

1. 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. THROAT 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-A515 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.
13. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICT AND POINTS OF CONNECTION PRIOR TO ANY CONSTRUCTION OF STORM SEWER.

1. 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 LEE'S SUMMIT REQUIREMENTS. CONTRACTOR SHALL NOT OBSTRUCT ACCESS TO EXISTING BUSINESSES.
5. CONTRACTOR SHALL INSTALL SAFETY FENCING SURROUNDING ALL EXCAVATIONS DURING DEMOLITION OF STRUCTURES, AREAS OF HEAVY EQUIPMENT USAGE FOR SITE GRADING AND GRUBBING, TREE DEMOLITION AREAS, AND 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.

1. 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.
3. FINISHED GRADES SHALL NOT BE STEEPER THAN 3:1.
4. EXISTING GRADE CONTOURS SHOWN AT 1 FOOT INTERVALS. PROPOSED GRADE CONTOURS SHOWN AT 1 FOOT INTERVALS.
5. HAUL OFF AND MATERIAL IMPORT SHALL NOT BE AN EXCLUDED ITEM IN THE BASE BID. ALL 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.
7. 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.
8. REFERENCE GEOTECHNICAL REPORT FOR BUILDING PAD PREPARATION.
9. 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).

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 AN ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.

D. 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.

E. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.

F. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.

G. GENERAL PERMIT TENN-010 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 AT 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.

M. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WILL BE STOPPED FOR AT LEAST 14 DAYS, SHALL BE TEMPORARILY STABILIZED. THESE AREAS SHALL BE STABILIZED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.

N. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY 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 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 PREVENT TRASH AND 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 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. 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 TRAFFIC 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.

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 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. IF 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 DURING 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 EXPENSE 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.

0. POSITIVE FLOW LINE DRAINAGE SHALL BE MAINTAINED THROUGHOUT 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.
1. TURNING SPACE SHALL BE LOCATED ANYWHERE THE PAR CHANGES DIRECTION, AND IF THE APPROACHING WALK IS INVERSE GRADE.
2. THE MAXIMUM CROSS SLOPE REQUIREMENTS FOR PERPENDICULAR CURB RAMPS AND BLENDED TRANSITIONS ADJACENT TO PEDESTRIAN STREET CROSSINGS ARE AS FOLLOWS:
AT YIELD OR STOP CONTROL - 2%;
WITHIN YIELD OR STOP CONTROL, OR WITH TRAFFIC SIGNALS - 5%;
AT MIDBLOCK - NO GREATER THAN THE STREET GRADE;
3. WHEN NOT ADJACENT TO PEDESTRIAN STREET CROSSINGS, PAR AND RAMP CROSS-SLOPE 1% DESIRED, 2% MAXIMUM.
4. CONTRACTION JOINTS SHALL BE CONSTRUCTED ALONG ALL GRADE BREAKS AND AT THE TOP OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES.
5. ALL GRADE BREAKS WITHIN THE PAR SHALL BE PERPENDICULAR TO THE PATH OF TRAVEL.
6. ALL RAMP TYPES SHOULD HAVE A MINIMUM OF 3' RAMP LENGTH.
7. DETECTABLE 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.
8. 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.
9. LONGITUDINAL JOINT SPACING TO MATCH WITH OF SIDEWALK (4' MIN.).
10. ISOLATION JOINTS SHALL BE PLACED WHERE WALK ABUTS DRIVEWAYS AND SIMILAR STRUCTURES, AND 250' CENTERS MAX.
11. SIDEWALK RAMPS SHALL BE LENGTHENED AS NEEDED TO PROVIDE COMPLIANT SLOPE (8.33% MAX.) BUT NEED NOT EXCEED 15' REGARDLESS OF RESULTING SLOPE.
12. NO CASTING OR UTILITY BOXES SHALL BE ALLOWED IN RAMPS OR TURNING SPACES. CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING UTILITY BOXES AND COORDINATING WITH UTILITIES TO OBTAIN RAMP AND SIDEWALK COMPLIANCE.
13. 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 COMPLIING WITH ICC A117.7 - 2009 AND 2010 ADA STANDARD SECTIONS 405.

