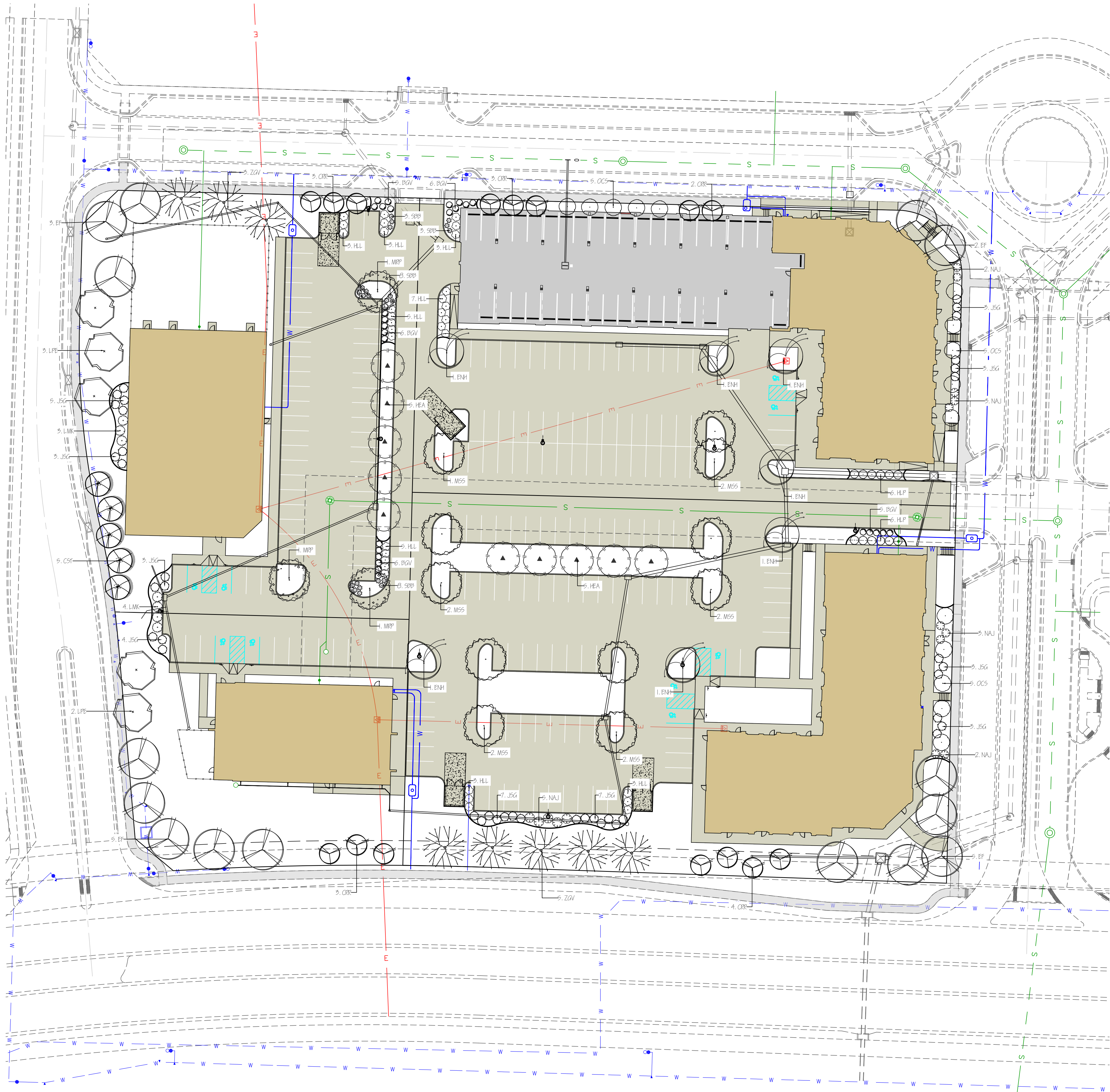
LEE'S SUMMIT UTILITY DETAILS

DESIGNED: NTE

DRAWN: NMD

PROJECT NO.: 230286

SHEET: CE 8.4



LANDSCAPE COMPLIANCE: LOTS 5-8

LEE'S SUMMIT, MISSOURI
CODE OF ORDINANCES: DIVISION III - LANDSCAPING, BUFFERS, AND TREE PROTECTION
SITE ZONED: CP-2, PROPOSED: PMIX

STREET FRONTAGE TREES

1 TREE PER 30 FEET OF STREET FRONTAGE		
DISCOVERY AVE - 403 LF STREET FRONTAGE	14 TREES REQUIRED	14 TREES PROPOSED
ALLURA WAY - 512 LF STREET FRONTAGE	18 TREES REQUIRED	18 TREES PROPOSED
TRAILSEDGE - 406 LF STREET FRONTAGE	14 TREES REQUIRED	14 TREES PROPOSED
NW COLBURN RD - 484 LF STREET FRONTAGE	17 TREES REQUIRED	17 TREES PROPOSED

OPEN YARD TREES

1 TREE PER 5,000 SF OF TOTAL LOT AREA, EXCLUDING BUILDING FOOTPRINT		
TOTAL LOT AREA = 154,598 SF	31 TREES REQUIRED	31 TREES PROPOSED

STREET FRONTAGE SHRUBS

1 SHRUB PER 20 FEET OF STREET FRONTAGE		
DISCOVERY AVE - 403 LF STREET FRONTAGE	21 SHRUBS REQUIRED	21 SHRUBS PROPOSED
ALLURA WAY - 512 LF STREET FRONTAGE	26 SHRUBS REQUIRED	26 SHRUBS PROPOSED
TRAILSEDGE - 406 LF STREET FRONTAGE	21 SHRUBS REQUIRED	21 SHRUBS PROPOSED
NW COLBURN RD - 484 LF STREET FRONTAGE	25 SHRUBS REQUIRED	25 SHRUBS PROPOSED

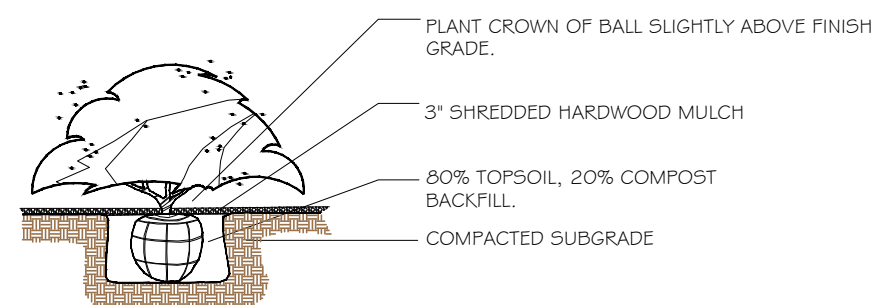
OPEN YARD SHRUBS

2 SHRUBS PER 5,000 SF OF TOTAL LOT AREA, EXCLUDING BUILDING FOOTPRINT		
TOTAL LOT AREA = 154,598 SF	62 SHRUBS REQUIRED	62 SHRUBS PROPOSED

