

Final Development Plan

100 NE Douglas Street

Section 6, Township 47 North, Range 31 West

Lee's Summit, Jackson County, Missouri

INDEX OF SHEETS:

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- C.201 ~ PRE DEVELOPMENT DRAINAGE PLAN
- C.202 ~ POST DEVELOPMENT DRAINAGE PLAN
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Land Use Schedule

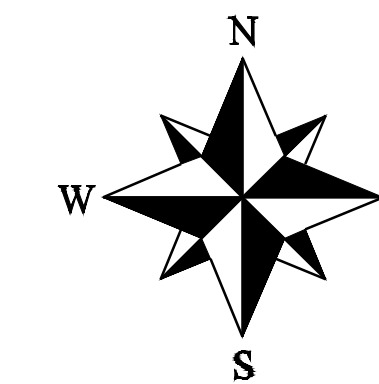
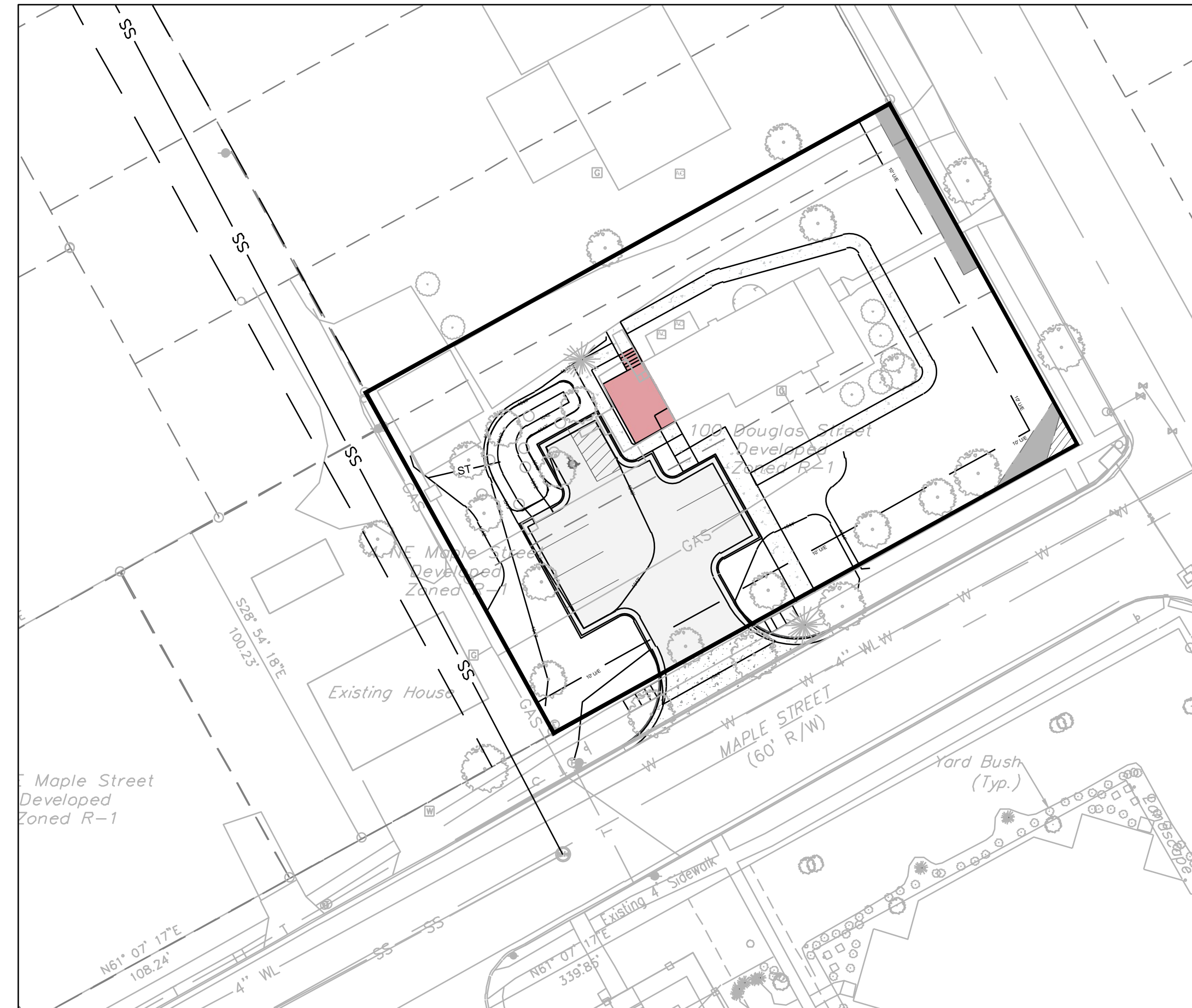
- a. Total floor area 1,102 sq. ft.
- b. Number of dwelling units N/A
- c. Land area 18,948.60 sq. ft. 0.44 acres
- d. Number of required and proposed parking spaces 7 Standard / 1 Handicap
- e. Impervious coverage
Parking/Sidewalk 4,262 sq. ft.
Building 1,102 sq. ft.
5,364 sq. ft. (28.3% of Site)
- f. Floor Area Ratio (FAR) 5.8%
- g. Dwelling units per acre, with and without common area: N/A
- h. The range of land uses to be permitted in each designated area of the development. Office

Current Zoning: TNZ

Sanitary Sewer Service
Existing Sanitary Sewer service from south of property.

Water Service
Existing Service from south of property.

Storm Sewer
New storm line and detention.



SITE LOCATION MAP

SCALE 1" = 30'



Vicinity Map

Summary of Quantities:

ITEM AND DESCRIPTION	UNIT	ESTIMATED QUANTITY
GEOGRID	S.Y.	432.00
MoDOT Type 5 Base	S.Y.	432.00
ASPHALT PAVING	S.Y.	336.00
CURBING	FT	280.00
CLEARING, GRADING & GRUBBING	LS	1
SILT FENCE	FT	425.00
INLET PROTECTION	UNIT	-
SEEDING / MULCHING/ FERTILIZING	AC	0.20
PRIVATE SIDEWALK	S.F.	808.00
ADA SIDEWALK RAMP	UNIT	2

LEGEND:

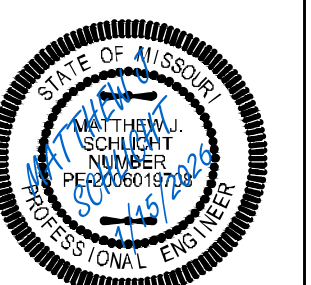
- Existing Underground Power — UGP — UGP —
- Existing Conc. Curb & Gutter —————
- Existing Wood Fence — X — X —
- Existing Gas Main — GAS — GAS —
- Existing Water Main —X-W/M— —X-W/M—
- Existing Storm Sewer —X-STM— —X-STM—
- Existing Sanitary Sewer —X-SAN— —X-SAN—
- Existing Underground Telephone — UGT — UGT —
- Existing Overhead Power — OHE —
- Proposed Storm Sewer — ST — ST — ST —
- Proposed Sanitary Sewer — SS — SS —
- Proposed Underground Power — UGT — UGT —
- Proposed Gas Service — GAS —
- Proposed 8" D.I.P. Water — W —
- Proposed Electrical Service — UGP — UGP —



Professional Registration
Missouri
Engineering 200502186-D
Surveying 2005008318-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

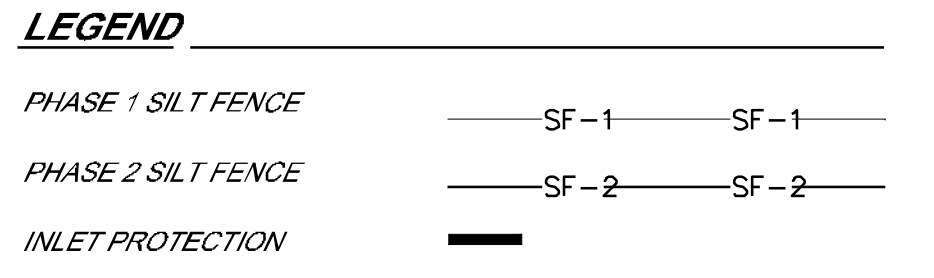
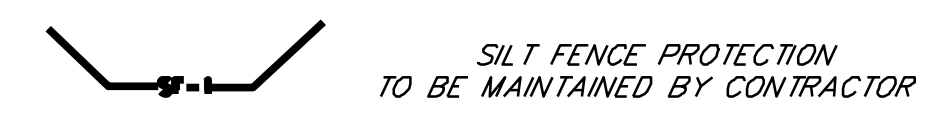
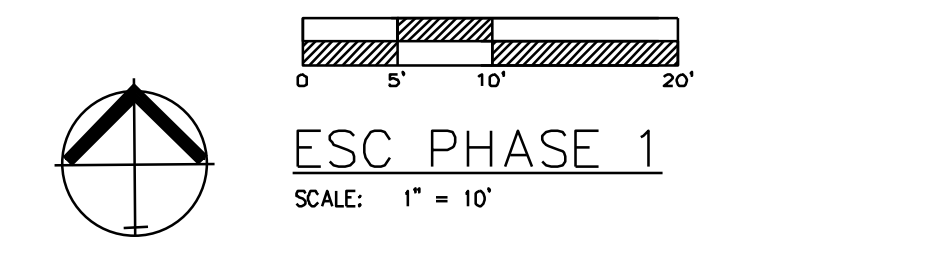
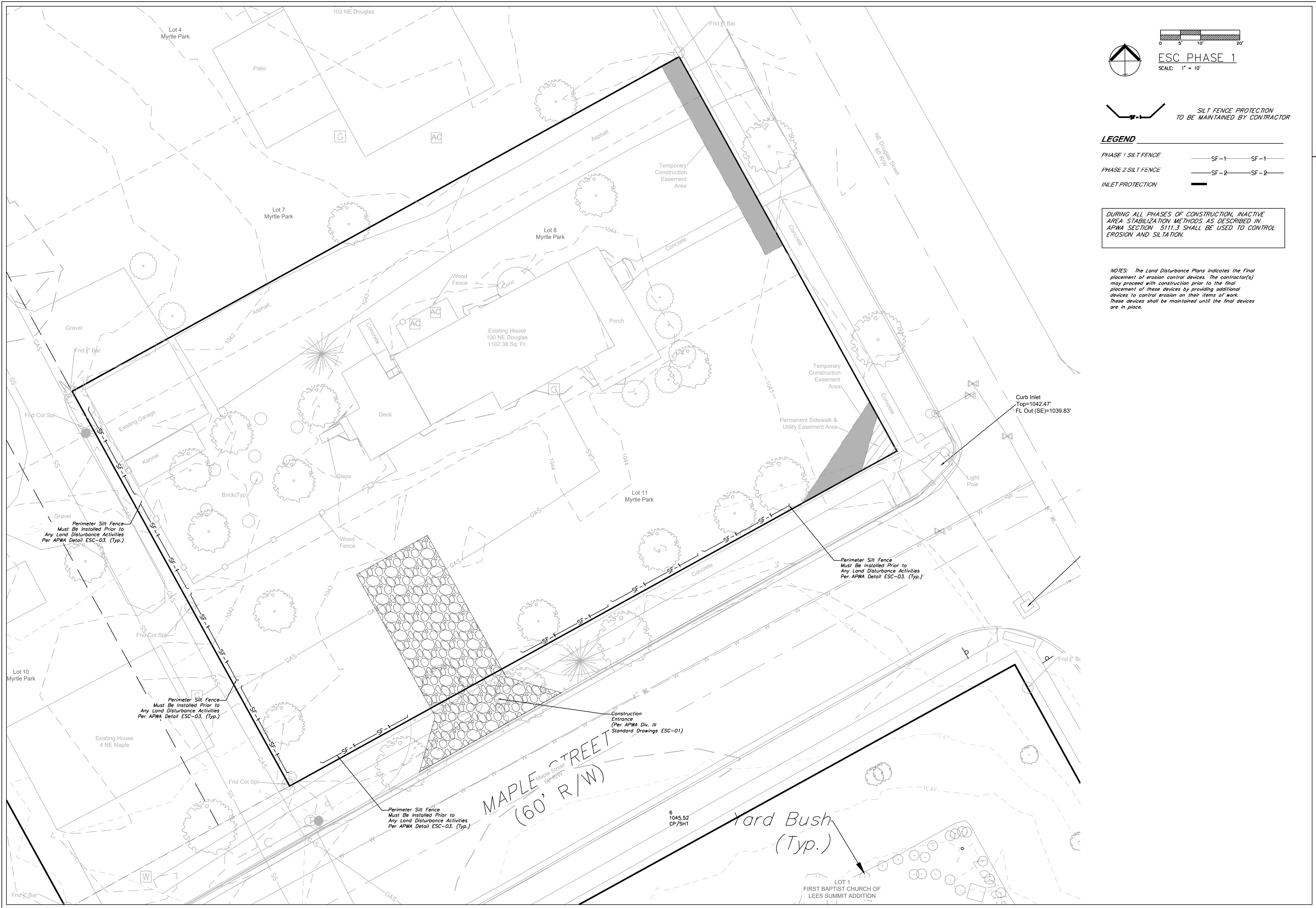
Project: 100 NE DOUGLAS STREET
 Issue Date: June 24, 2025
 Lee's Summit, Jackson County, Missouri

