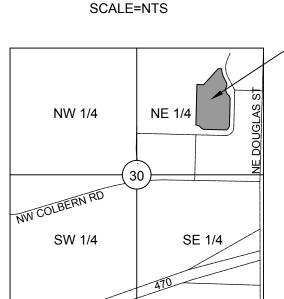
FINAL DEVELOPMENT PLANS **DISCOVERY PARK, ZONE 1, LOT 9** LEE'S SUMMIT, JACKSON COUNTY, MO



LOCATION MAP SECTION 30, TOWNSHIP 48N, RANGE 31W

JACKSON COUNTY, MISSOURI

PROJECT LOCATION

LEGAL DESCRIPTION:

THE VILLAGE AT DISCOVERY PARK, LOT 9



UTILITY CONTACTS:

SANITARY & WATER: CITY OF LEE'S SUMMIT, MO 220 SE GREEN STREET LEE'S SUMMIT, MO 64063 PHONE: (816) 969-1900

PUBLIC ROADWAY: CITY OF LEE'S SUMMIT, MO 220 SE GREEN STREET LEE'S SUMMIT, MO 64063 PHONE: (816) 969-1900

POWER: EVERGY 1300 SE HAMBLEN RD LEE'S SUMMIT, MO 64081 PHONE: (816) 347-4320

STORMWATER: CITY OF LEE'S SUMMIT, MO 220 SE GREEN STREET LEE'S SUMMIT, MO 64063 PHONE: (816) 969-1800

NATURAL GAS: SPIRE GAS ENERGY 3025 SW CLOVER DRIVE LEE'S SUMMIT, MO 64082 PHONE: (816) 985-8888

TELECOMMUNICATIONS: AT&T PHONE: 800-286-8313 SPECTRUM PHONE: 877-772-2253 GOOGLE FIBER PHONE: 877-454-6959

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FEMA FLOOD INFORMATION:

THE ENTIRE SITE IS LOCATED WITHIN ZONE X, "AREAS OF 0.2% ANNUAL CHANGE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AS DEPICTED ON THE FEMA FLOOD INSURANCE RATE (FIRM) MAP NUMBER 29095C0409G, REVISION DATE JANUARY 20, 2017.

OIL/GAS WELLS:

NO OIL OR GAS WELLS ARE LOCATED WITHIN PROJECT LIMITS. INFORMATION OBTAINED FROM THE MISSOURI DEPARTMENT OF NATURAL RESOURCES, GEOLOGICAL SURVEY GEOSCIENCES TTECHNICAL RESOURCE ASEESMENT TOOL (GEOSTRAT).



DATE: 4/19/2024

GENERAL NOTES:

- PROPERTY LINE UNLESS OTHERWISE NOTED.
- INSPECTION PRIOR TO SUBMITTING BID AND STARTING CONSTRUCTION.
- DRAWINGS.
- 5. REFER TO ARCHITECTURAL PLANS FOR EXACT BUILDING
- DIMENSIONS. OUTSIDE FACE OF THE BUILDING.
- CONTROL DEVICES (MUTCD), LATEST EDITION.

SECTION 30, T48N, R31W

WATERSHED: LITTLE CEDAR CREEK - LITTLE BLUE RIVER

DISTURBED AREA: 3.62 AC

| POINT # | NORTHING | EASTING | ELEVATION | FULL DESCRIPTION |
|---------|--------------|--------------|-----------|---------------------|
| 50 | 1012389.8190 | 2822108.7840 | 990.8100 | CTL |
| 51 | 1011606.5710 | 2817819.8520 | 933.2990 | CTL |
| 52 | 1009320.3430 | 2818811.2690 | 930.8920 | CTL |
| 53 | 1011007.3400 | 2823445.2840 | 988.4360 | CTL |
| 54 | 1014987.4060 | 2823402.9760 | 930.4780 | CTL |
| 55 | 1015699.8100 | 2821686.0380 | 935.0540 | CTL |
| L | 1 | 1 | 1 | |

0 200' 400

1. ALL SITE DIMENSIONS TO THE EDGE OF PAVEMENT, CONCRETE OR 2. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS BY DETAILED

3. COORDINATE WORK WITH OTHER SITE RELATED DEVELOPMENT

4. REFER TO STRUCTURAL PLANS FOR DEVELOPMENT OF SIDEWALKS ADJACENT TO FOUNDATIONS AND FOUNDATION STEMWALLS.

6. DIMENSIONS THAT LOCATE THE BUILDING ARE MEASURED TO THE

7. SIGN CONSTRUCTION AND PAVEMENT MARKINGS SHALL CONFORM TO THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC

PROJECT SPECIFICATIONS:

THE SPECIFICATIONS FOR THIS PROJECT SHALL BE THE FOLLOWING:

- 1. MOST CURRENT VERSION OF THE DESIGN AND CONSTRUCTION MANUAL OF THE CITY OF LEE'S SUMMIT. MO.
- 2. MOST CURRENT VERSION OF THE AMERICAN PUBLIC WORKS ASSOCIATION -KANSAS CITY METRO CHAPTER

THE STANDARD SPECIFICATIONS THROUGH AND INCLUDING THE LATEST AMENDMENTS SHALL BE PART OF THESE PROJECT DRAWINGS AND SPECIFICATIONS AND ARE HEREIN BY REFERENCE. THE MORE STRINGENT OF THESE STANDARD SPECIFICATIONS AND THOSE PREPARED BY THE ENGINEER PREPARING THESE PLANS SHALL GOVERN.

CIVIL ENGINEER: DEVELOPER:

OWN, INC. 8455 COLLEGE BLVD OVERLAND PARK, KS 66210 EMAIL: JBARTZ@WEAREOWN.COM PHONE: (816) 777-0400

Selley Bate

JEFFREY W. BARTZ, P.E. MISSOURI P.E. NO. 2012022594

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SURVEY CONTROL

POINT TABLE

CP #50: 1/2" IB/CAP ON THE NORTH SIDE OF NW COLBERN ROAD. IT IS IN THE **1ST FIELD ENTRANCE WEST OF NE DOUGLAS STREET**

CP#51: SET 1/2" IB/CAP ON THE SW CORNER OF COLBERN ROAD AND MAIN STREET CP#52: SET 1/2" IB/CAP ON THE SOUTH SIDE OF MAIN STREET WHERE MAIN

STREET TURNS EAST ON THE SOUTH SIDE OF I-470 CP#53: SET 1/2" IB/CAP ON THE EAST SIDE OF DOUGLAS JUST SOUTH OF THE

I-470 INTERCHANGE. IN THE NW CORNER OF THE PARKING LOT TO THE OLD OUTBACK

CP#54: SET 1/2" IB/CAP ON THE SOUTH SIDE OF NE DOUGLAS ST. (OLD) WHERE IT BENDS BACK NORTH AT THE SE CORNER OF "THE CURE" CHURCH

CP#55: SET 1/2" IB/CAP ON THE EAST SIDE OF DOUGLAS AT DRIVEWAY FOR **HOUSE 2545**

> INTRINSIC DEVELOPMENT 3622 ENDEAVOR AVE., STE. 101 COLUMBIA, MO 65201 CONTACT: JOHN ODLE PHONE: (573) 615-2252

PREPARED AND SUBMITTED BY:

04/19/2024 DATE



Engineering beyond.

8455 College Boulevard Overland Park, KS 66210 816,777,0400 weareown.com

ORMERLY ANDERSON ENGINEERIN

DISCOVERY PARK THE VILLAGE -LOT 9

200 NE ALURA WAY LEE'S SUMMIT, MO 64086

| | REVISIONS | | | | |
|-----|--------------------|------------|--|--|--|
| NO. | DESCRIPTION | DATE | | | |
| 1 | INITIAL SUBMISSION | 04/19/2024 | | | |
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| Γ | DRAWING INFORMATION |
|----|--|
| P | ROJECT NO: 24KC10006 |
| | DRAWN BY: JGD |
| | CHECK BY: JWB |
| IS | SUED DATE: 4/19/2024 |
| | FIELD BOOK: |
| | JEFEREY W. BARTZ NUMBER PE-2012022594 04/19/2024 |
| | ISSUED BY: |
| I | LICENSE NO: |
| | |
| | A licensed Missouri Engineering Corporation COA# 00062 |
| | SHEET TITLE |
| | COVER SHEET |
| | |
| | SHEET NUMBER |
| | C100 |
| | 1 OF 24 |

STORM SEWER GENERAL NOTES

PIPE LENGTHS SHOWN ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE OR TO THE CENTER OF TOE OF END SECTION. ALL PIPES SHALL BE FIELD STAKED TO THE CENTER

- OF THE INSIDE WALL FACE OF THE STRUCTURE. 2. THE DIMENSION FOR ALL STRUCTURES ARE FROM INSIDE FACE OF STRUCTURE TO INSIDE FACE OF STRUCTURE.
- 3. THE FIRST STRUCTURE DIMENSION SHOWN IS THE "L" DIMENSION AND THE SECOND IS THE "W"
- DIMENSION (SEE STORM SEWER STRUCTURE DETAILS). 4. LOCATIONS OF NORTHINGS AND EASTINGS SHOWN ARE AS FOLLOWS:
 - A. THROATED AREA INLET: CENTER OF STRUCTURE
 - B. SETBACK CURB INLET: CENTER OF STRUCTURE
 - C. MODIFIED CURB INLET: CENTER OF STRUCTURE ALONG TOP OF CURB AT INLET D. END SECTIONS: CENTER OF TOE OF END SECTION
- 5. STORM SEWER PIPE SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED: A. HIGH DENSITY POLYETHYLENE (HDPE) MEETING THE REQUIREMENTS FOR TEST METHODS, DIMENSIONS, AND MARKINGS FOUND IN AASHTO M294 AND ASTM F2306. JOINTS
- SHALL BE WATER TIGHT REINFORCED BELL & GASKETED SPIGOT TYPE. 6. ALL PIPE SHALL BE PLACED IN TRENCH CONDITIONS. PLACE A MINIMUM OF 2 FEET OF FILL OVER PROPOSED PIPE BEFORE TRENCHING AND PIPE INSTALLATION. PROPOSED FILL SHALL BE PLACED
- IN ACCORDANCE WITH PROJECT REQUIREMENTS. 7. UTILITY LINES AND STRUCTURES IN FILL AREAS BELOW PIPE GRADE SHALL NOT BE CONSTRUCTED UNTIL ALL CONSOLIDATION OF THE FILL IS COMPLETE AND SO APPROVED BY THE ON-SITE GEOTECHNICAL ENGINEER.
- 8. ALL CURB INLETS AND OTHER STRUCTURES SET AT LOW POINTS ARE TO BE SET LEVEL. ALL OTHER CURB INLETS ARE TO BE SET WITH THE GRADE AT THE TOP OF CURB OR PAVEMENT. ALL CURB INLETS SHALL HAVE TOP SLABS SLOPING TOWARD THE PAVEMENT AT A 2% GRADE UNLESS OTHERWISE NOTED.
- 9. PRECAST STRUCTURES MAY BE USED AT CONTRACTOR'S OPTION. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED CONCRETE INVERT FROM INVERT IN TO INVERT OUT.
- 10. ALL REINFORCING STEEL SHALL COMPLY WITH ASTM-615 GRADE 60.
- 11. THE LIDS OF ALL PRECAST STRUCTURES SHALL BE GROUTED TO THE TOP OF THE WALLS. 12. ALL UNSUITABLE MATERIAL ENCOUNTERED DURING THE INSTALLATION OF STORM SEWER SHALL BE REMOVED AT CONTRACTOR'S EXPENSE.

UTILITY PLAN GENERAL NOTES

- 1. UTILITY CONSTRUCTION SHALL COMPLY WITH THE STANDARD SPECIFICATIONS, CODES, AND
- DETAILS OF THE CITY OF CITY, STATE AND UTILITY PROVIDERS. 2. OPEN CUTTING OF EXISTING STREETS IS PROHIBITED. ALL PROPOSED UTILITY STREET CROSSINGS
- SHALL BE BORED UNDER STREETS UNLESS NOTED OTHERWISE. 3. THE LAST 10' OF UTILITY LINE BEDDING INTO THE BUILDING SHALL NOT CONTAIN GRANULAR
- MATERIAL. 4. THE INFORMATION SHOWN ON THESE PLANS CONCERNING THE TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES FOR FIELD LOCATION OF ALL UNDERGROUND UTILITY LINES PRIOR TO ANY EXCAVATION AND FOR MAKING HIS OWN VERIFICATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. CONTRACTOR SHALL CONTACT THE UTILITY LOCATION SERVICE A MINIMUM OF 72 HOURS PRIOR TO ANY EXCAVATION TO FIELD LOCATE UTILITIES.
- 5. IF DURING THE COURSE OF CONTRACTOR COORDINATION WITH ANY UTILITY THE NEED FOR AN EASEMENT IS REQUESTED CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY. 5. CONTRACTOR TO INSTALL PROTECTIVE SLEEVES IN FOOTINGS IF NECESSARY FOR UTILITY
- CONNECTION WITH BUILDING. SEE STRUCTURAL AND MEP PLANS. 7. CONTRACTOR SHALL CONTACT POWER PROVIDER TO INSPECT ELECTRIC CONDUIT INSTALLATION
- PRIOR TO BACKFILLING. 8. ROOF DRAINS, GUTTERS, AND DOWNSPOUTS SHALL NOT CONNECT TO SANITARY SEWER.

DEMOLITION PLAN GENERAL NOTES

- EXISTING CONDITIONS SHOWN FOR DEMOLITION ARE CURRENTLY UNDER CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH ON-SITE CONSTRUCTION CREWS TO MINIMIZE DEMOLITION OF NEWLY COMPLETED INFRASTRUCTURE.
- 2. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL ITEMS ENCOUNTERED DURING CONSTRUCTION THAT ARE NOT A REQUIRED PART OF THE PROPOSED PROJECT UPON COMPLETION.
- 3. CONTRACTOR SHALL COORDINATE WITH OWNER ON SALVAGING AND DISPOSAL OF DEMOLISHED/REMOVED ITEMS.
- 4. CONTRACTOR SHALL PROTECT OFFSITE IMPROVEMENTS (INCLUDING BUT NOT LIMITED TO SIDEWALKS, DRIVES, UTILITIES, CURBS, AND PAVING) SURROUNDING THE PROJECT BOUNDARY FROM DAMAGE DURING DEMOLITION ACTIVITY. ALL PAVEMENT REMOVALS SHALL BE SAWCUT WITH CLEAN FULL DEPTH CUTS ADJACENT TO EXISTING PAVEMENT TO REMAIN. CONTRACTOR SHALL INSTALL AND MAINTAIN PEDESTRIAN AND VEHICULAR TRAFFIC CONTROL SIGNAGE IN COMPLIANCE WITH THE MISSOURI DEPARTMENT OF TRANSPORTATION AND CITY OF LIBERTY REQUIREMENTS. CONTRACTOR SHALL NOT OBSTRUCT ACCESS TO EXISTING BUSINESSES.
- CONTRACTOR SHALL INSTALL SAFETY FENCING SURROUNDING ALL EXCAVATIONS DURING DEMOLITION OF STRUCTURES, AREAS OF HEAVY EQUIPMENT USAGE FOR SITE GRADING AND GRUBBING, TREE REMOVAL AREAS, AND ANY OTHER AREAS WHERE PEDESTRIAN OR VEHICULAR TRAFFIC MAY ENCROACH. THIS FENCING SHALL BE INSTALLED NO LATER THAN THE END OF EACH WORKING DAY, CONTRACTOR SHALL REPAIR AND MAINTAIN FENCING IN AN ORDERLY MANNER. CONTRACTOR MAY RE-USE FENCING MATERIALS AFTER ALL DEMOLITION ACTIVITIES HAVE BEEN COMPLETED FOR THAT AREA OF WORK.

GRADING PLAN GENERAL NOTES:

- ALL TOPSOIL, VEGETATION, ROOT STRUCTURES, AND DELETERIOUS MATERIALS SHALL BE STRIPPED FROM THE GROUND SURFACE PRIOR TO THE PLACEMENT OF EMBANKMENTS.
- 2. ALL DISTURBED AREAS THAT ARE NOT TO BE PAVED (GREEN SPACES) SHALL BE FINISH GRADED WITH A MINIMUM OF SIX INCHES OF TOPSOIL.
- FINISHED GRADES SHALL NOT BE STEEPER THAN 3:1. 3
- EXISTING GRADE CONTOURS SHOWN AT 1 FOOT INTERVALS. PROPOSED GRADE CONTOURS 4 SHOWN AT 1 FOOT INTERVALS.
- HAUL OFF AND MATERIAL IMPORT SHALL NOT BE AN EXCLUDED ITEM IN THE BASE BID. ALL 5 EXCAVATION SHALL BE CONSIDERED NON-CLASSIFIED. NO ADDITIONAL PAYMENT WILL BE MADE FOR ROCK EXCAVATION OR BLASTING.
- 6. ALL DISTURBED AREAS ARE TO RECEIVE TOPSOIL (6"), SEED/SOD, MULCH AND WATER UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED. RE-SEEDING SHALL BE REQUIRED.
- WITHIN FORTY-EIGHT HOURS PRIOR TO ANY ASPHALT OR CONCRETE PAVING, THE SUBGRADE SHALL BE PROOF-ROLLED WITH A FULLY LOADED TANDEM WHEEL DUMP TRUCK AND OBSERVED BY THE ON-SITE GEOTECHNICAL ENGINEER. AREAS OF THE SUBGRADE WITH EXCESSIVE RUTTING AND/OR PUMPING SHALL BE RE-WORKED OR REMOVED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. FLY ASH OR GRANULAR MATERIAL MAY BE ADDED BY THE CONTRACTOR (AS APPROVED BY THE ON-SITE GEOTECHNICAL ENGINEER) TO STABILIZE THE SUBGRADE.
- REFERENCE GEOTECHNICAL REPORT FOR BUILDING PAD PREPARATION. CONTRACTOR SHALL OPERATE UNDER THE TERMS AND PERMITS INCLUDED IN THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED FOR THIS PROJECT AND PERMITTED THROUGH THE STATE OF MISSOURI. CONTRACTOR SHALL EMPLOY A QUALIFIED PERSON TO CONDUCT REGULAR INSPECTIONS OF THE SITE EROSION CONTROL MEASURES AND DOCUMENT SUCH INSPECTIONS IN THE SWPPP DOCUMENT MAINTAINED BY THE CONTRACTOR.
- 10. THE CONTRACTOR SHALL ADHERE ALL TERMS & CONDITIONS AS OUTLINED IN THE PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH THE CONSTRUCTION ACTIVITIES AS ISSUED BY CITY OF LEE'S SUMMIT, MO AND THE MISSOURI DEPARTMENT OF NATURAL RESOURCES (MDNR).

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GENERAL EROSION & SEDIMENTATION NOTES:

- A. THE STORMWATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS DRAWING, THE STANDARD DETAILS, ATTACHMENTS INCLUDED IN SPECIFICATIONS, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
- B. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORMWATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
- C. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP, ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
- OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER. WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
- D. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, E. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED F. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS
- REQUIRED BY THE GENERAL PERMIT. G. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS,
- AND TOILET FACILITIES. H. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED. I. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL
- SPILLS AND LEAKS. J. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED. K. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
- L. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
- AT LEAST 7 DAYS, SHALL BE TEMPORARILY STABILIZED. THESE AREAS SHALL BE STABILIZED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. STOPPED SHALL BE STABILIZED. THESE AREAS SHALL BE STABILIZED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE
- M. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WILL BE STOPPED FOR N. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY GRADING PLAN.
- O. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE. ONLY USE INGRESS/EGRESS LOCATIONS AS PROVIDED.
- P. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY. Q. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION
- WITH THE STABILIZATION OF THE SITE. R. ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
- S. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION. T. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT. THE

EROSION & SEDIMENTATION CONTROL MAINTENANCE

- INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION. 2. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT
- SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE. 3. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT
- TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION EXITS AS CONDITIONS DEMAND. 4. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS DEMAND.

UTILITY NOTES:

- BE BORED UNDER STREETS UNLESS NOTED OTHERWISE. 3. THE INFORMATION SHOWN ON THESE PLANS CONCERNING THE TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OF ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES FOR FIELD LOCATIONS OF ALL UNDERGROUND UTILITY LINES PRIOR TO ANY EXCAVATION AND FOR MAKING HIS OWN VERIFICATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. CONTRACTOR SHALL CONTACT THE UTILITY LOCATION SERVICE A MINIMUM OF 72 HOURS PRIOR TO ANY EXCAVATION TO FIELD
- LOCATE UTILITIES. 4. IF CURING THE COURSE OF CONTRACTOR COORDINATION WITH ANY UTILITY THE NEED FOR AN EASEMENT IS REQUIRED CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY. 5. CONTRACTOR TO INSTALL PROTECTIVE SLEEVES IN FOOTINGS IF NECESSARY FOR UTILITY CONNECTION
- WITH BUILDING. SEE STRUCTURAL AND MEP PLANS.
- 6. CONTRACTOR SHALL CONTACT POWER PROVIDER TO INSPECT ELECTRIC CONDUIT INSTALLATION PRIOR TO BACKFILLING.
- 7. ROOF DRAINS, POOL DRAINS, GUTTERS, AND DOWNSPOUTS SHALL NOT CONNECT TO SANITARY SEWER! 8. THE CONTRACTOR IS OBLIGATED TO INSPECT FOR EXISTING CONDITIONS/INSTALLATIONS AND AVAILABLE INFORMATION PRIOR TO SUBMITTING A BID, REFER TO SPECIFICATIONS ALSO.
- 9. EXISTING INSTALLATIONS (SUCH AS WATER MAINS/LINES, GAS MAINS/LINES, SEWER MAINS/LINES TELEPHONE LINES, POWER LINES, AND UTILITY STRUCTURES IN THE VICINITY OF THE WORK TO BE DONE) ARE INDICATED ON THE DRAWINGS ONLY TO THE EXTENT THAT SUCH INFORMATION HAS BEEN MADE AVAILABLE TO OR DISCOVERED BY THE ENGINEER IN PREPARING THE DRAWINGS. THERE IS NO GUARANTEE AS TO THE ACCURACY OR COMPLETENESS OF SUCH INFORMATION, AND ALL RESPONSIBILITY FOR THE ACCURACY AND COMPLETENESS THEREOF IS EXPRESSLY DISCLAIMED. 10.THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR LOCATING ALL EXISTING INSTALLATIONS.
- 11. ANY DELAY, ADDITIONAL WORK, FEES OR EXTRA COST TO THE CONTRACTOR CAUSED BY OR RESULTING FROM DAMAGE TO OR MODIFICATION OF EXISTING INSTALLATIONS BY THE CONTRACTOR OR AFFECTED UTILITY COMPANY SHALL NOT CONSTITUTE A CLAIM FOR EXTRA WORK, ADDITIONAL PAYMENT OR DAMAGES.
- 12. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONSTRUCTION PRIOR TO SUBMITTING HIS BID. NO EXTRAS WILL BE PAID DUE TO UNANTICIPATED EXISTING CONDITIONS/INSTALLATIONS.

- CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENT CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION AND POLLUTANT DISCHARGE.
- ALL MEASURES STATED ON THIS SITE MAP. AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. UTILITY CONSTRUCTION SHALL COMPLY WITH THE STANDARD SPECIFICATIONS, CODES AND DETAILS OF THE CITY OF LEE'S SUMMIT, MISSOURI AND ALL LOCAL UTILITY PROVIDERS. 2. OPEN CUTTING OF EXISTING STREETS IS PROHIBITED, ALL PROPOSED UTILITY STREET CROSSINGS SHALL

GENERAL SIDEWALK & SIDEWALK RAMP NOTES

- 1. POSITIVE FLOW LINE DRAINAGE SHALL BE MAINTAINED THROUGH THE PEDESTRIAN ACCESS ROUTE (PAR). NO PONDING SHALL BE PRESENT IN THE PAR. ANY VERTICAL LIP THAT OCCURS AT THE FLOW LINE SHALL NOT BE GREATER THAN $\frac{1}{4}$ INCH.
- 2. TURNING SPACE SHALL BE LOCATED ANYWHERE THE PAR CHANGES DIRECTION, AND IF THE APPROACHING WALK IS INVERSE GRADE.
- 3. THE MAXIMUM CROSS SLOPE REQUIREMENTS FOR PERPENDICULAR CURB RAMPS AND BLENDED TRASNITIONS ADJACENT TO PEDESTRIAN STREET CROSSINGS ARE AS FOLLOWS: AT YEILD OR STOP CONTROL - 2%: WITHIN YEILD OR STOP CONTROL. OR WITH TRAFFIC SIGNALS - 5%: AT MIDBLOCK - NO GREATER THAN THE STREET GRADE;
- 4. WHEN NOT ADJACENT TO PEDESTRIAN STREET CROSSINGS, PAR AND RAMP CROSS-SLOPE 1% DESIRED, 2% MAXIMUM.
- 5. CONTRACTION JOINTS SHALL BE CONSTRUCTED ALONG ALL GRADE BREAKS AND AT THE TOP OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES.
- 6. ALL GRADE BREAKS WITHIN THE PAR SHALL BE PERPENDICULAR TO THE PATH OF TRAVEL.
- 7. ALL RAMP TYPES SHOULD HAVE A MINIMUM OF 3' RAMP LENGTH.
- 8. DETECTIBLE WARNINGS SHALL CONTINUOUSLY EXTEND FOR A MINIMUM OF 24" IN THE PATH OF TRAVEL. DETECTABLE WARNING TO COVER THE ENTIRE WIDTH OF SIDEWALK AND SHARED-USE PATHS. ARC LENGTH OF RADIAL DETECTABLE WARNINGS SHALL NOT BE GREATER THAN 20 FEET.
- 9. RECTANGULAR DETECTABLE WARNINGS SHALL BE SETBACK 2" MINIMUM TO 9" MAXIMUM FROM BACK OF CURB. RADIAL DETECTABLE WARNINGS SHALL BE SETBACK 2" MINIMUM TO 6" MAXIMUM FROM THE BACK OF CURB.
- 10. LONGITUDINAL JOINT SPACING TO MATCH WITH OF SIDEWALK (4' MIN.).
- 11. ISOLATION JOINTS SHALL BE PLACED WHERE WALK ABUTS DRIVEWAYS AND SIMILAR STRUCTURES, AND 250' CENTERS MAX.
- 12. SIDEWALK RAMPS SHALL BE LENGTHENED AS NEEDED TO PROVIDE COMPLIANT SLOPE (8.33% MAX.) BUT NEED NOT EXCEED 15' REGARDLESS OF RESULTING SLOPE.
- 13. NO CASTING OR UTILITY BOXES SHALL BE ALLOWED IN RAMPS OR TURNING SPACES. CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING UTILITY BOXES AND CORRDINATING WITH UTILITIES TO OBTAIN RAMP AND SIDEWALK COMPLIANCE.
- 14. NEWLY CONSTRUCTED EXTERIOR ACCESSIBLE ROUTES SHALL NOT EXCEED 5% SLOPE IN THE DIRECTION OF TRAVEL OR 2% CROSS-SLOPE. WALKING SURFACES EXCEEDING 5% SLOPE IN THE DIRECTION OR TRAVEL OF CHANGES IN ELEVATION GREATER THAN 1/4" UNBEVELED OR 1/2" BEVELED MUST HAVE RAMPS COMPLYING WITH ICC A117.7 - 2009 AND 2010 ADA STANDARD SECTIONS 405.



Engineering beyond.