PLANTING SCHEDULE:

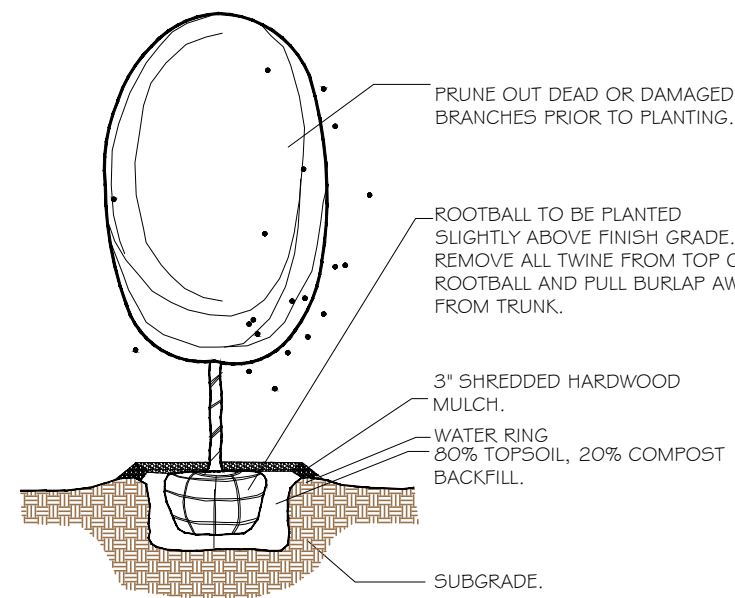
QUANTITY	SYMBOL	PLANT NAME	PLANT TYPE	SIZE
15	EF	ELM 'FRONTIER'	MEDIUM / LARGE TREE	3"
8	ZOV	ZEKOVIA 'GREEN VASE'	MEDIUM / LARGE TREE	3"
11	MSS	MIYABI MAPLE 'STATE STREET'	MEDIUM / LARGE TREE	3"
5	LPE	LONDON PLANETREE 'EXCLAMATION'	MEDIUM / LARGE TREE	3"
7	ENH	ELM 'NEW HORIZON'	MEDIUM / LARGE TREE	3"
15	OCS	OAK 'CRIMSON SPIRE'	MEDIUM / LARGE TREE	3"
10	HEA	HORNBEAM 'EMERALD AVE'	MEDIUM / LARGE TREE	3"
3	MRP	MAPLE 'RED POINTE'	MEDIUM / LARGE TREE	3"
5	CST	CRABAPPLE 'SUGARTIME'	ORNAMENTAL TREE	2"
15	CRR	CRABAPPLE 'ROYAL RANDROPS'	ORNAMENTAL TREE	2"
15	NAJ	NINEBARK 'AMBER JUBILEE'	DECIDUOUS SHRUB	#5
32	HLL	HYDRANGEA 'LITTLE LIME'	DECIDUOUS SHRUB	#5
7	LMK	LILAC 'MISS KIM'	DECIDUOUS SHRUB	#5
12	HLP	HYDRANGEA 'LITTLE LIME PUNCH'	FLOWERING SHRUB	#5
22	SBB	SPIREA 'BIG BANG'	DECIDUOUS SHRUB	#5
28	BOV	BOXWOOD 'GREEN VELVET'	EVERGREEN SHRUB	#5
40	JSG	JUNIPER 'SEA GREEN'	EVERGREEN SHRUB	#5

- THE PLANT LIST IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL VERIFY ALL PLANT COUNTS AND IF A DISCREPANCY EXISTS THE PLAN SHALL GOVERN.
- LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR BECOMING AWARE OF ALL UNDERGROUND UTILITIES, PIPES, AND STRUCTURES. THE LANDSCAPE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES FOR FIELD LOCATION OF ALL UNDERGROUND UTILITY LINES PRIOR TO ANY EXCAVATION.
- LANDSCAPE CONTRACTOR TO RECEIVE SITE GRADED TO +/-0.10 FOOT OF FINISHED GRADE.
- PLANTING BACK FILL MIX IS TO CONSIST OF 80% NATIVE TOPSOIL, AND 20% ORGANIC MATTER.
- SHRUB BEDS, BERMS, AND TREE WELLS ARE TO BE MULCHED WITH 3-4" DYED HARDWOOD MULCH.
- ALL BED AND LAWN AREAS SHALL BE IRRIGATED.
- ALL LAWN AREAS TO BE SODDED WITH TALL FESCUE SOD.
- LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF TWELVE MONTHS.
- ALL PLANTING BEDS AND TREE RINGS TO BE SEPARATED FROM TURF AREAS BY "V" TRENCHING.
- ALL PLANT MATERIAL MUST MEET THE SPECIFICATIONS OF THE AMERICAN ASSOCIATION OF NURSERYMEN.
- PLANT LOCATIONS MAY BE ADJUSTED ONSITE TO AVOID UTILITIES, SITE FEATURES, ETC.



SHRUB / PERENNIAL PLANTING DETAIL

Not To Scale



DECIDUOUS TREE PLANTING DETAIL

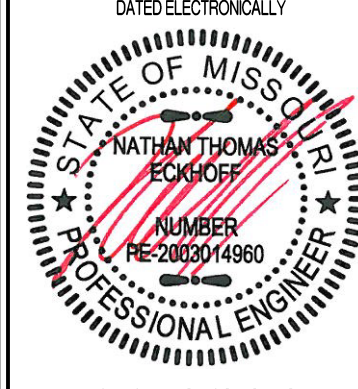
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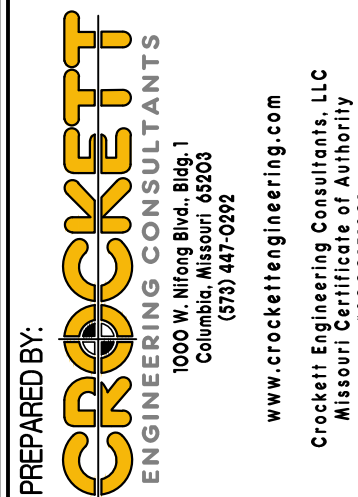
REVISIONS:

NO.	DATE
ORIGINAL	05/22/2024

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY



NATHAN THOMAS ECKHOFF
MO LICENSE 200304960



OWNER:
DISCOVERY PARK LEE'S SUMMIT LLC
4220 PHILLIPS FARM RD
COLUMBIA, MO 65201

THE VILLAGE AT DISCOVERY PARK
LOTS 5-8
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

DRAWING INCLUDES:

LANDSCAPING PLAN

DESIGNED: NTE

DRAWN: NMD

PROJECT NO.: 230286

SHEET:
CE 9.1

SITE LIGHTING PLAN SYMBOL LEGEND

X1

"X1" INDICATES FIXTURE TYPE (REFER TO SCHEDULE)