COVER SHEET
 Final Development Plans for:
 100 NE DOUGLAS STREET
 Lee's Summit, Jackson County, Missouri



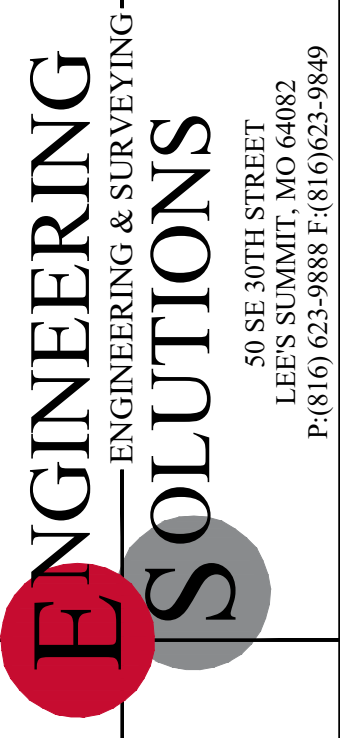
Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25228
NE PE E-14335

REVISIONS
REV. 12/18/2025
REV. 1/15/2026



DURING ALL PHASES OF CONSTRUCTION, INACTIVE AREA STABILIZATION METHODS AS DESCRIBED IN APWA SECTION 5111.3 SHALL BE USED TO CONTROL EROSION AND SILTATION.

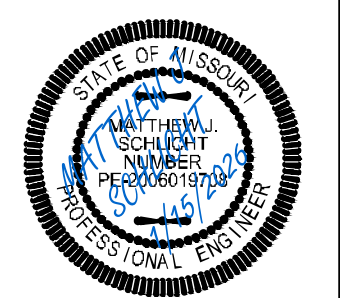
NOTES: The Land Disturbance Plans indicates the final placement of erosion control devices. The contractor(s) may proceed with construction prior to the final placement of these devices by providing additional devices to control erosion on their items of work. These devices shall be maintained until the final devices are in place.



Professional Registration
 Missouri
 Engineering 200502186-D
 Surveying 200503318-D
 Kansas
 Engineering E-1695
 Surveying LS-218
 Oklahoma
 Engineering 6254
 Nebraska
 Engineering CA2821

Project: 100 NE DOUGLAS STREET
 LSMD
 Issue Date: June 24, 2025

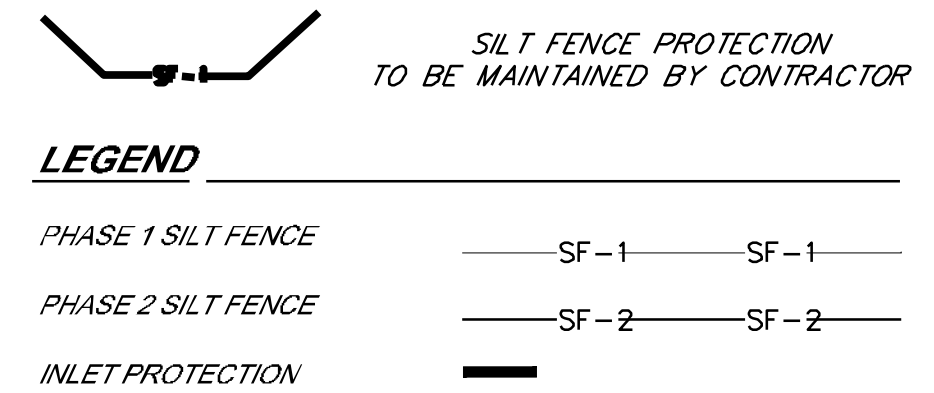
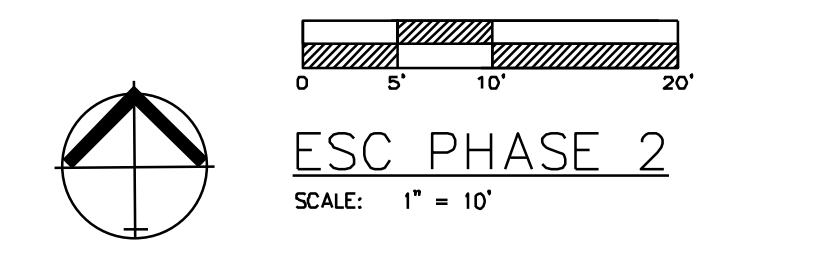
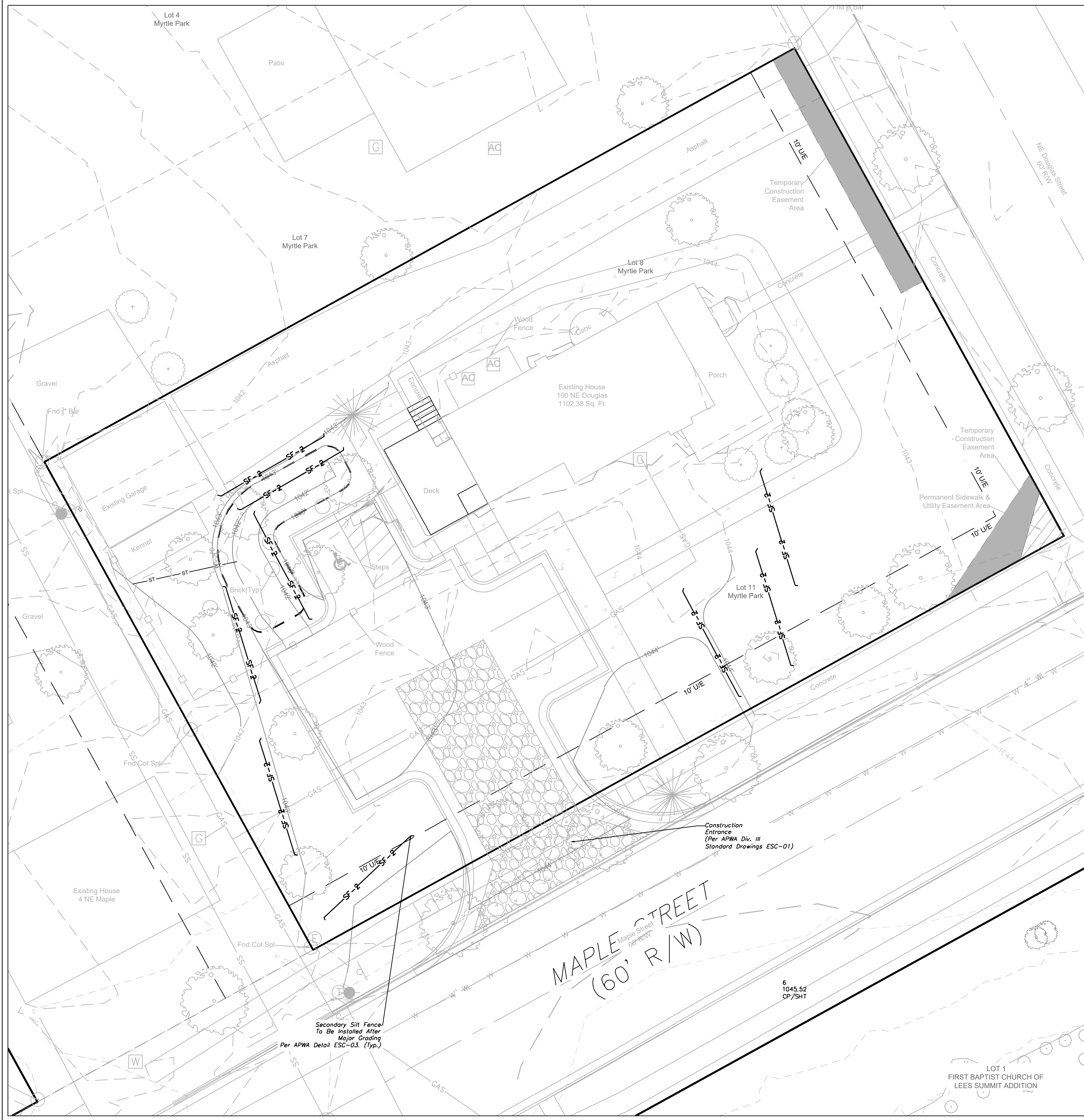
ESC PHASE 1 - Pre Clearing Plan
 Final Development Plans for:
 100 NE DOUGLAS STREET
 Lee's Summit, Jackson County, Missouri



Matthew J. Schlicht
 MO PE 2006019708
 KS PE 19071
 OK PE 25226
 NE PE E-14335

REVISIONS

REV. 12/18/2025
 REV. 1/15/2026



DURING ALL PHASES OF CONSTRUCTION, INACTIVE AREA STABILIZATION METHODS AS DESCRIBED IN APWA SECTION 5111.3 SHALL BE USED TO CONTROL EROSION AND SILTATION.