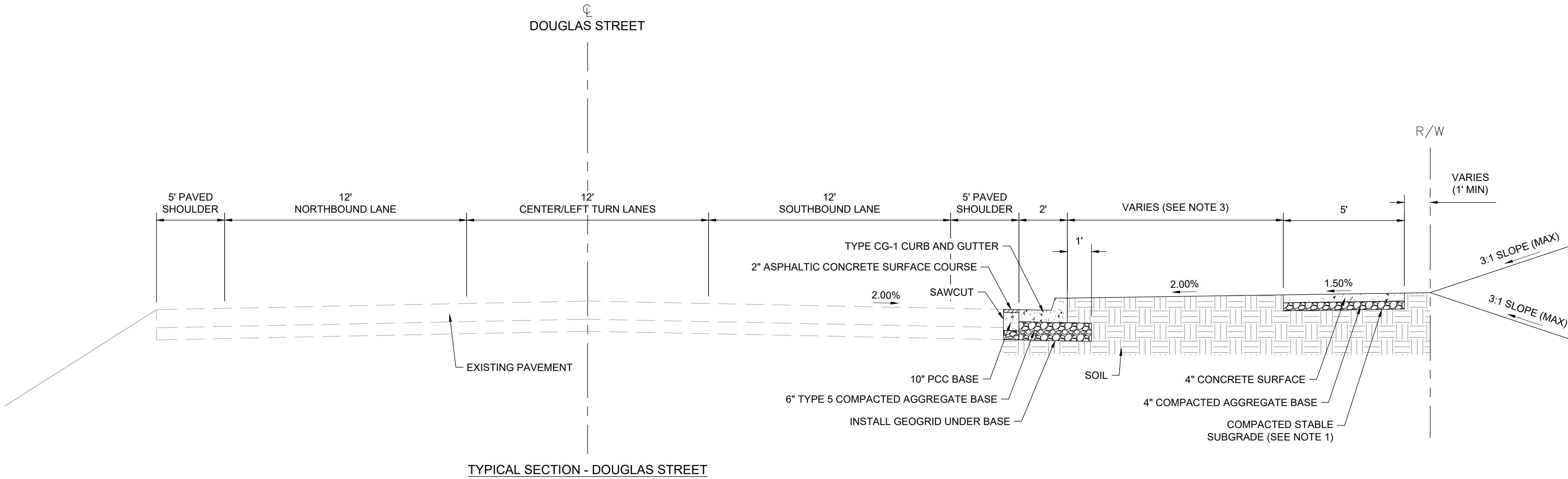
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE PLANS IN THEIR POSSESSION AR THE MOST CURRENT VERSION ISSUED, AND PRESENT ON SITE AT ALL TIME. CURRENT PLANS PREPARED BY OWN, INC. MAY BE OBTAINED AT THE DIRECTION OF THE OWNER. DIRECT REQUESTS TO OWN, INC. MAY REQUIRE ADDITIONAL AUTHORIZATIONS, AGREEMENTS, AND/OR FEES. PLEASE CONTACT THE ENGINEER FOR MORE INFORMATION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEVIATIONS FROM THESE PLANS UNLESS WRITTEN APPROVAL FROM ENGINEER, OWNER, AND DEVELOPER.
3. ALL WORK AND MATERIALS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE OWNER OR THE OWNER'S REPRESENTATIVE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO COMPLETE THE WORK SHOWN IN THE PLANS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS, PAYING ALL FEES, AND FOR OTHERWISE COMPLYING WITH ALL APPLICABLE REGULATIONS GOVERNING THE WORK.
6. THE CONTRACTOR SHALL NOT ENGAGE IN ACTIVITIES THAT MAY ENCROACH ON WATERS OF THE U.S., INCLUDING WETLANDS. UNTIL ANY NECESSARY PERMITS MAY BE OBTAINED, THE CONTRACTOR SHALL REVIEW AND COMPLY WITH ALL CONDITIONS DESCRIBED IN THE PERMIT.
7. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, THE SAFETY OF ALL PERSONS INCLUDING VISITORS AND THE GENERAL PUBLIC, AND PROPERTY DURING PERFORMANCE OF THE WORK.
8. PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE WITH ALL UTILITY COMPANIES AND OBTAIN ANY RELEVANT INFORMATION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
9. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL BOUNDARY CORNERS AND SECTION CORNERS. ANY BOUNDARY CORNERS AND/OR SECTION CORNERS DISTURBED OR DAMAGED DURING CONSTRUCTION ACTIVITIES SHALL BE RESET BY A LAND SURVEYOR LICENSED IN THE STATE OF MISSOURI AT THE CONTRACTOR'S EXPENSE.
10. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ADJACENT PROPERTIES AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE DURING CONSTRUCTION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR REPAIRING ANY DAMAGE RESULTING FROM CONSTRUCTION ACTIVITIES.
11. PRIOR TO MOVING OFF THE JOB THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER TO PERFORM A FINAL WALK-THROUGH OF THE CONSTRUCTION SITE.



DRAWING INFORMATION	
PROJECT NO:	24KC10030
DRAWN BY:	PJB
CHECK BY:	JWB
ISSUED DATE:	2025-07-22
FIELD BOOK:	
<div style="text-align: center;"></div>	
ISSUED BY:	JEFFREY W BARTZ, PE
LICENSE NO:	MO #2012022594

SHEET NUMBER
C050
2 OF 12

- NOTES:
- (1) SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
 - (2) ALL MATERIALS TO CONFORM TO THE MOST CURRENT VERSION OF THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL.
 - (3) GREEN SPACE WIDTH VARIES IN WIDTH FROM 5 FT TO 16 FT BUT SHALL NOT BE LESS THAN 5 FEET. REFER TO SHEET C200 FOR ADDITIONAL DETAIL.





Engineering beyond.

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

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A licensed Kansas
Engineering Corporation
COA# E-137

DOUGLAS STREET
PUBLIC
IMPROVEMENTS -
ALURA APARTMENTS
DISCOVERY PARK

ALURA APARTMENTS
THE VILLAGE AT DISCOVERY PARK
LEE'S SUMMIT, MISSOURI

REVISIONS		
NO.	DESCRIPTION	DATE
1	CITY COMMENTS	07/22/2025

DRAWING INFORMATION


PROJECT NO: 24KC10030

DRAWN BY: PJB

CHECK BY: JWB

ISSUED DATE: 2025-07-22

FIELD BOOK:



ISSUED BY: JEFFREY W BARTZ, PE
LICENSE NO: MO #2012022594

SHEET TITLE

TYPICAL ROAD
SECTIONS

SHEET NUMBER

C060

3 OF 12



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**DOUGLAS STREET
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[illegible]