POLE LIGHT

ARROW INDICATES FORWARD AIMING DIRECTION

+
1.1

PHOTOMETRIC CALCULATIONS (IN FOOT-CANDELES)

- SITE LIGHTING PLAN GENERAL NOTES:
- SITE PHOTOMETRIC VALUES SHOWN HAVE BEEN CALCULATED PER SPECIFIED LIGHT FIXTURES AT INDICATED MOUNTING HEIGHTS. ANY CHANGES OR ALTERATIONS TO LIGHTING LAYOUT SHOWN WILL REQUIRE RECALCULATING SITE PHOTOMETRICS AND WILL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR / EQUIPMENT SUPPLIER.
 - PHOTOMETRIC CALCULATIONS SHOWN DO NOT INCLUDE EXISTING LIGHT FIXTURE(S), ONLY NEW POLE LIGHT FIXTURE(S) SHOWN.
 - SEE SHEET EL101 FOR BUILDING MOUNTED EXTERIOR LIGHT FIXTURE CIRCUITING AND ADDITIONAL DETAILS.
 - BUILDING-MOUNTED EXTERIOR LIGHTING IS NOT YET DESIGNED FOR PROPOSED BUILDINGS. ALL BUILDING-MOUNTED LIGHTING WILL BE INTENDED AS ACCENT LIGHTING AND NOT INTENDED TO PROVIDE GENERAL AREA LIGHTING. ALL BUILDING-MOUNTED LIGHTING SHALL COMPLY WITH CITY OF LEE'S SUMMIT UDO SECTIONS 8.220, 8.260, & 8.270.

TRAILSEDGE BLVD.

ALURA WAY

PROPOSED
NEW BUILDING 'LOT 8'

PROPOSED
NEW BUILDING 'LOT 7'

PROPOSED
NEW BUILDING 'LOT 6'

PROPOSED
NEW BUILDING 'LOT 5'



SITE LIGHTING PLAN

SCALE: 1" = 20 ft

STATE OF MISSOURI

JAMES P. WATSON

NUMBER PE-2015017071

PROFESSIONAL ENGINEER

James Watson, P.E.

May 24, 2024

PE-2015017071

MO Certificate of Authority # 2018029680

J-SQUARED
ENGINEERING

2400 Bluff Creek Drive, Suite 101
Columbia, Missouri 65201
573 - 234 - 4492 phone
www.j-squaredeng.com

J2 PROJECT No:	J21209.1
J2 DESIGN:	ACW
ISSUE TITLE	DATE
FDP SUBMITTAL	05 / 24 / 2024

Mechanical - Electrical - Plumbing Design Drawings for

Discovery Lots 5-8 Site Lighting Plan

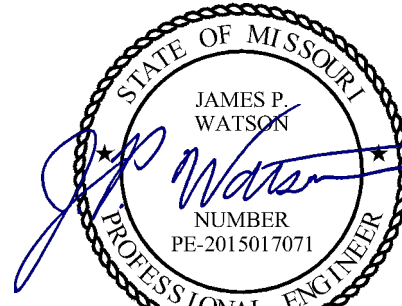
Lots 5-8
Lee's Summit, Jackson County, MO 64064

SHEET TITLE

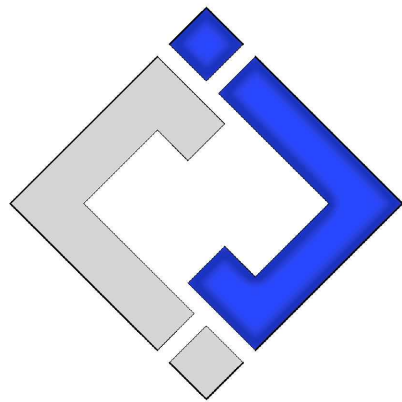
SITE LIGHTING
PLAN

SHEET NUMBER

SL1



James Watson, P.E. May 24, 2024
PE-2015017071
MO Certificate of Authority # 2018029680



J-SQUARED
ENGINEERING
2400 Bluff Creek Drive, Suite 101
Columbia, Missouri 65201
573 - 234 - 4492 phone
www.j-squaredeng.com