NOTES: The Land Disturbance Plans indicates the final placement of erosion control devices. The contractor(s) may proceed with construction prior to the final placement of these devices by providing additional devices to control erosion on their items of work. These devices shall be maintained until the final devices are in place.

EROSION CONTROL DESCRIPTION:

- 1.) SILT FENCE SHALL BE PLACED AT THE PERIMETER OF THE GRADING AND AT INTERMEDIATE AREAS THROUGHOUT THE SITE AS SHOWN ON THE PLAN. INLET SEDIMENT TRAPS SHALL BE PLACED SURROUNDING ALL STORM INLETS.
- 2.) INSTALL TEMPORARY CONSTRUCTION ENTRANCE AS SHOWN ON PLAN.

EROSION CONTROL PROCEDURE:

- 1.) SILT FENCE AND TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT THE PERIMETER OF THE GRADED AREAS PRIOR TO BEGINNING OF CLEARING OR DEMOLITION OPERATIONS. THE CONTRACTOR SHALL INSTALL SILT FENCE AS SHOWN ON PLANS AS GRADING PROGRESSES.

TEMPORARY CONSTRUCTION ENTRANCE NOTES:

- A.) INSTALLATION**
- 1.) AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC STREETS. IF POSSIBLE, LOCATE WHERE PERMANENT ROADS WILL EVENTUALLY BE CONSTRUCTED.
 - 2.) REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE AND CROWN FOR POSITIVE DRAINAGE.
 - 3.) IF SLOPE TOWARDS THE PUBLIC ROAD EXCEEDS 2% CONSTRUCT A 8 TO 8 INCH HIGH RIDGE WITH 3H: 1V SIDE SLOPES ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE EDGE OF THE PUBLIC ROAD TO DIVERT RUNOFF AWAY FROM IT.
 - 4.) INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES ALONG PUBLIC ROADS.
 - 5.) PLACE STONE TO DIMENSIONS AND GRADES AS SHOWN ON PLANS. LEAVE SURFACE SMOOTH AND SLOPED FOR DRAINAGE.
 - 6.) DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE.
 - 7.) IF WET CONDITIONS ARE ANTICIPATED PLACE GEOTEXTILE FABRIC ON THE GRADED FOUNDATION TO IMPROVE STABILITY.
- B.) TROUBLESHOOTING**
- 1.) CONSULT WITH A QUALIFIED DESIGN PROFESSIONAL IF ANY OF THE FOLLOWING OCCUR:
 - INADEQUATE RUNOFF CONTROLS TO THE EXTENT THAT SEDIMENT WASHES ONTO PUBLIC ROADS
 - INSTALL DIVERSIONS OR OTHER RUNOFF CONTROL MEASURES
 - SMALL STONE, THIN PAD, OR ABSENCE OF GEOTEXTILE FABRIC RESULTS IN RUTS AND MUDDY CONDITIONS AS STONE IS PRESSED INTO SOIL - INCREASE STONE SIZE THICKNESS OR ADD GEOTEXTILE FABRIC.
 - PAD TOO SHORT FOR HEAVY CONSTRUCTION TRAFFIC - EXTEND PAD BEYOND THE MINIMUM 50 FOOT LENGTH AS NECESSARY.
- C.) INSPECTION AND MAINTENANCE**
- 1.) INSPECT STONE PAD AND SEDIMENT DISPOSAL AREA WEEKLY AND AFTER ANY RAIN EVENT.
 - 2.) RESHAPE PAD AS NEEDED FOR PROPER DRAINAGE AND RUNOFF CONTROL.
 - 3.) TOP DRESS WITH CLEAN 2 AND 3 INCH STONE AS NEEDED.
 - 4.) IMMEDIATELY REMOVE MUD OR SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADWAY. REPAIR ANY BROKEN ROAD PAVEMENT IMMEDIATELY.
 - 5.) REMOVE ALL TEMPORARY ROAD MATERIALS FROM AREAS WHERE PERMANENT VEGETATION WILL BE ESTABLISHED.

MAINTENANCE:

TO MAINTAIN THE EROSION AND SEDIMENT CONTROLS, THE FOLLOWING PROCEDURES WILL BE PERFORMED:
SEDIMENT CAPTURE DEVICES: SEDIMENT WILL BE REMOVED FROM THE UPSTREAM OR UPSLOPE SIDE OF THE FILTER FABRIC FENCES. WHEN THE DEPTH OF ACCUMULATED SEDIMENT REACHES ABOUT ONE-THIRD THE HEIGHT OF THE STRUCTURE.
STORM SEWER INLETS: ANY SEDIMENT IN THE STORM SEWER INLETS WILL BE REMOVED AND DISPOSED OF PROPERLY.
TEMPORARY CONTROLS: ALL TEMPORARY CONTROLS WILL BE REMOVED AFTER THE DISTURBED AREAS HAVE BEEN STABILIZED.

INSPECTION PROCEDURES:

INSPECTIONS WILL BE DONE BY THE RESPONSIBLE PERSON(S) AT LEAST ONCE EVERY WEEK AND WITHIN 24 HOURS EACH STORM EVENT PRODUCING ANY AMOUNT OF RAINFALL. AREAS THAT HAVE BEEN RESEDED WILL BE INSPECTED REGULARLY AFTER SEED GERMINATION TO ENSURE COMPLETE COVERAGE OF EXPOSED AREAS. DISTURBED AREAS THAT HAVE NOT BEEN FINALLY STABILIZED SHALL HAVE ALL POLLUTION CONTROL MEASURES INSPECTED FOR PROPER INSTALLATION, OPERATION AND MAINTENANCE. LOCATIONS WHERE STORM WATER LEAVES THE SITE SHALL BE INSPECTED FOR EVIDENCE OF EROSION OR SEDIMENT DEPOSITION. ANY DEFICIENCIES SHALL BE NOTED IN A REPORT OF THE INSPECTION AND CORRECTED WITHIN SEVEN CALENDAR DAYS OF THE INSPECTION. THE PERMITTEE SHALL PROMPTLY NOTIFY THE SITE CONTRACTORS RESPONSIBLE FOR OPERATION AND MAINTENANCE OF POLLUTION CONTROL DEVICES OF DEFICIENCIES.

IF THE EXISTING GROUND COVER IS NATURAL GRASS, DISTURBED AREAS SHALL BE TEMPORARILY SEEDDED WITH WHEATRYRGE AT A RATE OF 1.5 POUNDS PER 1000 SQUARE FEET. PERMANENT SEEDING SHALL CONSIST OF 90% IN THREE EQUAL PARTS OF THIN SLADE, TURF-TYPE, TALL FESCUE AND 10% BLUEGRASS SEED AT A RATE OF 10 POUNDS PER 1000 SQUARE FEET. BOTH TEMPORARY AND PERMANENT SEEDING AREAS SHALL BE MULCHED AND WATERED TO MAINTAIN THE PROPER MOISTURE LEVEL OF THE SOIL TO ESTABLISH GRASS. NEW GRASS SHALL BE WATERED AND MAINTAINED UNTIL IT REACHES A HEIGHT OF 3 INCHES. ANY BARE AREAS SHALL BE RESEDED.

ALL EROSION CONTROL DEVICES SHALL BE REMOVED BY GENERAL CONTRACTOR AFTER SITE STABILIZATION IS COMPLETE AND APPROVED BY ENGINEER.

THE DEVELOPER WILL DESIGNATE A QUALIFIED PERSON OR PERSONS TO PERFORM THE FOLLOWING INSPECTIONS:
STABILIZATION MEASURES: DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION WILL BE INSPECTED FOR EVIDENCE OF OR THE POTENTIAL FOR POLLUTANTS ENTERING THE DRAINAGE SYSTEM. AFTER A PORTION OF THE SITE IS FINALLY STABILIZED, INSPECTIONS WILL BE CONDUCTED AT LEAST ONCE EVERY MONTH THROUGHOUT THE LIFE OF THE PROJECT. CONTRACTOR CAN CONTACT ENGINEERING SOLUTIONS FOR COPIES OF THE INSPECTION FORM TO BE USED FOR STABILIZATION MEASURES.
STRUCTURAL CONTROLS: FILTER FABRIC FENCES AND ALL OTHER EROSION CONTROL MEASURES IDENTIFIED IN THE PLAN WILL BE INSPECTED REGULARLY FOR PROPER POSITIONING, ANCHORING, AND EFFECTIVENESS IN TRAPPING SEDIMENTS. SEDIMENT WILL BE REMOVED FROM THE UPSTREAM OR UPSLOPE SIDE OF THE FILTER FABRIC. CONTRACTOR CAN CONTACT ENGINEERING SOLUTIONS FOR COPIES OF THE INSPECTION FORM TO BE USED FOR STABILIZATION MEASURES.
DISCHARGE POINTS: DISCHARGE POINTS OR LOCATIONS WILL BE INSPECTED TO DETERMINE WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT AMOUNTS OF POLLUTANTS FROM ENTERING RECEIVING WATERS.
CONSTRUCTION ENTRANCE: LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE WILL BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.