8455 College Boulevard Overland Park, KS 66210 816.777.0400 weareown.com

FORMERLY ANDERSON ENGINEERING

DISCOVERY PARK THE VILLAGE -LOT 9

200 NE ALURA WAY LEE'S SUMMIT, MO 64086

LOT 9 - THE VILLAGE AT DISCOVERY PARK NW COLBERN RD & NE DOUGLAS ST

| REVISIONS | | | | | |
|-----------|--------------------|------------|--|--|--|
| NO. | DESCRIPTION | DATE | | | |
| 1 | INITIAL SUBMISSION | 04/19/2024 | | | |
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DRAWING INFORMATION PROJECT NO: 24KC10006

DRAWN BY: JGD CHECK BY: JWB ISSUED DATE: 4/19/2024 FIELD BOOK:



ISSUED BY: LICENSE NO:

> A licensed Missouri Engineering Corporation COA# 00062





SHEET NUMBER

C101 2 OF 24

LEGEND

| _ | PROPERTY LINE | 2031 NE. TRAILS EDGE BLVD |
|-----|---|---------------------------|
| | EX. SSWR EASEMENT | 363,917 SQ. FT |
| | EX. STORM EASEMENT | 8.35 ACRES |
| | EX. CURB AND GUTTER | |
| | EX. STORM SEWER | |
| | | |
| | UGE - EX. ELECTRICAL MAIN | |
| _ | 1335— — EXISTING GRADE LINES | |
| PLA | E: ERENCE THE FOLLOWING APPROVED CONSTRUCTION NS FOR MORE INFROMATION ON THE EXISTING RASTRUCTURE SHOWN: | |
| 1) | <u>PRSITE20235732</u> PRIVATE SITE DEVELOPMENT PLANS FOR THE VILLAGE AT DISCOVERY PARK ZONE 1 | |
| 2) | PRSUBD20232726 (PL20233146) MASS GRADING & EROSION AND SEDIMENT CONTROL | |
| | PLANS FOR THE VILLAGE AT DISCOVERY PARK ZONE 1 | |
| - 1 | & ARIA APARTMENTS | |
| 3) | PRSUBD20232726 (PL2023206) | |

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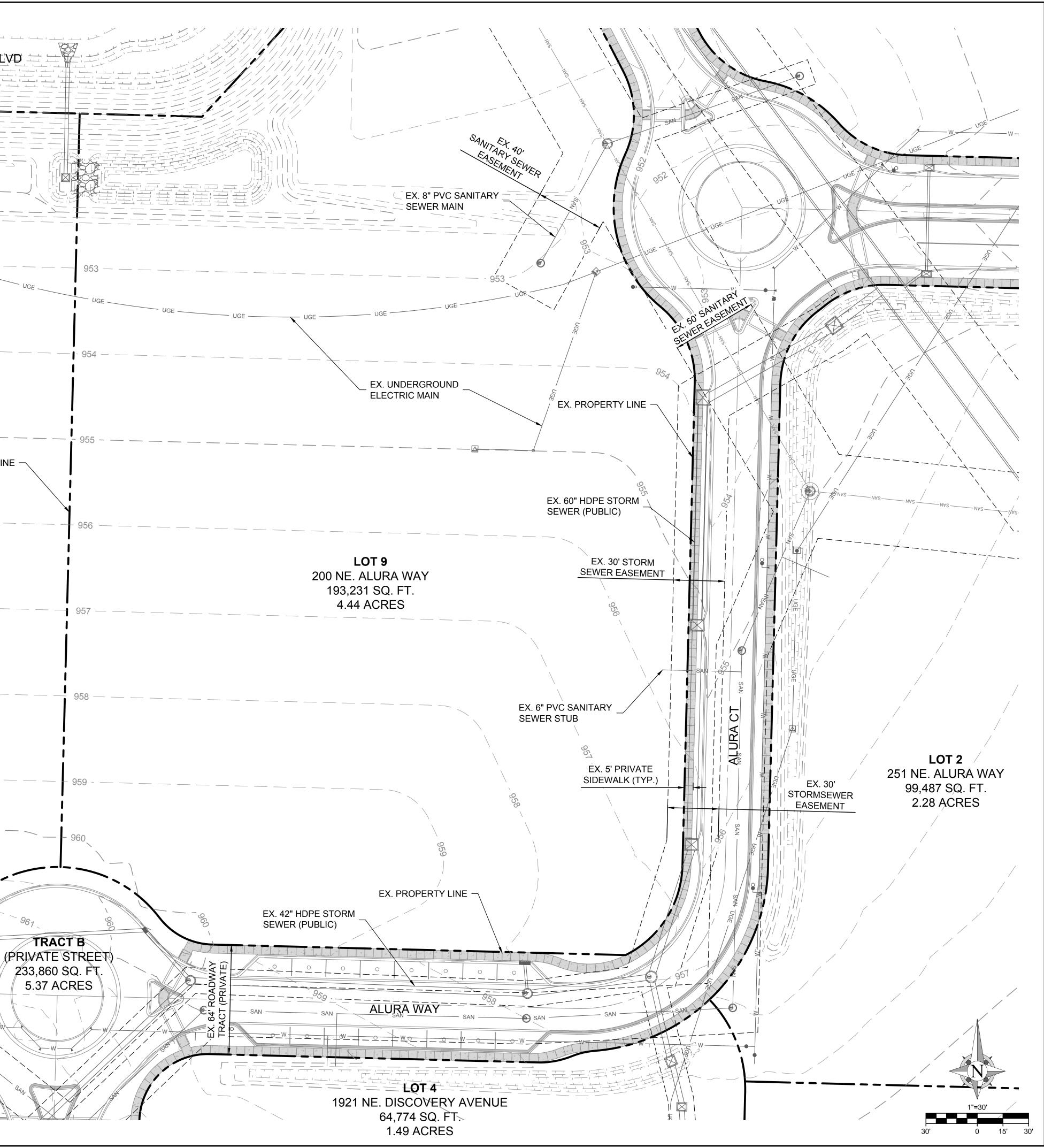
- PUBLIC STORM SEWER PLANS FOR THE VILLAGE AT DISCOVERY PARK ZONE 1 4) **PRSUBD20232726 (PL2023144)**
- PUBLIC WATER MAIN EXTENSION PLANS FOR THE VILLAGE AT DISCOVERY PARK ZONE 1 5) **PRSUBD20232726 (PL2023145)**
- PUBLIC SANITARY SEWER AND FORCE MAIN RELOCATION PLANS FOR THE VILLAGE AT DISCOVERY PARK ZONE 1

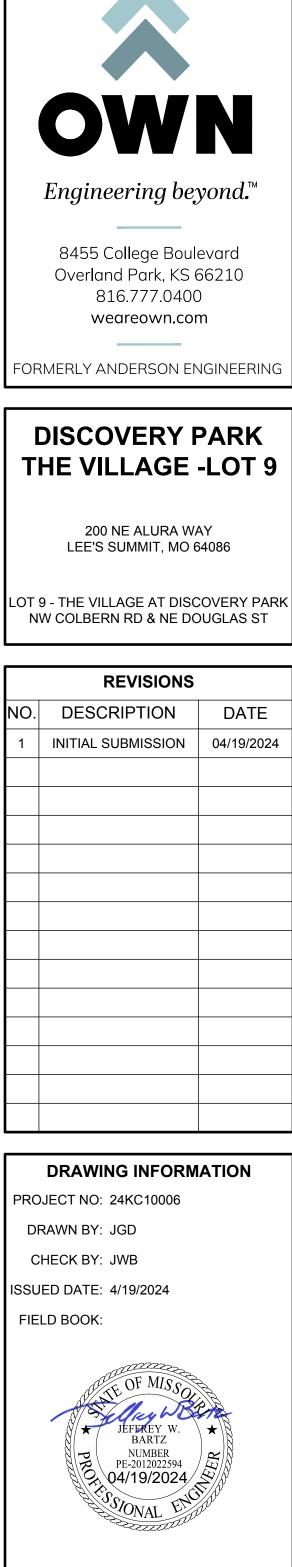
LOT 10 100 NE ALURA WAY 176,803 SQ. FT. 4.06 ACRES

EX. PROPERTY LINE -

TRACT A

(DETENTION)





ISSUED BY: LICENSE NO:

> A licensed Missouri Engineering Corporation COA# 00062

> > SHEET TITLE



SHEET NUMBER

C102

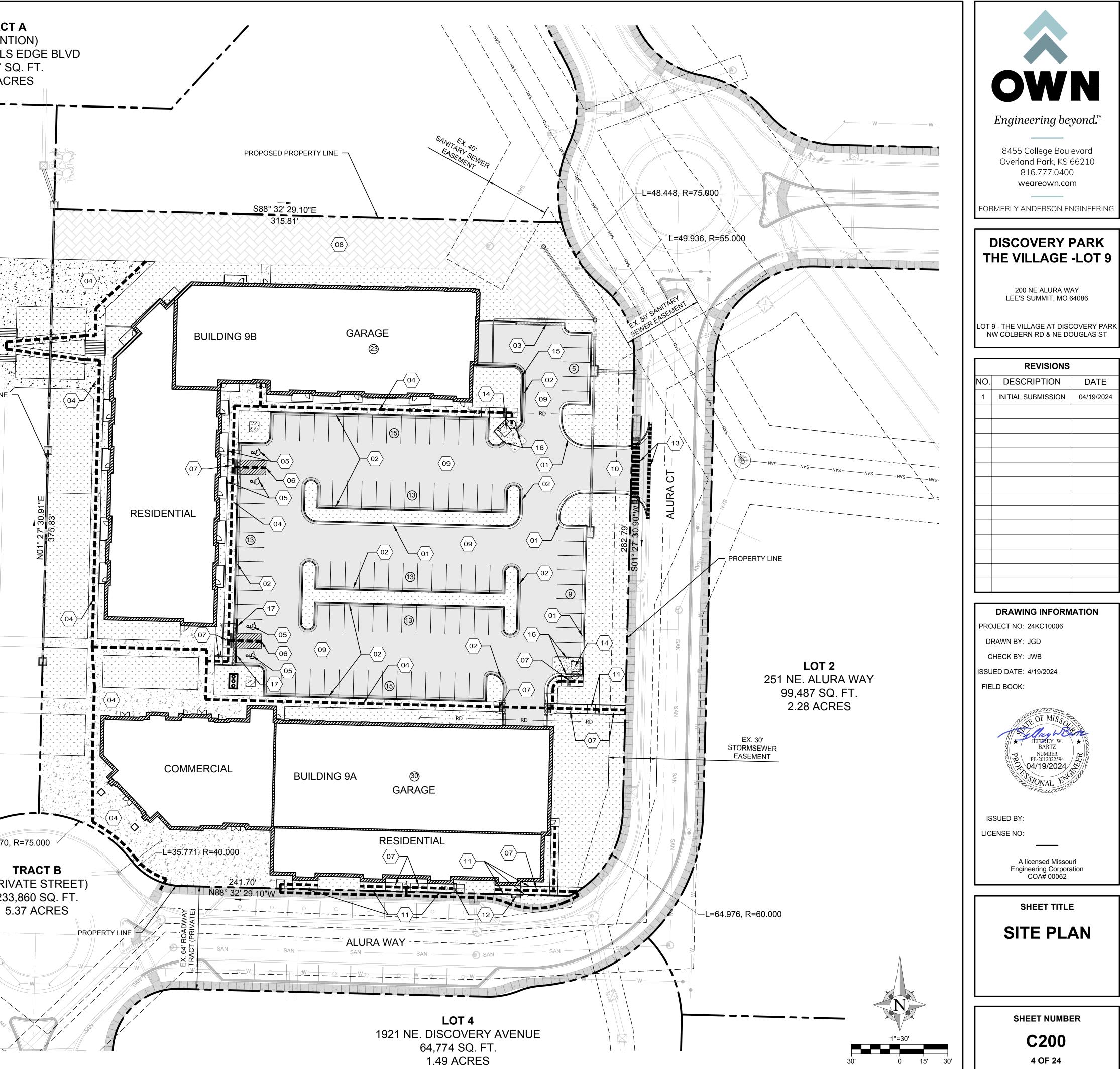
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| LEGEND | | | |
|--|--|---|---|
| | PROPERTY | LINE | |
| | EX. UTILITY | EASEMENT | (DETEN 2031 NE. TRAILS |
| | CURB AND (| GUTTER (TYPE CG-1) | 363,917 S |
| | CURB AND (| GUTTER (TYPE CG-1 DRY) | 8.35 AC |
| | CURB AND (| GUTTER (TYPE CG-2) | |
| | CURB AND (| GUTTER (AT RAMP) | |
| | | C. PAVEMENT | |
| | PROP. STOP | | |
| | ADA ACCES | | |
| (#) | PARKING ST | CRETE SIDEWALK | |
| | | Y CONCRETE PAVEMENT | |
| ∠ : | FIRE ACCES | | |
| | | IALT PAVEMENT | |
| | GREEN SPA | | A |
| KEY NOTE | | | |
| | | G-1) | |
| | | G-1 CURB AND GUTTER DETAIL. | |
| 02 INSTALL CURB & G REFER TO DETAIL | <u>BUTTER</u> (TYPE C SHEET C600 FO | G-1 DRY) R TYPE CG-1 DRY CURB AND GUTTER DETAIL. | |
| _ | C600 FOR TYPE | <u>G-2)</u> CG-2 CURB AND GUTTER DETAIL. | |
| | C601 FOR STAN | DARD SIDEWALK DETAIL. | |
| (05) ACCESSIBLE PARI REFER TO DETAIL | KING SYMBOL P 008/SHEET C602 | AVEMENT STRIPING & SIGNAGE 2 FOR ADA PAVEMENT STRIPING & SIGNING. | |
| 06 ACCESSIBLE PARK | | | 3 |
| | | T MARKINGS TO MATCH STRIPING COLOR UNLESS OTHERWISE ERNING ACCESSIBILITY REGULATIONS. | PROPOSED LOT 10 |
| 07 PROPOSED ADA R REFER TO SHEET C602 FOR ADA RAI | C301 AND C302 | FOR PROPOSED SPOT ELEVATIONS. REFER TO DETAIL 007/SHEET | MIX-USE DEVELOPMENT (UNDER SEPARATE COVER) |
| | <u>.ANE</u> SHALL COORE | DINATE WITH HARDSCAPE DESIGNER ON FIRE LANE PAVEMENT | |
| SECTION. DETAIL 006/SHEET | C602 HAS BEEN | PROVIDED FOR REFERENCE ONLY. | |
| $\langle 09 \rangle \frac{\text{PROPOSED ASPHA}}{\text{INSTALL ASPLIA}}$ | | T AS SHOWN ON PLANS. | |
| REFER TO DET | AILS 005/SHEE | T C602 FOR MORE DETAIL. | 100 NE ALURA WAY 176,803 SQ. FT. |
| | OF LEE'S SUI | MMIT STANDARD DETAIL GEN-1/SHEET C600. | 4.06 ACRES |
| | L AS SHOWN ON C301 - GRADING | I PLANS. DETAILS FOR PROPOSED HANDRAIL LOCATION. REFER TO DETAIL PROPOSED HANDRAIL DETAIL. | |
| 12 PROPOSED STAIR | | | |
| REFER TO SHEET | C301 - GRADING | DETAILS FOR PROPOSED RISER LOCATIONS. REFER TO DETAIL PROPOSED RISER DETAIL. | ۰ مین |
| | E, AND DISPOSE | <u>BE REMOVED)</u> E OF 60 LF OF EXISTING FULL HEIGHT CURB AS NEEDED TO INSTALL E. CONTRACTOR SHALL REPLACE ANY EXISTING CONCRETE | |
| DAMAGED DURING | G CURB REMOVA | | |
| 14 PROPOSED TRASH INSTALL HEAVY-DU RE: ARCHITECTUR | UTY CONCRETE | | |
| | | OTHERS, FOR REFERENCE ONLY) PLANS FOR MORE DETAIL. | |
| | | PLAN. REFER TO DETAILS 011/SHEET C603 FOR MORE | |
| DETAIL. $\overline{17}$ PROPOSED PAR | | | |
| \/ INSTALL PARKIN | | SHOWN ON PLANS. REFER TO DETAIL 012/SHEET C604. | |
| SITE DATA | | | |
| TOTAL SITE AREA: PRO. CONSTRUCTIO | ON AREA. | 147,668.40 SF (3.39 AC) 147,668.40 SF (3.39 AC) | L=67.070 |
| IMPERVIOUS AREA: PROP. IMPERVIOUS | | 0 SF (0.00 %) 114,608.78 SF (77.61 %) | |
| FAR: | | 0.94 | (PRI) |
| <u>BUILDING</u> TOTAL FLOOR AREA | . , | 71,322.00 SQ. FT. | |
| TOTAL FLOOR AREA BUILDING HEIGHT (E | . , | 85,672.30 SQ. FT. 51'-11 ³ / ₄ " | |
| BUILDING HEIGHT (E DWELLING UNITS (B | BLDG B): BLDG A): | 42' - $0\frac{7}{8}$ " 40 | |
| DWELLING UNITS (B | | 57 | |
| <u>PARKING</u> REQUIRED TOTAL P | | 153 (STANDARD) | |
| TOTAL PARKING ST SURFACE PARKING | STALLS: | 150 97 | |
| GARAGE PARKING S REQUIRED ADA STA | ALLS: | 53 7 | |
| ADA STALLS PROVI | | 8 | Sale Sale |
| LAND USE / ZONING EXISTING: | <u>.</u> | | |
| PROPOSED: | | MIXED USE (COMMERCIAL/RESIDENTIAL) | |

| EXISTING: |
|-----------|
| PROPOSED: |

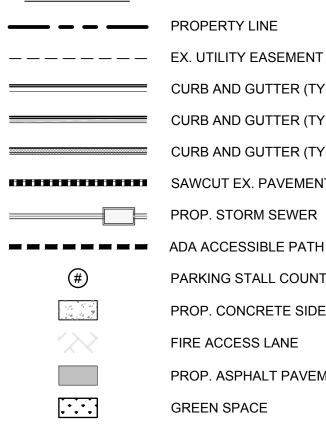
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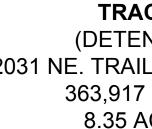
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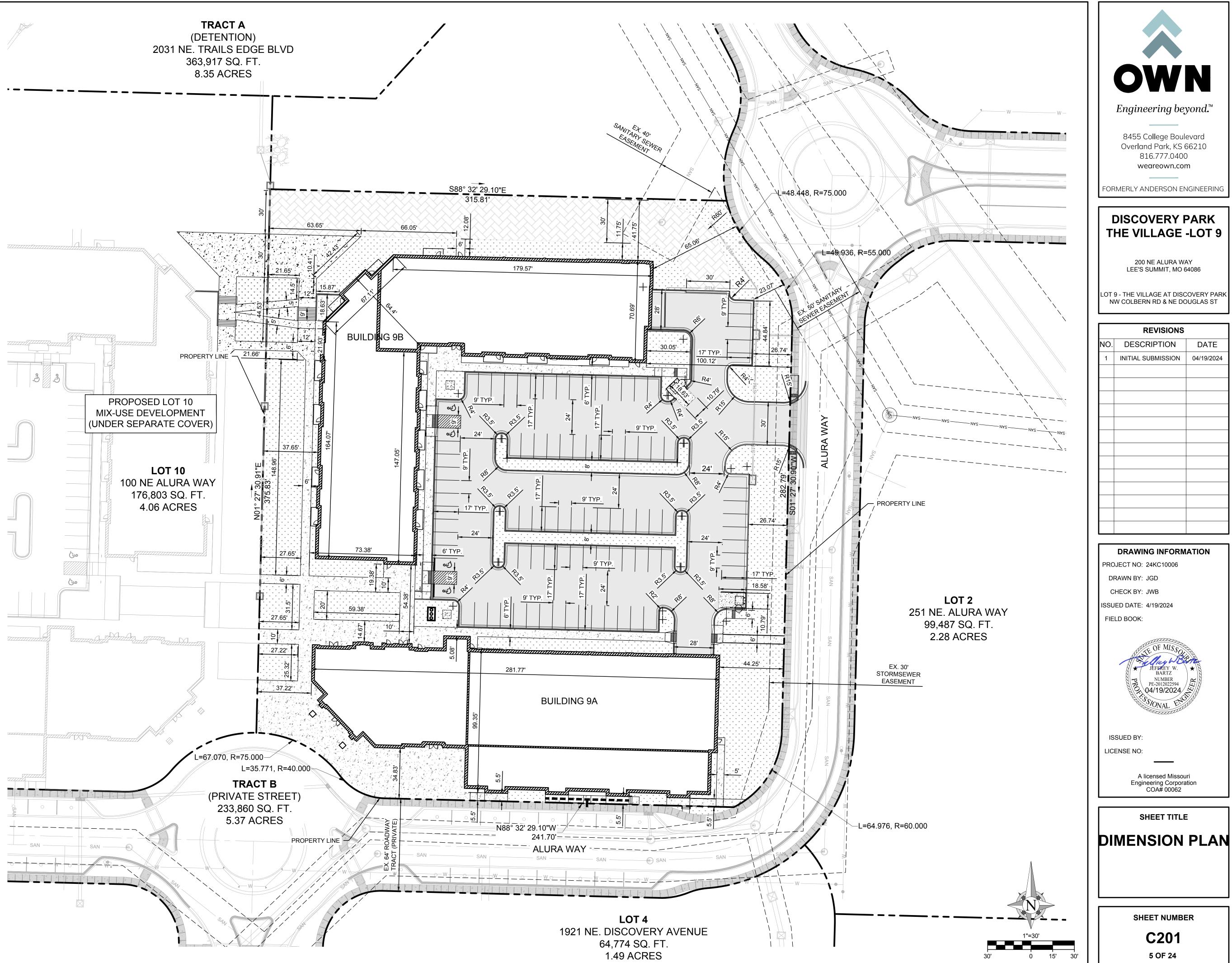
LEGEND



PROPERTY LINE CURB AND GUTTER (TYPE CG-1) CURB AND GUTTER (TYPE CG-1 DRY) CURB AND GUTTER (TYPE CG-2) SAWCUT EX. PAVEMENT PROP. STORM SEWER ADA ACCESSIBLE PATH PARKING STALL COUNT PROP. CONCRETE SIDEWALK FIRE ACCESS LANE PROP. ASPHALT PAVEMENT

GREEN SPACE





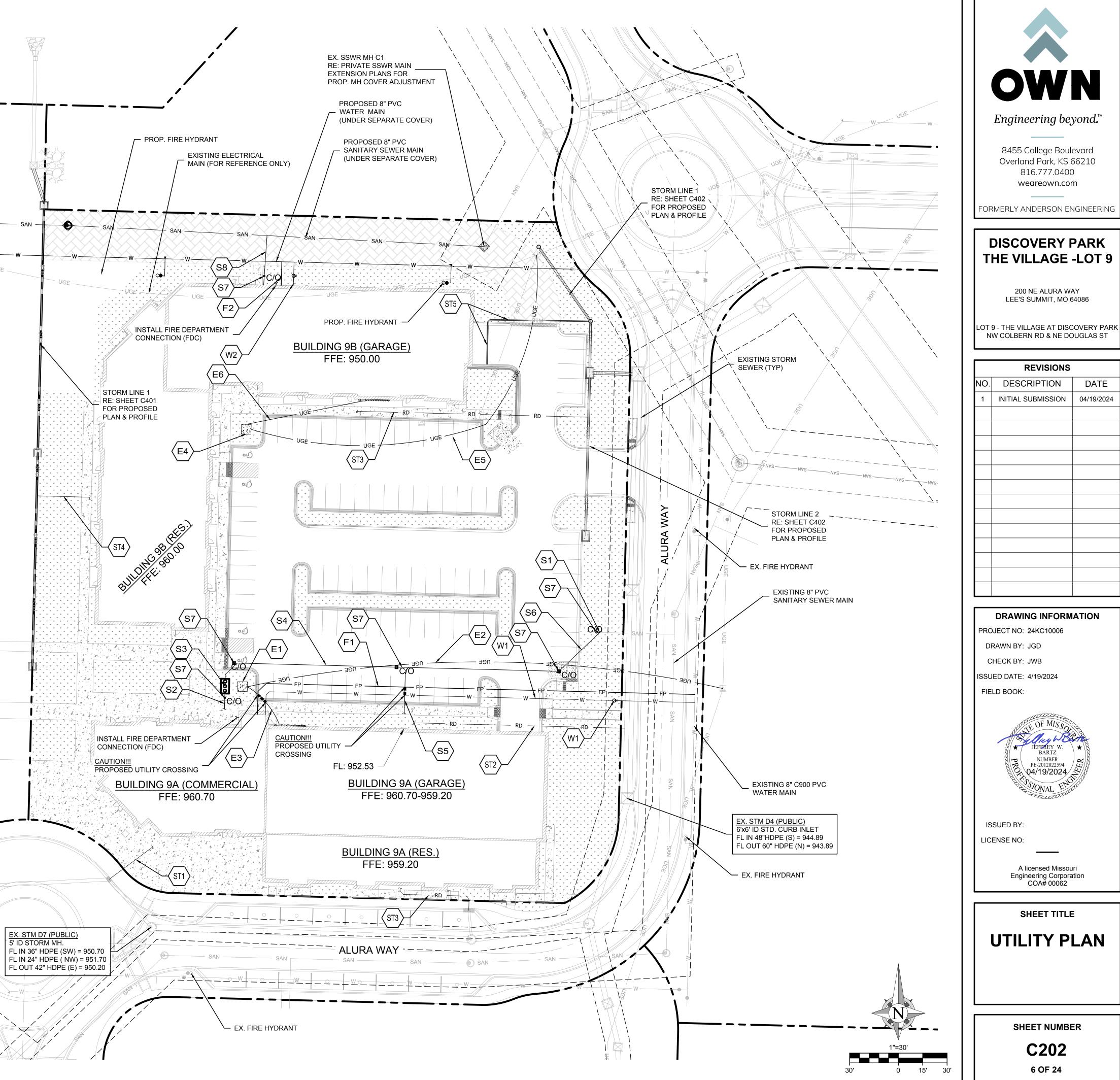
NOTE: HARDSCAPE DIMENSIONS ARE PROVIDED FOR REFERENCE ONLY. REFERENCE APPROVED HARDSCAPE PLANS FOR PROPOSED DIMENSIONS.