J2 PROJECT No: J21209.1

J2 DESIGN: ACW

ISSUE TITLE DATE

FDP SUBMITTAL 05 / 24 / 2024

Mechanical - Electrical - Plumbing Design Drawings for

Discovery Lots 5-8 Site Lighting Plan

Lots 5-8
Lee's Summit, Jackson County, MO 64064

SHEET TITLE

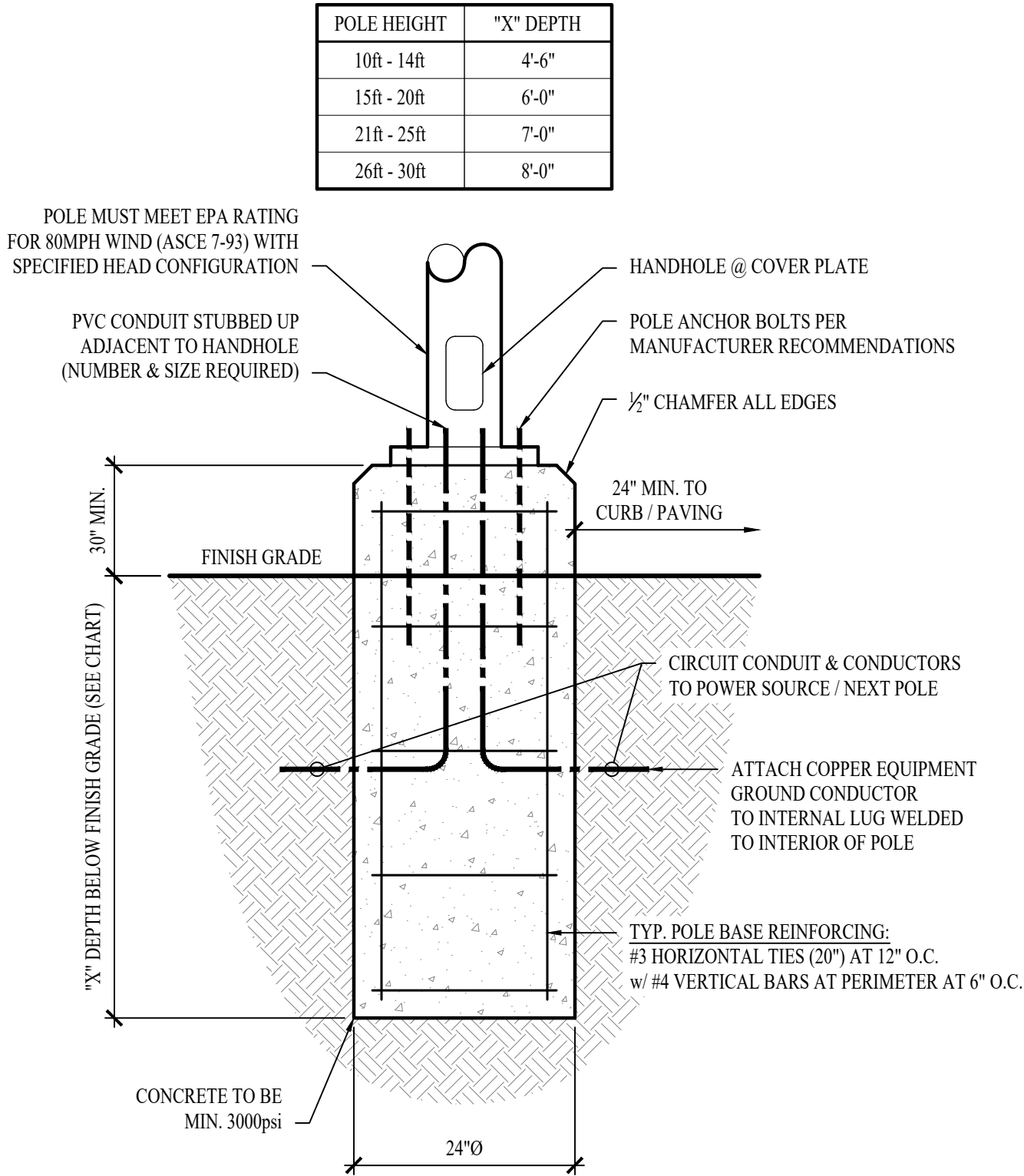
SITE LIGHTING
PLAN

SHEET NUMBER

SL1

SITE LIGHTING CALCULATION SUMMARY						
AREA	UNIT	AVERAGE	MAXIMUM	MINIMUM	AVG.MIN	MAX.MIN
PARKING/DRIVE- AISLES	FC	2.25	7.5	0.6	3.8	12.5

SITE LIGHTING FIXTURE SCHEDULE										
TAG	MANUFACTURER (OR EQUAL)	MODEL NUMBER (OR EQUAL)	DESCRIPTION	MOUNTING	LUMEN OUTPUT	CCT (°K)	CRI	VOLTS	WATTS	NOTES
PL1	MCCRAW-EDISON	PRV-XL-PA4A-740-U-SWQ	POLE LIGHT	20' POLE ON 30" BASE	35,079	4000	70	208	245	WITH #MS/DIM-L40W MOTION SENSING DIMMING
PL2	MCCRAW-EDISON	PRV-XL-PA4B-740-U-T3	POLE LIGHT	20' POLE ON 30" BASE	36,002	4000	70	208	303	WITH #MS/DIM-L40W MOTION SENSING DIMMING
PL3	MCCRAW-EDISON	PRV-XL-PA4B-740-U-T4W-HSS	POLE LIGHT	20' POLE ON 30" BASE	28,286	4000	70	208	303	WITH #MS/DIM-L40W MOTION SENSING DIMMING
NOTES: 1. VERIFY LIGHT FIXTURE FINISHES WITH OWNER / ARCHITECT PRIOR TO INSTALLATION										



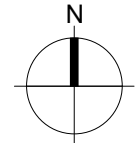
TYPICAL LIGHT POLE DETAIL - 1



LOT 5
LEE'S SUMMIT, MO

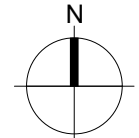
SHEET NUMBER:

A-101.







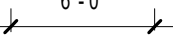



Legend for symbols used in the drawings:

- PARTIAL HEIGHT PARTITION
- NON-RATED PARTITION; SEE ASSEMBLIES
- 1 HR RATED PARTITION; SEE ASSEMBLIES
- WINDOW TYPE; SEE WINDOW SCHEDULE
- DOOR TYPE; SEE DOOR SCHEDULE
- PARTITION TYPE; SEE ASSEMBLIES
- FRAMING DIMENSIONS
- LAYOUT LINE DIMENSIONS



PLAN LEGEND

	PARTIAL HEIGHT PARTITION
	NON-RATED PARTITION; SEE ASSEMBLIES
	1 HR RATED PARTITION; SEE ASSEMBLIES
	WINDOW TYPE; SEE WINDOW SCHEDULE
	DOOR TYPE; SEE DOOR SCHEDULE
	PARTITION TYPE; SEE ASSEMBLIES
	FRAMING DIMENSIONS
	LAYOUT LINE DIMENSIONS

**rosemann
& ASSOCIATES** P.C.

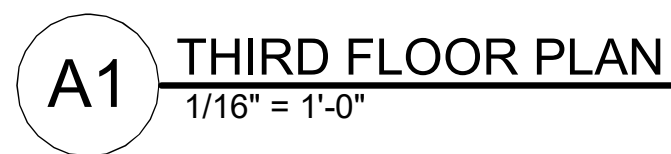
ARCHITECTURE
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THE VILLAGE AT DISCOVERY -
LOT 5
LEE'S SUMMIT, MO

A-103.



MATERIAL LEGEND

- KING SIZE BRICK - COLOR 1 - ALLENDALE HILL
- KING SIZE BRICK - COLOR 2 - GLEN GERY SADDLE BROWN
- KING SIZE BRICK - COLOR 3 - CAVALRY GRAY
- STONE CAP - ROUGH ASHLAR
- LARGE FORMAT MASONRY - ROUGH ASHLAR

PRINTS ISSUED

05/10/2024 - FDP

REVISIONS:

rosemann
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THE VILLAGE AT DISCOVERY -
LOT 5
LEE'S SUMMIT, MO

SHEET TITLE
EXTERIOR ELEVATIONS COLOR

PROJECT NUMBER: 23102

SHEET NUMBER:

A-202



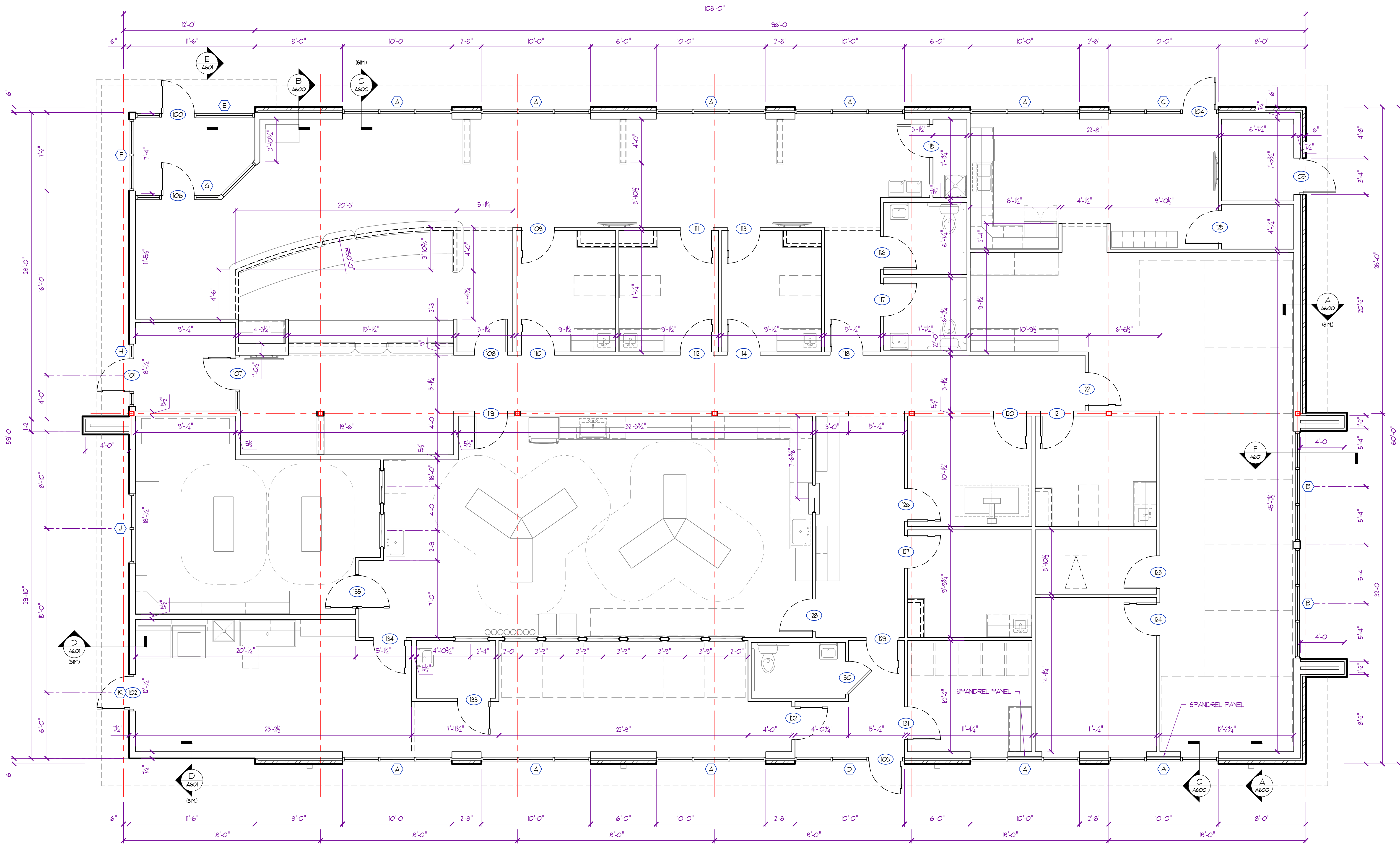
3 CORNER ELEVATION - COLOR
1/8" = 1'-0"



2 EAST ELEVATION - COLOR
1/8" = 1'-0"

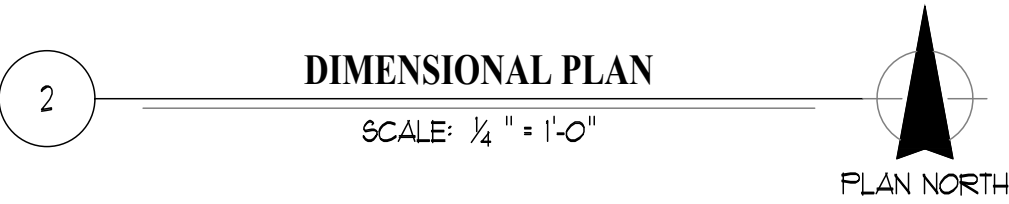


1 NORTH ELEVATION 2 - COLOR
1/8" = 1'-0"

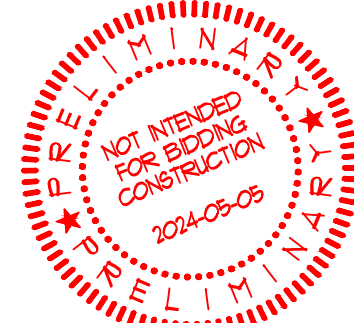


FLOOR PLAN GENERAL NOTES:

- ALL WORK SHALL CONFORM TO ALL STATE, LOCAL, AND/OR ANY AUTHORITY HAVING JURISDICTION.
- ALL DIMENSIONS SHOWN ARE TO FACE OF MASONRY / STUD OR CENTERLINE OF COLUMN / BEAM UNLESS NOTED OTHERWISE.
- ALL INTERIOR WALL PARTITIONS ARE TO BE 2x4 WOOD STUD FRAMING @ 16" O.C. MAX. w/ 5/8" GYPSUM BOARD ON EACH SIDE UNLESS NOTED OTHERWISE.
- INTERIOR WALLS & GYPSUM BOARD TO EXTEND A MIN. OF 6" ABOVE FINISH CEILING. (SEE A300 FOR WALL HEIGHT DIAGRAM)
- CONTRACTOR TO PROVIDE TEMPORARY & PERMANENT BRACING AS REQUIRED. INTERIOR PARTITIONS TO HAVE DIAGONAL BRACING TO STRUCTURE @ 4'-0" O.C. WHERE APPLICABLE.
- ALL DOORS TO HAVE A MIN. OF 6" FROM HINGE JAMB TO ADJACENT WALL UNLESS NOTED OTHERWISE.
- INSTALL 4" ACOUSTICAL BATT INSULATION ON CEILING A MIN. OF 24" FROM COMMON WALLS FOR ADDITIONAL SOUND DEADENING AS NECESSARY. (COORDINATE LOCATIONS WITH OWNER / TENANT)
- ALL EQUIPMENT, APPLIANCES, & FURNITURE SHOWN FOR REFERENCE ONLY. (VERIFY & COORDINATE EQUIPMENT PRIOR TO ANY WORK)
- SEE STOREFRONT DETAILS ON SHEET A602 FOR REMAINING INFO.
- SEE ROOM FINISH SCHEDULE ON SHEET A300 FOR REMAINING INFO.



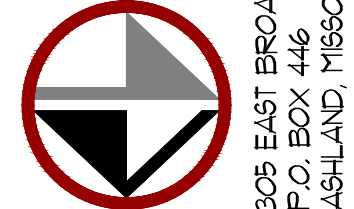
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PROJECT

Discovery Park
Discovery Animal Hospital
1901 NE Trails Edge Boulevard
Lee's Summit, Jackson County, Missouri

ISSUE

ID	DESCRIPTION	DATE
1	PROGRESS	5/05/2020

PROJECT NO.