A LOG OF EACH INSPECTION SHALL BE KEPT. THE INSPECTION REPORT IS TO INCLUDE THE FOLLOWING MINIMUM INFORMATION: INSPECTOR'S NAME, DATE OF INSPECTION, OBSERVATIONS RELATIVE TO THE EFFECTIVENESS OF THE POLLUTION CONTROL DEVICES, ACTIONS TAKEN OR NECESSARY TO CORRECT DEFICIENCIES, AND LISTING OF AREAS WHERE LAND DISTURBANCE OPERATIONS HAVE PERMANENTLY OR TEMPORARILY STOPPED. THE INSPECTION REPORT SHALL BE SIGNED BY THE PERMITTEE OR BY THE PERSON PERFORMING THE INSPECTION IF DULY AUTHORIZED TO DO SO.



Professional Registration
 Missouri
 Engineering 200502186-D
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 Kansas
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 Oklahoma
 Engineering 6254
 Nebraska
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Project: 100 NE DOUGLAS STREET
 Inactive Area Stabilization Plan
 Final Development Plans for:
 100 NE DOUGLAS STREET
 Lee's Summit, Jackson County, Missouri

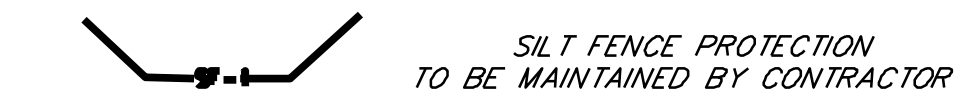
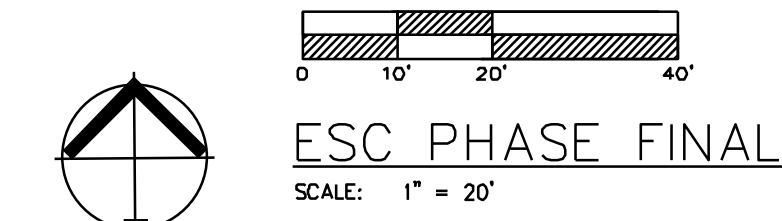
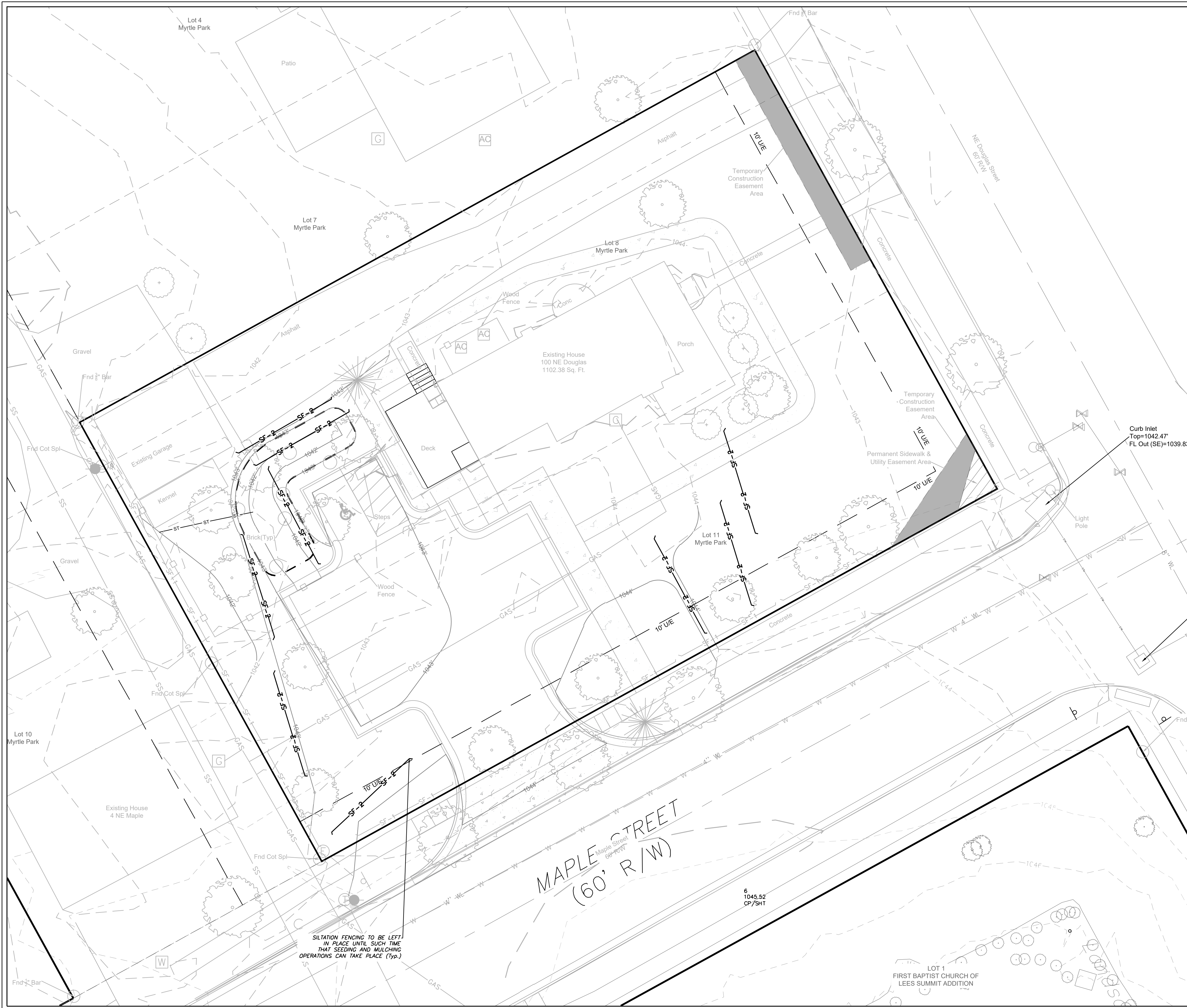
Issue Date: June 24, 2025

ESC PHASE 2
 Inactive Area Stabilization Plan
 Final Development Plans for:
 100 NE DOUGLAS STREET
 Lee's Summit, Jackson County, Missouri



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 MO PE 0006019708
 KS PE 19071
 OK PE 25226
 NE PE E-14335

REVISIONS
 REV. 12/18/2025
 REV. 1/15/2026



LEGEND

PHASE 1 SILT FENCE — SF-1 — SF-1

PHASE 2 SILT FENCE — SF-2 — SF-2

INLET PROTECTION —

DURING ALL PHASES OF CONSTRUCTION, INACTIVE AREA STABILIZATION METHODS AS DESCRIBED IN APWA SECTION 5111.3 SHALL BE USED TO CONTROL EROSION AND SILTATION.

NOTES: The Land Disturbance Plans indicates the final placement of erosion control devices. The contractor(s) may proceed with construction prior to the final placement of these devices by providing additional devices to control erosion on their items of work. These devices shall be maintained until the final devices are in place.

SEED AND MULCH NOTES:

All areas disturbed by construction activities shall be seeded and mulched. Seeding shall be done before the proposed seedbed becomes eroded, crusted over, or dried out and shall not be done when the ground is frozen, or covered with snow. The seed shall comply with the requirements of the Missouri Seed Law and the Federal Seed Act. Also, it shall contain no seed of any plant on the Federal Noxious Weed List. Other weed seeds shall not exceed one percent by weight of mix.

Seed and Fertilizer Rate:

Mix 1 — Rye Grass / Blue Grass -----
 100 lbs. per Acre

Mix 2 — Tall Fescue / Blue Grass ----- 195
 lbs. per Acre

Lime -----2000
 lbs per Acre (50 lbs. per 1000 sq. ft.)

Fertilizer -----800
 to 1200 lbs per Acre (25 lbs per 1000 sq. ft.)

During the dates December 15th through May 31 ALL lime fertilizer, seed and mulch shall be applied to finished slopes of disturbed areas. During the months of June, July, October and November 1st through December 15th, lime fertilizer, seed and mulch shall be applied at the following rates:

Lime — 100% of specified quantity
 Fertilizer — 75% of the specified quantity
 Seed — 50% of the specified quantity
 Mulch — 100% of the specified quantity

Mulch shall be Vegetative type, cereal straw from stalks of oats, rye, or barley, or approved equal. The straw shall be free of prohibited weed seed and relatively free of all other noxious and undesirable seed. Mulch shall be applied at the rate of 2 tons per acre, (70 to 90 lbs per 1000 sq. ft.). Mulch shall be embedded by a mulch anchoring tool or disk type roller having flat serrated disks spaced not more than 10 inches apart and cleaning scrapers shall be provided

ONCE SITE IS 90% VEGETATED ALL ESC DEVICES SHALL BE REMOVED AND ANY DISTURBED AREAS SHALL BE RESTORED

ENGINEERING SOLUTIONS
 ENGINEERING & SURVEYING
 50 SE 30TH STREET
 LEES SUMMIT, MO 64082
 P: (816) 623-9888 F: (816) 623-9849

Professional Registration
 Missouri
 Engineering 200502186-D
 Surveying 2005038318-D
 Kansas
 Engineering E-1695
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 Engineering 6254
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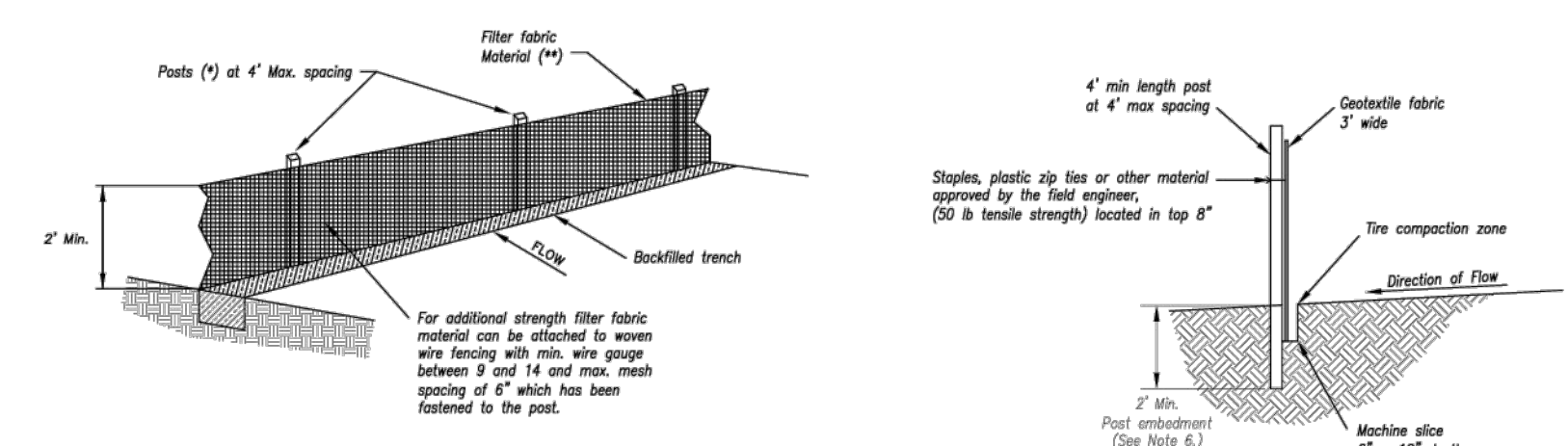
Project: 100 NE DOUGLAS STREET
 Issue Date: June 24, 2025