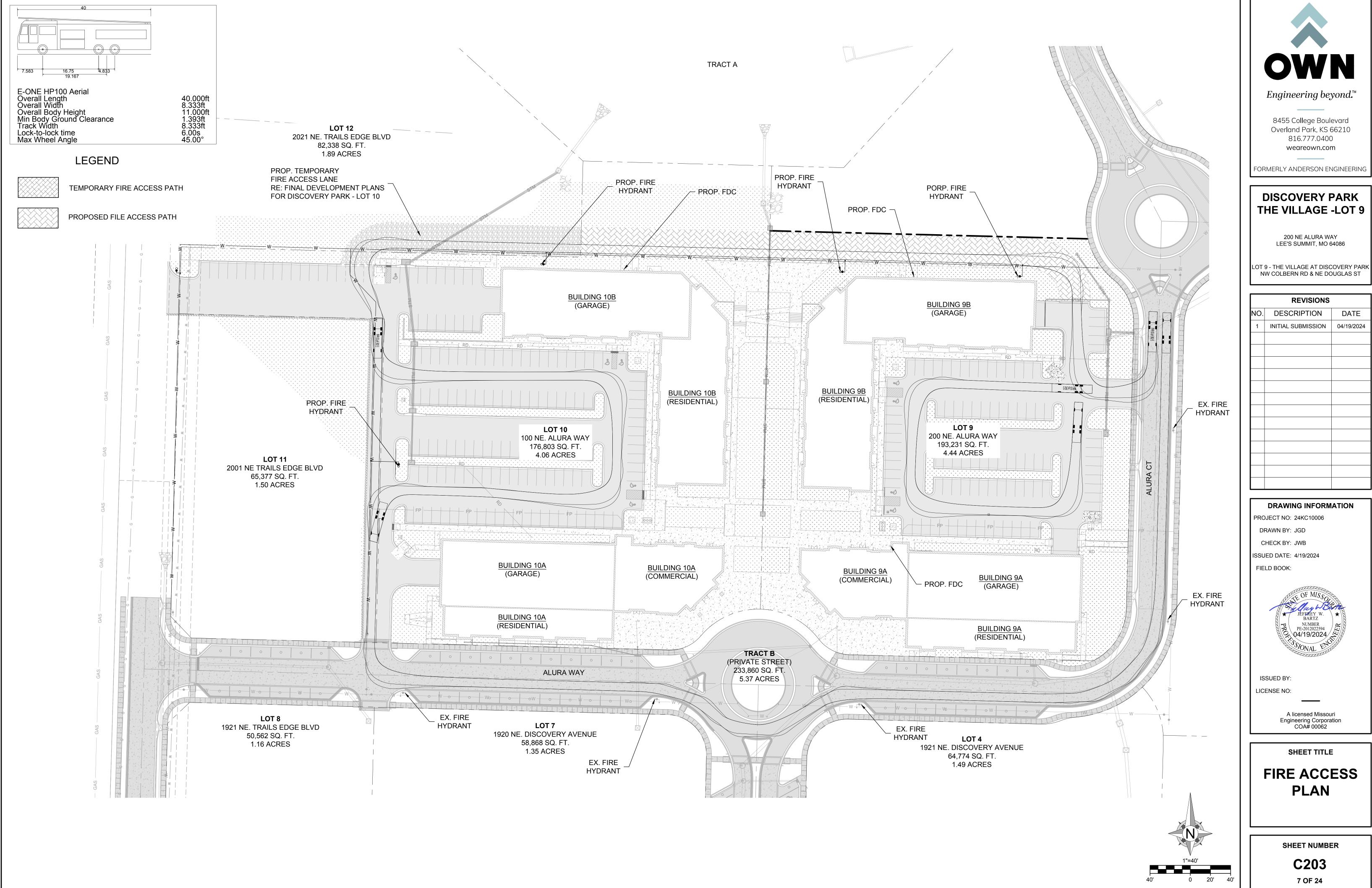
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| KEY NOTES: | | LEGEND | | |
|---|----------------------|--------------------------------------|---|------|
| BUILDING A | | W | WATER SERVICE | |
| S1 CONNECT TO EXISTING 6" SSWR STUB REFERENCE PUBLIC SANITARY SEWER AND FORCEMAIN | | a go | SANITARY SEWER SERVICE | |
| RELOCATION PLANS FOR THE VILLAGE AT DISCOVERY PARK ZONE | _ | | U/G ELECTRIC STORM SEWER | |
| 1. CONTRACTOR SHALL POTHOLD EXISTING STUB TO VERIFY AS-BUILT INVERT ELEVATION. | _ | SAN | SANITARY SEWER MAIN | |
| FL INV @ CAP = 945.60 FL INV @ MAIN = 938.80 | | | PROP. UTILITY CROSSING | • • |
| $\langle S2 \rangle$ SANITARY SEWER SERVICE LINE (4", SDR-26 PVC) | | | | |
| INSTALL 10 LF @ MIN. 1.00% FROM PROP. BUILDING TO PROP. GREASE INTERCEPTOR. | | BUILDING B | | |
| MIN. FL @ BLDG = 957.70. RE: MEP PLANS FOR BUILDING CONTINUATION. | $\langle s8 \rangle$ | | R SERVICE LINE (4", SDR-26 PVC) | |
| | | INSTALL 13 LF FRO | VERITICAL RISER @ 50%. OM VERICAL RISER TO PROP. BUILDING | ; |
| S3 INSTALL GREASE INTERCEPTOR AS SHOWN. REFER TO MEP PLANS FOR MORE DETAILS. | | 9B @ 6.46%. FL @ BLDG 9B = 9 | | |
| REFER TO DETAIL 011/SHEET C603 - DETAILS - 4 FOR REFERENCE DETAIL. | | FL @ 8" SSWR MA | IN = 935.16 | |
| FL IN = 957.60 | $\langle W2 \rangle$ | | <u>R SERVICE LINE (2", TYPE K-COPPER)</u> 3" TYPE K-COPPER SERVICE LINES FRO | DM— |
| FL OUT = 957.60 | | | 9B TO PROP. 8" C900 PVC. INSTALL 2" PIT PER CITY OF LEE'S SUMMIT | UGE |
| S4 SANITARY SEWER SERVICE LINE (4", SDR-26 PVC) INSTALL 118.5 LF @ 4.89% FROM PROP. GREASE INTERCEPTOR TO | | STANDARD DETAI | ILS WAT-11, SHEET C603. | |
| PROP. 6" SDR-26 PVC SSWR SERVICE. FL @ GREASE INTERCEPTOR = 957.60 | $\langle F2 \rangle$ | | ON SERVICE LINE (6", DUCTILE-IRON PIP OM PROP. BUILDING TO EX.8" C900 PVC | |
| FL @ 6" SSWR SERVICE = 951.82 | | MAIN. | ALL COORDINATE WITH FIRE | |
| S5 SANITARY SEWER SERVICE LINE (6", SDR-26 PVC) INSTALL 38.5 LF @ 2.00% FROM PROP. BUILDING 9A GARAGE TO | | SUPPRESSION DE | ESIGNER OR BACKFLOW LOCATION. EER IF THE NEED FOR EXTERNAL VAUL | т |
| PROP. 6" SDR-26 PVC SSWR SERVICE. FL @ BLDG 9A = 952.53 | | ARISES. | ER IF THE NEED FOR EXTERNAL VAUL | I |
| FL @ 6" SSWR SERVICE = 951.82 | $\langle G2 \rangle$ | GAS SERVICE LIN | | |
| S6 SANITARY SEWER SERVICE LINE (6", SDR-26 PVC) INSTALL 127.50 LF @ 4.89% FROM 6" SSWR SERVICE LINE TO EX. 6" | \smile | MATERIAL MAIN | OM PROP. BUILDING TO EX./PROP. X" | |
| SSWR STUB CAP. FL @ 6" SSWR SERVICE = 951.82 | $\langle E4 \rangle$ | PROPOSED TRAN | | |
| FL @ 6" SSWR STUB CAP = 945.60 | | STANDARDS. | ED TRANSFORMER PER EVERGY | |
| S7 INSTALL SSWR SERVICE LINE CLEANOUT INSTALL CLEANOUT AS SHOWN ON PLANS. | _ | (FOR REFERENCE | EONLY) | |
| REFER TO DETAIL 009/SHEET C602. | $\left< E5 \right>$ | | <u>VICE PRIMARY (SIZE/QTY PER EVERGY)</u> ROM EX. SECTIONALIZE TO PROPOSED | - |
| | | TRANSFORMER. (| FOR REFERENCE ONLY) | |
| BUILDING TO EX. 3" STUB. INSTALL 2" METER & METER PIT PER CITY | $\left< E6 \right>$ | | VICE SECONDARY (6 - 4" CONDUIT) OM PROPOSED TRANSFORMER TO | |
| OF LEE'S SUMMIT STANDARD DETAILS WAT-11, SHEET C603. | | PROPOSED METE | R BANK. (FOR REFERENCE ONLY) | |
| F1 FIRE SUPPRESSION SERVICE LINE (6", DUCTILE-IRON PIPE) INSTALL 296 LF FROM PROP. BUILDING TO EX. 6" D.I.P FIRE SERVICE | ST3 | ROOF DRAIN (10" INSTALL 142 LF @ | HDPE/PVC) 2.00% FROM PROPOSED BUILDING 9B | |
| LINE STUB. CONTRACTOR SHALL COORDINATE WITH FIRE SUPPRESSION | | GARAGE TO PROP | P. 24" HDPE STORM SEWER. IALL CORE DRILL AND INSTALL 6" ADS | |
| DESIGNER OR BACKFLOW LOCATION. CONTACT ENGINEER IF THE NEED FOR EXTERNAL VAULT ARISES. | | INSERTA TEE. FL @ BLDG 9B GA | | |
| $\langle G1 \rangle$ GAS SERVICE LINE (X", MATERIAL) | | FL @ PROP. STM I | | |
| COORDINATE WITH OWNER AND MEP ON PROPOSED GAS SERVICE LINE. | \frown | ROOF DRAIN (6" H | | |
| (E1) PROPOSED TRANSFORMER | ST4 | INSTALL 32 LF @ 4 | 4.00% FROM PROPOSED BUILDING 9B 1 | 0 |
| (FOR REFERENCE ONLY) | | CONTRACTOR SH | STORM SEWER. (STORM LINE 1) IALL CORE DRILL AND INSTALL 6" ADS | |
| | | | LANS FOR BUILDING CONTINUATION. | |
| E2 INSTALL 297 LF FROM EX. SECTIONALIZE TO PROPOSED TRANSFORMER. (FOR REFERENCE ONLY) | | FL @ BLDG 9B = 9 FL @ PROP. STM I | LINE 1 = 953.03 | |
| | _ | | S FOR BUILDING CONTINUATION | |
| E3 INSTALL 32 LF FROM PROPOSED TRANSFORMER TO PROPOSED METER BANK. (FOR REFERENCE ONLY) | ST5 | CONTRACTOR MA | <u> </u> | |
| | | TO ENGINEER FO | | |
| ST1 INSTALL 47 LF @ 2.00% FROM PROPOSED BUILDING 9A COMMERCIAL TO EX, STM D7. | | CHANNEL SECTIO | SECTIONS K2-1 THRU K2-7) OF SLOPED NN W/ TYPE 605Q - GALVANIZED GRATE. | |
| REFER TO MEP PLANS FOR BUILDING CONTINUATION. FL @ BLDG 9A COMMERCIAL = 956.50 | | | ERSAL INLET/OUTLET END CAP TO DNNECT 6" SCH. 40 PVC TO K2 UNIVERS. | AL - |
| FL @ EX. STM D7 = 955.56 | | | NUFACTURE SPECIFICATIONS. SCH. 40 PVC @ 8.15 % FROM PROP. | |
| $\left\langle ST2 \right\rangle \frac{\text{ROOF DRAIN (6" HDPE/PVC)}}{INSTALL 120 LE (20.6.77%) EPONA DEODOSED BUILDING DA CABACE$ | | TRENCH DRAIN TO FL @ TRENCH DR | O PROP. STORM STR. 3A. AIN = 949.13 | |
| 10 EX. 60" HDPE STORM SEWER. CONTRACTOR SHALL CORE DRILL | | FL @ STR. 3B = 94 | 3.75 | 7 |
| AND INSTALL 6" ADS INSERTA TEE. REFER TO MEP PLANS FOR BUILDING CONTINUATION. | | | | / |
| FL @ BLDG 9A GARAGE = 956.30 FL @ EX. STM D7 = 947.50 | | | | / |
| ROOF DRAIN (6" HDPE/PVC) | | | | |
| INSTALL 53 LF @ 5.00% FROM PROPOSED BUILDING 9A RESIDENTIAL TO EX. STM F1. | | | | X |
| REFER TO MEP PLANS FOR BUILDING CONTINUATION. FL @ BLDG 9A GARAGE = 954.93 | | | | |
| FL @ EX. STR F1 = 952.28 | | | | |
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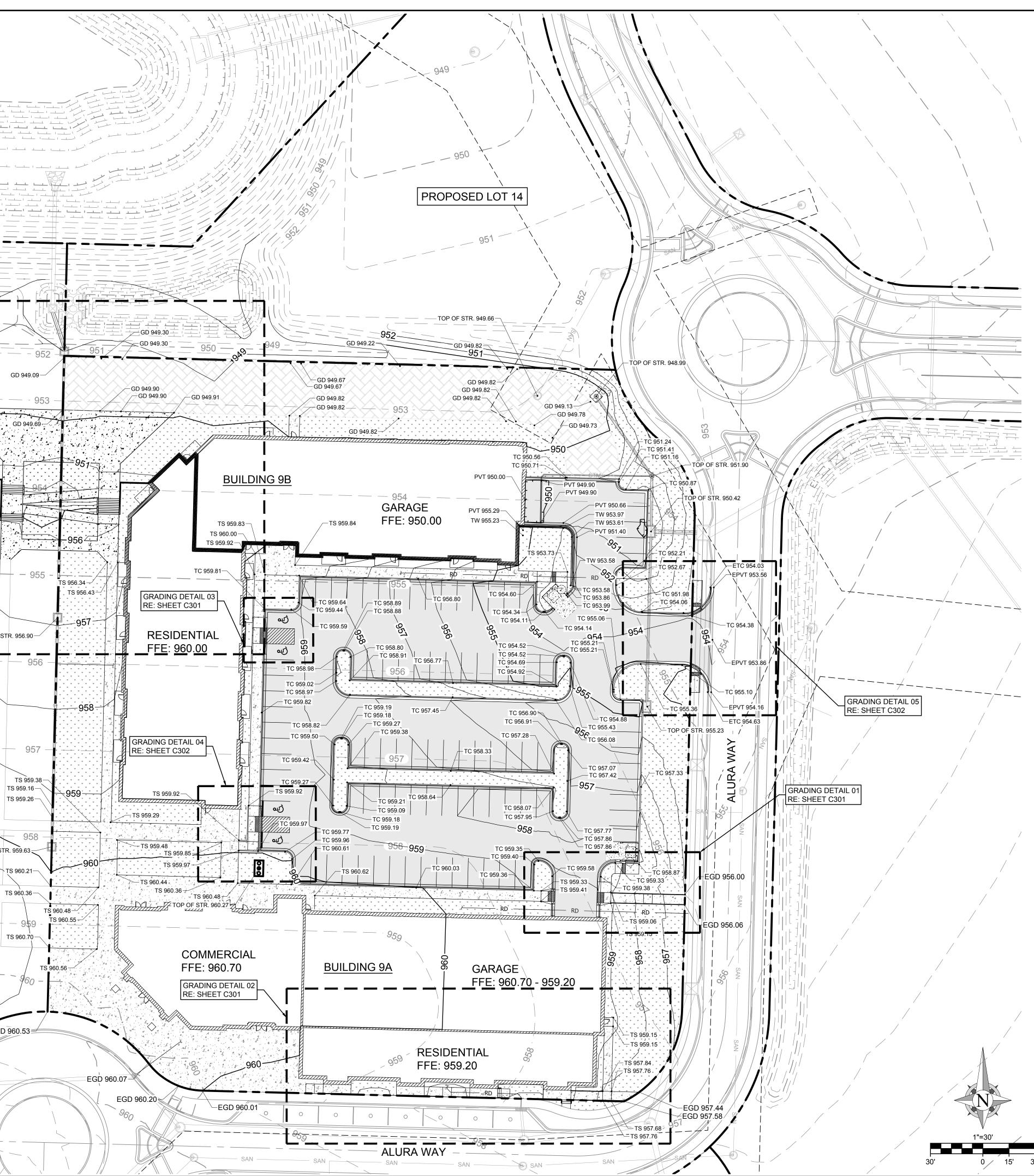
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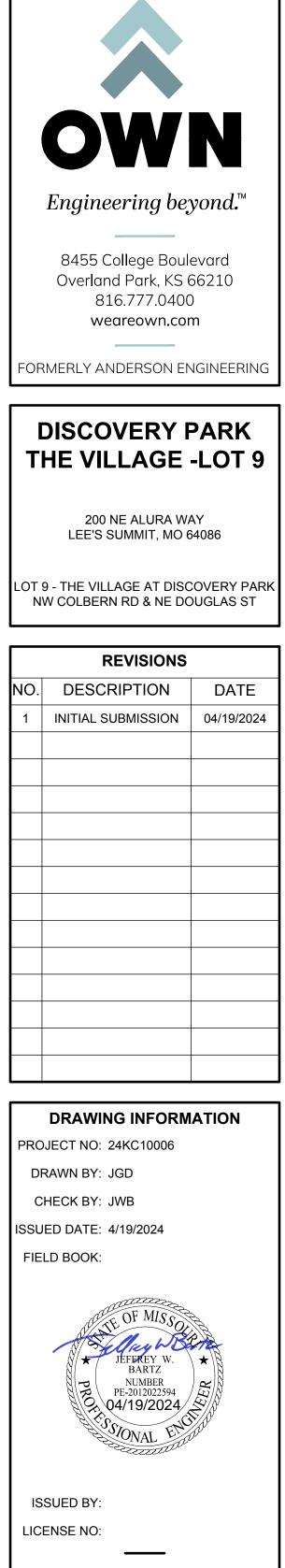




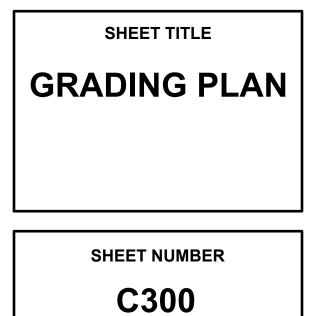
LEGEND - - 1335- - EXISTING GRADE LINES - - - GRADING DETAIL AREAS NEW SPOT ELEVATIONS ABBREVIATION LIST SIDEWALK SW TOP OF CURB ΤС TOP OF PAVEMENT PVT NEW GRADE GD ETC 1355.5 TC^{_/} **EXISTING TOP OF CURB EXISTING GRADE** EGD EXISTING PAVEMENT EPVT ESW EXISTING SIDEWALK MATCH EXISTING SIDEWALK ME TS ± TOP OF STR TOP OF STR. TOP OF WALL ΤW _ __ __ _ _____. GRADING DETAIL 03 RE: SHEET C303 E BUILDING 10B FFE: 960.50 TOP OF STR. 956.90-PROPOSED LOT 10 GRADING FOR REFERENCE ONLY مىل _میل TOP OF STR. 959.63 TS 960.21sinnin yuun _M_ TS 960.70-**BUILDING 10A** FFE: 961.70 EGD 960.53 961

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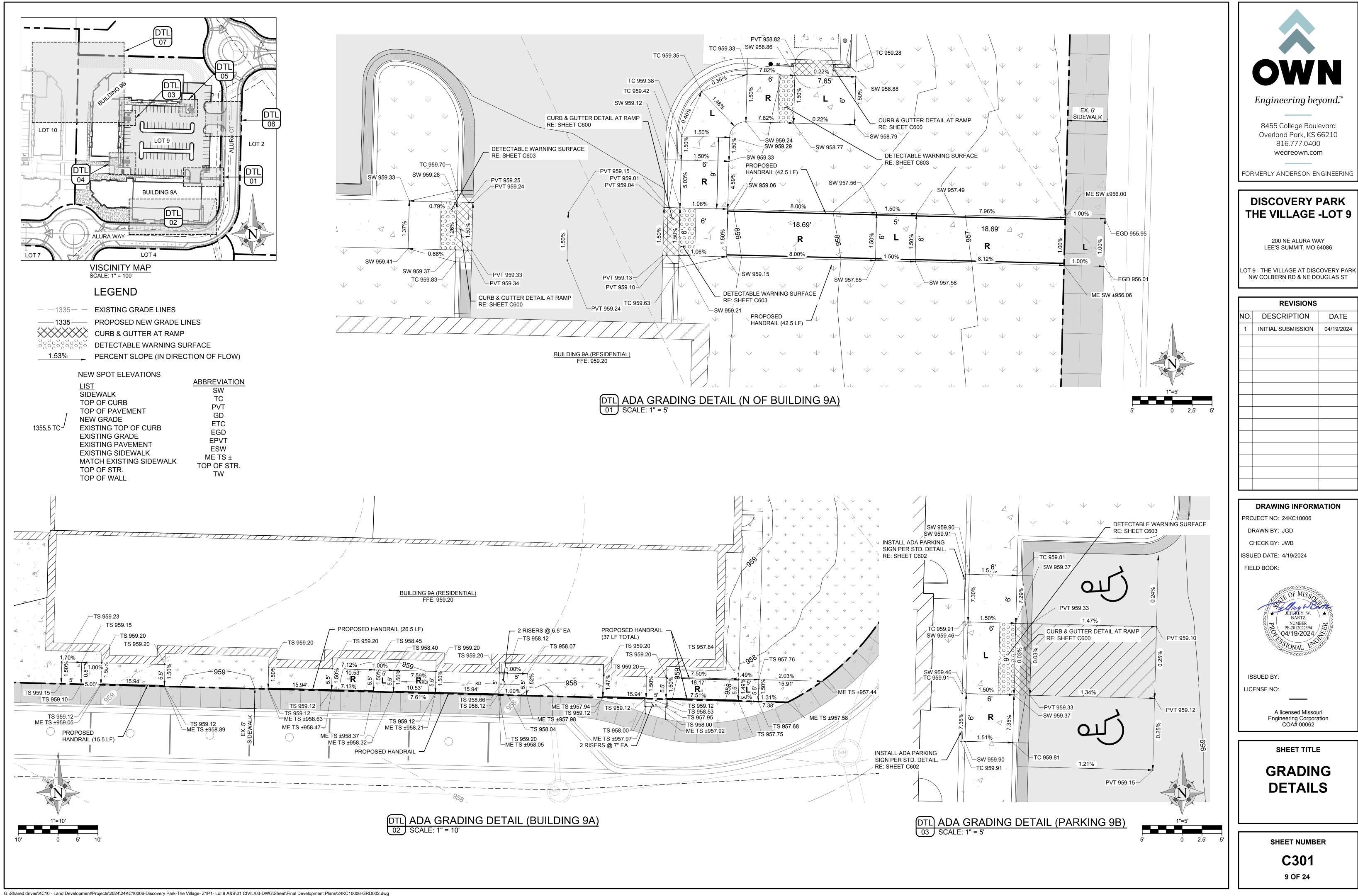




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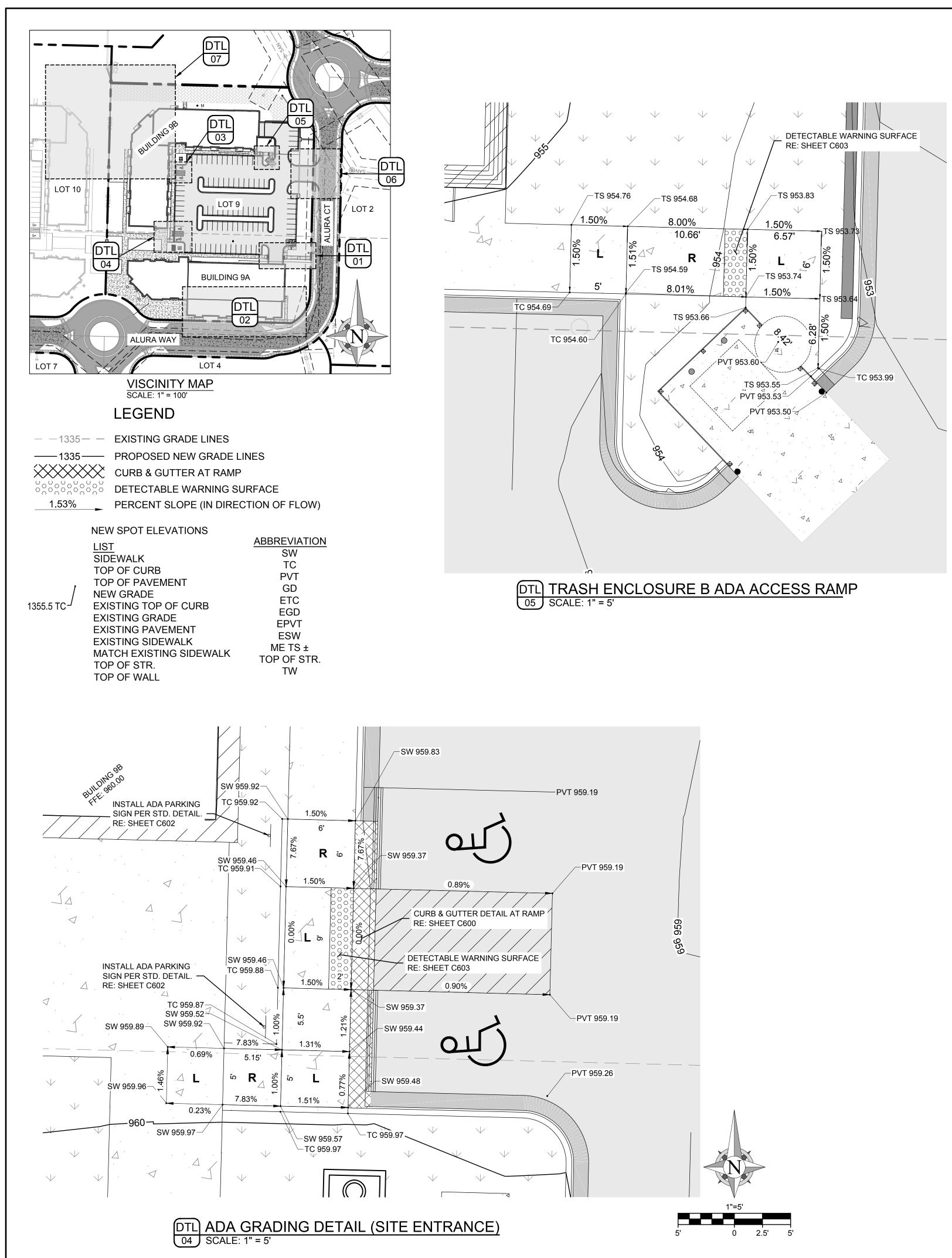


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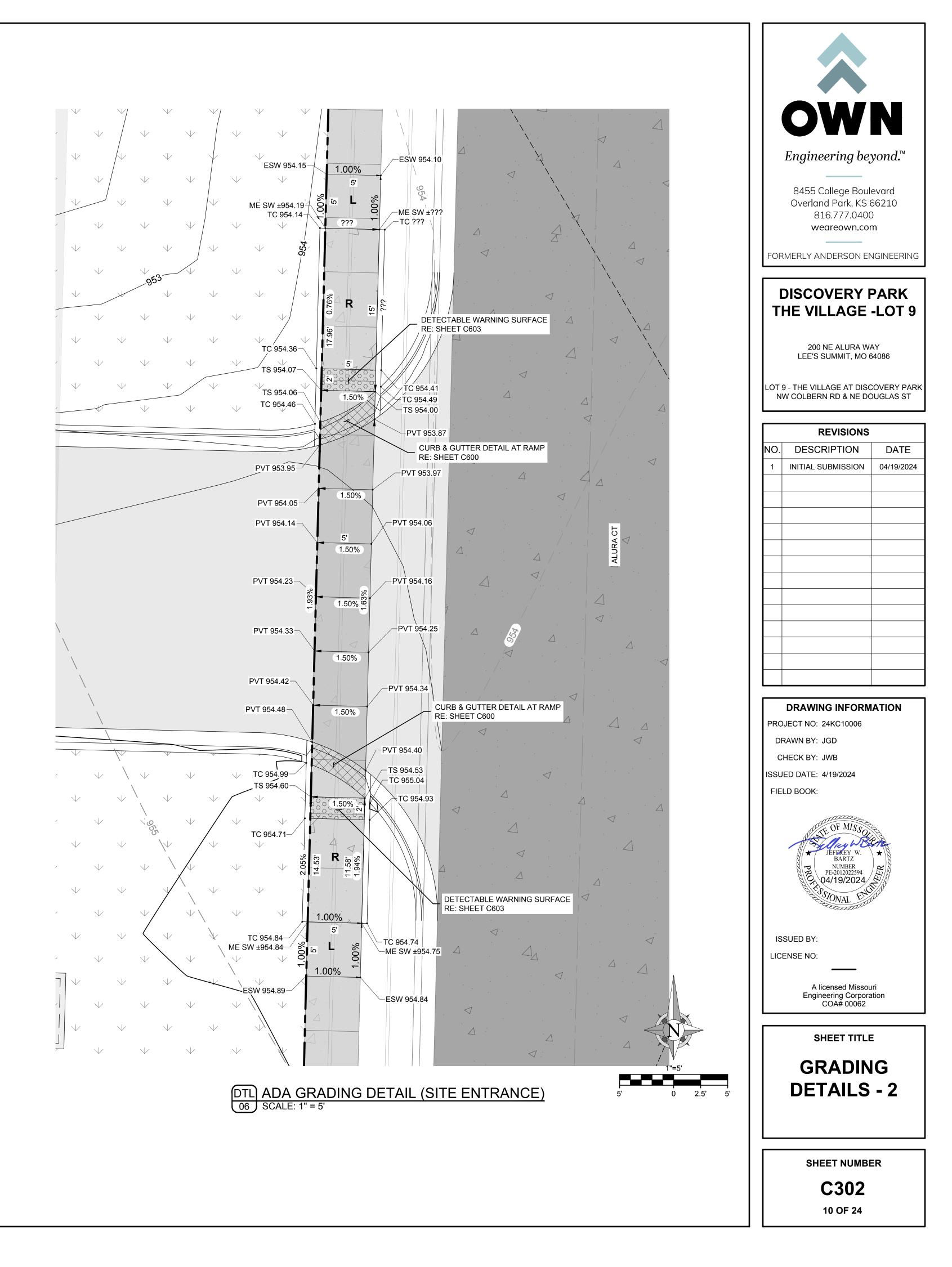