FB42417

SHEET TITLE

DIMENSIONAL PLAN

SHEET NUMBER

A200



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E3
A100

WEST ELEVATION

SCALE: 3/8" = 1'-0"



E3
A100

SOUTH ELEVATION

SCALE: 3/8" = 1'-0"

ELEVATOIN GENERAL NOTES:

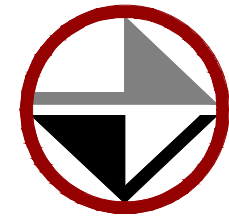
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PORTER, BERENDZEN & ASSOCIATES, P.C.
ARCHITECTS
305 EAST BROADWAY, SUITE 4
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PROJECT

Discovery Park
Discovery Animal Hospital
1901 NE Trails Edge Boulevard
Lee's Summit, Jackson County, Missouri

ISSUE		
ID	DESCRIPTION	DATE
1	PROGRESS	5/05/2020

PROJECT NO.
FB242417
SHEET TITLE

EXTERIOR
ELEVATIONS

SHEET NUMBER

A500

PRELIMINARY DOCUMENTS - NOT INTENDED FOR BIDDING OR CONSTRUCTION

PRELIMINARY
NOT FOR
CONSTRUCTION

THE VILLAGE AT DISCOVERY -
LOT 7
LEE'S SUMMIT, MO

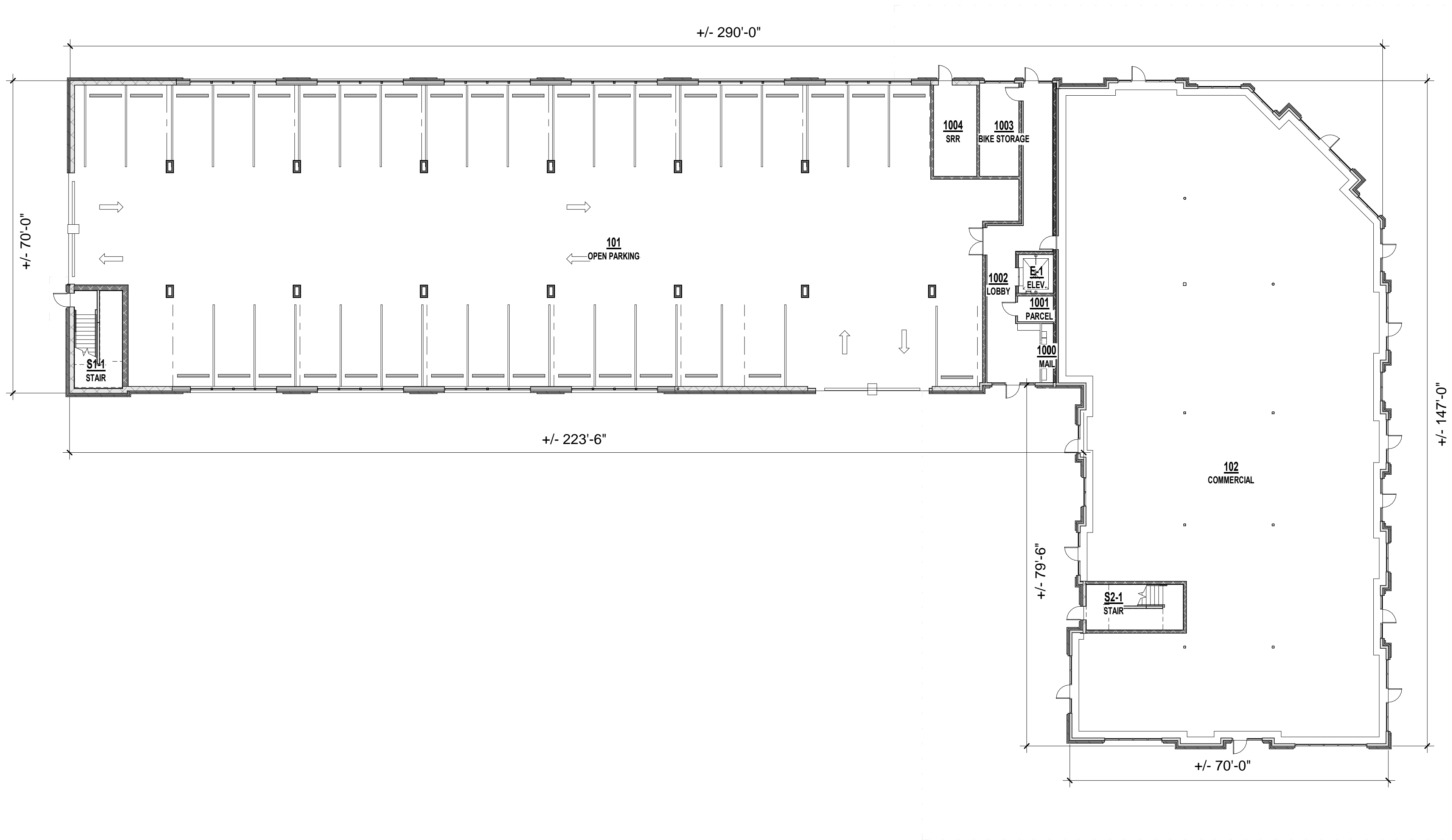
SHEET TITLE
FIRST FLOOR PLAN

PROJECT NUMBER: 23099
SHEET NUMBER:

A-101

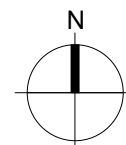
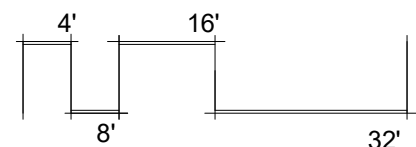
PLAN LEGEND

	PARTIAL HEIGHT PARTITION
	NON-RATED PARTITION; SEE ASSEMBLIES
	1 HR RATED PARTITION; SEE ASSEMBLIES
	2 HR RATED PARTITION; SEE ASSEMBLIES
	WINDOW TYPE; SEE WINDOW SCHEDULE
	DOOR TYPE; SEE DOOR SCHEDULE
	PARTITION TYPE; SEE ASSEMBLIES
	FRAMING DIMENSIONS
	LAYOUT LINE DIMENSIONS



A1

1ST FLOOR PLAN - FDP
1/16" = 1'-0"



PRINTS ISSUED

05/10/2024 - FDP

REVISIONS:

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THE VILLAGE AT DISCOVERY -
LOT 7