ESC PHASE 3 — Final Restoration Plan
 Final Development Plans for:
 100 NE DOUGLAS STREET
 Lee's Summit, Jackson County, Missouri

Matthew J. Schlicht
 MO PE 2005019708
 KS PE 19071
 OK PE 25226
 NE PE E-14335

REVISIONS

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REV. 1/15/2026	



- (*) EGGS**
- MIN. LENGTH 4"
 - HARDWOOD 1 3/4" x 1 3/4"
 - NO.2 SOUTHERN PINE 2 1/2" x 2 1/2"
 - STEEL 1.35 LB/FT

(*) - Geotextile Fabric shall meet the requirements of AASHTO M228

SILT FENCE DETAILS
Not to Scale

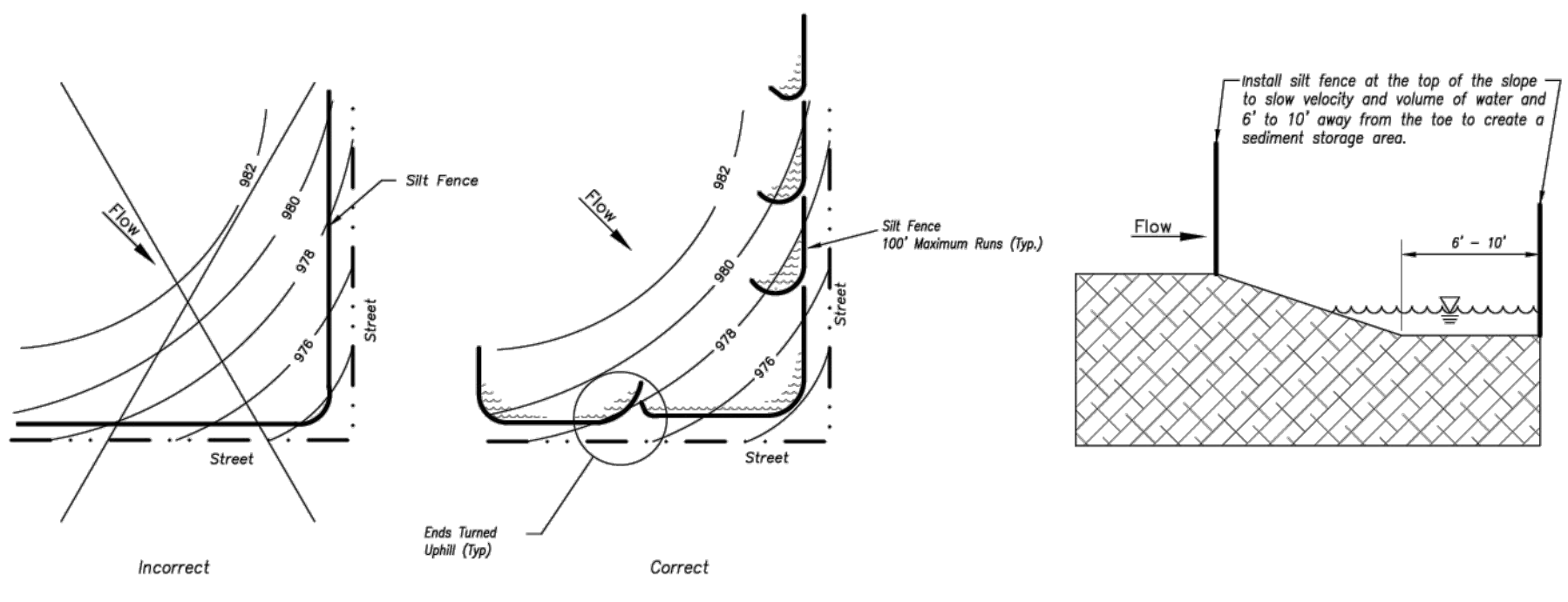


Figure A

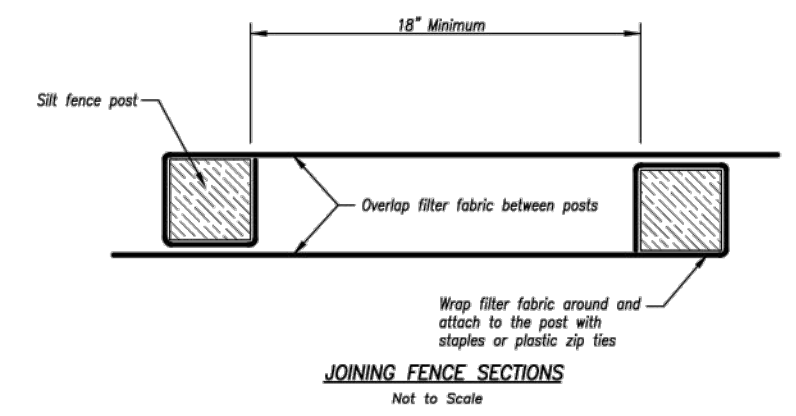
SILT FENCE LAYOUT
Not to Scale

Notes:

- In order to contain water, the ends of the silt fence must be turned uphill (Figure A).
- Long perimeter runs of silt fence must be limited to 100'. Runs should be broken up into several smaller segments to minimize water concentrations (Figure A).
- Long slopes should be broken up with intermediate rows of silt fence to slow runoff velocities.
- Attach fabric to upstream side of post.
- Install posts a minimum of 2' into the ground.
- Fencing will only be allowed for small or difficult installations, where staking machines cannot be reasonably used.

Maintenance:

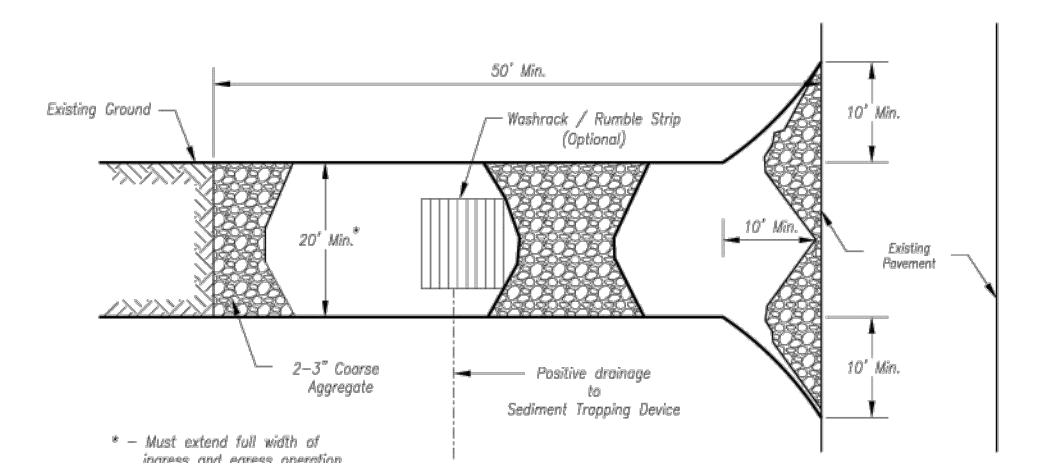
- Remove and dispose of sediment deposits when the deposit approaches 1/2 the height of silt fence.
- Repair as necessary to maintain function and structure.



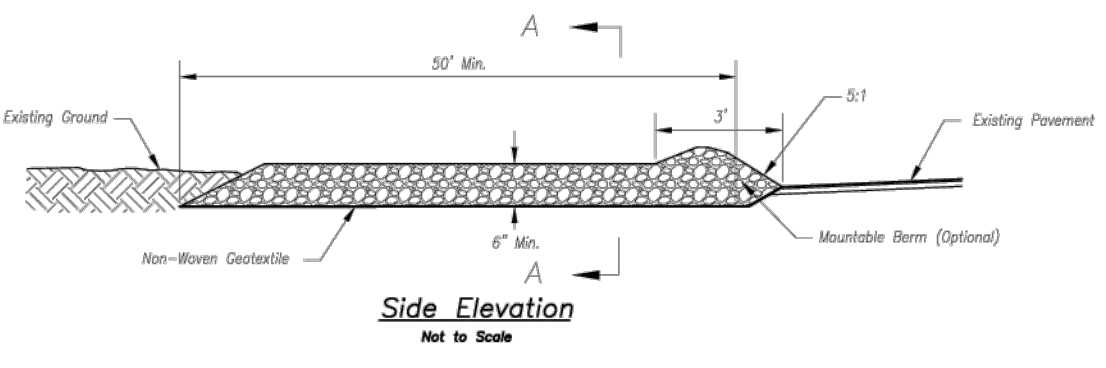
JOINING FENCE SECTIONS
Not to Scale

AMERICAN PUBLIC WORKS ASSOCIATION	
	KANSAS CITY METRO CHAPTER
SILT FENCE	STANDARD DRAWING NUMBER ESC-03 ADOPTED: 10/24/2016

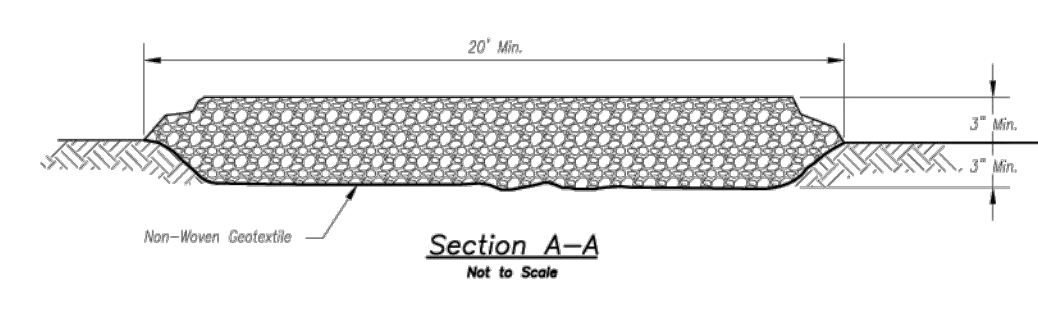
Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.