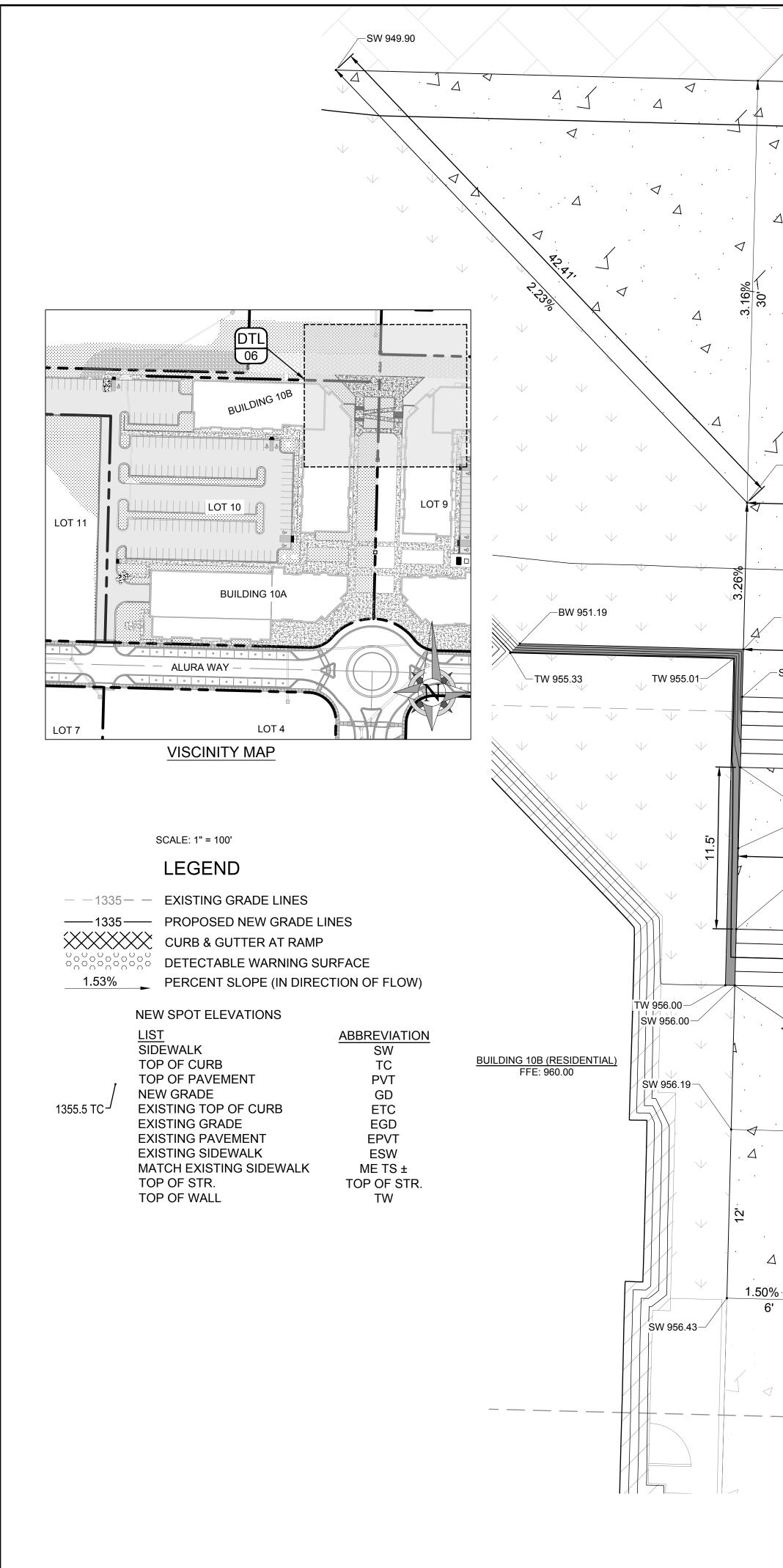


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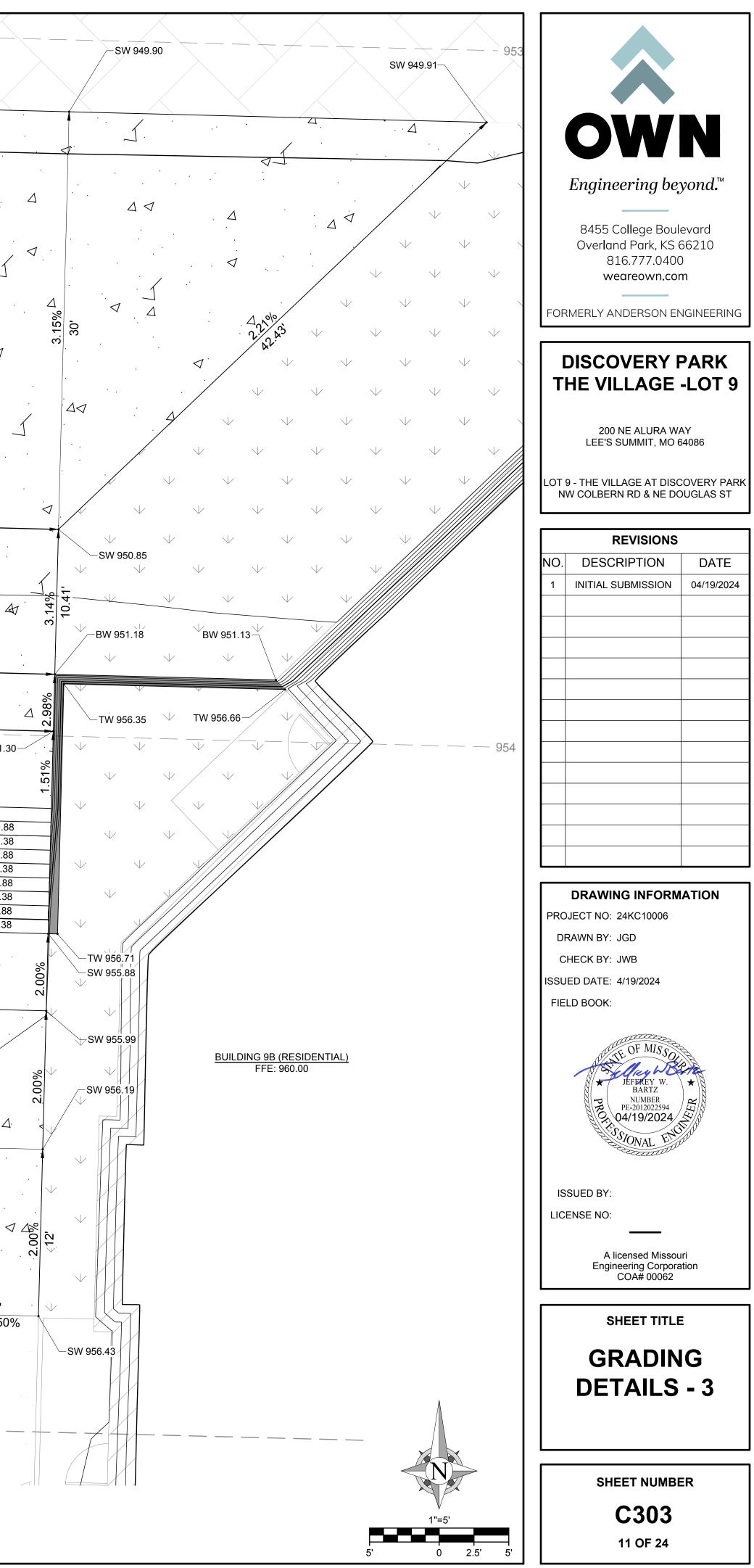


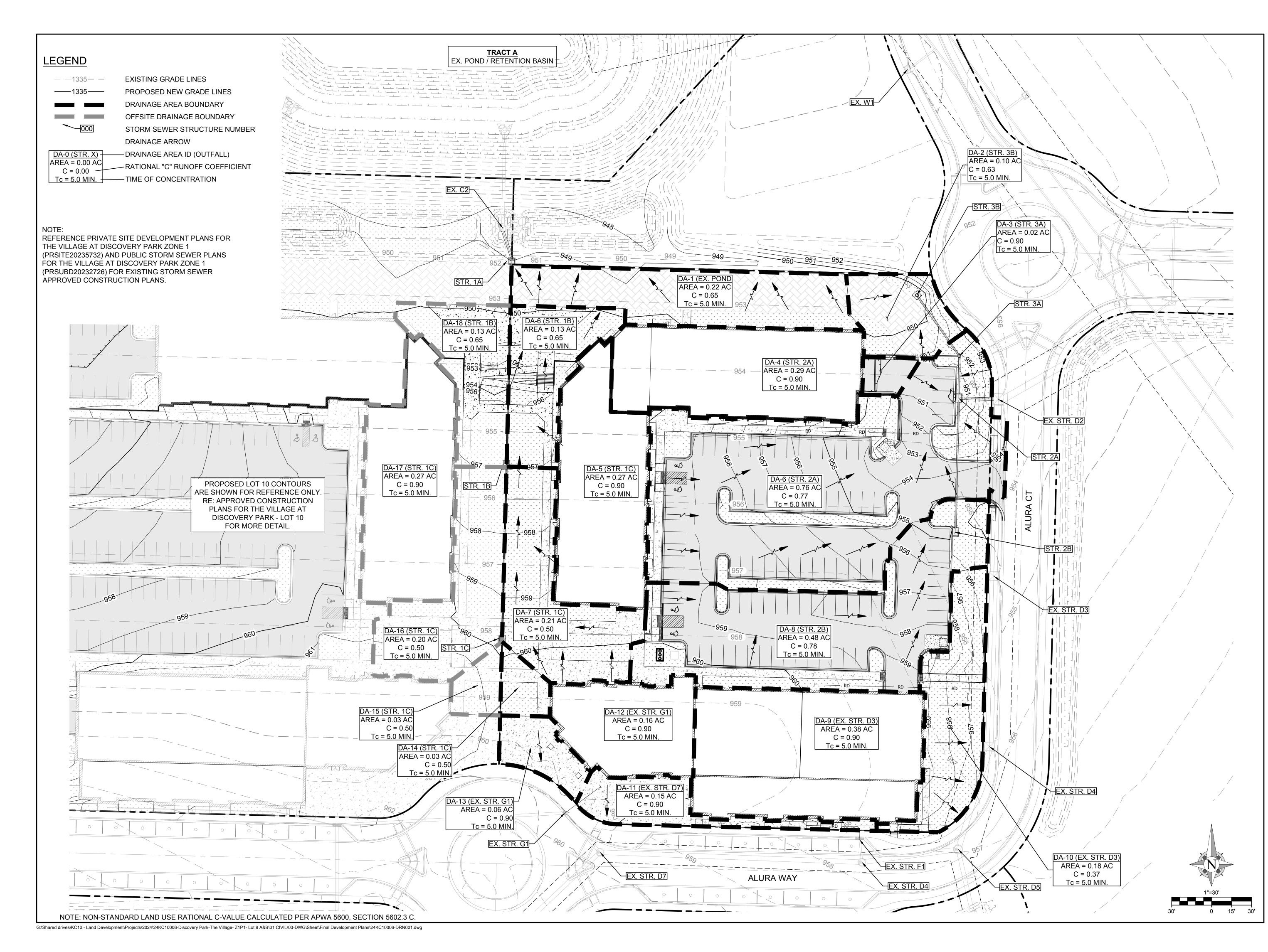


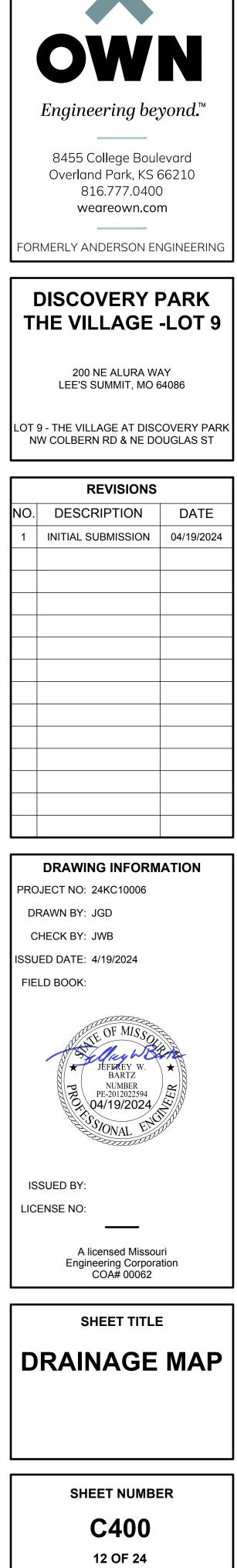
G:\Shared drives\KC10 - Land Development\Projects\2024\24KC10006-Discovery Park-The Village- Z1P1- Lot 9 A&B\01 CIVIL\03-DWG\Sheet\Final Development Plans\24KC10006-GRD003.dwg

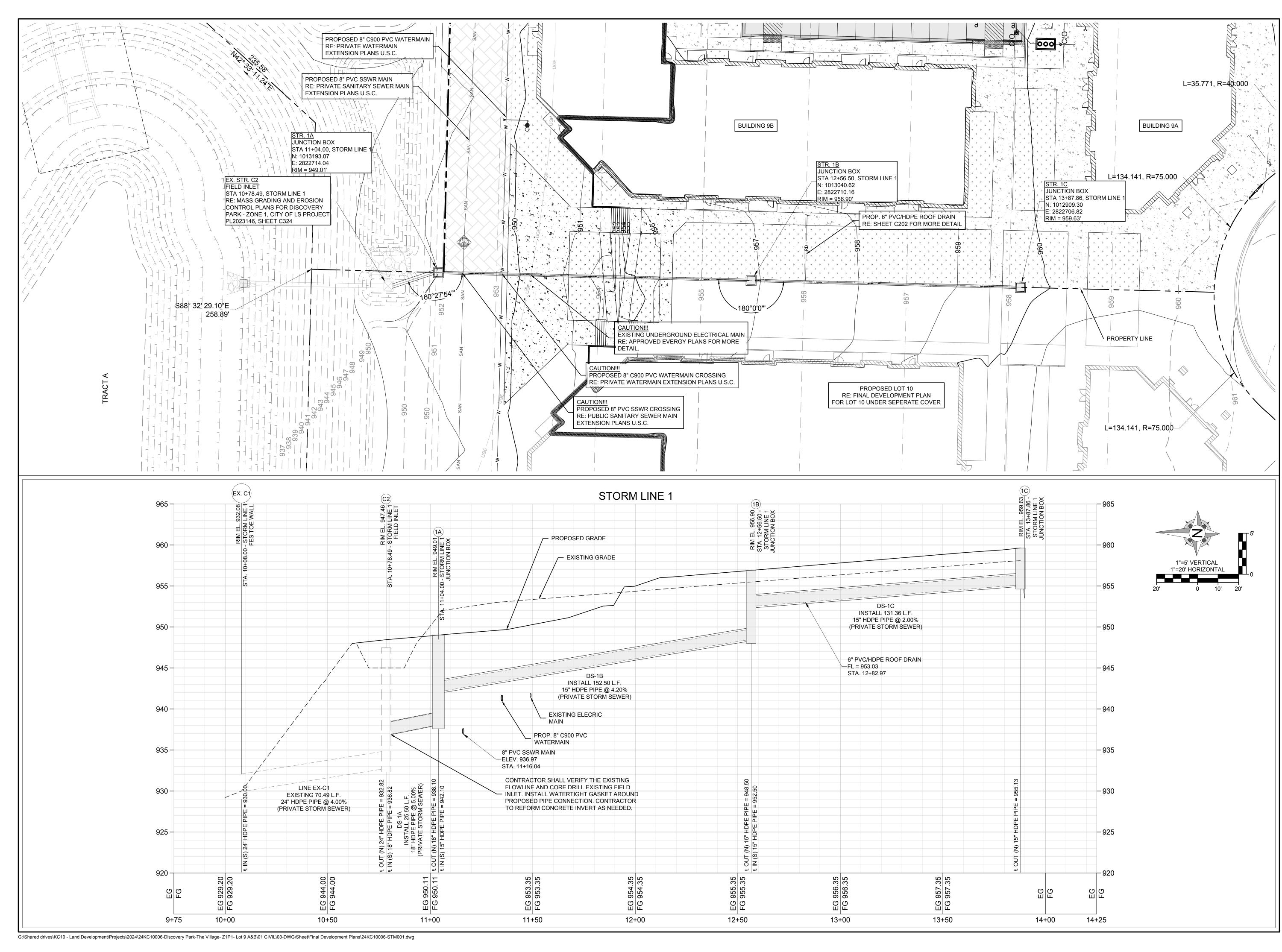
| -SW 949.90 | —SW 949.9 | 0 | | -SW 949.69 | $\neq \neq$ | | SW 949.90 |
|-------------------------------------|---|--|---|--------------------------------|--|---|---|
| · 4 | | 0.96% | | | 0.98% | | |
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| Δ Δ | | Д | Δ | | | 4] | |
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| \triangleleft | 30' | √ | · · | 3.85% ∕ ³ 0 | | 3.14% | 30 |
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| $\int \Delta$ | | Δ | < | | | | < |
| _SW 950.85 | | | Δ | -SW 950.88 | 5 | | -SW 950.85 |
| 12' | | 21.65' | · · · · · · · · · · · · · · · · · · · | | 21.65' | | ے 12' |
| 951 | ↓ ↓ ↓ ↓ | \checkmark \checkmark \checkmark | ↓ × ↓ ↓ | | 95 ₇ | | |
| <u> </u> | 3.27% | \checkmark \checkmark | ↓ \ | | \checkmark \checkmark | 3.13% | 951 |
| -−Bw 951.19 SW 951.19 12' Δ | | \checkmark | $\forall \forall$ | | \vee \vee | | —SW 951.17 |
| | → % -SW 951.30 ↓ ↓ ↓ | \checkmark \checkmark \checkmark | V V | | $\begin{array}{ccc} \checkmark & \checkmark \\ & \checkmark & \checkmark \\ & \checkmark & \checkmark \end{array}$ | \checkmark \checkmark \checkmark | 2 12' |
| GD 951.30 GD 951.80 GD 952.30 | | | | 952 V | $^{\vee}$ — $^{\vee}$ — | → 3.13% | 12' |
| GD 952.80 GD 953.30 | | 4 | $\psi \qquad \psi$ 5.7 | | 952 | SW 951.30 🗸 👋 ir | BW 951.30- |
| SW 953.80 | SW 953.81 | | o53∢ √ | ס <u>א</u> ר ש ר | | SW 951.37 | _SW 951.38 12' |
| | -SW 953.88 | 4 | 5.7 | 953 ↓ 953 | -\/\/ | | GD 951.88 GD 952.38 GD 952.88 |
| SW 953.96 SW 954.00 SW 953.97 | -954 | · · · | ↓ ↓ | | 95,4 g | | GD 953.38 GD 953.88 |
| GD 954.00 | | - | 4 تم | 60% / · | | 956 | GD 954.38 GD 954.88 GD 955.38 |
| GD 954.50 GD 955.00 | | \downarrow · · · | 4 | 50% V V | | 23% | −SW 955.88 −SW 955.89 ∎ ⊲ |
| GD 955.50 12' | ↓ ↓ ↓ ↓SW 955.97 | \checkmark \checkmark \checkmark | ψ ψ | | ψ ψ | 5 5 5 | L 12' |
| 256 25 256 47 | $ \begin{vmatrix} -300 \ 955.97 \\ \psi \\ \psi \\ \psi \end{vmatrix} $ | \checkmark | ψ ψ | ↓ ↓ | | | 0.23% |
| 956 10.24' | $\psi \qquad \psi$ | \checkmark \checkmark | \checkmark | \downarrow \downarrow | \checkmark \checkmark | 1 0, ↓ | 956 |
| 1.50% | SW 956.01 | ↓ ↓ | $\forall \qquad \forall$ | | | ↓ SW 956.01 ↓ | Δ |
| 12' ∠ 24% | | 4 | \triangleleft | 1 | | | 12' 1.50% ⊲ |
| 1.54 | | 21.65' | Δ. | ∆ | 21.65' | 1.50% | 1 |
| 2.839/2.5 | ↓ | \forall \forall | \downarrow | -SW 956.10 | ψ ψ | SW 956.10 | |
| | $\forall \qquad \forall$ | \checkmark | ψ ψ | $\downarrow \qquad \downarrow$ | \checkmark \lor | \checkmark \lor | 10.9 00000000000000000000000000000000000 |
| -SW 956.34 | \checkmark \checkmark | \downarrow \downarrow | \downarrow | | ψ ψ | \downarrow \downarrow | ↓ <u>6'</u> 1.50% |
| | $\begin{array}{ccc} & & & \\ & & \\ & \\ & \\ & \\ & \\ & \\ & \\ $ | \downarrow \downarrow \downarrow | $\begin{array}{c c} \downarrow & \downarrow \\ \downarrow \\ \downarrow \\ \downarrow \\ \end{array} \qquad \qquad$ | | | ✓ ✓ SW 99 ✓ ✓ | 56.34 |
| | ↓ ↓ | V 066 | ψ ψ | \downarrow \downarrow | \checkmark \checkmark | \checkmark | ✓ |
| | $\overline{\vee}$ $\overline{\vee}$ | 955 — — — V | | | ↓ | | |
| | | | | | | | |
| DTL CC | OURTYARD G ALE: 1" = 5' | <u>BRADING</u> | | | | | |
| <u> </u> | | | | | | | |