DRAWING INFORMATION

PROJECT NO: 24KC10030

DRAWN BY: PJB

CHECK BY: JWB

ISSUED DATE: 2025-07-22

FIELD BOOK:



ISSUED BY: JEFFREY W BARTZ, PE

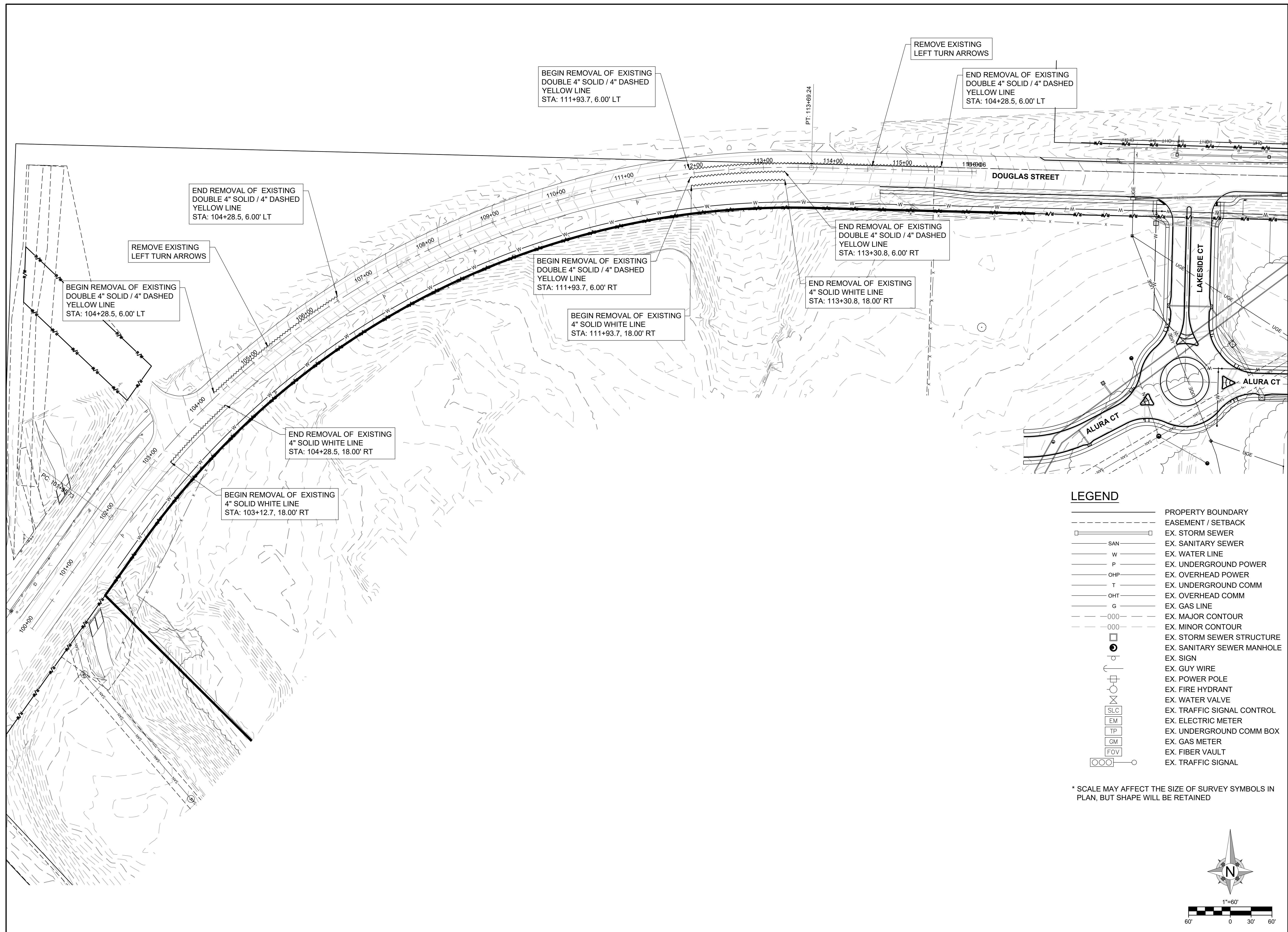
LICENSE NO: MO #2012022594

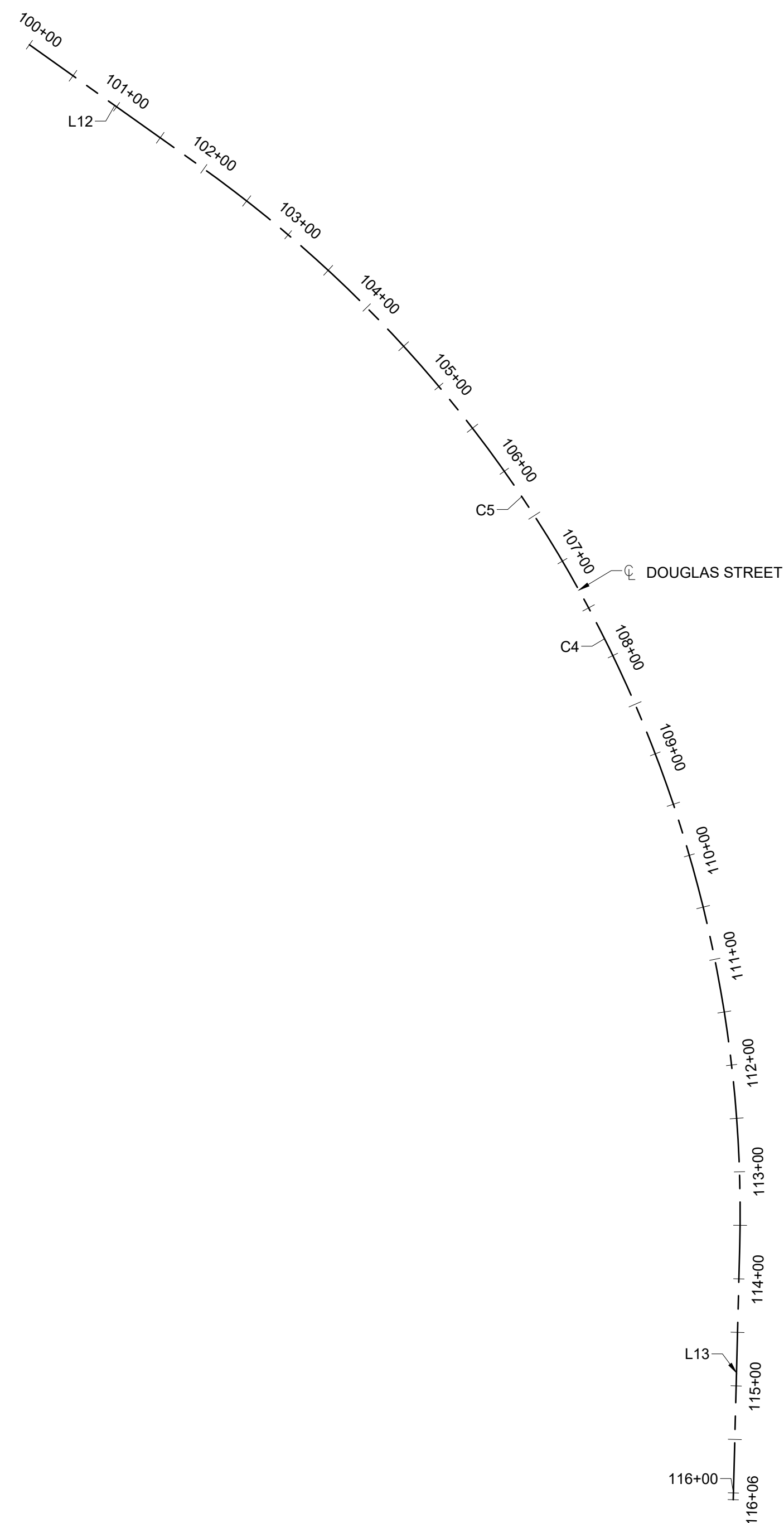
SHEET TITLE
**EXISTING
CONDITIONS &
DEMOLITION
PLAN**

SHEET NUMBER

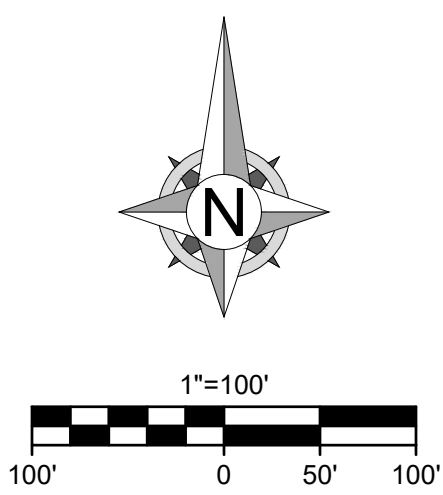
C100

4 OF 12





DOUGLAS STREET									
SEGMENT #		STATION	NORTHING	EASTING	LENGTH	LINE/CHORD DIRECTION	DELTA	TANGENT	RADIUS
L12		100+00.00	1014859.0902	2822747.0850	195.733	S54° 34' 19.30"E			
C4	PC= PI= PT=	101+95.73	1014745.6278	2822906.5771	1173.502	S26° 33' 24.20"E	056° 01' 50"	638.46	1200.000
C???	PC= PI= PT=	101+95.73	1014745.6278	2822906.5771	1173.502	S26° 33' 24.20"E	056° 01' 50"	638.46	1200.000
C???	PC= PI= PT=	101+95.73	1014745.6278	2822906.5771	1173.502	S26° 33' 24.20"E	056° 01' 50"	638.46	1200.000
C5	PC= PI= PT=	101+95.73	1014745.6278	2822906.5771	1173.502	S26° 33' 24.20"E	056° 01' 50"	638.46	1200.000
L13		113+69.24	1013737.2688	2823410.5734	237.116	S01° 27' 30.90"W			

[illegible]

DRAWING INFORMATION


PROJECT NO: 24KC10030

DRAWN BY: PJB

CHECK BY: JWB

ISSUED DATE: 2025-07-22

FIELD BOOK:



ISSUED BY: JEFFREY W BARTZ, PE

LICENSE NO: MO #2012022594

SHEET TITLE

ALIGNMENT DATA

SHEET NUMBER

C101

5 OF 12



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Overland Park, KS 66210
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**DOUGLAS STREET
PUBLIC
IMPROVEMENTS -
ALURA APARTMENTS
DISCOVERY PARK**

ALURA APARTMENTS
THE VILLAGE AT DISCOVERY PARK
LEE'S SUMMIT, MISSOURI

[illegible]

DRAWING INFORMATION

PROJECT NO: 24KC10030

DRAWN BY: PJB

CHECK BY: JWB

ISSUED DATE: 2025-07-22

FIELD BOOK:



ISSUED BY: JEFFREY W BARTZ, PE

LICENSE NO: MO #2012022594

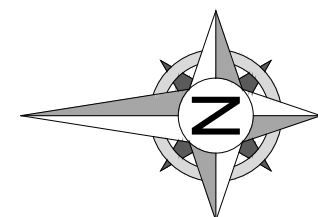
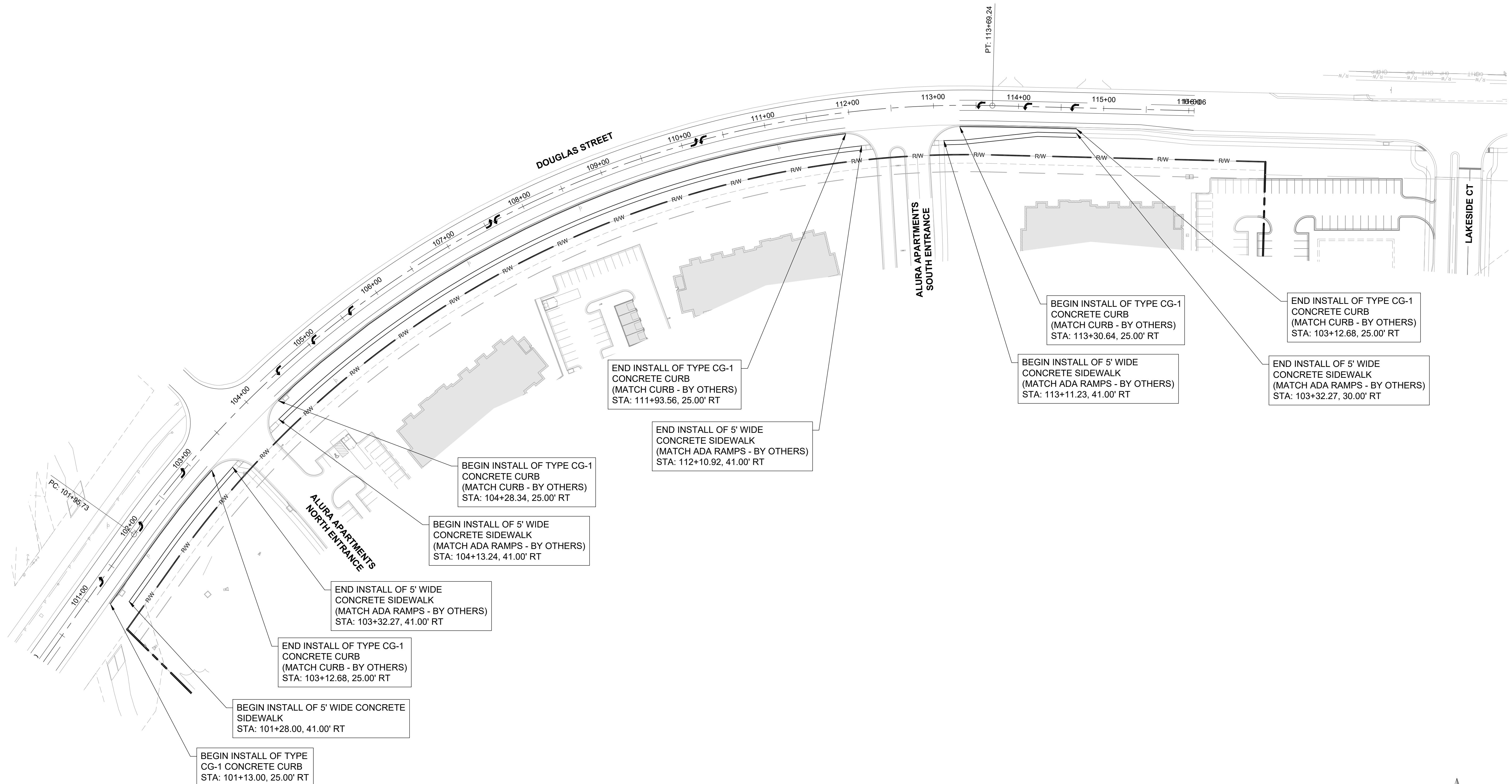
SHEET TITLE

SITE PLAN

SHEET NUMBER

C200

6 OF 12



1"=60'

60' 0 30' 60'



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**DOUGLAS STREET
PUBLIC
IMPROVEMENTS -
ALURA APARTMENTS
DISCOVERY PARK**

ALURA APARTMENTS
THE VILLAGE AT DISCOVERY PARK
LEE'S SUMMIT, MISSOURI

[illegible]

DRAWING INFORMATION

PROJECT NO: 24KC10030

DRAWN BY: PJB

CHECK BY: JWE

ISSUED DATE: 2025-07-22

FIELD BOOK:



ISSUED BY: JEFFREY W BARTZ, P

LICENSE NO: MO #2012022594

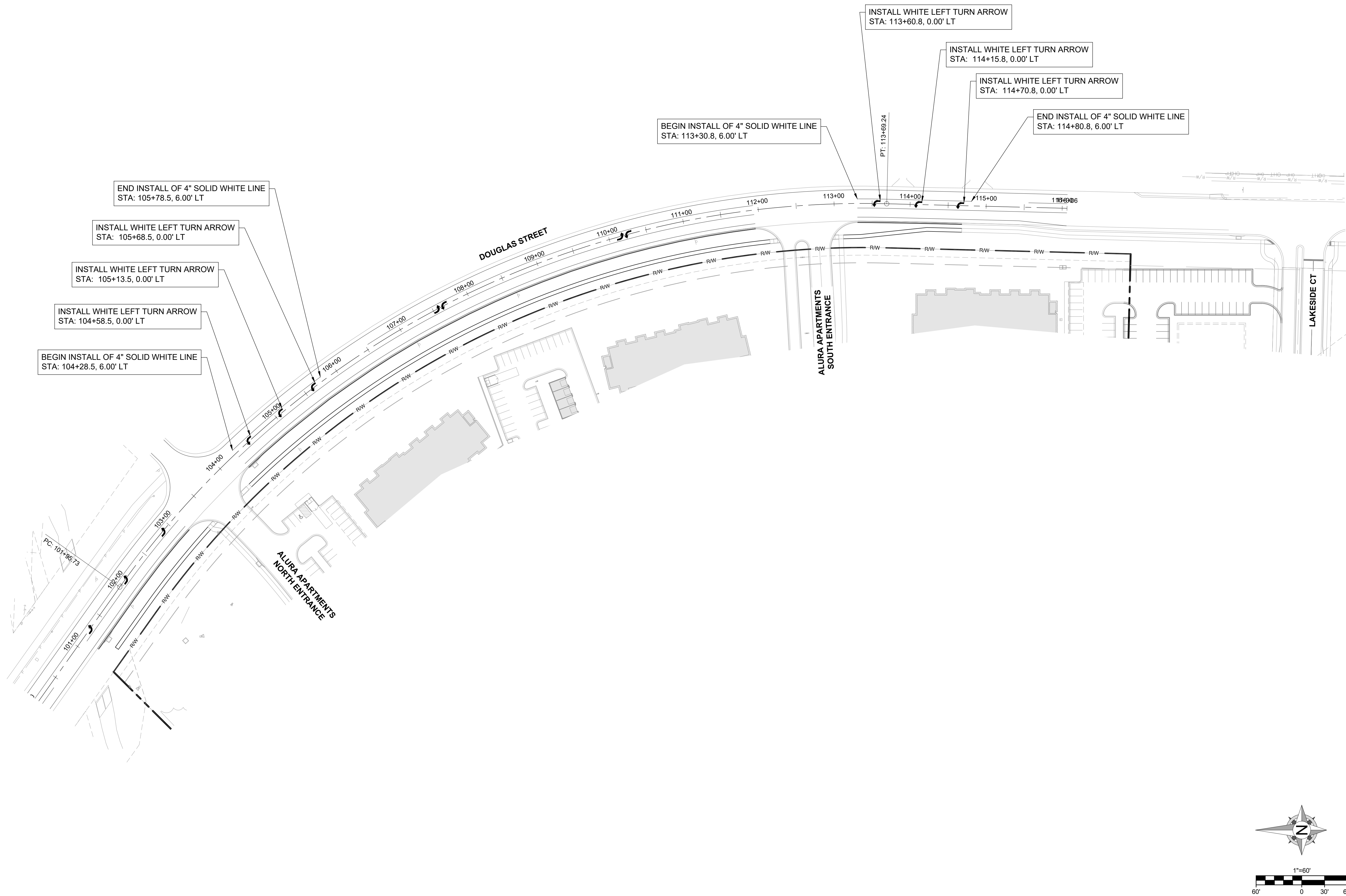
SHEET TITLE

STRIPING PLAN

SHEET NUMBER

C201

7 OF 12





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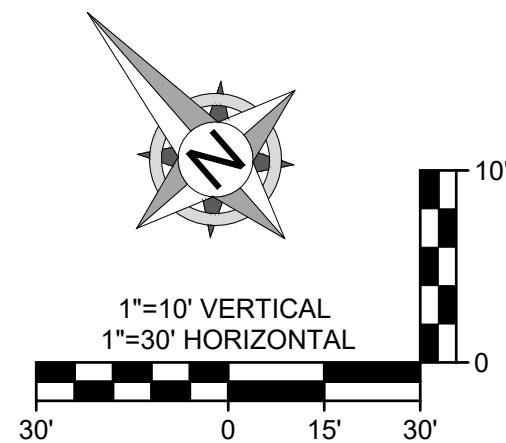
**DOUGLAS STREET
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ALURA APARTMENTS
DISCOVERY PARK**

[illegible]

LICENSE NO: MO #2012022594

STORM PLAN & PROFILE

8 OF 12



- (1) REFER TO ALURA APARTMENTS FINAL DEVELOPMENT PLAN FOR PRIVATE STORM LAYOUT AND DETAILS.
- (2) REFER TO ALURA APARTMENTS FINAL DEVELOPMENT PLAN FOR DETENTION BASIN DETAILS.
- (3) ALL MATERIALS TO CONFORM TO THE MOST CURRENT VERSION OF THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL.