Plan View
Not to Scale



Side Elevation
Not to Scale



Section A-A
Not to Scale

Notes for Construction Entrance:

- Avoid locating on steep slopes, at curves on public roads, or directly at disturbed area.
- Remove all vegetation and other unsuitable material from the foundation area, grade, and crown for positive drainage.
- If slope towards the public road exceeds 2%, construct a 6- to 8-inch high ridge with 20:1 slope across the foundation approximately 15 feet from the edge of the public road to divert runoff from it.
- Install pipe under the entrance if needed to maintain drainage ditches along public roads.
- Place stone to dimensions and grade as shown on plans. Leave surface sloped for drainage.
- Divert all surface runoff and drainage from the entrance to a sediment control device.
- If conditions warrant, place geotextile fabric on the graded foundation to improve stability.

Maintenance for Construction Entrances:

- Reshape entrance as needed to maintain function and integrity of installation. Top dress with clean aggregate as needed.

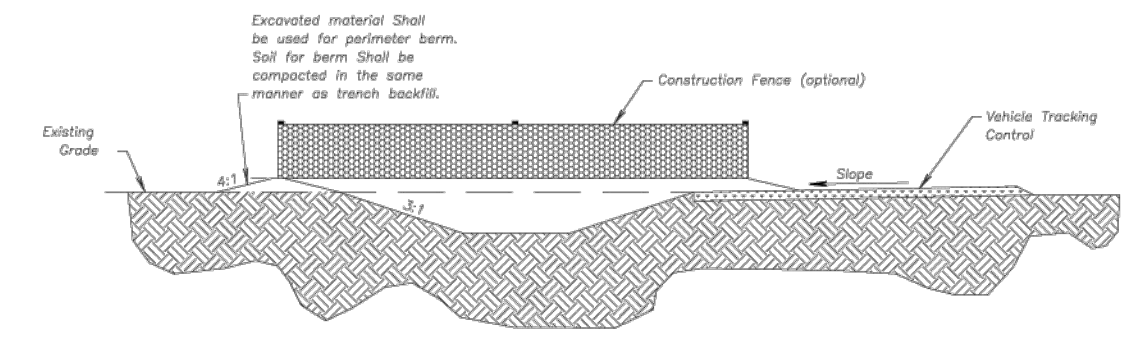
CONSTRUCTION ENTRANCE

Notes for Concrete Washout:

- Concrete washout areas shall be installed prior to any concrete placement on site.
- Concrete washout areas shall include a flat substructure all steel rebar to the amount of concrete to be placed on site. The slope leading out of the substructure shall be 2:1. The vehicle tracking post shall be sloped towards the concrete washout area.
- Vehicle tracking control is required at the access point to all concrete washout areas.
- Signs shall be placed at the construction site entrance, washout area and elsewhere as necessary to clearly indicate the location(s) of the concrete washout area(s) to operators of concrete truck and pump rigs.
- A one-piece impervious liner may be required along the bottom and sides of the substructure pit in sandy or gravelly soils.

Maintenance for Concrete Washout:

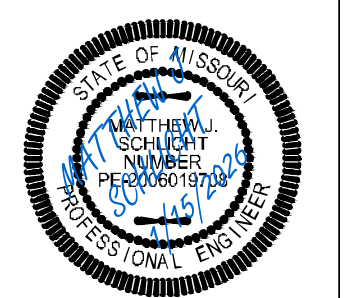
- Concrete washout materials shall be removed once the materials have filled the washout to approximately 75% full.
- Concrete washout areas shall be enlarged as necessary to maintain capacity for washed concrete.
- Concrete washout water, washed pieces of concrete and all other debris in the substructure pit shall be transported from the job site in a water-tight container and disposed of properly.
- Concrete washout areas shall remain in place until all concrete for the project is placed.
- When concrete washout areas are removed, excavations shall be filled with suitable compacted backfill and topped, any disturbed areas associated with the installation, maintenance, and/or removal of the concrete washout areas shall be stabilized.



CONCRETE WASHOUT

AMERICAN PUBLIC WORKS ASSOCIATION	
	KANSAS CITY METRO CHAPTER
CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT	STANDARD DRAWING NUMBER ESC-01 ADOPTED: 10/24/2016

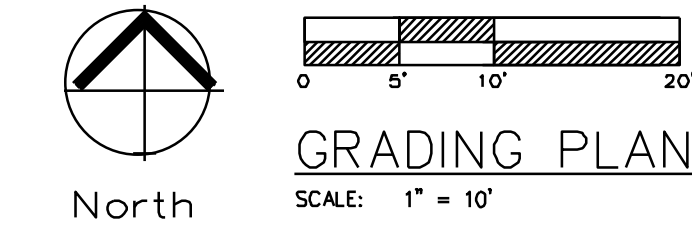
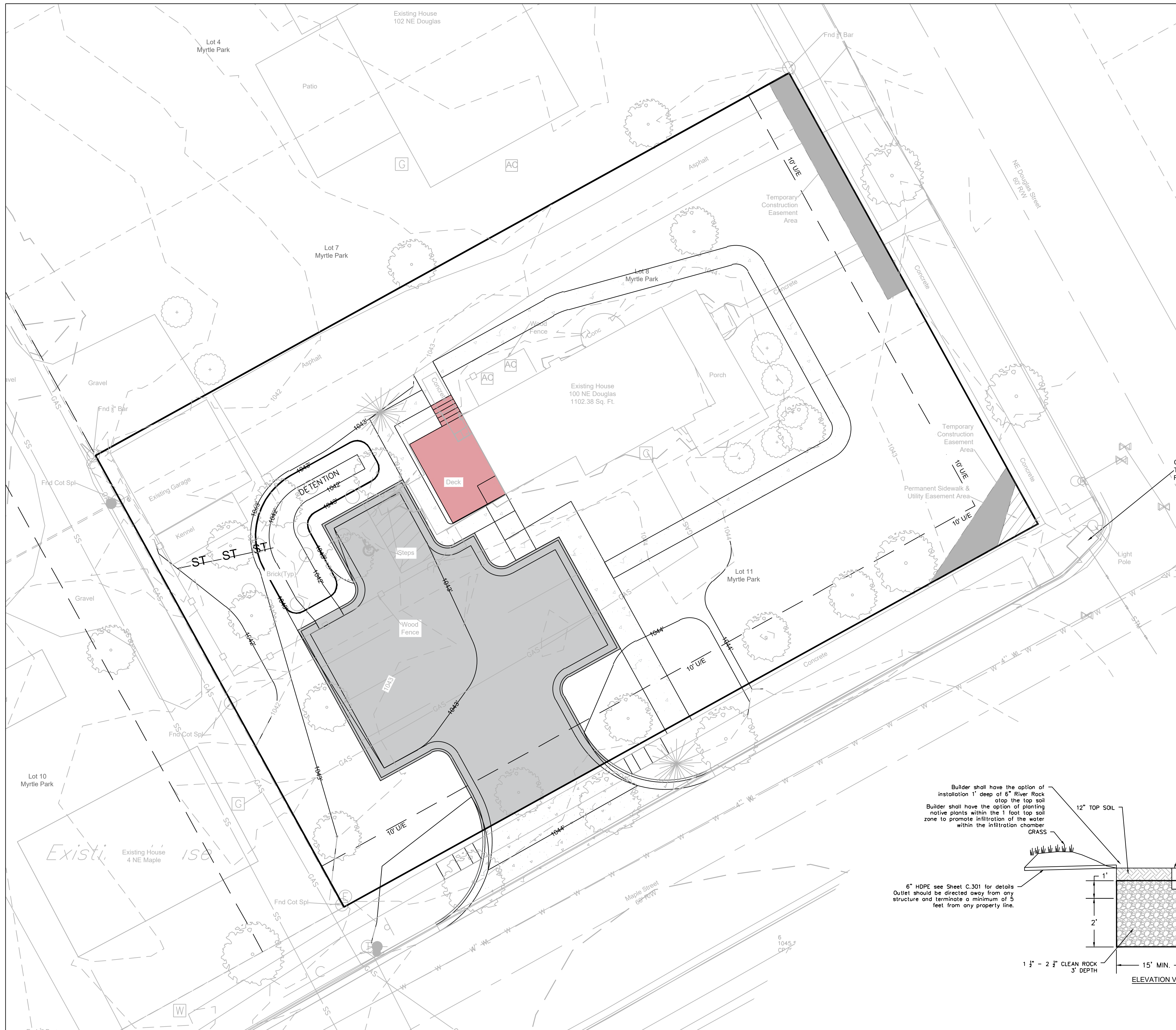
Construction Entrance modified from 2015 Overland Park Standard Details for Erosion and Sediment Control. Concrete Washout modified from 2009 City of Great Bend Standard Drawings.