953 — — — — —









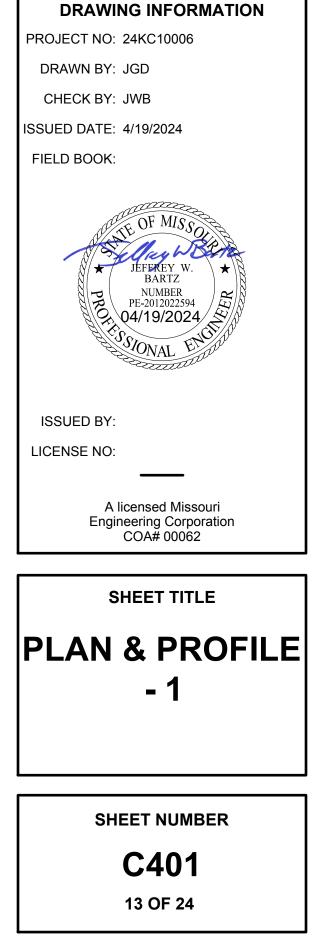


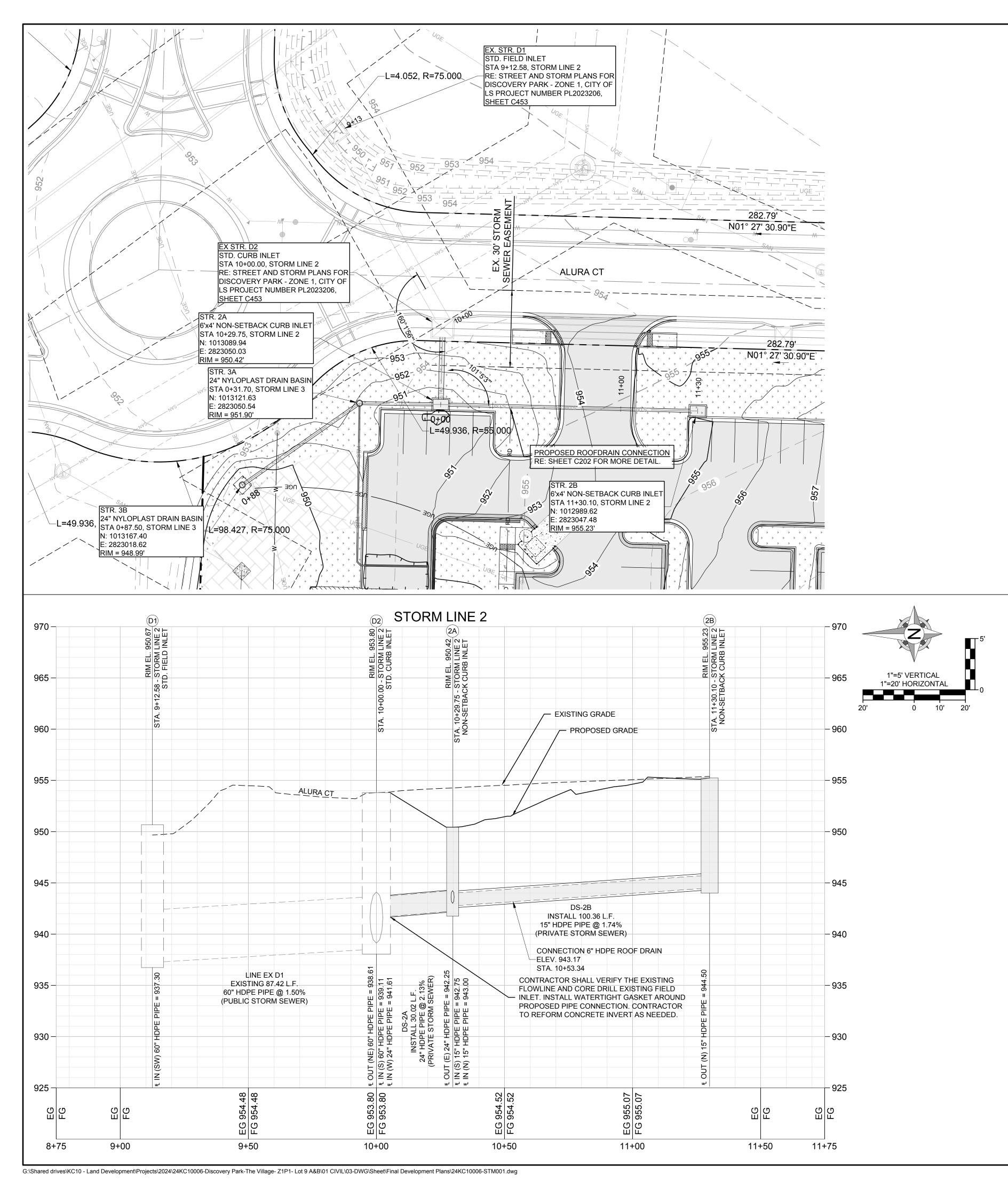
FORMERLY ANDERSON ENGINEERING

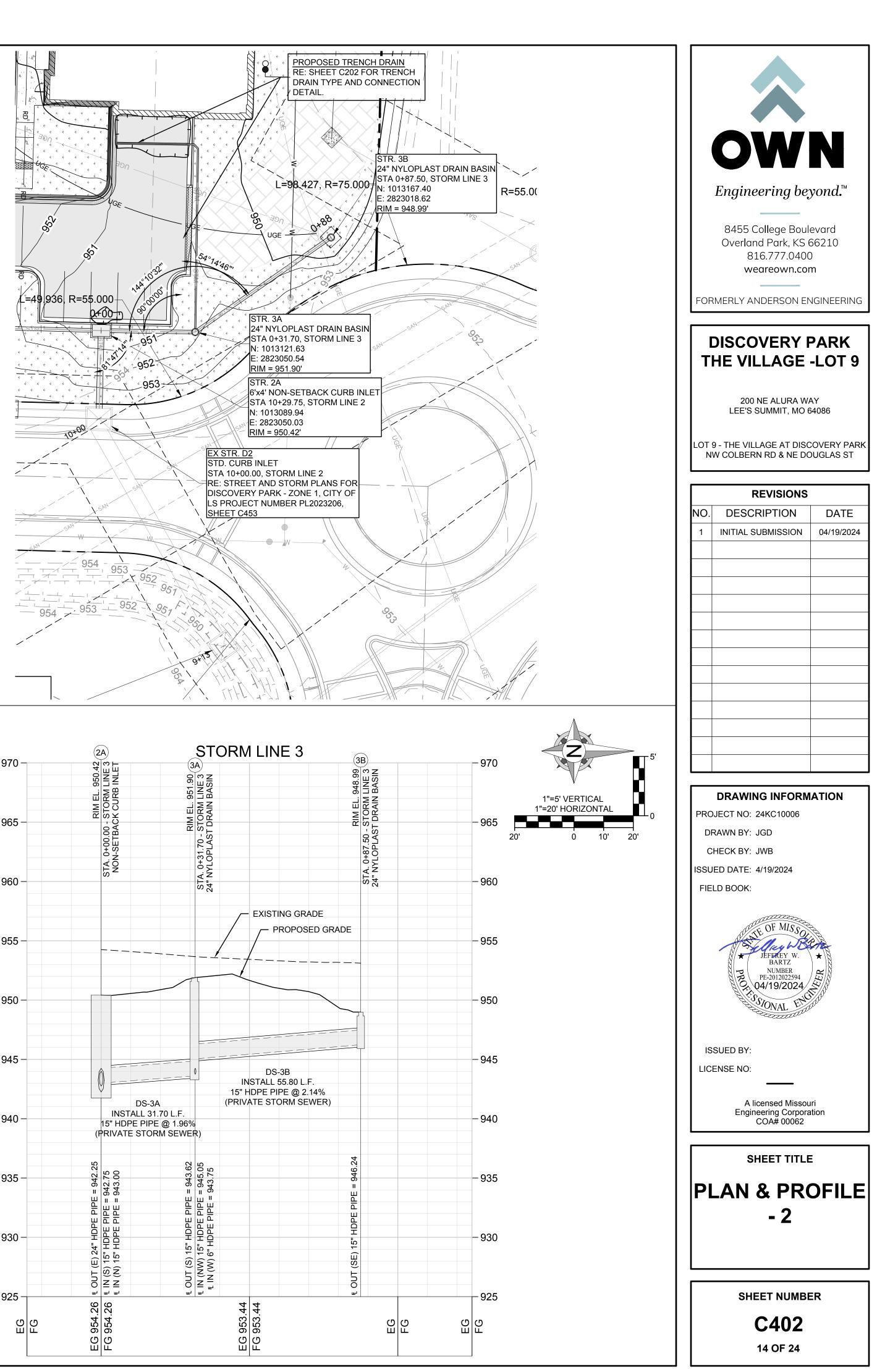
DISCOVERY PARK THE VILLAGE -LOT 9

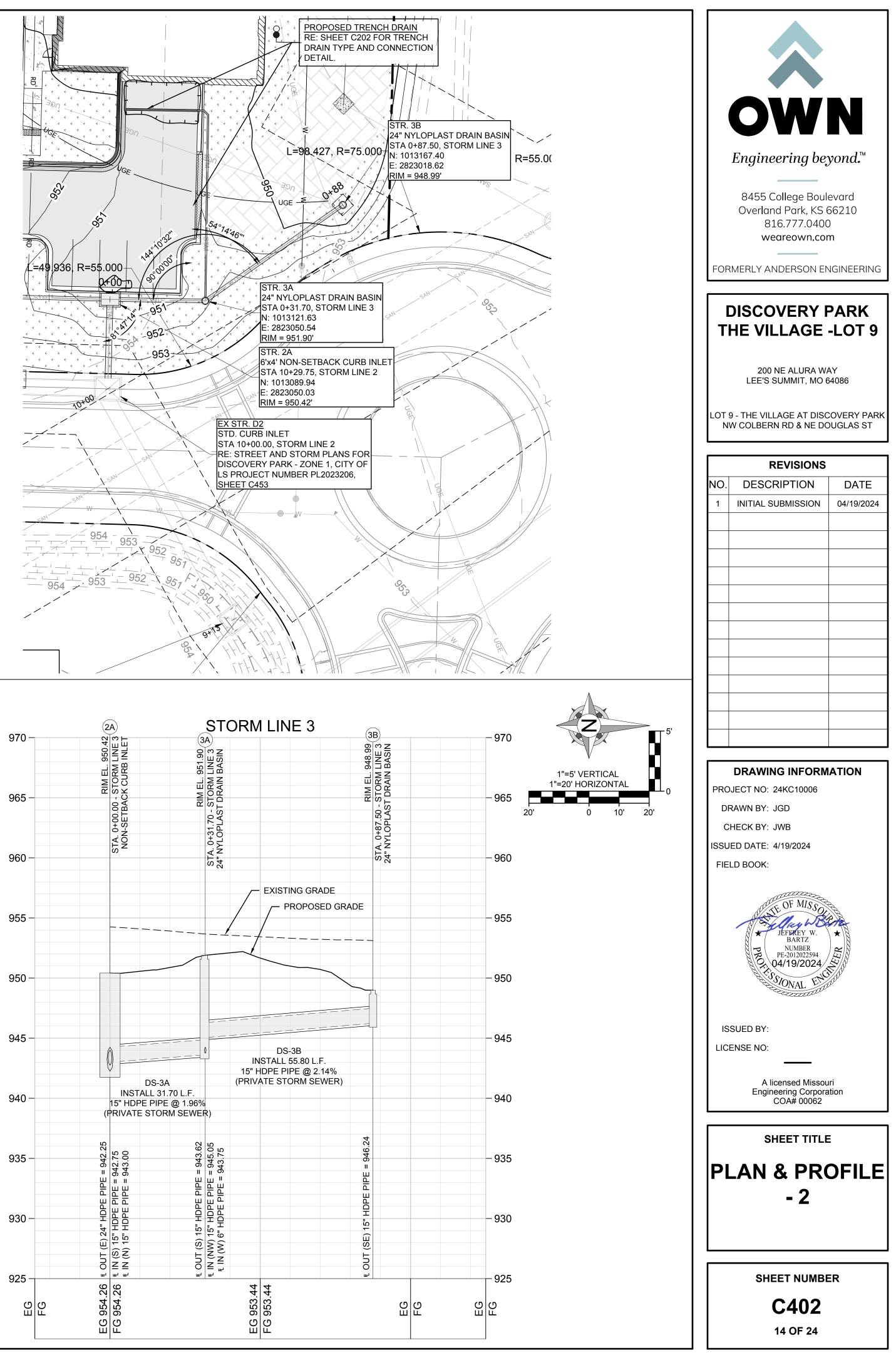
200 NE ALURA WAY LEE'S SUMMIT, MO 64086

| | REVISIONS | |
|-----|--------------------|------------|
| NO. | DESCRIPTION | DATE |
| 1 | INITIAL SUBMISSION | 04/19/2024 |
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|---|---|---|---|--|---|--|---|--|--|---|---|--|---|--|--|---|--|---|--|--|--|--|--|--|
| LineNo. | LinelD | DnStrmLine No. | RunoffCoeff | DrainageArea | IncrCxA | TotalArea | Тс | iSys | InletTime | IncrQ | TotalRunoff | InvertUp | InvertDn | LineLength | LineSlope | LineSize | n-valuePipe | FlowRate | CapacityFull | VelAve | HGLUp | HGLDn | EGLUp | EGLDn |
| | | | (C) | (ac) | | (ac) | (min) | (in/hr) | (min) | (cfs) | (cfs) | (ft) | (ft) | (ft) | (%) | (in) | | (cfs) | (cfs) | (ft/s) | (ft) | (ft) | (ft) | (ft) |
| 1 | LINE EX-C1 | Outfall | 0.65 | 0.01 | 0.01 | 1.29 | 6.10 | 6.92 | 5.00 | 0.05 | 6.22 | 932.82 | 930.00 | 70.49 | 4.00 | 24.00 | 0.010 | 6.22 | 58.81 | 4.67 | 933.70 | 930.88 | 934.04 | 931.22 |
| 2 | DS-1A | 1 | 0.65 | 0.01 | 0.01 | 1.28 | 6.00 | 6.95 | 5.00 | 0.05 | 6.21 | 938.10 | 936.82 | 25.50 | 5.02 | 18.00 | 0.010 | 6.21 | 30.58 | 9.37 | 939.06 | 937.28 | 939.48 | 937.70 |
| 3 | DS-1B | 2 | 0.65 | 0.26 | 0.17 | 1.27 | 5.50 | 7.09 | 5.00 | 1.22 | 6.28 | 948.50 | 942.10 | 152.50 | 4.20 | 15.00 | 0.010 | 6.28 | 17.20 | 9.41 | 949.51 | 942.62 | 950.05 | 943.17 |
| 4 | DS-1C | 3 | 0.71 | 1.01 | 0.72 | 1.01 | 5.00 | 7.24 | 5.00 | 5.19 | 5.19 | 955.13 | 952.50 | 131.36 | 2.00 | 15.00 | 0.010 | 5.19 | 11.88 | 7.35 | 956.05 | 953.08 | 956.50 | 953.52 |
| 5 | D6-D7 | Outfall | 0.65 | 0.01 | 0.01 | 0.23 | 5.20 | 7.18 | 5.00 | 61.24 | 1.47 | 950.20 | 948.03 | 197.01 | 1.10 | 42.00 | 0.010 | 71.97 | 137.26 | 8.44 | 952.86 | 951.30 | 954.17 | 952.61 |
| 6 | G1-D7 | 5 | 0.90 | 0.22 | 0.20 | 0.22 | 5.00 | 7.24 | 5.00 | 10.74 | 1.43 | 952.29 | 951.70 | 39.56 | 1.49 | 24.00 | 0.010 | 10.74 | 35.91 | 5.66 | 953.46 | 952.86 | 953.95 | 953.34 |
| 7 | D1-D2 | Outfall | 0.65 | 0.01 | 0.01 | 1.86 | 8.60 | 6.33 | 5.00 | 12.50 | 8.85 | 938.61 | 937.30 | 87.42 | 1.50 | 60.00 | 0.010 | 148.45 | 414.50 | 8.86 | 942.10 | 942.26 | 943.70 | 943.86 |
| 8 | DS-2A | 7 | 0.81 | 1.05 | 0.85 | 1.67 | 8.40 | 6.37 | 5.00 | 6.16 | 8.43 | 942.25 | 941.61 | 29.75 | 2.15 | 24.00 | 0.010 | 8.43 | 43.13 | 7.90 | 943.28 | 942.21 | 943.70 | 942.62 |
| 9 | DS-3A | 8 | 0.90 | 0.02 | 0.02 | 0.14 | 7.50 | 6.58 | 5.00 | 0.13 | 0.65 | 943.62 | 943.00 | 31.70 | 1.96 | 15.00 | 0.010 | 0.65 | 11.74 | 2.90 | 943.93 | 943.28 | 944.05 | 943.40 |
| 10 | DS-TD | 9 | 0.90 | 0.02 | 0.02 | 0.02 | 5.00 | 7.24 | 5.00 | 0.13 | 0.13 | 948.31 | 943.75 | 61.88 | 7.37 | 6.00 | 0.010 | 0.13 | 1.98 | 2.02 | 948.49 j | 943.93 | 948.56 | 944.00 |
| 11 | DS-3B | 9 | 0.63 | 0.10 | 0.06 | 0.10 | 5.00 | 7.24 | 5.00 | 0.46 | 0.46 | 946.24 | 945.05 | 55.80 | 2.13 | 15.00 | 0.010 | 0.46 | 12.26 | 3.60 | 946.50 | 945.21 | 946.59 | 945.31 |
| 12 | DS-2B | 8 | 0.78 | 0.48 | 0.37 | 0.48 | 5.00 | 7.24 | 5.00 | 2.71 | 2.71 | 944.50 | 942.75 | 100.36 | 1.74 | 15.00 | 0.010 | 2.71 | 11.09 | 4.77 | 945.16 | 943.28 | 945.42 | 943.55 |
| 13 | D2-D3 | 7 | 0.37 | 0.18 | 0.07 | 0.18 | 5.00 | 7.24 | 5.00 | 127.63 | 0.48 | 941.17 | 939.11 | 133.07 | 1.55 | 60.00 | 0.010 | 127.63 | 421.31 | 9.97 | 944.40 | 942.10 | 945.81 | 943.51 |
| | | | | | | | | | | | | | | | | | | | | | | | | |
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| | · · · · · · · · · · · · · · · · · · · | | | | | | | | | | ery Park - Lot | | orm Summa | - | | | | I | | | | | 1 | |
| LineNo. | LinelD | DnStrmLine No. | | DrainageArea | IncrCxA | TotalArea | Тс | iSys | InletTime | IncrQ | TotalRunoff | InvertUp | orm Summa | LineLength | • | LineSize | n-valuePipe | FlowRate | • • | VelAve | HGLUp | HGLDn | EGLUp | EGLDn |
| LineNo. | | DnStrmLine No. | RunoffCoeff (C) | DrainageArea (ac) | IncrCxA | TotalArea (ac) | | iSys (in/hr) | InletTime (min) | | - | | orm Summa | - | LineSlope (%) | LineSize (in) | n-valuePipe | I | CapacityFull (cfs) | VelAve (ft/s) | HGLUp (ft) | HGLDn (ft) | 1 | |
| LineNo. | LinelD LINE EX-C1 | DnStrmLine No. Outfall | | | IncrCxA 0.01 | | Тс | - | | IncrQ | TotalRunoff | InvertUp | orm Summa | LineLength | • | | n-valuePipe 0.01 | FlowRate | • • | | • | | EGLUp | EGLDn |
| LineNo. 1 2 | LINE | | (C) | (ac) | | (ac) | Tc (min) | (in/hr) | | IncrQ (cfs) | TotalRunoff (cfs) | InvertUp (ft) | orm Summa InvertDn (ft) | LineLength (ft) | • | (in) | | FlowRate (cfs) | (cfs) | (ft/s) | (ft) | (ft) | EGLUp (ft) | EGLDn (ft) |
| LineNo. 1 2 3 | LINE EX-C1 | | (C) 0.65 | (ac) 0.01 | 0.01 | (ac) 1.29 | Tc (min) 5.8 | (in/hr) 9.55 | | IncrQ (cfs) 0.06 | TotalRunoff (cfs) 8.58 | InvertUp (ft) 932.82 | orm Summa InvertDn (ft) 930 | LineLength (ft) 70.493 | (%) 4 | (in) 24 | 0.01 | FlowRate (cfs) 8.58 | (cfs) 58.81 | (ft/s) 5.81 | (ft) 933.86 | (ft) 930.88 | EGLUp (ft) 934.28 | EGLDn (ft) 931.3 |
| 1 2 | LINE EX-C1 DS-1A | Outfall 1 | (C) 0.65 0.65 | (ac) 0.01 0.01 | 0.01 | (ac) 1.29 1.28 | Tc (min) 5.8 5.7 | (in/hr) 9.55 9.58 | (min) 5 5 | IncrQ (cfs) 0.06 0.06 | TotalRunoff (cfs) 8.58 8.55 | InvertUp (ft) 932.82 938.1 | orm Summa InvertDn (ft) 930 936.82 | LineLength (ft) 70.493 25.503 | (%) 4 5.02 | (in) 24 18 | 0.01 | FlowRate (cfs) 8.58 8.55 | (cfs) 58.81 30.58 | (ft/s) 5.81 10.4 | (ft) 933.86 939.23 | (ft) 930.88 937.36 | EGLUp (ft) 934.28 939.79 | EGLDn (ft) 931.3 937.92 |
| 1 2 3 | LINE EX-C1 DS-1A DS-1B | Outfall 1 2 | (C) 0.65 0.65 0.65 | (ac) 0.01 0.01 0.26 | 0.01 0.01 0.17 | (ac) 1.29 1.28 1.27 | Tc (min) 5.8 5.7 | (in/hr) 9.55 9.58 9.7 | (min) 5 5 5 | IncrQ (cfs) 0.06 0.06 1.66 | TotalRunoff (cfs) 8.58 8.55 8.6 | InvertUp (ft) 932.82 938.1 948.5 | orm Summa InvertDn (ft) 930 936.82 942.1 | LineLength (ft) 70.493 25.503 152.5 | (%) 4 5.02 | (in) 24 18 15 | 0.01 0.01 0.01 | FlowRate (cfs) 8.58 8.55 8.6 | (cfs) 58.81 30.58 17.2 | (ft/s) 5.81 10.4 10.66 | (ft) 933.86 939.23 949.64 | (ft) 930.88 937.36 942.73 | EGLUp (ft) 934.28 939.79 950.47 | EGLDn (ft) 931.3 937.92 943.56 |
| 1 2 3 4 | LINE EX-C1 DS-1A DS-1B DS-1C | Outfall 1 2 3 | (C) 0.65 0.65 0.65 0.71 | (ac) 0.01 0.01 0.26 1.01 | 0.01 0.01 0.17 0.72 | (ac) 1.29 1.28 1.27 1.01 | Tc (min) 5.8 5.7 5.4 5 | (in/hr) 9.55 9.58 9.7 9.83 | (min) 5 5 5 5 5 | IncrQ (cfs) 0.06 0.06 1.66 7.05 | TotalRunoff (cfs) 8.58 8.55 8.6 7.05 | InvertUp (ft) 932.82 938.1 948.5 955.13 | orm Summa InvertDn (ft) 930 936.82 942.1 952.5 | LineLength (ft) 70.493 25.503 152.5 131.362 | (%) 4 5.02 4.2 2 | (in) 24 18 15 15 | 0.01 0.01 0.01 0.01 0.01 | FlowRate (cfs) 8.58 8.55 8.6 7.05 | (cfs) 58.81 30.58 17.2 11.88 | (ft/s) 5.81 10.4 10.66 8.22 | (ft) 933.86 939.23 949.64 956.19 | (ft) 930.88 937.36 942.73 953.19 | EGLUp (ft) 934.28 939.79 950.47 956.82 | EGLDn (ft) 931.3 937.92 943.56 953.82 |
| 1 2 3 4 5 | LINE EX-C1 DS-1A DS-1B DS-1C D6-D7 | Outfall 1 2 3 Outfall | (C) 0.65 0.65 0.65 0.71 0.65 | (ac) 0.01 0.26 1.01 0.01 | 0.01 0.01 0.17 0.72 0.01 | (ac) 1.29 1.28 1.27 1.01 0.23 | Tc (min) 5.8 5.7 5.4 5 | (in/hr) 9.55 9.58 9.7 9.83 9.79 | (min) 5 5 5 5 5 5 | IncrQ (cfs) 0.06 0.06 1.66 7.05 104.8 | TotalRunoff (cfs) 8.58 8.55 8.6 7.05 2 | InvertUp (ft) 932.82 938.1 948.5 955.13 950.2 | orm Summa InvertDn (ft) 930 936.82 942.1 952.5 948.03 | LineLength (ft) 70.493 25.503 152.5 131.362 197.013 | (%) 4 5.02 4.2 2 1.1 | (in) 24 18 15 15 42 | 0.01 0.01 0.01 0.01 0.01 0.01 | FlowRate (cfs) 8.58 8.55 8.6 7.05 122.78 | (cfs) 58.81 30.58 17.2 11.88 137.26 | (ft/s) 5.81 10.4 10.66 8.22 13.13 | (ft) 933.86 939.23 949.64 956.19 953.47 | (ft) 930.88 937.36 942.73 953.19 951.3 | EGLUp (ft) 934.28 939.79 950.47 956.82 956.15 | EGLDn (ft) 931.3 937.92 943.56 953.82 953.98 |
| 1 2 3 4 5 6 | LINE EX-C1 DS-1A DS-1B DS-1C D6-D7 G1-D7 | Outfall 1 2 3 Outfall 5 | (C) 0.65 0.65 0.65 0.71 0.65 0.9 | (ac) 0.01 0.26 1.01 0.21 0.22 | 0.01 0.01 0.17 0.72 0.01 0.2 | (ac) 1.29 1.28 1.27 1.01 0.23 0.22 | Tc (min) 5.8 5.7 5.4 5 5 5.1 5.1 5 | (in/hr) 9.55 9.58 9.7 9.83 9.79 9.83 | (min) 5 5 5 5 5 5 5 5 | IncrQ (cfs) 0.06 0.06 1.66 7.05 104.8 17.99 | TotalRunoff (cfs) 8.58 8.55 8.6 7.05 2 1.95 | InvertUp (ft) 932.82 938.1 948.5 955.13 955.2 952.29 | orm Summa InvertDn (ft) 930 936.82 942.1 952.5 948.03 951.7 | LineLength (ft) 70.493 25.503 152.5 131.362 197.013 39.556 | (%) 4 5.02 4.2 2 1.1 1.49 | (in) 24 18 15 15 42 24 | 0.01 0.01 0.01 0.01 0.01 0.01 0.01 | FlowRate (cfs) 8.58 8.55 8.6 7.05 122.78 17.99 | (cfs) 58.81 30.58 17.2 11.88 137.26 35.91 | (ft/s) 5.81 10.4 10.66 8.22 13.13 6.56 | (ft) 933.86 939.23 949.64 956.19 953.47 953.82 j | (ft) 930.88 937.36 942.73 953.19 951.3 953.47 | EGLUp (ft) 934.28 939.79 950.47 956.82 956.15 954.58 | EGLDn (ft) 931.3 937.92 943.56 953.82 953.98 954.23 |
| 1 2 3 4 5 6 7 | LINE EX-C1 DS-1A DS-1B DS-1C D6-D7 G1-D7 D1-D2 | Outfall 1 2 3 Outfall 5 Outfall | (C) 0.65 0.65 0.65 0.71 0.65 0.9 0.65 | (ac) 0.01 0.01 0.26 1.01 0.01 0.22 0.01 | 0.01 0.01 0.17 0.72 0.01 0.2 0.01 | (ac) 1.29 1.28 1.27 1.01 0.23 0.22 1.86 | Tc (min) 5.8 5.7 5.4 5 5.1 5.1 5 7.6 | (in/hr) 9.55 9.58 9.7 9.83 9.79 9.83 9.79 9.83 8.99 | (min) 5 5 5 5 5 5 5 5 5 | IncrQ (cfs) 0.06 0.06 1.66 7.05 104.8 17.99 21.12 | TotalRunoff (cfs) 8.58 8.55 8.6 7.05 2 1.95 12.56 | InvertUp (ft) 932.82 938.1 948.5 955.13 955.2 952.29 938.61 | orm Summa InvertDn (ft) 930 936.82 942.1 952.5 948.03 951.7 937.3 | LineLength (ft) 70.493 25.503 152.5 131.362 197.013 39.556 87.42 | (%) 4 5.02 4.2 2 1.1 1.49 1.5 | (in) 24 18 15 15 42 24 60 | 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 | FlowRate (cfs) 8.58 8.55 8.6 7.05 122.78 17.99 252.77 | (cfs) 58.81 30.58 17.2 11.88 137.26 35.91 414.5 | (ft/s) 5.81 10.4 10.66 8.22 13.13 6.56 13.31 | (ft) 933.86 939.23 949.64 956.19 953.47 953.82 j 943.05 | (ft) 930.88 937.36 942.73 953.19 951.3 953.47 942.26 | EGLUp (ft) 934.28 939.79 950.47 956.82 956.15 954.58 945.98 | EGLDn (ft) 931.3 937.92 943.56 953.82 953.98 954.23 945.19 |
| 1 2 3 4 5 6 7 8 | LINE EX-C1 DS-1A DS-1B DS-1C D6-D7 G1-D7 D1-D2 DS-2A | Outfall 1 2 3 Outfall 5 Outfall 7 | (C) 0.65 0.65 0.65 0.71 0.65 0.9 0.65 0.81 | (ac) 0.01 0.01 0.26 1.01 0.01 0.22 0.01 1.05 | 0.01 0.01 0.17 0.72 0.01 0.2 0.01 0.85 | (ac) 1.29 1.28 1.27 1.01 0.23 0.22 1.86 1.67 | Tc (min) 5.8 5.7 5.4 5 5.1 5 5.1 5 7.6 7.5 | (in/hr) 9.55 9.58 9.7 9.83 9.79 9.83 9.79 9.83 8.99 9.03 | (min) 5 5 5 5 5 5 5 5 5 | IncrQ (cfs) 0.06 0.06 1.66 7.05 104.8 17.99 21.12 8.36 | TotalRunoff (cfs) 8.58 8.55 8.6 7.05 2 1.95 12.56 11.95 | InvertUp (ft) 932.82 938.1 948.5 955.13 955.2 952.29 938.61 942.25 | orm Summa InvertDn (ft) 930 936.82 942.1 952.5 948.03 951.7 937.3 941.61 | LineLength (ft) 70.493 25.503 152.5 131.362 197.013 39.556 87.42 29.746 | (%) 4 5.02 4.2 2 1.1 1.49 1.5 2.15 | (in) 24 18 15 15 42 24 60 24 | 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 | FlowRate (cfs) 8.58 8.55 8.6 7.05 122.78 17.99 252.77 11.95 | (cfs) 58.81 30.58 17.2 11.88 137.26 35.91 414.5 43.13 | (ft/s) 5.81 10.4 10.66 8.22 13.13 6.56 13.31 5.39 | (ft) 933.86 939.23 949.64 956.19 953.47 953.82 j 943.05 943.49 j | (ft) 930.88 937.36 942.73 953.19 953.47 953.47 942.26 943.05 | EGLUp (ft) 934.28 939.79 950.47 956.82 956.15 954.58 945.98 944.02 | EGLDn (ft) 931.3 937.92 943.56 953.82 953.98 954.23 945.19 943.58 |
| 1 2 3 4 5 6 7 8 9 | LINE EX-C1 DS-1A DS-1B DS-1C D6-D7 G1-D7 D1-D2 DS-2A DS-2A DS-3A | Outfall 1 2 3 Outfall 5 Outfall 7 8 | (C) 0.65 0.65 0.65 0.71 0.65 0.9 0.65 0.81 0.9 0.9 0.9 0.9 0.9 | (ac) 0.01 0.01 0.26 1.01 0.22 0.01 1.05 0.02 | 0.01 0.01 0.17 0.72 0.01 0.2 0.01 0.85 0.02 | (ac) 1.29 1.28 1.27 1.01 0.23 0.22 1.86 1.67 0.14 | Tc (min) 5.8 5.7 5.4 5 5.1 5 5.1 5 7.6 7.5 | (in/hr) 9.55 9.58 9.7 9.83 9.79 9.83 9.79 9.83 8.99 9.03 9.23 9.23 9.83 9.83 | (min) 5 5 5 5 5 5 5 5 5 | IncrQ (cfs) 0.06 0.06 1.66 7.05 104.8 17.99 21.12 8.36 0.18 | TotalRunoff (cfs) 8.58 8.55 8.6 7.05 2 1.95 12.56 11.95 0.91 | InvertUp (ft) 932.82 938.1 948.5 955.13 955.2 952.29 938.61 942.25 943.62 | orm Summa InvertDn (ft) 930 936.82 942.1 952.5 948.03 951.7 937.3 941.61 943 943.75 945.05 | LineLength (ft) 70.493 25.503 152.5 131.362 197.013 39.556 87.42 29.746 31.699 | (%) 4 5.02 4.2 2 1.1 1.49 1.5 2.15 1.96 | (in) 24 18 15 15 42 24 60 24 15 | 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 | FlowRate (cfs) 8.58 8.55 8.6 7.05 122.78 17.99 252.77 11.95 0.91 | (cfs) 58.81 30.58 17.2 11.88 137.26 35.91 414.5 43.13 11.74 | (ft/s) 5.81 10.4 10.66 8.22 13.13 6.56 13.31 5.39 2.5 | (ft) 933.86 939.23 949.64 956.19 953.47 953.82 j 943.05 943.49 j 943.99 j | (ft) 930.88 937.36 942.73 953.19 953.47 953.47 942.26 943.05 943.49 | EGLUp (ft) 934.28 939.79 950.47 956.82 956.15 954.58 945.98 945.98 944.02 944.13 | EGLDn (ft) 931.3 937.92 943.56 953.82 953.98 954.23 945.19 943.58 943.63 |
| 1 2 3 4 5 6 7 8 9 10 | LINE EX-C1 DS-1A DS-1B DS-1C D6-D7 G1-D7 D1-D2 DS-2A DS-2A DS-3A DS-3A | Outfall 1 2 3 Outfall 5 Outfall 7 8 9 | (C) 0.65 0.65 0.65 0.71 0.65 0.9 0.65 0.81 0.9 0.9 0.9 | (ac) 0.01 0.01 0.26 1.01 0.22 0.01 1.05 0.02 0.02 0.02 | 0.01 0.01 0.17 0.72 0.01 0.2 0.01 0.85 0.02 0.02 | (ac) 1.29 1.28 1.27 1.01 0.23 0.22 1.86 1.67 0.14 0.02 | Tc (min) 5.8 5.7 5.4 5 5.1 5 5.1 5 7.6 7.5 | (in/hr) 9.55 9.58 9.7 9.83 9.79 9.83 9.79 9.83 8.99 9.03 9.23 9.83 | (min) 5 5 5 5 5 5 5 5 5 | IncrQ (cfs) 0.06 0.06 1.66 7.05 104.8 17.99 21.12 8.36 0.18 0.18 | TotalRunoff (cfs) 8.58 8.55 8.6 7.05 2 1.95 12.56 11.95 0.91 0.18 | InvertUp (ft) 932.82 938.1 948.5 955.13 955.29 952.29 938.61 942.25 943.62 948.31 | orm Summa InvertDn (ft) 930 936.82 942.1 952.5 948.03 951.7 937.3 941.61 943 943.75 | LineLength (ft) 70.493 25.503 152.5 131.362 197.013 39.556 87.42 29.746 31.699 61.878 | (%) 4 5.02 4.2 2 1.1 1.49 1.5 2.15 1.96 7.37 | (in) 24 18 15 15 42 24 60 24 15 6 | 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 | FlowRate (cfs) 8.58 8.55 8.6 7.05 122.78 17.99 252.77 11.95 0.91 0.18 | (cfs) 58.81 30.58 17.2 11.88 137.26 35.91 414.5 43.13 11.74 1.98 | (ft/s) 5.81 10.4 10.66 8.22 13.13 6.56 13.31 5.39 2.5 2.06 | (ft) 933.86 939.23 949.64 956.19 953.47 953.82 j 943.05 943.49 j 943.99 j 948.52 j | (ft) 930.88 937.36 942.73 953.19 953.47 942.26 943.05 943.49 943.99 | EGLUp (ft) 934.28 939.79 950.47 956.82 956.15 954.58 945.98 945.98 944.02 944.13 948.6 | EGLDn (ft) 931.3 937.92 943.56 953.82 953.98 954.23 945.19 943.58 943.63 944.07 |