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LEE'S SUMMIT, MISSOURI

REVISIONS

[illegible]

DRAWING INFORMATION

PROJECT NO: 24KC10030

DRAWN BY: PJB

CHECK BY: JWB

ISSUED DATE: 2025-07-22

FIELD BOOK:



ISSUED BY: JEFFREY W BARTZ, PE

LICENSE NO: MO #2012022594

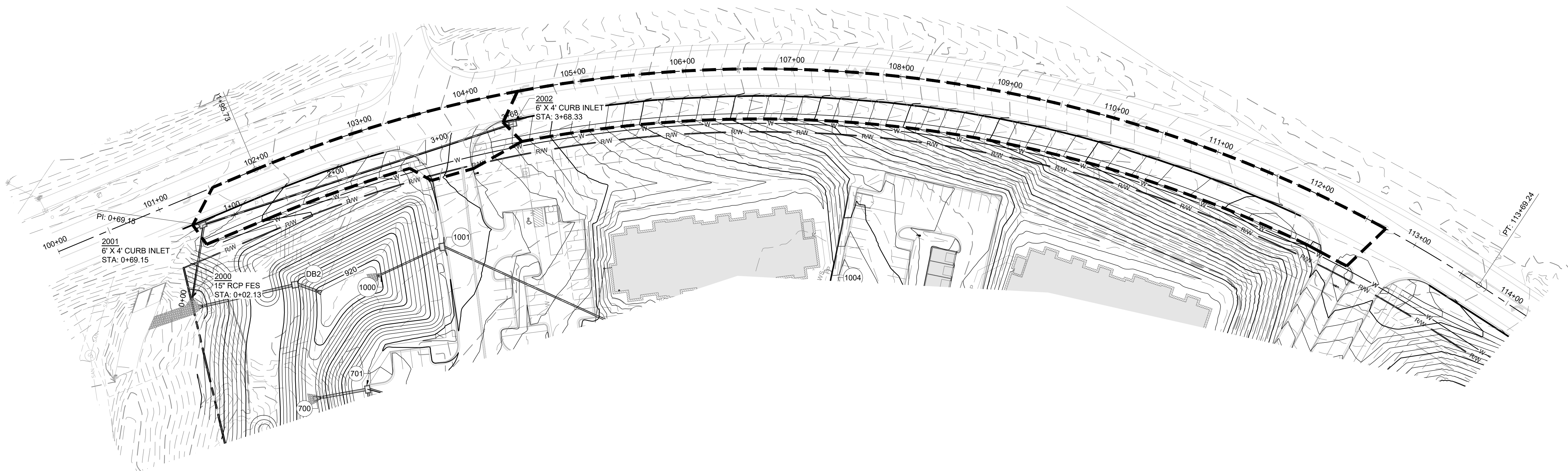
SHEET TITLE

DRAINAGE MAP & CALCULATIONS

SHEET NUMBER

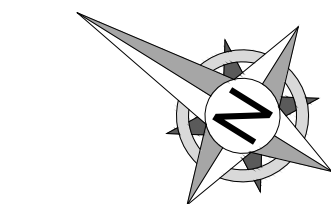
C301

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STORM SEWER CALCULATIONS

Runoff Calculations														Pipe Properties													
Inlet #	Area (acres)	"C" Value	Cumul. Area (acres)	Cumul. CxA	Tc	Intensity	Runoff To Inlet	Cumul. Runoff	Pipe Cap.	Pipe Vel.	Piped Inlet 1	Up Inlet 2	Up Area (acres)	Up CxA	Up Inlet	Down Inlet	Pipe Type	"n" Value	Pipe Size	Length	Slope %	Drop In Inlet	FL Up	FL Down	Inlet Top	HGL Elev.	
LINE 2000																							DS TAILWATER @ STR #2000				FREE
2001	0.34	0.90	1.20	1.08	5.5	7.21	2.21	7.79	9.14	7.44			0.00	0.00	2001	2000	RCP	0.013	15	67.02	2.00	0.50	919.34	918.00	929.04	920.80	
2002	0.86	0.90	0.86	0.77	5.0	7.35	5.69	5.69	12.98	10.58			0.00	0.00	2002	2001	RCP	0.013	15	299.18	4.04	N/A	931.92	919.84	937.92	933.13	



NOTES:

- (1) REFER TO ALURA APARTMENTS FINAL DEVELOPMENT PLAN FOR PRIVATE STORM LAYOUT AND DETAILS.
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- (3) ALL MATERIALS TO CONFORM TO THE MOST CURRENT VERSION OF THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL.



FORMERLY ANDERSON ENGINEERING

**DOUGLAS STREET
PUBLIC
IMPROVEMENTS -
ALURA APARTMENTS
DISCOVERY PARK**

[illegible]

STATE OF MISSOURI
JEFFREY W. BARTZ
NUMBER
PE-2012022594
07/22/2025
PROFESSIONAL ENGINEER

LICENSE NO: MO #2012022594

ADA RAMP DETAILS

10 OF 12



CURB REPLACEMENT DETAIL

GENERAL NOTES

1. 3/4" ISOLATION JOINTS WITH 2 (2"-#5 BAR) SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
2. 3" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APPROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
3. CONCRETE FILL SHALL HAVE UNIFORM AND SMOOTH FINISH
4. KCMWB 4K CONCRETE SHALL BE USED FOR ALL CURB.
5. ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 2205.2.
6. CURBS FOR NEW STREETS SHALL BE BUILT ON ASPHALT OR AGGREGATE BASE AS SHOWN IN TYPICAL SECTION DETAIL.
7. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.
8. ALL DOWELS & TIE BARS SHALL BE EPOXY COATED.