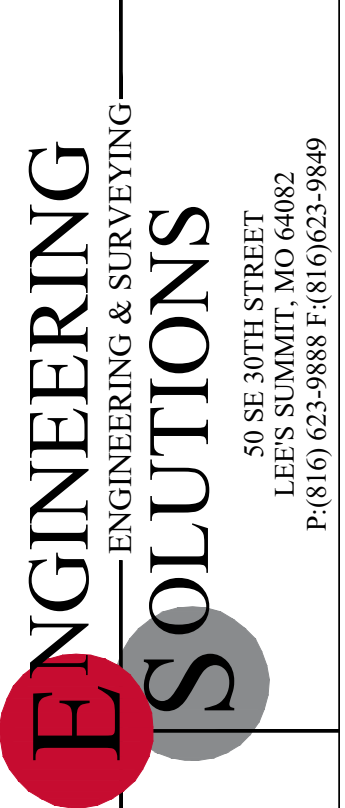
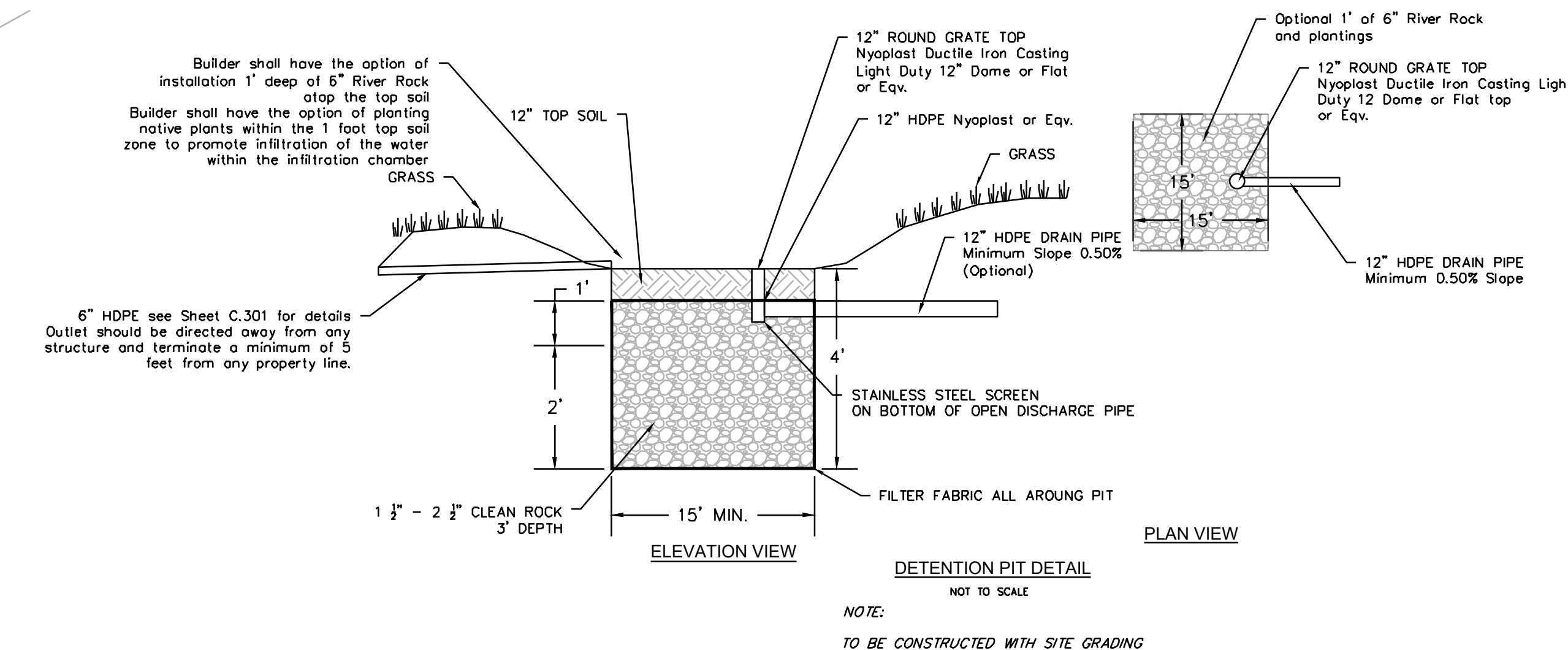
Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-143325

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REV. 1/15/2026	



- Notes**
1. Contractor is responsible for verifying all existing utility locations prior to excavation
 2. There are no known natural or artificial water storage detention areas, or wetlands in the area designated for construction
 3. No part of the project lies within the 100 year flood plain
 4. All erosion and sediment control measures need to be implemented prior to construction
 5. Additional erosion control may be required by the City Engineer, Design Engineer or Owner at any time problematic areas are noted in the field or existing measures are found to be ineffective
 6. Soil Stabilization of disturbed areas shall be completed within 14 days of construction inactivity
 7. Contractor responsible for all density testing of roadway subgrade and granular base.



ENGINEERING & SURVEYING SOLUTIONS
50 SE 30TH STREET
LEES SUMMIT, MO 64082
P: (816) 623-9888 F: (816) 623-9849

Professional Registration
Missouri
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Surveying 200500319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

100 NE DOUGLAS STREET
Lee's Summit, Jackson County, Missouri

Project:
100 NE DOUGLAS
LSMO
Issue Date:
June 24, 2025

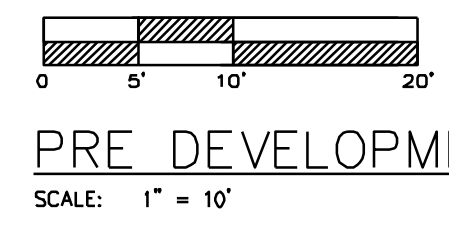
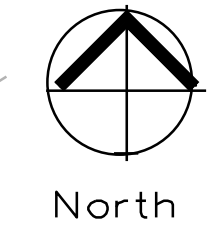
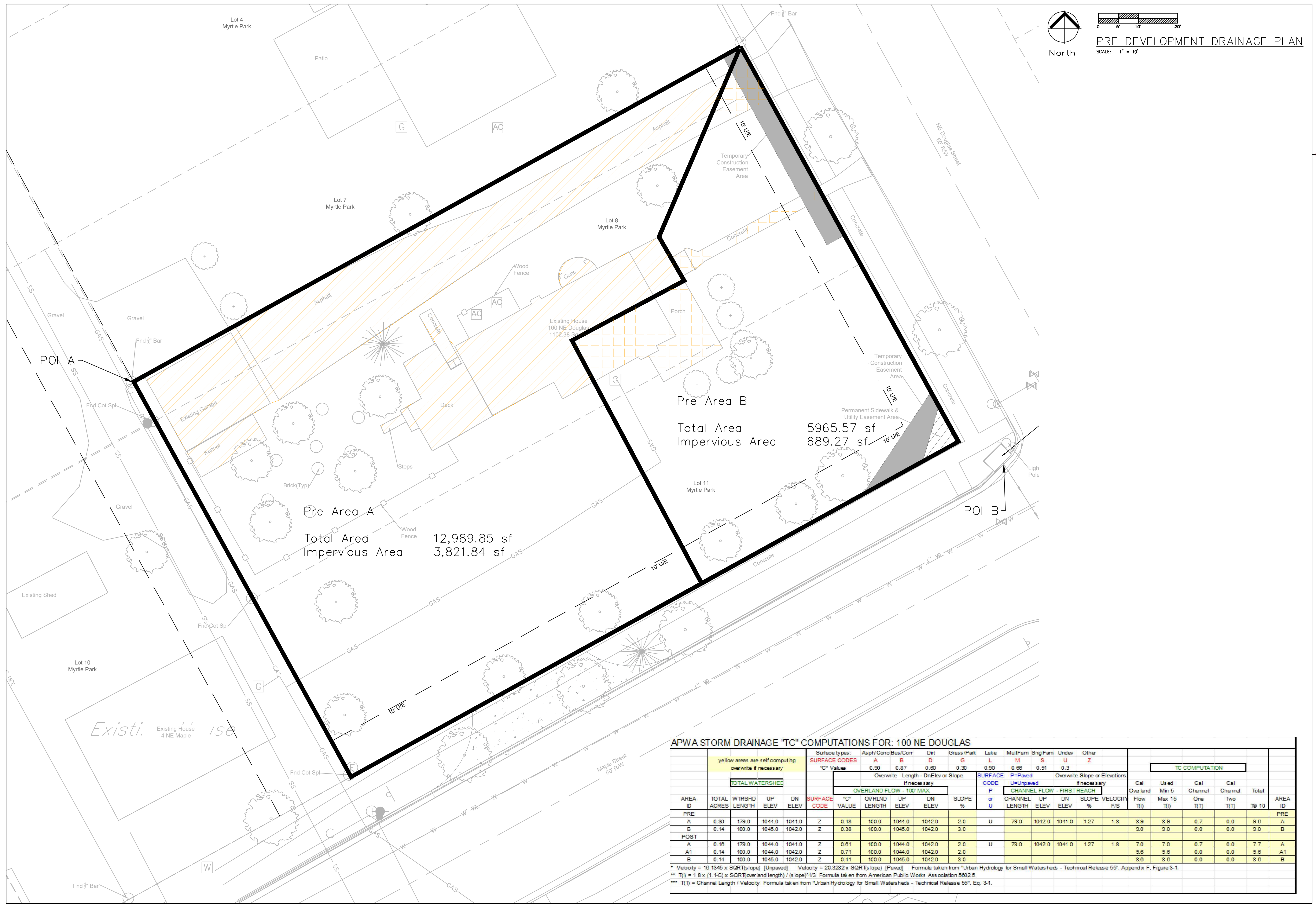
Grading Plan
Final Development Plans for:
100 NE DOUGLAS STREET
Lee's Summit, Jackson County, Missouri



Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS

REV. 12/18/2025
REV. 1/15/2026

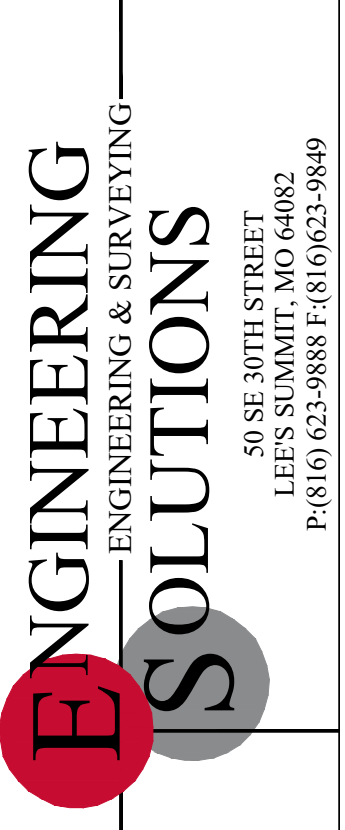


PRE DEVELOPMENT DRAINAGE PLAN
SCALE: 1" = 10'

APWA STORM DRAINAGE "TC" COMPUTATIONS FOR: 100 NE DOUGLAS

TOTAL WATERSHED		SURFACE CODES										TC COMPUTATION										
AREA ID	TOTAL ACRES	WTRSHD LENGTH	UP ELEV	DN ELEV	SURFACE CODE	"C" VALUE	OVR/UND LENGTH	UP ELEV	DN ELEV	SLOPE %	CHANNEL LENGTH	UP ELEV	DN ELEV	SLOPE %	VELOCITY F/S	Cal Flow T(I)	Used Min 5 T(I)	Cal Channel One T(T)	Cal Channel Two T(T)	Total T8 10	AREA ID	
PRE																						
A	0.30	179.0	1044.0	1041.0	Z	0.48	100.0	1044.0	1042.0	2.0	U	79.0	1042.0	1041.0	1.27	1.8	8.9	8.9	0.7	0.0	9.6	A
B	0.14	100.0	1045.0	1042.0	Z	0.38	100.0	1045.0	1042.0	3.0	U					9.0	9.0	0.0	0.0	9.0	B	
POST																						
A	0.16	179.0	1044.0	1041.0	Z	0.61	100.0	1044.0	1042.0	2.0	U	79.0	1042.0	1041.0	1.27	1.8	7.0	7.0	0.7	0.0	7.7	A
A1	0.14	100.0	1044.0	1042.0	Z	0.71	100.0	1044.0	1042.0	2.0	U					5.6	5.6	0.0	0.0	5.6	A1	
B	0.14	100.0	1045.0	1042.0	Z	0.41	100.0	1045.0	1042.0	3.0	U					8.6	8.6	0.0	0.0	8.6	B	

* Velocity = 16.1345 x SQRT(slope) [Unpaved] Velocity = 20.3282 x SQRT(slope) [Paved] Formula taken from "Urban Hydrology for Small Watersheds - Technical Release 55", Appendix F, Figure 3-1.
 ** T(I) = 1.8 x (1.1-C) x SQRT(overland length) / (slope)^1/3 Formula taken from American Public Works Association 5602.5.
 *** T(T) = Channel Length / Velocity Formula taken from "Urban Hydrology for Small Watersheds - Technical Release 55", Eq. 3-1.