| | | | | | | | | | | Discov | very Park - Lot | 9.10-Vr Sto | orm Summa | rv | | | | | | | | | | |
|---|---|--|---|--|---|--|---|--|--|---|---|---|--|--|--|---|--|--|--|--|--|---|---|---|
| LineNo. | LineID | DnStrmLine No. | RunoffCoeff | DrainageArea | IncrCxA | TotalArea | Тс | iSys | InletTime | IncrQ | TotalRunoff | | 1 | - | LineSlope | LineSize | n-valuePipe | FlowRate | CapacityFull | VelAve | HGLUp | HGLDn | EGLUp | EGLDn |
| | Lincib | | (C) | (ac) | | (ac) | (min) | (in/hr) | (min) | (cfs) | (cfs) | (ft) | (ft) | (ft) | (%) | (in) | | (cfs) | (cfs) | (ft/s) | (ft) | (ft) | (ft) | (ft) |
| 1 | LINE | Outfall | 0.65 | 0.01 | 0.01 | 1.29 | 6.10 | 6.92 | 5.00 | 0.05 | 6.22 | 932.82 | 930.00 | 70.49 | 4.00 | 24.00 | 0.010 | 6.22 | 58.81 | 4.67 | 933.70 | 930.88 | 934.04 | 931.22 |
| 2 | EX-C1 DS-1A | 1 | 0.65 | 0.01 | 0.01 | 1.28 | 6.00 | 6.95 | 5.00 | 0.05 | 6.21 | 938.10 | 936.82 | 25.50 | 5.02 | 18.00 | 0.010 | 6.21 | 30.58 | 9.37 | 939.06 | 937.28 | 939.48 | 937.70 |
| 3 | DS-1A DS-1B | 2 | 0.65 | 0.01 | 0.01 | 1.27 | 5.50 | 7.09 | 5.00 | 1.22 | 6.28 | 948.50 | 942.10 | 152.50 | 4.20 | 15.00 | 0.010 | 6.28 | 17.20 | 9.41 | 949.51 | 942.62 | 950.05 | 943.17 |
| 4 | DS-1D DS-1C | 3 | 0.00 | 1.01 | 0.72 | 1.01 | 5.00 | 7.24 | 5.00 | 5.19 | 5.19 | 955.13 | 952.50 | 131.36 | 2.00 | 15.00 | 0.010 | 5.19 | 11.88 | 7.35 | 956.05 | 953.08 | 956.50 | 953.52 |
| 5 | D6-D7 | Outfall | 0.65 | 0.01 | 0.01 | 0.23 | 5.20 | 7.18 | 5.00 | 61.24 | 1.47 | 950.20 | 948.03 | 197.01 | 1.10 | 42.00 | 0.010 | 71.97 | 137.26 | 8.44 | 952.86 | 951.30 | 954.17 | 952.61 |
| 6 | G1-D7 | 5 | 0.90 | 0.01 | 0.20 | 0.23 | 5.00 | 7.24 | 5.00 | 10.74 | 1.43 | 952.29 | 951.70 | 39.56 | 1.10 | 24.00 | 0.010 | 10.74 | 35.91 | 5.66 | 953.46 | 952.86 | 953.95 | 953.34 |
| 7 | D1-D7 | Outfall | 0.65 | 0.22 | 0.20 | 1.86 | 8.60 | 6.33 | 5.00 | 12.50 | 8.85 | 938.61 | 937.30 | 87.42 | 1.45 | 60.00 | 0.010 | 148.45 | 414.50 | 8.86 | 942.10 | 942.26 | 943.70 | 943.86 |
| 8 | DS-2A | 7 | 0.81 | 1.05 | 0.85 | 1.67 | 8.40 | 6.37 | 5.00 | 6.16 | 8.43 | 942.25 | 941.61 | 29.75 | 2.15 | 24.00 | 0.010 | 8.43 | 43.13 | 7.90 | 943.28 | 942.21 | 943.70 | 942.62 |
| 9 | DS-3A | 8 | 0.90 | 0.02 | 0.02 | 0.14 | 7.50 | 6.58 | 5.00 | 0.10 | 0.65 | 943.62 | 943.00 | 31.70 | 1.96 | 15.00 | 0.010 | 0.65 | 11.74 | 2.90 | 943.93 | 943.28 | 944.05 | 943.40 |
| 10 | DS-TD | 9 | 0.90 | 0.02 | 0.02 | 0.02 | 5.00 | 7.24 | 5.00 | 0.13 | 0.13 | 948.31 | 943.75 | 61.88 | 7.37 | 6.00 | 0.010 | 0.13 | 1.98 | 2.02 | 948.49 j | 943.93 | 948.56 | 944.00 |
| 10 | DS-3B | 9 | 0.63 | 0.10 | 0.06 | 0.10 | 5.00 | 7.24 | 5.00 | 0.46 | 0.46 | 946.24 | 945.05 | 55.80 | 2.13 | 15.00 | 0.010 | 0.46 | 12.26 | 3.60 | 946.50 | 945.21 | 946.59 | 945.31 |
| 12 | DS-2B | 8 | 0.78 | 0.48 | 0.37 | 0.48 | 5.00 | 7.24 | 5.00 | 2.71 | 2.71 | 944.50 | 942.75 | 100.36 | 1.74 | 15.00 | 0.010 | 2.71 | 11.09 | 4.77 | 945.16 | 943.28 | 945.42 | 943.55 |
| 13 | D2-D3 | 7 | 0.37 | 0.18 | 0.07 | 0.18 | 5.00 | 7.24 | 5.00 | 127.63 | 0.48 | 941.17 | 939.11 | 133.07 | 1.55 | 60.00 | 0.010 | 127.63 | 421.31 | 9.97 | 944.40 | 942.10 | 945.81 | 943.51 |
| _ | _ | | | | | | | | | | | _ | | | | | | | _ | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| LineNo. | | | | | | | | | | Discove | ery Park - Lot | 9: 100-Yr St | orm Summa | ary | | | | | | | | | | |
| Lineno. | LinelD | DnStrmLine No. | RunoffCoeff | DrainageArea | IncrCxA | TotalArea | Тс | iSys | InletTime | Discov IncrQ | ery Park - Lot TotalRunoff | | 1 | ary LineLength | LineSlope | LineSize | n-valuePipe | FlowRate | CapacityFull | VelAve | HGLUp | HGLDn | EGLUp | EGLDn |
| Linewo. | LineID | DnStrmLine No. | RunoffCoeff (C) | DrainageArea (ac) | IncrCxA | TotalArea (ac) | Tc (min) | iSys (in/hr) | InletTime (min) | | • | | 1 | • | LineSlope (%) | LineSize (in) | n-valuePipe | FlowRate (cfs) | CapacityFull (cfs) | VelAve (ft/s) | HGLUp (ft) | HGLDn (ft) | EGLUp (ft) | EGLDn (ft) |
| 1 | LinelD LINE EX-C1 | DnStrmLine No. Outfall | | | IncrCxA 0.01 | | | - | | IncrQ | , TotalRunoff | InvertUp | InvertDn | LineLength | • | | n-valuePipe 0.01 | | | | • | _ | · · | |
| 1 | LINE | | (C) | (ac) | | (ac) | (min) | (in/hr) | | IncrQ (cfs) | TotalRunoff (cfs) | InvertUp (ft) | InvertDn (ft) | LineLength (ft) | • | (in) | | (cfs) | (cfs) | (ft/s) | (ft) | (ft) | (ft) | (ft) |
| 1 2 3 | LINE EX-C1 | | (C) 0.65 | (ac) 0.01 | 0.01 | (ac) 1.29 | (min) 5.8 | (in/hr) 9.55 | | IncrQ (cfs) 0.06 | TotalRunoff (cfs) 8.58 | InvertUp (ft) 932.82 | InvertDn (ft) 930 | LineLength (ft) 70.493 | (%) 4 | (in) 24 | 0.01 | (cfs) 8.58 | (cfs) 58.81 | (ft/s) 5.81 | (ft) 933.86 | (ft) 930.88 | (ft) 934.28 | (ft) 931.3 |
| 1 | LINE EX-C1 DS-1A | Outfall 1 | (C) 0.65 0.65 | (ac) 0.01 0.01 | 0.01 | (ac) 1.29 1.28 | (min) 5.8 5.7 | (in/hr) 9.55 9.58 | (min) 5 5 | IncrQ (cfs) 0.06 0.06 | TotalRunoff (cfs) 8.58 8.55 | InvertUp (ft) 932.82 938.1 | InvertDn (ft) 930 936.82 | LineLength (ft) 70.493 25.503 | (%) 4 5.02 | (in) 24 18 | 0.01 | (cfs) 8.58 8.55 | (cfs) 58.81 30.58 | (ft/s) 5.81 10.4 | (ft) 933.86 939.23 | (ft) 930.88 937.36 | (ft) 934.28 939.79 | (ft) 931.3 937.92 |
| 1 2 3 | LINE EX-C1 DS-1A DS-1B | Outfall 1 2 | (C) 0.65 0.65 0.65 | (ac) 0.01 0.01 0.26 | 0.01 0.01 0.17 | (ac) 1.29 1.28 1.27 | (min) 5.8 5.7 5.4 | (in/hr) 9.55 9.58 9.7 | (min) 5 5 | IncrQ (cfs) 0.06 0.06 1.66 | TotalRunoff (cfs) 8.58 8.55 8.6 | InvertUp (ft) 932.82 938.1 948.5 | InvertDn (ft) 930 936.82 942.1 | LineLength (ft) 70.493 25.503 152.5 | (%) 4 5.02 4.2 | (in) 24 18 15 | 0.01 0.01 0.01 | (cfs) 8.58 8.55 8.6 | (cfs) 58.81 30.58 17.2 | (ft/s) 5.81 10.4 10.66 | (ft) 933.86 939.23 949.64 | (ft) 930.88 937.36 942.73 | (ft) 934.28 939.79 950.47 | (ft) 931.3 937.92 943.56 |
| 1 2 3 4 | LINE EX-C1 DS-1A DS-1B DS-1C | Outfall 1 2 3 | (C) 0.65 0.65 0.65 0.71 | (ac) 0.01 0.01 0.26 1.01 | 0.01 0.01 0.17 0.72 | (ac) 1.29 1.28 1.27 1.01 | (min) 5.8 5.7 5.4 5 | (in/hr) 9.55 9.58 9.7 9.83 | (min) 5 5 5 5 5 | IncrQ (cfs) 0.06 0.06 1.66 7.05 | TotalRunoff (cfs) 8.58 8.55 8.6 7.05 | InvertUp (ft) 932.82 938.1 948.5 955.13 | InvertDn (ft) 930 936.82 942.1 952.5 | LineLength (ft) 70.493 25.503 152.5 131.362 | (%) 4 5.02 4.2 2 | (in) 24 18 15 15 | 0.01 0.01 0.01 0.01 0.01 | (cfs) 8.58 8.55 8.6 7.05 | (cfs) 58.81 30.58 17.2 11.88 | (ft/s) 5.81 10.4 10.66 8.22 | (ft) 933.86 939.23 949.64 956.19 | (ft) 930.88 937.36 942.73 953.19 | (ft) 934.28 939.79 950.47 956.82 | (ft) 931.3 937.92 943.56 953.82 |
| 1 2 3 4 5 | LINE EX-C1 DS-1A DS-1B DS-1C D6-D7 | Outfall 1 2 3 Outfall | (C) 0.65 0.65 0.65 0.71 0.65 | (ac) 0.01 0.26 1.01 0.01 | 0.01 0.01 0.17 0.72 0.01 | (ac) 1.29 1.28 1.27 1.01 0.23 | (min) 5.8 5.7 5.4 5 | (in/hr) 9.55 9.58 9.7 9.83 9.79 | (min) 5 5 5 5 5 | IncrQ (cfs) 0.06 0.06 1.66 7.05 104.8 | TotalRunoff (cfs) 8.58 8.55 8.6 7.05 2 | InvertUp (ft) 932.82 938.1 948.5 955.13 950.2 | InvertDn (ft) 930 936.82 942.1 952.5 948.03 | LineLength (ft) 70.493 25.503 152.5 131.362 197.013 | (%) 4 5.02 4.2 2 1.1 | (in) 24 18 15 15 42 | 0.01 0.01 0.01 0.01 0.01 0.01 | (cfs) 8.58 8.55 8.6 7.05 122.78 | (cfs) 58.81 30.58 17.2 11.88 137.26 | (ft/s) 5.81 10.4 10.66 8.22 13.13 | (ft) 933.86 939.23 949.64 956.19 953.47 | (ft) 930.88 937.36 942.73 953.19 951.3 | (ft) 934.28 939.79 950.47 956.82 956.15 | (ft) 931.3 937.92 943.56 953.82 953.98 |
| 1 2 3 4 5 6 | LINE EX-C1 DS-1A DS-1B DS-1C D6-D7 G1-D7 | Outfall 1 2 3 Outfall 5 | (C) 0.65 0.65 0.65 0.71 0.65 0.9 | (ac) 0.01 0.26 1.01 0.22 | 0.01 0.01 0.17 0.72 0.01 0.2 | (ac) 1.29 1.28 1.27 1.01 0.23 0.22 | (min) 5.8 5.7 5.4 5 5.1 5.1 5 | (in/hr) 9.55 9.58 9.7 9.83 9.79 9.83 | (min) 5 5 5 5 5 | IncrQ (cfs) 0.06 0.06 1.66 7.05 104.8 17.99 | TotalRunoff (cfs) 8.58 8.55 8.6 7.05 2 1.95 | InvertUp (ft) 932.82 938.1 948.5 955.13 955.2 952.29 | InvertDn (ft) 930 936.82 942.1 952.5 948.03 951.7 | LineLength (ft) 70.493 25.503 152.5 131.362 197.013 39.556 | (%) 4 5.02 4.2 2 1.1 1.49 | (in) 24 18 15 15 42 24 | 0.01 0.01 0.01 0.01 0.01 0.01 0.01 | (cfs) 8.58 8.55 8.6 7.05 122.78 17.99 | (cfs) 58.81 30.58 17.2 11.88 137.26 35.91 | (ft/s) 5.81 10.4 10.66 8.22 13.13 6.56 | (ft) 933.86 939.23 949.64 956.19 953.47 953.82 j | (ft) 930.88 937.36 942.73 953.19 951.3 953.47 | (ft) 934.28 939.79 950.47 956.82 956.15 954.58 | (ft) 931.3 937.92 943.56 953.82 953.98 954.23 |
| 1 2 3 4 5 6 7 | LINE EX-C1 DS-1A DS-1B DS-1C D6-D7 G1-D7 D1-D2 | Outfall 1 2 3 Outfall 5 Outfall | (C) 0.65 0.65 0.65 0.71 0.65 0.9 0.65 | (ac) 0.01 0.01 0.26 1.01 0.01 0.22 0.01 | 0.01 0.01 0.17 0.72 0.01 0.2 0.01 | (ac) 1.29 1.28 1.27 1.01 0.23 0.22 1.86 | (min) 5.8 5.7 5.4 5 5.1 5.1 5 7.6 | (in/hr) 9.55 9.58 9.7 9.83 9.79 9.83 9.83 8.99 | (min) 5 5 5 5 5 | IncrQ (cfs) 0.06 0.06 1.66 7.05 104.8 17.99 21.12 | TotalRunoff (cfs) 8.58 8.55 8.6 7.05 2 1.95 12.56 | InvertUp (ft) 932.82 938.1 948.5 955.13 955.2 955.29 938.61 | InvertDn (ft) 930 936.82 942.1 952.5 948.03 951.7 937.3 | LineLength (ft) 70.493 25.503 152.5 131.362 197.013 39.556 87.42 | (%) 4 5.02 4.2 2 1.1 1.49 1.5 | (in) 24 18 15 15 42 24 60 | 0.01 0.01 0.01 0.01 0.01 0.01 0.01 | (cfs) 8.58 8.55 8.6 7.05 122.78 17.99 252.77 | (cfs) 58.81 30.58 17.2 11.88 137.26 35.91 414.5 | (ft/s) 5.81 10.4 10.66 8.22 13.13 6.56 13.31 | (ft) 933.86 939.23 949.64 956.19 953.47 953.82 j 943.05 | (ft) 930.88 937.36 942.73 953.19 951.3 953.47 942.26 | (ft) 934.28 939.79 950.47 956.82 956.15 954.58 945.98 | (ft) 931.3 937.92 943.56 953.82 953.98 954.23 945.19 |
| 1 2 3 4 5 6 7 8 | LINE EX-C1 DS-1A DS-1B DS-1C D6-D7 G1-D7 D1-D2 DS-2A | Outfall 1 2 3 Outfall 5 Outfall 7 | (C) 0.65 0.65 0.65 0.71 0.65 0.9 0.65 0.81 | (ac) 0.01 0.01 0.26 1.01 0.22 0.01 1.05 | 0.01 0.01 0.17 0.72 0.01 0.2 0.01 0.85 | (ac) 1.29 1.28 1.27 1.01 0.23 0.22 1.86 1.67 | (min) 5.8 5.7 5.4 5 5.1 5 5.1 5 7.6 7.5 | (in/hr) 9.55 9.58 9.7 9.83 9.79 9.83 9.79 9.83 8.99 9.03 | (min) 5 5 5 5 5 5 5 5 5 5 | IncrQ (cfs) 0.06 0.06 1.66 7.05 104.8 17.99 21.12 8.36 | TotalRunoff (cfs) 8.58 8.55 8.6 7.05 2 1.95 12.56 11.95 | InvertUp (ft) 932.82 938.1 948.5 955.13 955.2 952.29 938.61 942.25 | InvertDn (ft) 930 936.82 942.1 952.5 948.03 951.7 937.3 941.61 | LineLength (ft) 70.493 25.503 152.5 131.362 197.013 39.556 87.42 29.746 | (%) 4 5.02 4.2 2 1.1 1.49 1.5 2.15 | (in) 24 18 15 15 42 24 60 24 | 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 | (cfs) 8.58 8.55 8.6 7.05 122.78 17.99 252.77 11.95 | (cfs) 58.81 30.58 17.2 11.88 137.26 35.91 414.5 43.13 | (ft/s) 5.81 10.4 10.66 8.22 13.13 6.56 13.31 5.39 | (ft) 933.86 939.23 949.64 956.19 953.47 953.82 j 943.05 943.49 j | (ft) 930.88 937.36 942.73 953.19 951.3 953.47 942.26 943.05 | (ft) 934.28 939.79 950.47 956.82 956.15 954.58 945.98 944.02 | (ft) 931.3 937.92 943.56 953.82 953.98 954.23 945.19 943.58 |
| 1 2 3 4 5 6 7 8 9 | LINE EX-C1 DS-1A DS-1B DS-1C D6-D7 G1-D7 D1-D2 DS-2A DS-2A DS-3A | Outfall 1 2 3 Outfall 5 Outfall 7 8 | (C) 0.65 0.65 0.65 0.71 0.65 0.9 0.65 0.81 0.9 | (ac) 0.01 0.01 0.26 1.01 0.22 0.01 1.05 0.02 | 0.01 0.01 0.17 0.72 0.01 0.2 0.01 0.85 0.02 | (ac) 1.29 1.28 1.27 1.01 0.23 0.22 1.86 1.67 0.14 | (min) 5.8 5.7 5.4 5 5.1 5 5.1 5 7.6 7.5 | (in/hr) 9.55 9.58 9.7 9.83 9.79 9.83 9.79 9.83 8.99 9.03 9.23 | (min) 5 5 5 5 5 5 5 5 5 5 5 | IncrQ (cfs) 0.06 0.06 1.66 7.05 104.8 17.99 21.12 8.36 0.18 | TotalRunoff (cfs) 8.58 8.55 8.6 7.05 2 1.95 12.56 11.95 0.91 | InvertUp (ft) 932.82 938.1 948.5 955.13 955.2 952.29 938.61 942.25 943.62 | InvertDn (ft) 930 936.82 942.1 952.5 948.03 951.7 937.3 941.61 943 | LineLength (ft) 70.493 25.503 152.5 131.362 197.013 39.556 87.42 29.746 31.699 | (%) 4 5.02 4.2 2 1.1 1.49 1.5 2.15 1.96 | (in) 24 18 15 15 42 24 60 24 15 | 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 | (cfs) 8.58 8.55 8.6 7.05 122.78 17.99 252.77 11.95 0.91 | (cfs) 58.81 30.58 17.2 11.88 137.26 35.91 414.5 43.13 11.74 | (ft/s) 5.81 10.4 10.66 8.22 13.13 6.56 13.31 5.39 2.5 | (ft) 933.86 939.23 949.64 956.19 953.47 953.82 j 943.05 943.49 j 943.99 j | (ft) 930.88 937.36 942.73 953.19 951.3 953.47 942.26 943.05 943.49 | (ft) 934.28 939.79 950.47 956.82 956.15 954.58 945.98 944.02 944.13 | (ft) 931.3 937.92 943.56 953.82 953.98 954.23 945.19 943.58 943.63 |
| 1 2 3 4 5 6 7 8 9 10 | LINE EX-C1 DS-1A DS-1B DS-1C D6-D7 G1-D7 D1-D2 DS-2A DS-2A DS-3A DS-3A | Outfall 1 2 3 Outfall 5 Outfall 7 8 9 | (C) 0.65 0.65 0.65 0.71 0.65 0.9 0.65 0.81 0.9 0.9 0.9 | (ac) 0.01 0.01 0.26 1.01 0.22 0.01 1.05 0.02 0.02 | 0.01 0.01 0.17 0.72 0.01 0.2 0.01 0.85 0.02 0.02 | (ac) 1.29 1.28 1.27 1.01 0.23 0.22 1.86 1.67 0.14 0.02 | (min) 5.8 5.7 5.4 5 5.1 5 5.1 5 7.6 7.5 | (in/hr) 9.55 9.58 9.7 9.83 9.79 9.83 8.99 9.03 9.23 9.83 | (min) 5 5 5 5 5 5 5 5 5 5 5 | IncrQ (cfs) 0.06 0.06 1.66 7.05 104.8 17.99 21.12 8.36 0.18 0.18 | TotalRunoff (cfs) 8.58 8.55 8.6 7.05 2 1.95 12.56 11.95 0.91 0.18 | InvertUp (ft) 932.82 938.1 948.5 955.13 955.2 952.29 938.61 942.25 943.62 948.31 | InvertDn (ft) 930 936.82 942.1 952.5 948.03 951.7 937.3 941.61 943 943.75 | LineLength (ft) 70.493 25.503 152.5 131.362 197.013 39.556 87.42 29.746 31.699 61.878 | (%) 4 5.02 4.2 2 1.1 1.49 1.5 2.15 1.96 7.37 | (in) 24 18 15 15 42 24 60 24 15 6 | 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 | (cfs) 8.58 8.55 8.6 7.05 122.78 17.99 252.77 11.95 0.91 0.18 | (cfs) 58.81 30.58 17.2 11.88 137.26 35.91 414.5 43.13 11.74 1.98 | (ft/s) 5.81 10.4 10.66 8.22 13.13 6.56 13.31 5.39 2.5 2.06 | (ft) 933.86 939.23 949.64 956.19 953.47 953.82 j 943.05 943.49 j 943.99 j 948.52 j | (ft) 930.88 937.36 942.73 953.19 951.3 953.47 942.26 943.05 943.49 943.99 | (ft) 934.28 939.79 950.47 956.82 956.15 954.58 945.98 945.98 944.02 944.13 948.6 | (ft) 931.3 937.92 943.56 953.82 953.98 954.23 945.19 943.58 943.63 944.07 |

| Drainage Area Design Table (10-yr) | | | | | | | |
|------------------------------------|------------------|------|-------|---------|------|--------------|--|
| Inlet | Drainage Area | С | Тс | i | К | Peak Flow | |
| | (Ac) | | (min) | (in/hr) | | (cfs) | |
| 2A | 0.76 | 0.77 | 5.00 | 7.35 | 1.00 | 4.30 | |
| 2B | 0.48 | 0.78 | 5.00 | 7.35 | 1.00 | 2.75 | |

| Inlet Design Table (10-yr) | | | | | | | | |
|----------------------------|------------------|-------------------|------------------------------------|-----------------|-------------------|-----------------------|-----------|--------|
| Inlet | Throat Height | Orifice Coeff. | Depth at Lip of Curb opening | Inlet Length | Inlet Capacity | 80% Inlet Capacity | Peak Flow | Bypass |
| | (ft) | | (ft) | (ft) | (cfs) | (cfs) | (cfs) | (cfs) |
| 2A | 0.50 | 0.67 | 0.83 | 6.00 | 14.72 | 11.78 | 4.30 | 0.00 |
| 2B | 0.50 | 0.67 | 0.83 | 6.00 | 14.72 | 11.78 | 2.75 | 0.00 |

| Drainage Area Design Table (100-yr) | | | | | | | |
|-------------------------------------|------------------|------|-------|---------|------|--------------|--|
| Inlet | Drainage Area | С | Тс | i | К | Peak Flow | |
| | (Ac) | | (min) | (in/hr) | | (cfs) | |
| 2A | 0.76 | 0.77 | 5.00 | 10.32 | 1.25 | 7.55 | |
| 2B | 0.48 | 0.78 | 5.00 | 10.32 | 1.25 | 4.83 | |

| Inlet Design Table (100-yr) | | | | | | | | |
|-----------------------------|------------------|-------------------|------------------------------------|-----------------|-------------------|-----------------------|-----------|--------|
| Inlet | Throat Height | Orifice Coeff. | Depth at Lip of Curb opening | Inlet Length | Inlet Capacity | 80% Inlet Capacity | Peak Flow | Bypass |
| | (ft) | | (ft) | (ft) | (cfs) | (cfs) | (cfs) | (cfs) |
| 2A | 0.50 | 0.67 | 0.83 | 6.00 | 14.72 | 11.78 | 7.55 | 0.00 |
| 2B | 0.50 | 0.67 | 0.83 | 6.00 | 14.72 | 11.78 | 4.83 | 0.00 |

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_____ FORMERLY ANDERSON ENGINEERING