LS LEE'S SUMMIT
MISSOURI

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

Project: **LEE'S**

Drawn By: MUF
Checked By: DL
Date: 08/2023
Proj. #:

GEN-4



1. SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAPPED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
2. 1.5% CROSS SLOPE MUST BE MAINTAINED THROUGH DRIVEWAYS.
3. KCMXB 4/4 CONCRETE MIX SHALL BE REQUIRED FOR ALL SIDEWALKS/SHARED-USE PATHS.
4. ALL SIDEWALK/SHARED-USE PATHS SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROG).
5. AN ISOLATION JOINT SHALL BE PLACED AT A MAXIMUM OF 100 FT. CONSTRUCTION JOINTS SHALL BE PLACED THE SAME WIDTH OF SIDEWALK/SHARED-USE PATHS, BUT NO GREATER THAN 10 FT.
6. AN ISOLATION JOINT SHALL BE PLACED WHEREVER A SIDEWALK/SHARED-USE PATHS MEETS A RESIDENTIAL DRIVEWAY.
7. SHARED-USE PATHS WIDTH SHALL BE 10 FT. WIDE.
8. SIDEWALK/SHARED-USE PATHS FINISHING SHALL BE FULL BROOM FINISH OR AS DIRECTED BY CITY INSPECTOR
9. WHATEVER FINISHING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.



LEE'S SUMMIT
MISSOURI

PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

SIDEWALK/SHARED-USE PATH DETAIL

SIDEWALK/SHARED-USE PATH DETAIL

Date: 08/2023

Drawn By: MU

Checked By: D

GEN-2



FORMERLY ANDERSON ENGINEERING

**DOUGLAS STREET
PUBLIC
IMPROVEMENTS -
ALURA APARTMENTS
DISCOVERY PARK**

[illegible]

STATE OF MISSOURI
JEFFREY W. BARTZ
NUMBER
PE-2012022594
07/22/2025
PROFESSIONAL ENGINEER

LICENSE NO: MO #2012022594

TRAFFIC DETAILS

12 OF 12



1. DIAGONAL LINES ARE REQUIRED BETWEEN CENTERLINES IF THE WIDTH OF THE AREA BETWEEN THE CENTER LINES IS GREATER THAN 12' AND/OR THE LENGTH OF THE AREA BETWEEN CENTER LINES IS GREATER THAN 250'.
2. DIAGONAL LINES SHOULD BE SPACED AT 5' INCREMENTS, EQUAL TO THE POSTED SPEED LIMIT.
3. EQUAL SPACING IS CALCULATED AS $(L - 40) / (S - 1)$.
4. WHEN A THROUGH LANE OF TRAFFIC TERMINATES AS A MANDATORY TURN LANE, ARROW AND "ONLY" SYMBOLS SHOULD BE MARKED IN THE TURN LANE, IN ALTERNATING ORDER. THE FIRST AND LAST SYMBOLS SHOULD BE ARROWS.



1. DASHED EXTENSION LINES SHALL NOT EXTEND THROUGH CROSSWALKS.



PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | IFF'S SUMMIT MO 64063

INTERSECTION MARKING DETAILS

PM-2



1. ALL EDGE LINE, CENTER LINE, AND LANE LINE PAVEMENT MARKINGS SHALL BE 4" WIDE UNLESS OTHERWISE NOTED.
2. EDGE LINES SHALL BE CONTINUOUS SOLID WHITE OR YELLOW LINES. RIGHT SIDE EDGE LINES SHALL BE SOLID WHITE. MEDIAN OR LEFT SIDE EDGE LINES ON DIVIDED ROADWAYS ARE TO BE SOLID YELLOW. EDGE LINES AND CENTER LINES SHALL BE CONTINUOUS ACROSS DRIVEWAYS.



1. ALL ARROW AND SYMBOL MARKINGS SHALL BE WHITE, AND SHALL BE CENTERED IN THEIR RESPECTIVE TRAFFIC LANES.
2. RIGHT-TURN AND COMBINATION RIGHT-TURN/STRAIGHT ARROWS ARE REVERSE OF ARROWS SHOWN.



1. TRANSVERSE CROSSWALK LINES SHALL BE INSTALLED SUCH THAT THE DISTANCE BETWEEN LINES IS AT LEAST 6 FEET OR 10 FEET.
2. STOP LINES ARE REQUIRED AT SIGNALIZED INTERSECTIONS, ON MULTI-LANE STOP CONTROLLED APPROACHES, OR ADVANCE OF CROSSWALKS AT CONTROLLED INTERSECTIONS.



1. ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

2. ALL PAVEMENT MARKING SYMBOLS SHALL CONFORM TO THE LATEST EDITION OF STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS PRINTED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.

3. ALL PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH THE DESIGNED SPEED LIMIT WHICH IS OPEN TO TRAFFIC.

4. ALL PAVEMENT MARKINGS THAT CONFLICT WITH THE DESIRED MARKINGS SHALL BE COMPLETELY REMOVED. REMOVALS SHALL NOT LEAVE THE ROAD SURFACE SCARRED WITH AN IMAGE THAT MISLEADS TRAFFIC. ANY EXCESS DAMAGE OR SCARPING OF PAVEMENT SHALL BE REPAIRED.

5. THE PROPOSED PERMANENT MARKINGS SHALL BE LAID OUT BY THE CONTRACTOR IN ADVANCE OF THE MARKING INSTALLATION.

6. ALL PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH THE DESIGNED SPEED LIMIT WHICH IS OPEN TO TRAFFIC.

7. CENTER LINES SHALL BE MARKED ON ALL UNDIVIDED ARTERIAL STREETS, AND ANY OTHER UNDIVIDED STREET WITH MORE THAN TWO LANES AND/OR A SPEED LIMIT OF 30 MPH OR MORE.

8. EDGE LINES SHALL BE MARKED ON ALL NON-CURB STREETS.



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ROADWAY MARKING DETAILS

PM-1