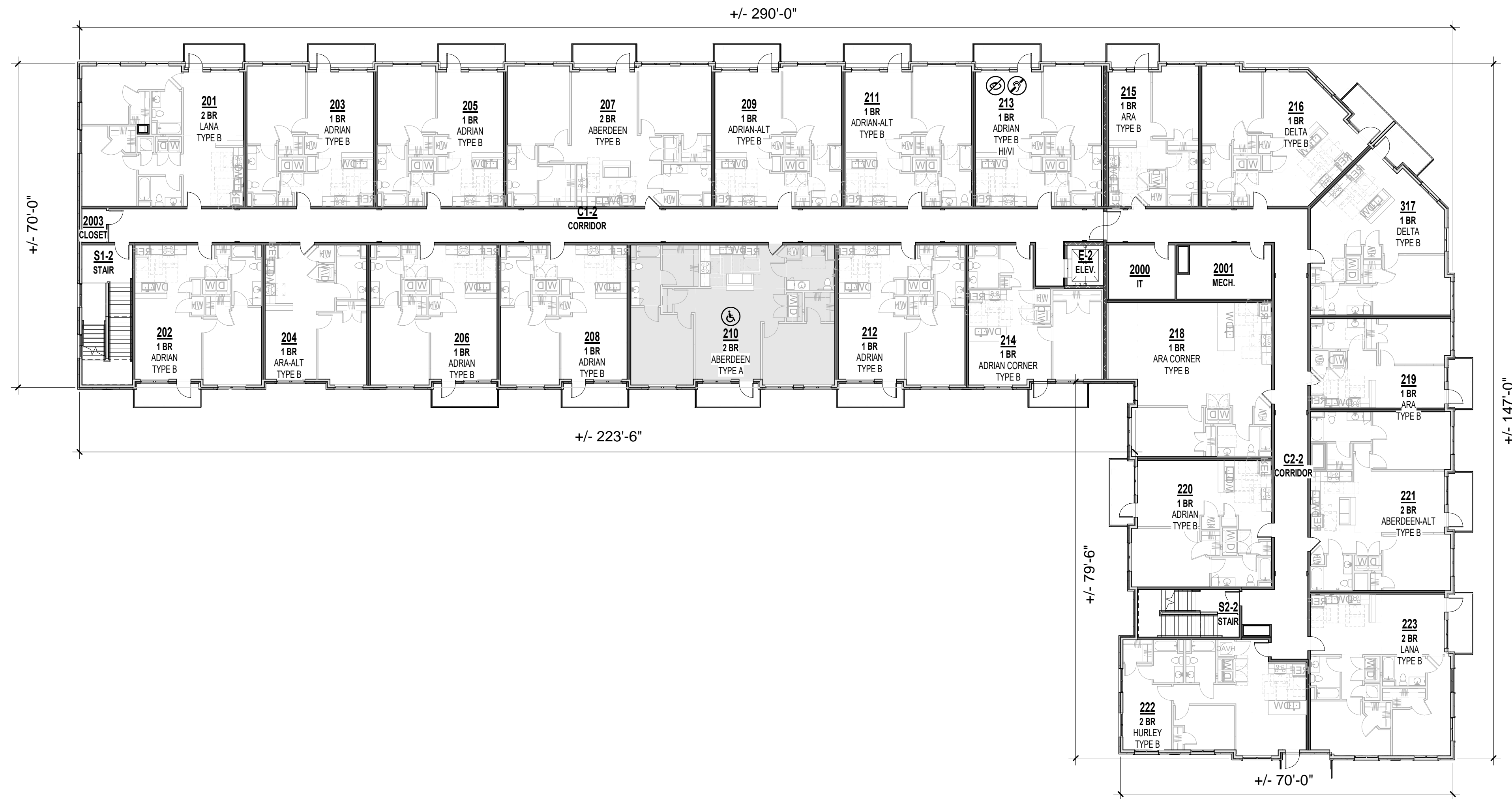
LEE'S SUMMIT, MO

SHEET TITLE
SECOND FLOOR PLAN

PROJECT NUMBER: 23099

SHEET NUMBER:

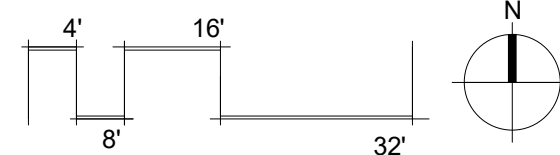
A-102



A1

SECOND FLOOR PLAN

1/16" = 1'-0"



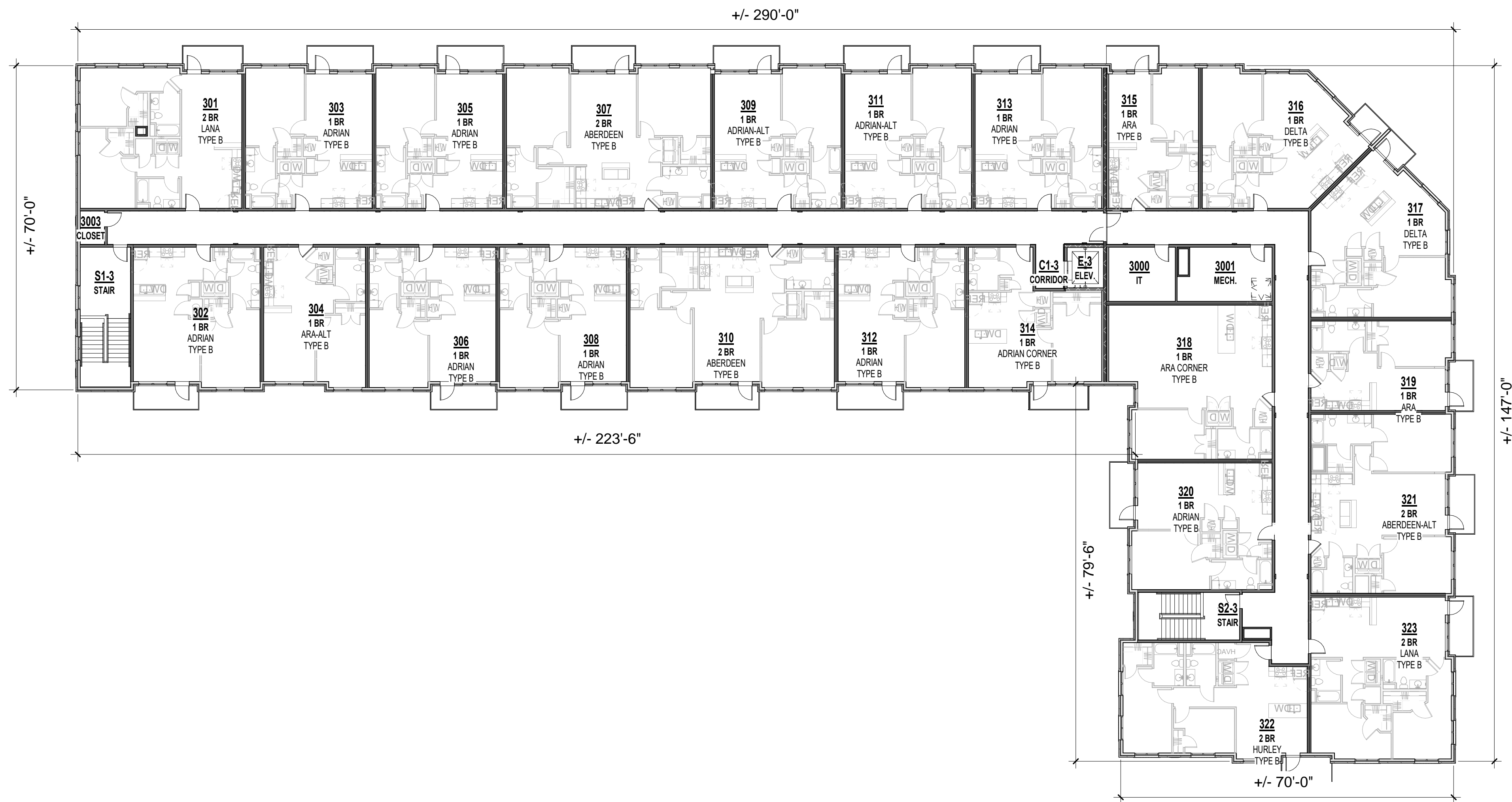
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CONSTRUCTION