DISCOVERY PARK THE VILLAGE -LOT 9

200 NE ALURA WAY LEE'S SUMMIT, MO 64086

| | REVISIONS | |
|-----|--------------------|------------|
| NO. | DESCRIPTION | DATE |
| 1 | INITIAL SUBMISSION | 04/19/2024 |
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GENERAL NOTES:

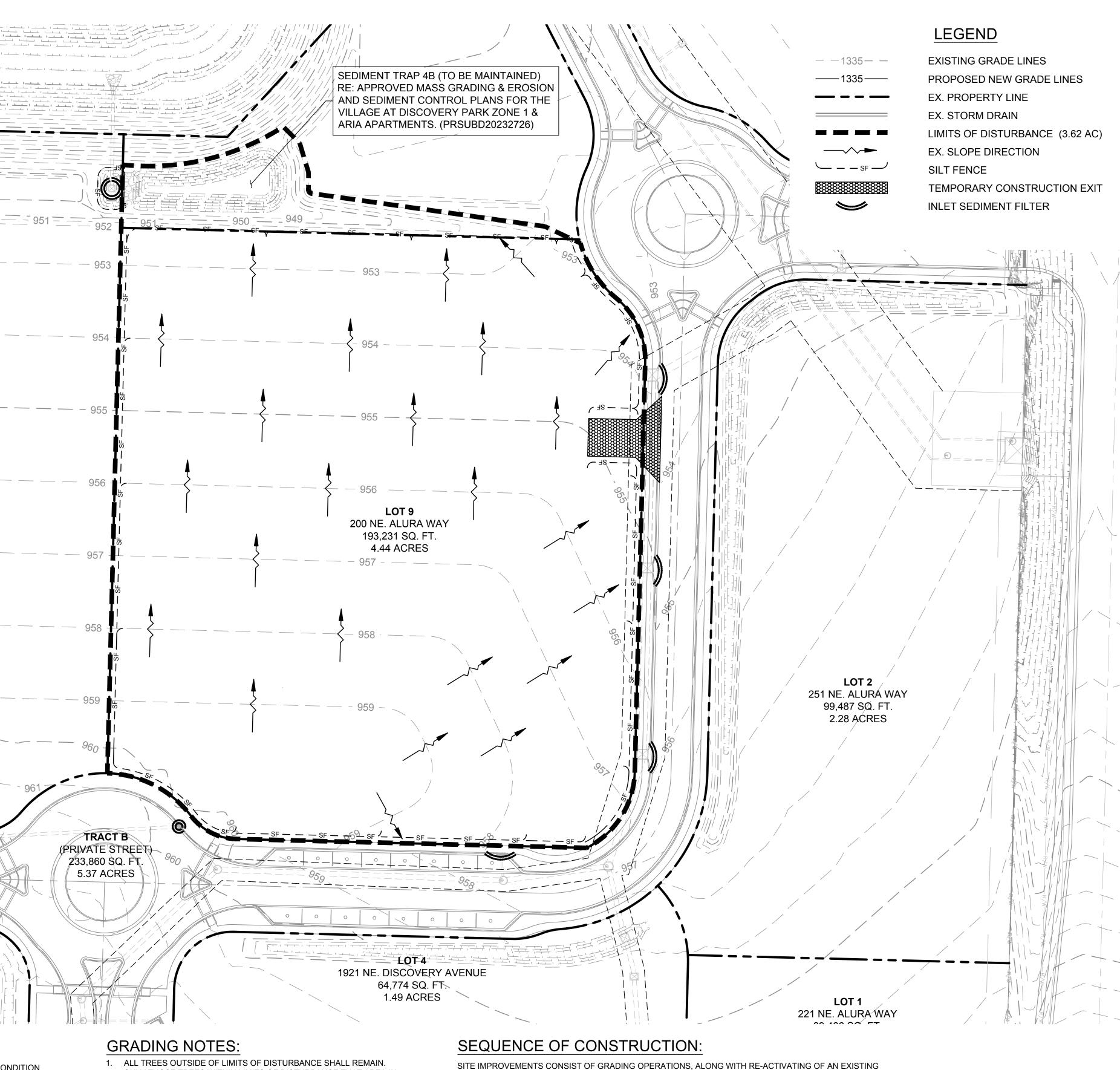
- 1. THE STORMWATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS DRAWING ("EROSION CONTROL"), THE STANDARD DETAILS, ATTACHMENTS INCLUDED IN SPECIFICATIONS ("SWPPP"), PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
- 2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORMWATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
- 3. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DIRECTED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
- BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FENDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
- SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATER OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
- 6. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
- 7. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
- 8. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OF DISPOSED.
- 9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOATATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
- 10. DUST ON SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
- 11. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATER OF THE STATE.
- 12. ALL STORM WATER POLLUTION PREVENTION MEASURED PRESENTED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS POSSIBLE
- 13. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WILL BE STOPPED FOR AT LEAST 14 DAYS, SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 7 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
- 14. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE STABILIZED. THESE AREAS SHALL BE STABILIZED NO LATER THAN 21 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. STABILIZATION MAY CONSIST OF SEED, SOD, TOCK, PAVEMENT, STRUCTURE OR OTHER NON-ERODIBLE COVER.
- 15. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IS IS CARRIED OFF THE SITE. ONLY USED INGRESS/EGRESS LOCATIONS AS PROVIDED.
- 16. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
- 17. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
- 18. ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
- 19. SLOPES CONSISTING OF TOPSOIL, CLAY, OR SILT SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
- 20. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENT CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION AND POLLUTANT DISCHARGE.
- 21. CONTR5ACTOR RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE. PONDING OF WATER WILL NOT BE ALLOWED ON SITE. IF NECESSARY, CONTRACTOR TO PROVIDE TEMPORARY SWALES OR PUMPING IN LOW POINT SUMP CONDITIONS UNTIL THE INSTALLATION OF STORM SEWER.

EROSION CONTROL & MAINTENANCE PLAN NOTES:

ALL MEASURES STATED ON THIS SITE MAP, AND IN THE STORMWATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

- 1. AT A MINIMUM, THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS FOR GOOD HOUSEKEEPING, SPILL CONTROL AND EROSION AND SEDIMENT CONTROL AS SPECIFIED IN THE KANSAS CITY METROPOLITAN CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION SECTION 2150.
- 2. INLET PROTECTION DEVISED AND BARRIERS SHALL BE REPAIRED OR REPLACED IN THEY SHOWN SIGNS OF UNDERMINING OR DETERIORATION. 3. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED, AREAS SHOULD BE FERTILIZED, WATERED, AND
- RESEEDED AS NEEDED. 4. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT
- REACHED ONE-THIRD THE HEIGHT OF THE SILT FENCE. 5. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP D4RESSING OF THE CONSTRUCTION EXITS AS CONDITIONS DEMAND.
- 6. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS DEMAND.
- 7. DRAINAGE SWALES WITH SLOPES STEEPER THAN 15% SHALL BE INSPECTED AFTER EACH RAINFALL EVENT. THESE CHANNELS AND SLOPES SHOULD BE TREATED WITH EROSION CONTROL FABRIC. IF THE CHANNELS OR SLOPES SHOW ANY SIGNS OF FAILURE, COORDINATE WITH THE ENGINEER TO DEVELOP A PLAN TO RE-STABLIZE THE FAILED AREA.

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- ONLY THOSE TREES WITHIN LIMITS OF DISTURBANCE THAT AREA IN THE AREA TO BE GRADED SHALL BE REMOVED. 2. ALL TOPSOIL, VEGETATION, ROOT STRUCTURES, AND DELETERIOUS MATERIALS SHALL BE STRIPPED FROM THE GROUND SURFACE PRIOR
- TO THE PLACEMENT OF EMBANKMENTS. CONTRACTOR SHALL OBTAIN THE ON-SITE GEOTECHNICAL REPRESENTATIVE'S ACCEPTANCE OF THE EXISTING GROUND SURFACE MATERIALS AND THE PROPOSED FILL MATERIAL PRIOR TO THE PLACEMENT OF FILL.
- 3. ALL PROPOSED CONTOUR LINES AND SPOT ELEVATIONS SHOWN ARE FINISH GRADE ELEVATIONS. CONTRACTOR SHALL ACCOUNT FOR PAVEMENT DEPTHS, BUILDING PADS, TOPSOIL, ETC. WHEN GRADING THE SITE.
- 4. ALL DISTURBED AREAS THAT SHALL BE FINISH GRADED WITH A
- MINIMUM OF FOUR INCHES OF TOPSOIL 5. FINISHED GRADES SHALL NOT BE STEEPER THAN 3:1.
- 6. ALL GRADING WORK SHALL BE CONSIDERED UNCLASSIFIED. NO ADDITIONAL PAYMENTS SHALL BE MADE FOR ROCK EXCAVATION. CONTRACTOR SHALL SATISFY HIMSELF AS TO ANY ROCK EXCAVATION REQUIRED TO ACCOMPLISH THE IMPROVEMENTS SHOWN HEREIN.

SEDIMENT TRAP. WORK SHALL BE CONDUCTED AS FOLLOWS:

- 1. MAINTAIN/RECONSTRUCT EXISTING SEDIMENT TRAP 4B AS DETAILED IN "MASS GRADING & EROSION AND SEDIEMNT CONTROL PLANS FOR THE VILLAGE AT DISCOVERY PARKING ZONE 1 & ARIA APARTMENTS." (CITY OF LEE'S SUMMIT, MO PROJECT NUMBER PRSUBD20232726)
- 2. INSTALL CONSTRUCTION VEHICLE ENTRANCE AND INSTALL PERIMETER SILT FENCE AND INLET PROTECTION TO EXISTING INLETS SURROUNDING THE LIMITS OF DISTURBANCE.
- 3. INSTALL SILT FENCE AND/OR DIVERSION BERM(S) AT TOE OF SLOPE ALONG PERIMETER OF PHASE I AREA. PHASE II ACTIVITIES CANNOT BEGIN UNTIL PHASE I IS COMPLETED.
- 4. CONTRACTOR TO CONSTRUCT/MAINTAIN STORMWATER MANAGEMENT FACILITIES, SPECIFICALLY THOSE FEATURES RELATED TO DETENTION, PRIOR TO ANY LAND DISTURBANCE OF THE SITE AND PRIOR TO THE CONSTRUCTION OF ANY OTHER SITE DEVELOPMENT WORK AS NOT TO EFFECT
- DOWNSTREAM NEIGHBORS WITH UNDETAINED STORMWATER DISCHARGE. 5. AS GRADING OPERATIONS ARE COMPLETED, AREAS TO REMAIN INACTIVE FOR MORE THAN 14 DAYS SHALL BE STABILIZED WITH SEED AND COMPOST MULCH AND/OR STEEP SLOPE PROTECTION. SEE INTERMEDIATE EROSION CONTROL PLAN.

OWN Engineering beyond.™ 8455 College Boulevard Overland Park, KS 66210

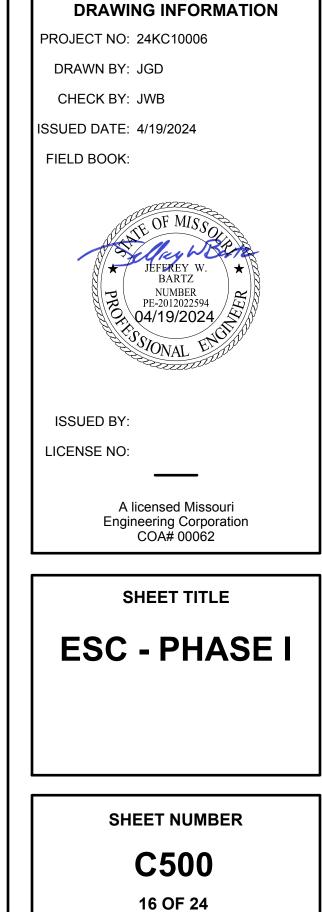
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DISCOVERY PARK THE VILLAGE -LOT 9

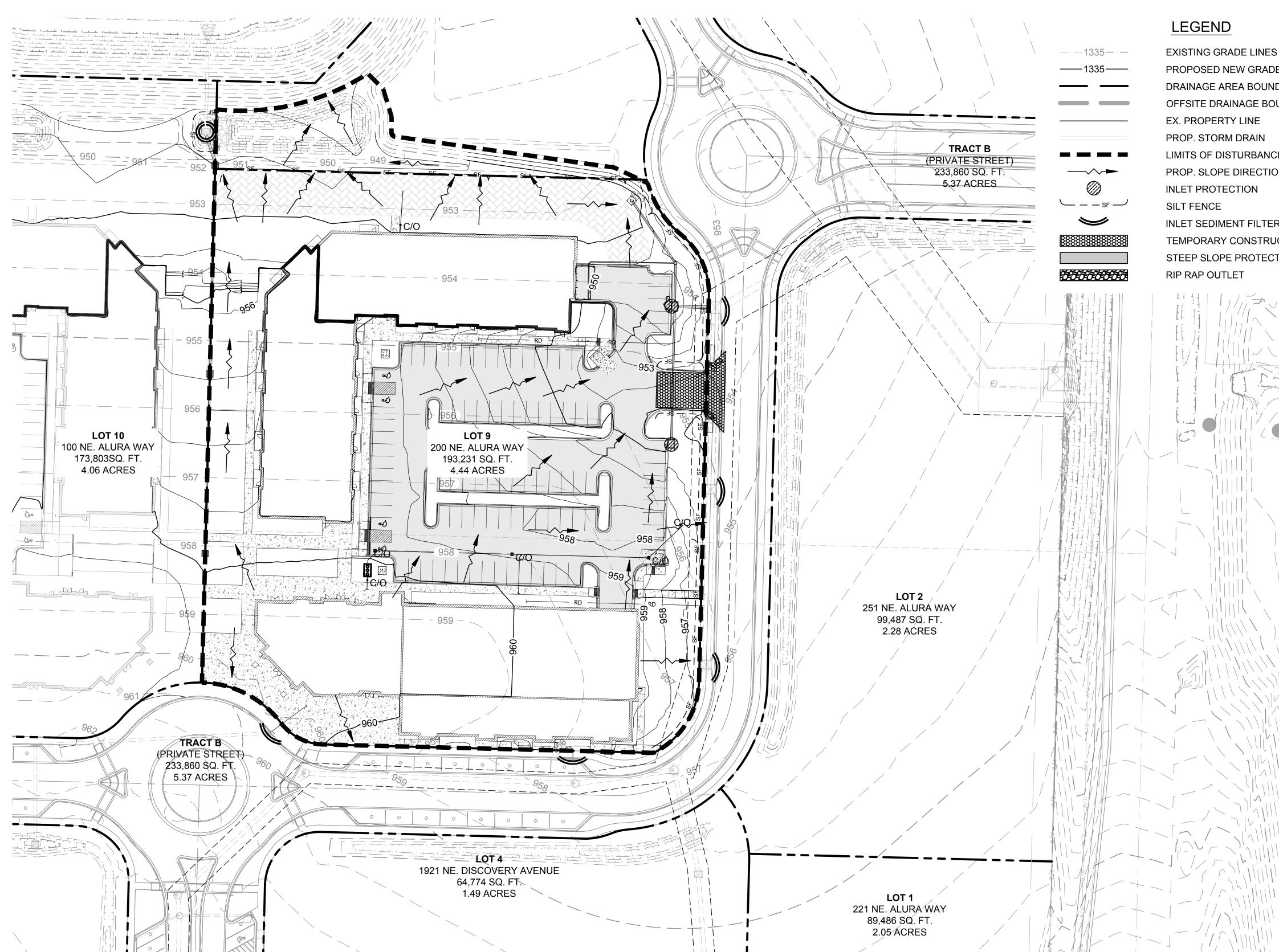
200 NE ALURA WAY LEE'S SUMMIT, MO 64086

| | REVISIONS | |
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| NO. | DESCRIPTION | DATE |
| 1 | INITIAL SUBMISSION | 04/19/2024 |
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GENERAL NOTES:

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- 2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORMWATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
- 3. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DIRECTED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
- BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
- SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATER OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
- 6. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
- 7. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
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- 9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOATATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
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- 12. ALL STORM WATER POLLUTION PREVENTION MEASURED PRESENTED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS POSSIBLE
- 13. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WILL BE STOPPED FOR AT LEAST 14 DAYS, SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 7 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
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- 15. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IS IS CARRIED OFF THE SITE. ONLY USED INGRESS/EGRESS LOCATIONS AS PROVIDED.
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- 18. ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
- 19. SLOPES CONSISTING OF TOPSOIL, CLAY, OR SILT SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
- 20. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENT CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION AND POLLUTANT DISCHARGE.
- 21. CONTR5ACTOR RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE. PONDING OF WATER WILL NOT BE ALLOWED ON SITE. IF NECESSARY, CONTRACTOR TO PROVIDE TEMPORARY SWALES OR PUMPING IN LOW POINT SUMP CONDITIONS UNTIL THE INSTALLATION OF STORM SEWER.



EROSION CONTROL & MAINTENANCE PLAN NOTES:

ALL MEASURES STATED ON THIS SITE MAP, AND IN THE STORMWATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

- 1. AT A MINIMUM, THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS FOR GOOD HOUSEKEEPING, SPILL CONTROL AND EROSION AND SEDIMENT CONTROL AS SPECIFIED IN THE KANSAS CITY METROPOLITAN CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION SECTION 2150.
- 2. INLET PROTECTION DEVISED AND BARRIERS SHALL BE REPAIRED OR REPLACED IN THEY SHOWN SIGNS OF UNDERMINING OR DETERIORATION. 3. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED, AREAS SHOULD BE FERTILIZED, WATERED, AND
- RESEEDED AS NEEDED. 4. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT
- REACHED ONE-THIRD THE HEIGHT OF THE SILT FENCE. 5. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP D4RESSING OF THE CONSTRUCTION EXITS AS CONDITIONS DEMAND.
- 6. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS DEMAND.
- 7. DRAINAGE SWALES WITH SLOPES STEEPER THAN 15% SHALL BE INSPECTED AFTER EACH RAINFALL EVENT. THESE CHANNELS AND SLOPES SHOULD BE TREATED WITH EROSION CONTROL FABRIC. IF THE CHANNELS OR SLOPES SHOW ANY SIGNS OF FAILURE, COORDINATE WITH THE ENGINEER TO DEVELOP A PLAN TO RE-STABLIZE THE FAILED AREA.

GRADING NOTES:

- 1. ALL TREES OUTSIDE OF LIMITS OF DISTURBANCE SHALL REMAIN. ONLY THOSE TREES WITHIN LIMITS OF DISTURBANCE THAT AREA IN THE AREA TO BE GRADED SHALL BE REMOVED. 2. ALL TOPSOIL, VEGETATION, ROOT STRUCTURES, AND DELETERIOUS MATERIALS SHALL BE STRIPPED FROM THE GROUND SURFACE PRIOR TO THE PLACEMENT OF EMBANKMENTS. CONTRACTOR SHALL OBTAIN
- THE ON-SITE GEOTECHNICAL REPRESENTATIVE'S ACCEPTANCE OF THE EXISTING GROUND SURFACE MATERIALS AND THE PROPOSED FILL MATERIAL PRIOR TO THE PLACEMENT OF FILL. 3. ALL PROPOSED CONTOUR LINES AND SPOT ELEVATIONS SHOWN ARE
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SEQUENCE OF CONSTRUCTION:

SITE IMPROVEMENTS CONSIST OF FINISHING MASS GRADING ACTIVITIES, BUILDING CONSTRUCTION, PARKING LOT PAVING, PROPOSED SERVICE LINE UTILITY INSTALLATION, AND STORM SEWERS. WORK SHALL BE CONDUCTED AS FOLLOWS:

- FINISH ANY MASS GRADING AND/OR STEEP SLOPE STABILIZATION ACTIVITIES THAT WERE NOT COMPLETED IN PHASE I. 2. BEGIN INSTALLING UNDERGROUND INFRASTRUCTURE STARTING WITH SANITARY SEWER, FOLLOWED BY STORM SEWER, THEN WATER LINE. INSTALL INLET PROTECTION AND SLOPE INTERRUPT SILT FENCE ONCE PIPE BACKFILLING HAS BEEN COMPLETED.
- 3. AS PIPE INSTALLATION OPERATIONS ARE COMPLETED, AREAS TO REMAIN INACTIVE FOR MORE THAN 14 DAYS SHALL BE
- STABILIZED WITH SEED AND COMPOST MULCH AND/OR STEEP SLOPE PROTECTION. SEE FINAL STABILIZATION PLAN.
- STORM SEWER INFRASTRUCTURE FROM HIGHLY CONCENTRATED DISCHARGE FLOWS. 5. ALL PHASE I AND PHASE II EROSION CONTROL MEASURES SHALL CONTINUE BEING REGULARLY INSPECTED AND MAINTAINED UNTIL FINAL STABILIZATION OF AT LEAST 70% OF THE DISTURBED SURFACE HAS BEEN MET THROUGH
- TEMPORARY SEEDING.

4. AS STORM SEWER INFRASTRUCTURE IS COMPLETED, INLET PROTECTION SHALL BE INSTALLED TO PROTECT EXISTING

6. PHASE 1 EROSION CONTROL BMPS MAY BE REMOVED UPON COMPLETION OF PAVING ACTIVITIES.

PROPOSED NEW GRADE LINES DRAINAGE AREA BOUNDARY OFFSITE DRAINAGE BOUNDARY LIMITS OF DISTURBANCE (3.62 AC) PROP. SLOPE DIRECTION INLET SEDIMENT FILTER TEMPORARY CONSTRUCTION EXIT STEEP SLOPE PROTECTION



Engineering beyond.™

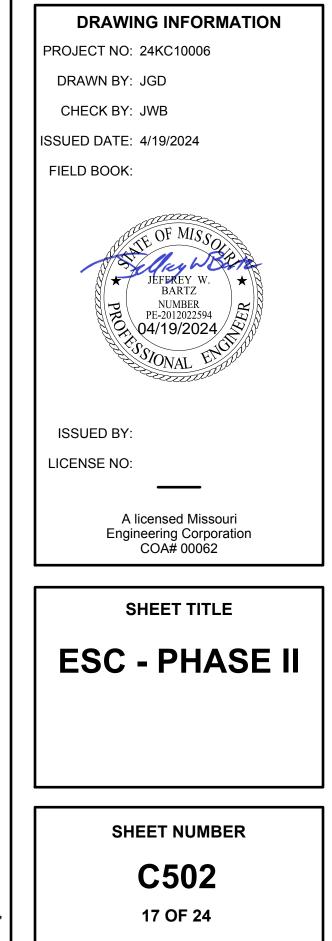
8455 College Boulevard Overland Park, KS 66210 816.777.0400 weareown.com

FORMERLY ANDERSON ENGINEERING

DISCOVERY PARK THE VILLAGE -LOT 9

200 NE ALURA WAY LEE'S SUMMIT, MO 64086

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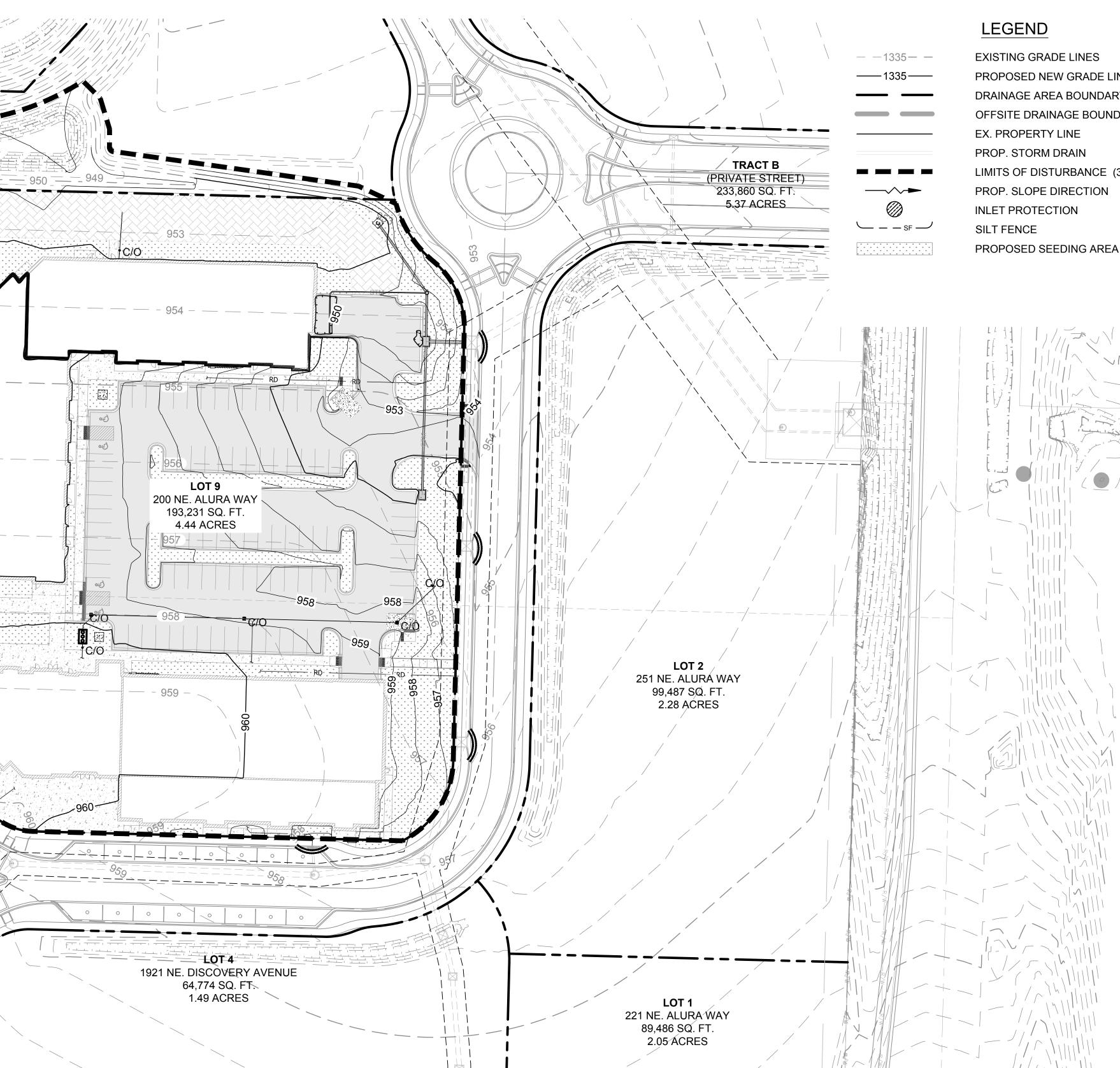
____ 955 956 LOT 10 100 NE. ALURA WAY 173,803SQ. FT. 4.06 ACRES _____ 957 _______ TRACT B (PRIVATE STREET) 233,860 SQ. FT. 5.37 ACRES



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SEQUENCE OF CONSTRUCTION:

SITE IMPROVEMENTS CONSIST OF PAVING STREETS, RE-ESTABLISHING GROUNDCOVER VEGETATION, DEACTIVATING SEDIMENT TRAP 4B, REMOVING SILT FENCE, AND REMOVING INLET PROTECTION. WORK SHALL BE COMPLETED IN THE SEQUENCE AS FOLLOWS:

- REMOVE CONSTRUCTION ENTRANCE/EXIT AS ROADS ARE PAVED. 2. INSTALL CURB, ROAD PAVEMENT, AND REQUIRED SIDEWALKS. ADJUST SILT FENCE AS NECESSARY TO PREVENT MUD
- AND SILT FROM FLOWING LONG DISTANCES. 3. SEED AND/OR SOD ALL DISTURBED AREAS ONCE FINISHED GRADE HAS BEEN ACHIEVED. MAINTAIN SILT FENCE AND
- INLET PROTECTION UNTIL VEGETATIVE COVER HAS BEEN ESTABLISHED OVER 70% OF THE TOTAL DISTURBED AREA. 4. AS ALL DISTURBED AREAS ARE STABLIXED WITH VEGETATIVE COVER, STORM SEWER INLET PROTECTION, SILT FENCE,
- AND SEDIMENT TRAP CAN BE REMOVED UPON CITY INSPECTION AND APPROVAL. ENSURE ENTIRE SITE IS STABLIZED PRIOR TO DEACTIVATION ON EROSION CONTROL.

PROPOSED NEW GRADE LINES DRAINAGE AREA BOUNDARY OFFSITE DRAINAGE BOUNDARY LIMITS OF DISTURBANCE (3.62 AC)



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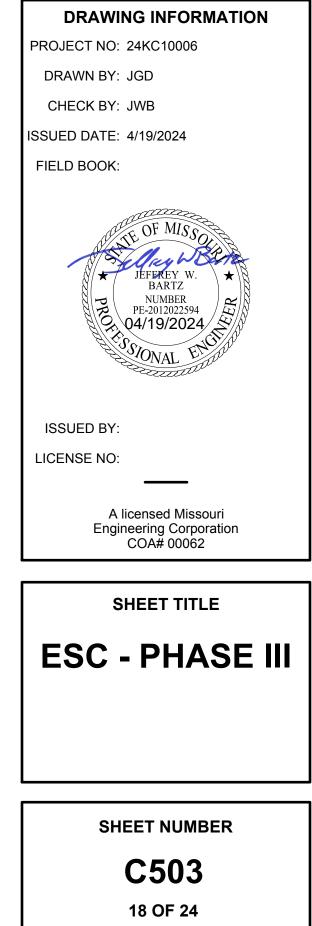
8455 College Boulevard Overland Park, KS 66210 816.777.0400 weareown.com

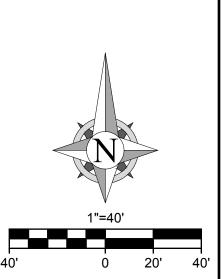
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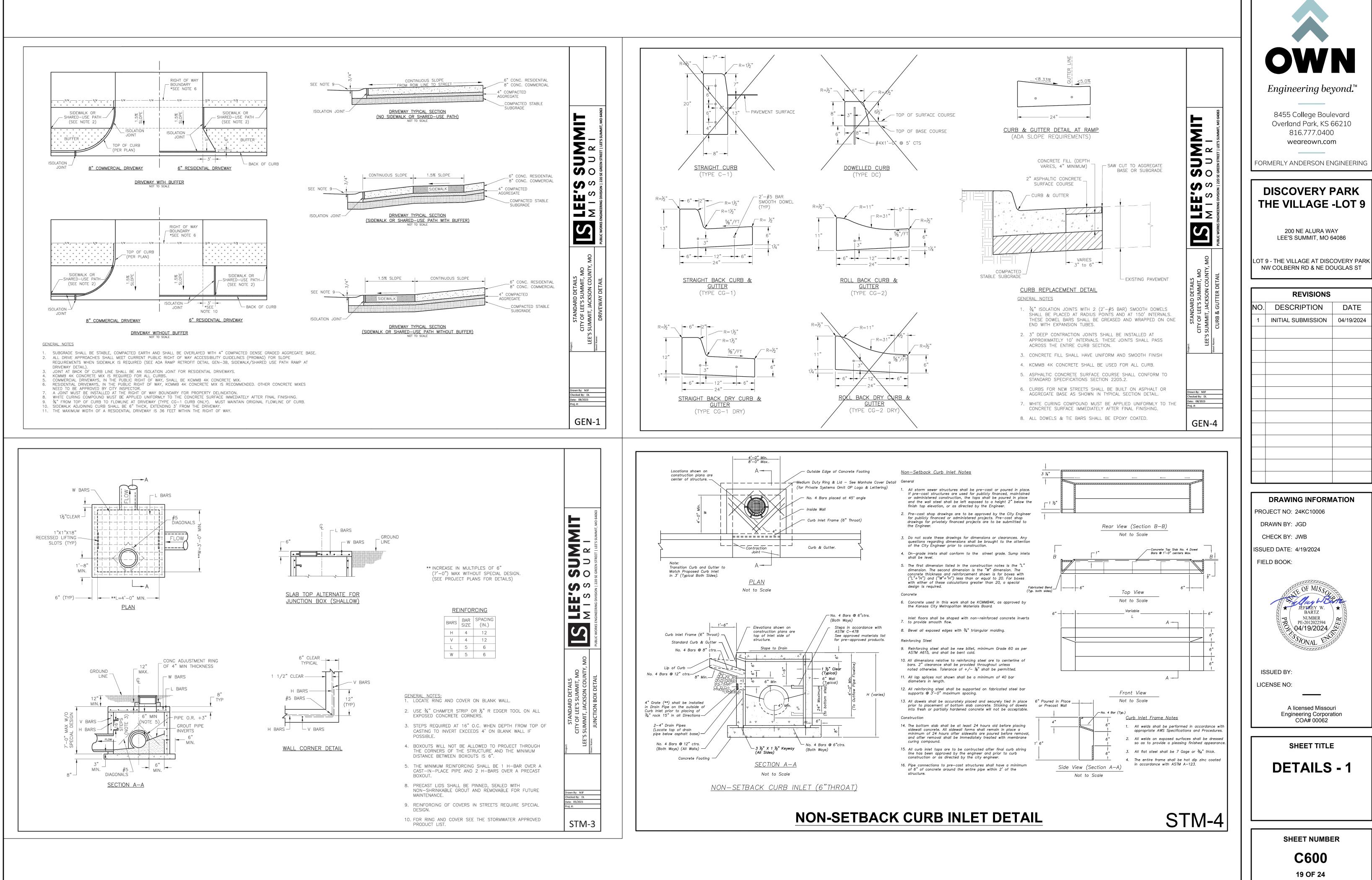
DISCOVERY PARK THE VILLAGE -LOT 9

200 NE ALURA WAY LEE'S SUMMIT, MO 64086

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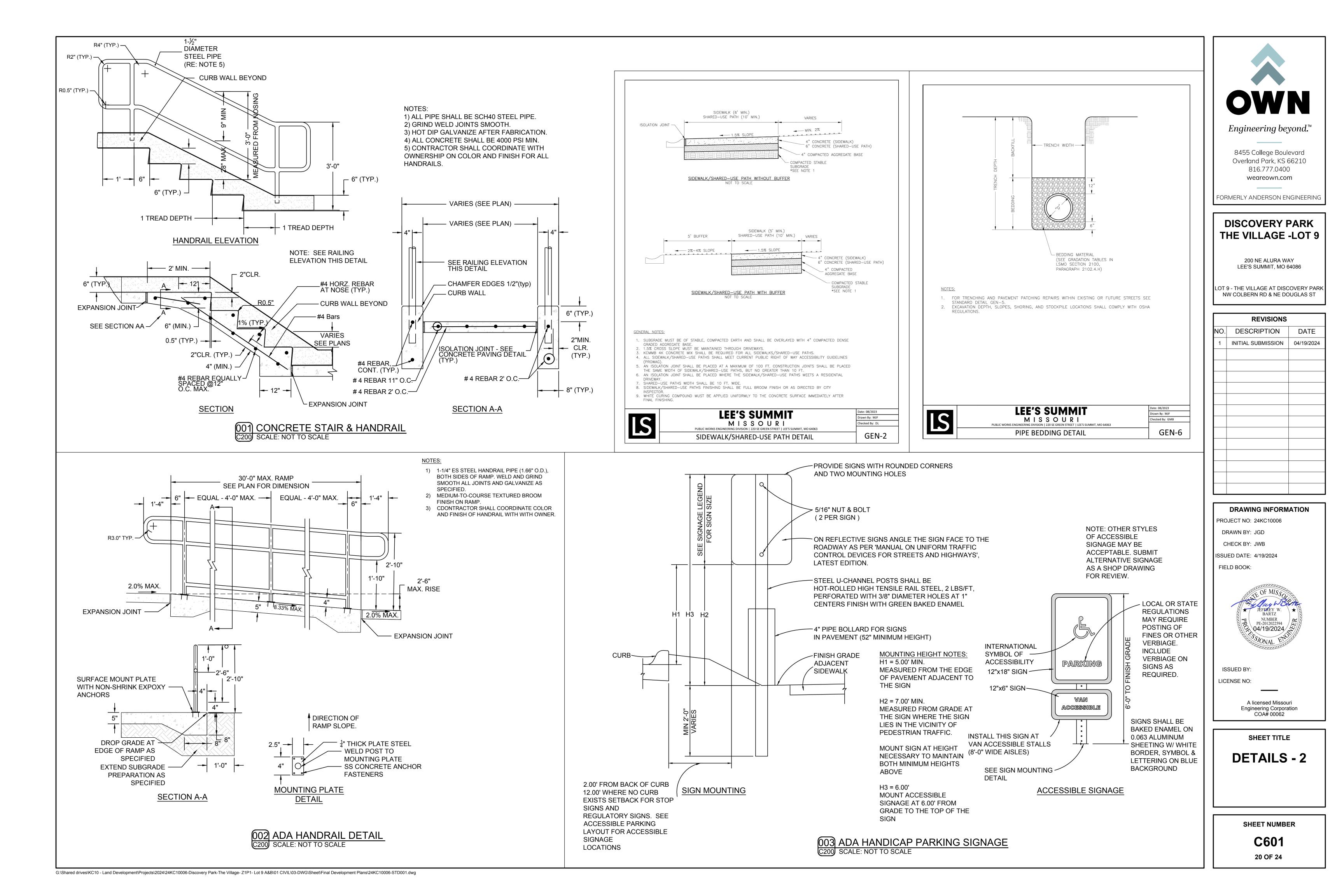


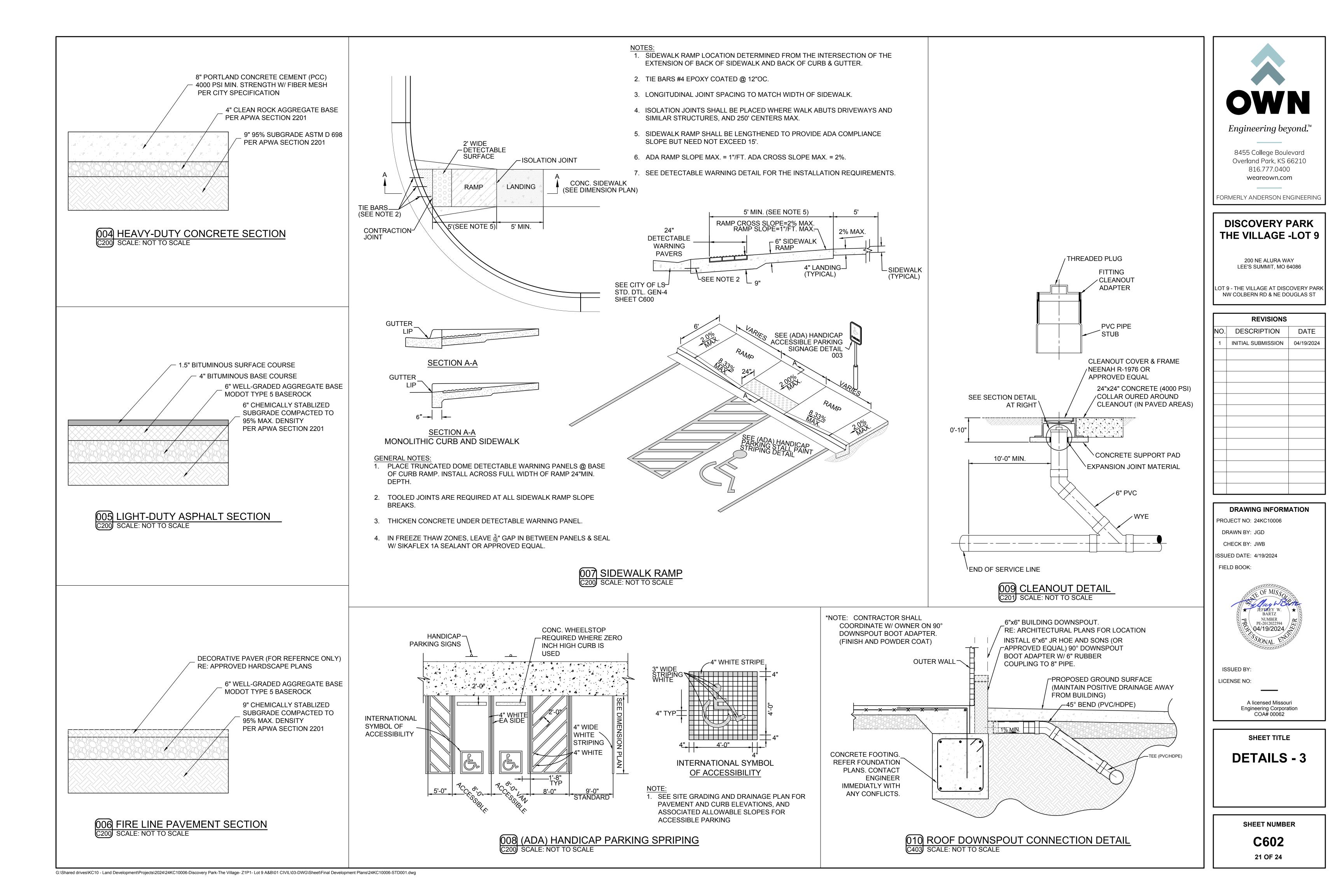


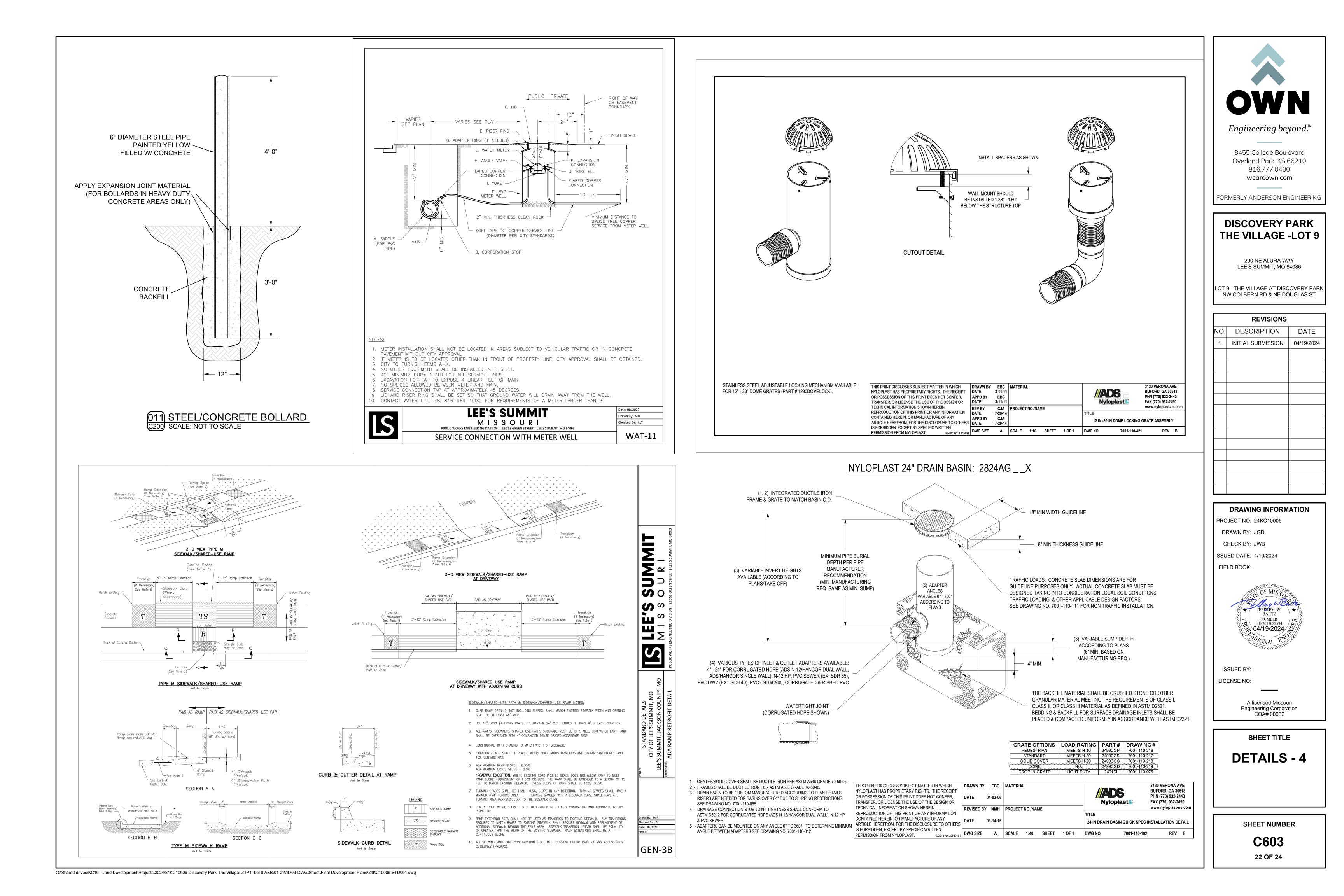
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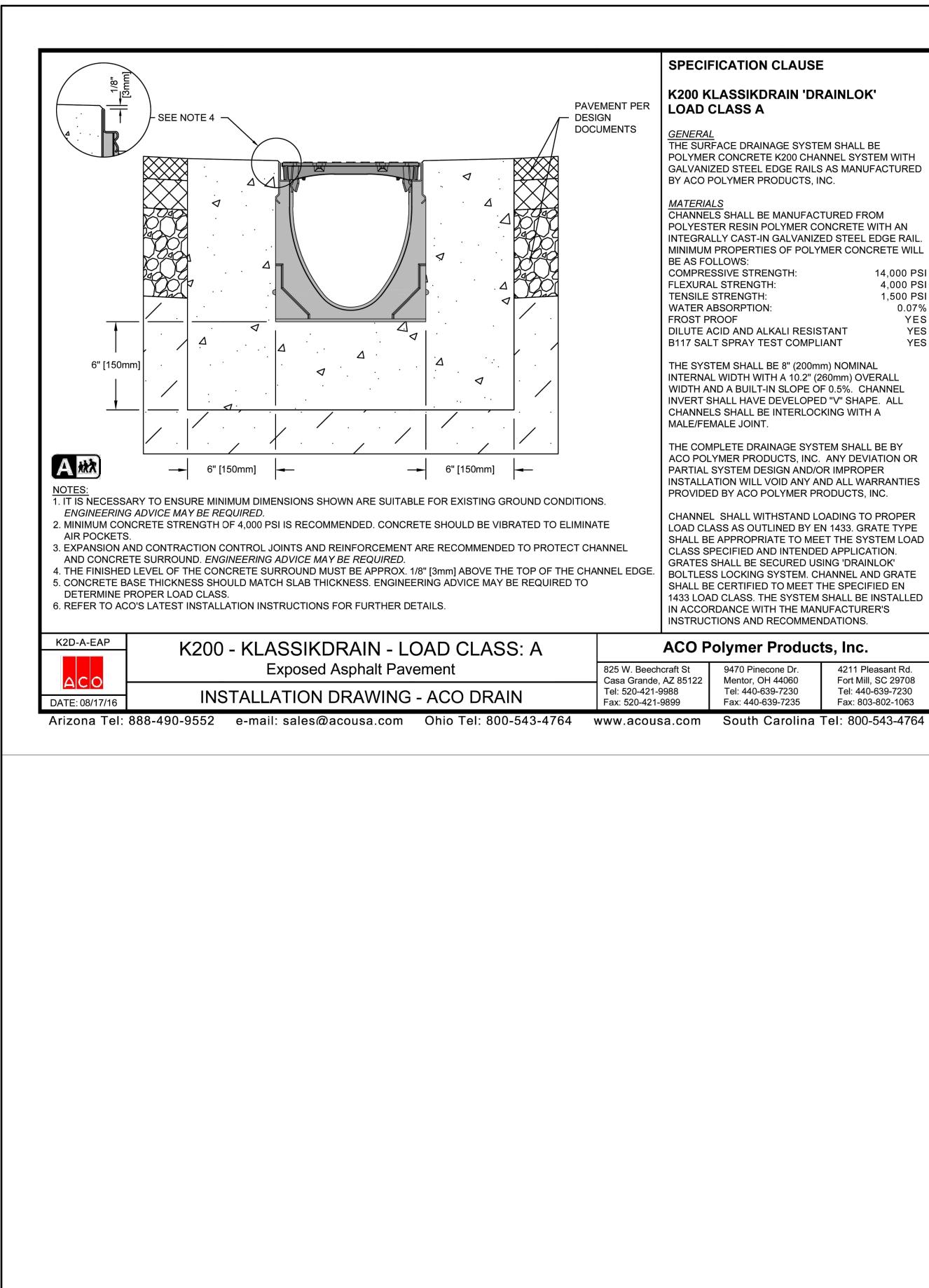


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K200 KLASSIKDRAIN 'DRAINLOK'

<u>GENERAL</u> THE SURFACE DRAINAGE SYSTEM SHALL BE POLYMER CONCRETE K200 CHANNEL SYSTEM WITH GALVANIZED STEEL EDGE RAILS AS MANUFACTURED

| ALL BE MANUFACTURED FROM SIN POLYMER CONCRETE WITH AN AST-IN GALVANIZED STEEL EDGE RAIL. | | | | |
|--|---------------|--|--|--|
| PERTIES OF POLYMER | CONCRETE WILL | | | |
| /S: | | | | |
| STRENGTH: | 14,000 PSI | | | |
| ENGTH: | 4,000 PSI | | | |
| NGTH: | 1,500 PSI | | | |
| PTION: | 0.07% | | | |
| | | | | |

YES

YES

YES

DILUTE ACID AND ALKALI RESISTANT B117 SALT SPRAY TEST COMPLIANT

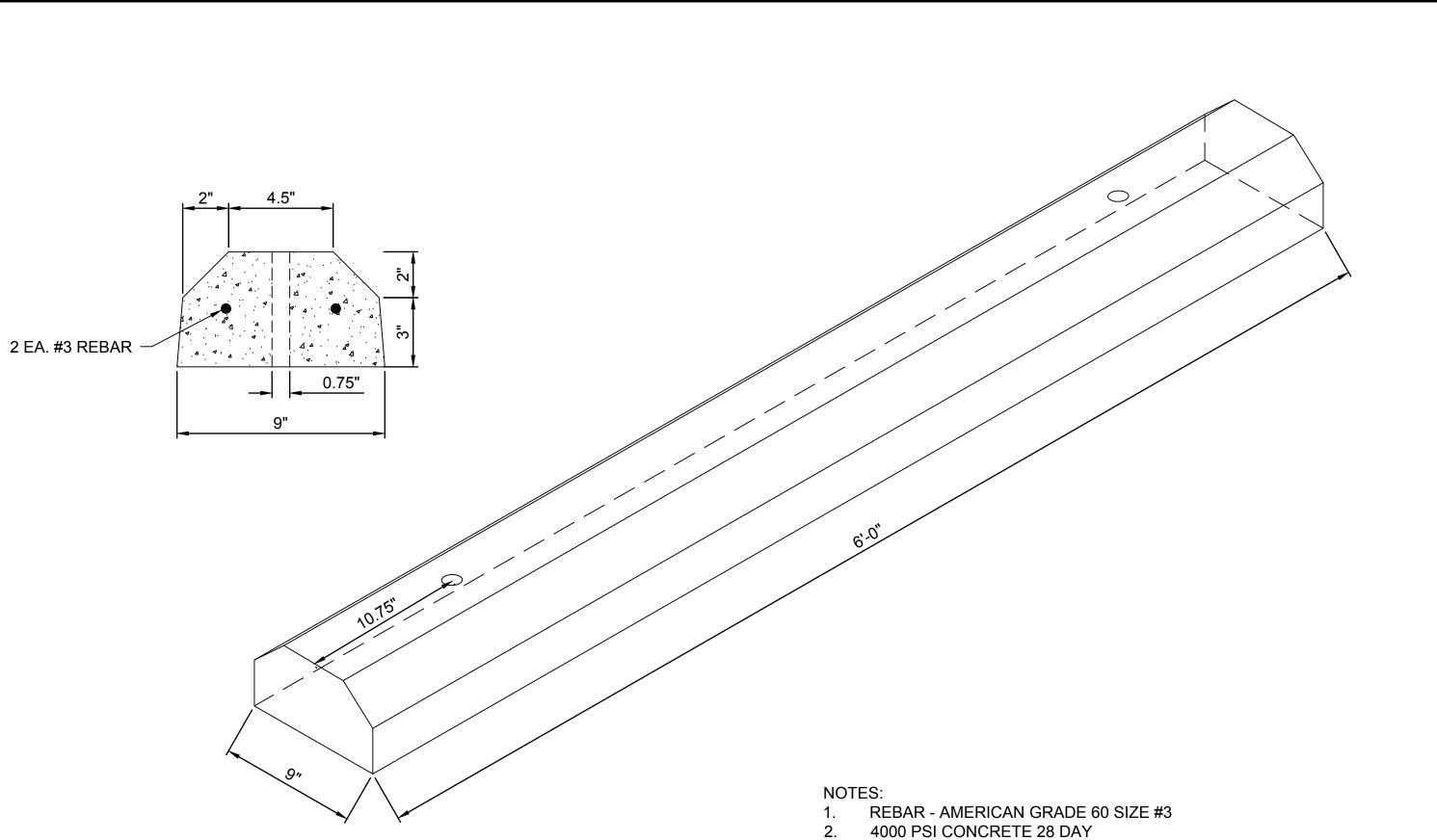
THE SYSTEM SHALL BE 8" (200mm) NOMINAL INTERNAL WIDTH WITH A 10.2" (260mm) OVERALL WIDTH AND A BUILT-IN SLOPE OF 0.5%. CHANNEL INVERT SHALL HAVE DEVELOPED "V" SHAPE. ALL CHANNELS SHALL BE INTERLOCKING WITH A

THE COMPLETE DRAINAGE SYSTEM SHALL BE BY ACO POLYMER PRODUCTS, INC. ANY DEVIATION OR PARTIAL SYSTEM DESIGN AND/OR IMPROPER INSTALLATION WILL VOID ANY AND ALL WARRANTIES PROVIDED BY ACO POLYMER PRODUCTS, INC.

CHANNEL SHALL WITHSTAND LOADING TO PROPER LOAD CLASS AS OUTLINED BY EN 1433. GRATE TYPE SHALL BE APPROPRIATE TO MEET THE SYSTEM LOAD CLASS SPECIFIED AND INTENDED APPLICATION. GRATES SHALL BE SECURED USING 'DRAINLOK' BOLTLESS LOCKING SYSTEM. CHANNEL AND GRATE SHALL BE CERTIFIED TO MEET THE SPECIFIED EN 1433 LOAD CLASS. THE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.

ACO Polymer Products, Inc.

| 0 Pinecone Dr. | 4211 Pleasant Rd. |
|----------------|---------------------|
| ntor, OH 44060 | Fort Mill, SC 29708 |
| 440-639-7230 | Tel: 440-639-7230 |
| : 440-639-7235 | Fax: 803-802-1063 |
| | |
| uth Carolina | TAL 000 542 4764 |



012 PARKING BLOCK (TYP.) C200 SCALE: NOT TO SCALE

- WEIGHT 200 POUNDS 3.



Engineering beyond.™

8455 College Boulevard Overland Park, KS 66210 816.777.0400 weareown.com

FORMERLY ANDERSON ENGINEERING

DISCOVERY PARK THE VILLAGE -LOT 9

200 NE ALURA WAY LEE'S SUMMIT, MO 64086

LOT 9 - THE VILLAGE AT DISCOVERY PARK NW COLBERN RD & NE DOUGLAS ST

| | REVISIONS | | |
|-----|--------------------|------------|--|
| NO. | DESCRIPTION | DATE | |
| 1 | INITIAL SUBMISSION | 04/19/2024 | |
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DRAWING INFORMATION PROJECT NO: 24KC10006 DRAWN BY: JGD CHECK BY: JWB ISSUED DATE: 4/19/2024 FIELD BOOK: BARTZ NUMBER PE-2012022594 04/19/202 ISSUED BY: LICENSE NO: A licensed Missouri

Engineering Corporation COA# 00062 SHEET TITLE **DETAILS - 5** SHEET NUMBER **C604** 23 OF 24