THE VILLAGE AT DISCOVERY -
LOT 7
LEE'S SUMMIT, MO

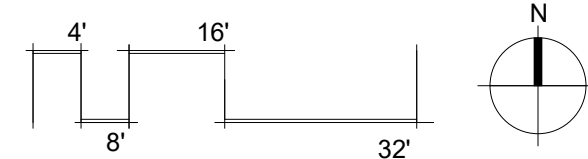
SHEET TITLE
THIRD FLOOR PLAN

PROJECT NUMBER: 23099
SHEET NUMBER:

A-103



A1 THIRD FLOOR PLAN
1/16" = 1'-0"



MATERIAL LEGEND

- KING SIZE BRICK - COLOR 1 - ALLENDALE HILL
- KING SIZE BRICK - COLOR 2 - GLEN GERY SADDLE BROWN
- KING SIZE BRICK - COLOR 3 - CAVALRY GRAY
- STONE CAP - ROUGH ASHLAR
- LARGE FORMAT MASONRY - ROUGH ASHLAR

PRINTS ISSUED
05/10/2024 - FDP
REVISIONS:

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PRELIMINARY
NOT FOR
CONSTRUCTION

THE VILLAGE AT DISCOVERY -
LOT 7

LEE'S SUMMIT, MO

SHEET TITLE
EXTERIOR COLOR ELEVATIONS
PROJECT NUMBER: 23099
SHEET NUMBER:

A-202



2 EAST ELEVATION - COLOR
3/32" = 1'-0"



1 NORTH ELEVATION - COLOR
3/32" = 1'-0"

PRELIMINARY
NOT FOR
CONSTRUCTION

THE VILLAGE AT DISCOVERY -
LOT 7
LEE'S SUMMIT, MO

SHEET TITLE
EXTERIOR COLOR ELEVATIONS
PROJECT NUMBER: 23099
SHEET NUMBER:

A-203



3 CORNER ELEVATION - COLOR
3/32" = 1'-0"



2 WEST ELEVATION - COLOR
3/32" = 1'-0"



1 SOUTH ELEVATION - COLOR
3/32" = 1'-0"

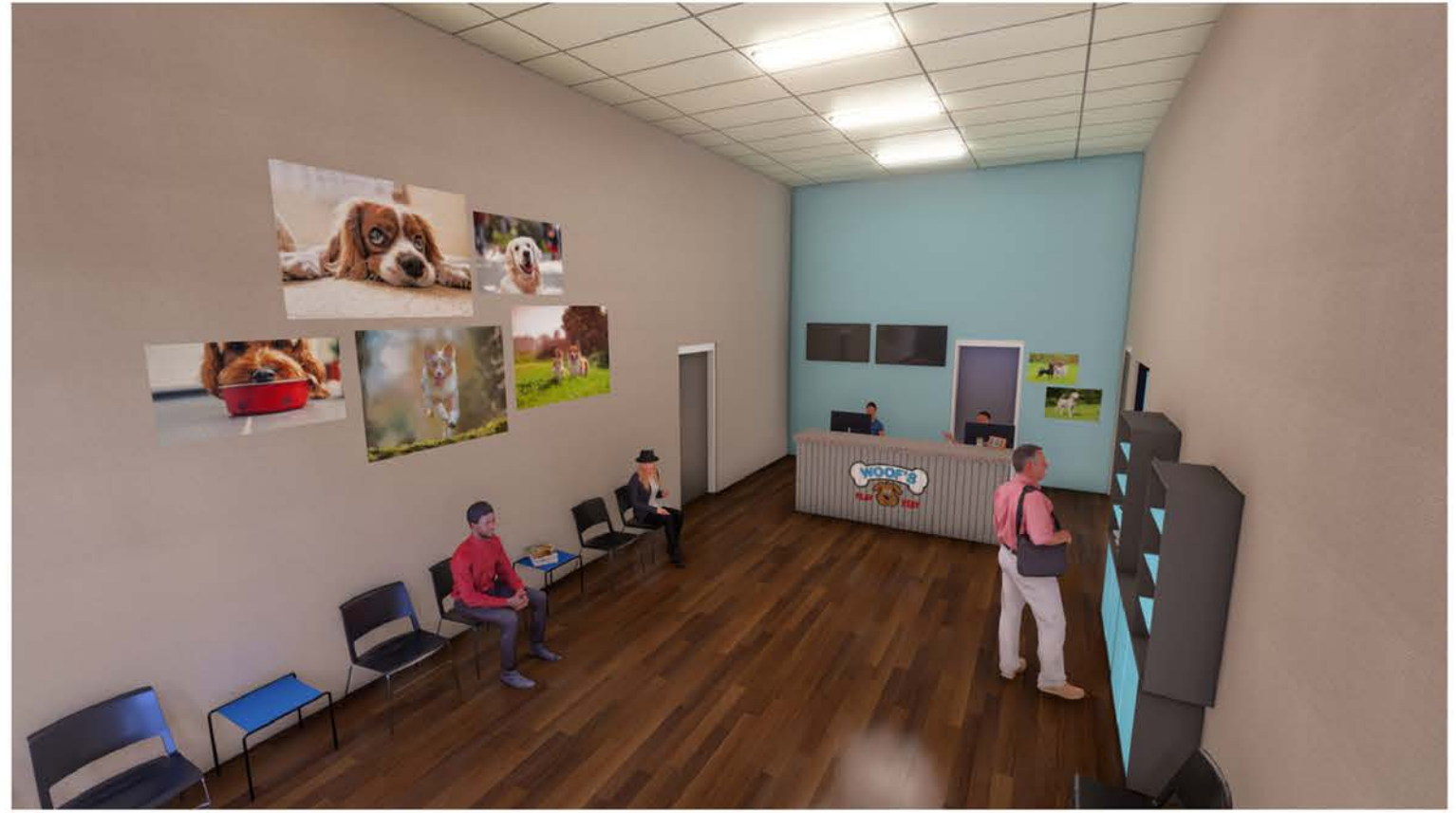


the
VILLAGE
at discovery park



Woof's Play
and Stay

the
VILLAGE
at discovery park



1

Woof's Play and Stay Floor Plan

10,180 SQFT