Professional Registration
Missouri
Engineering 2005002186-D
Surveying 200500319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

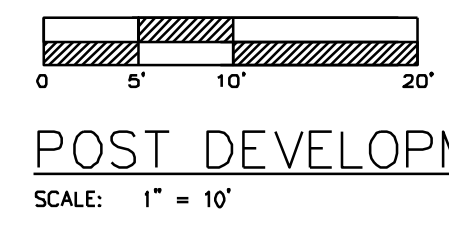
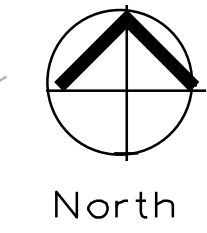
Project: 100 NE DOUGLAS
LSMO
Issue Date: June 24, 2025
100 NE DOUGLAS STREET
Lee's Summit, Jackson County, Missouri

Pre Development
Final Development Plans for:
100 NE DOUGLAS STREET
Lee's Summit, Jackson County, Missouri



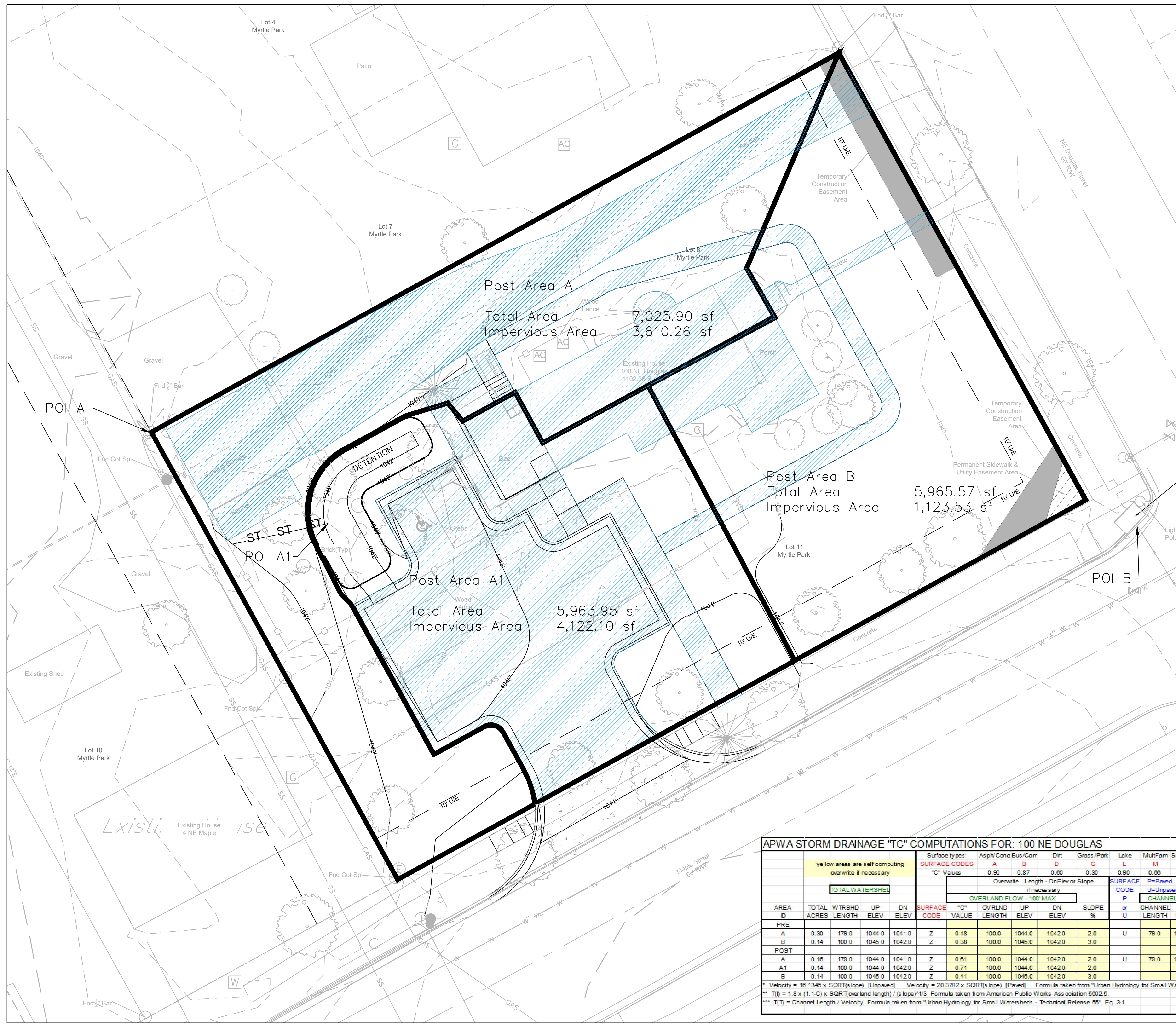
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POST DEVELOPMENT DRAINAGE PLAN

SCALE: 1" = 10'



Post Area A
Total Area 7,025.90 sf
Impervious Area 3,610.26 sf

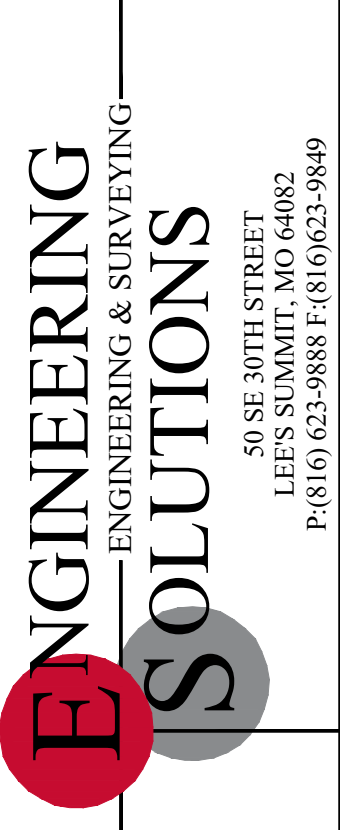
Post Area B
Total Area 5,965.57 sf
Impervious Area 1,123.53 sf

Post Area A1
Total Area 5,963.95 sf
Impervious Area 4,122.10 sf

APWA STORM DRAINAGE "TC" COMPUTATIONS FOR: 100 NE DOUGLAS

AREA ID	TOTAL ACRES	WTRSHD LENGTH	UP ELEV	DN ELEV	SURFACE CODE	SURFACE TYPES				SLOPE %	TC COMPUTATION				AREA ID							
						A	B	D	G		Cal Flow	Used Min 5	Cal Channel One	Cal Channel Two		Total T@ 10						
PRE																						
A	0.30	179.0	1044.0	1041.0	Z	0.48	100.0	1044.0	1042.0	2.0	U	79.0	1042.0	1041.0	1.27	1.8	8.9	8.9	0.7	0.0	9.6	A
B	0.14	100.0	1045.0	1042.0	Z	0.38	100.0	1045.0	1042.0	3.0							9.0	9.0	0.0	0.0	9.0	B
POST																						
A	0.16	179.0	1044.0	1041.0	Z	0.61	100.0	1044.0	1042.0	2.0	U	79.0	1042.0	1041.0	1.27	1.8	7.0	7.0	0.7	0.0	7.7	A
A1	0.14	100.0	1044.0	1042.0	Z	0.71	100.0	1044.0	1042.0	2.0							5.6	5.6	0.0	0.0	5.6	A1
B	0.14	100.0	1045.0	1042.0	Z	0.41	100.0	1045.0	1042.0	3.0							8.6	8.6	0.0	0.0	8.6	B

* Velocity = 16.1345 x SQRT(slope) [Unpaved] Velocity = 20.3282 x SQRT(slope) [Paved] Formula taken from "Urban Hydrology for Small Watersheds - Technical Release 55", Appendix F, Figure 3-1.
 ** T(1) = 1.8 x (1.1-C) x SQRT(overland length) / (s slope)^1/3 Formula taken from American Public Works Association 5602.5.
 *** T(T) = Channel Length / Velocity Formula taken from "Urban Hydrology for Small Watersheds - Technical Release 55", Eq. 3-1.



Professional Registration
 Missouri
 Engineering 2005002186-D
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 Engineering E-1695
 Surveying LS-218
 Oklahoma
 Engineering 6254
 Nebraska
 Engineering CA2821

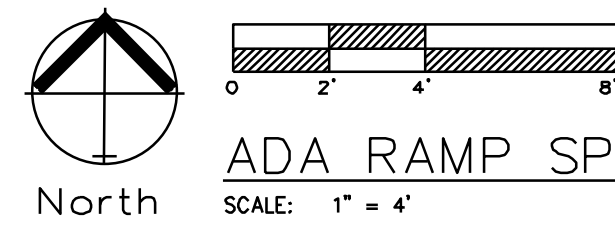
Project: 100 NE DOUGLAS STREET
 Issue Date: June 24, 2025
 Post Development Final Development Plans for: 100 NE DOUGLAS STREET
 Lee's Summit, Jackson County, Missouri

Professional Registration
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 Kansas
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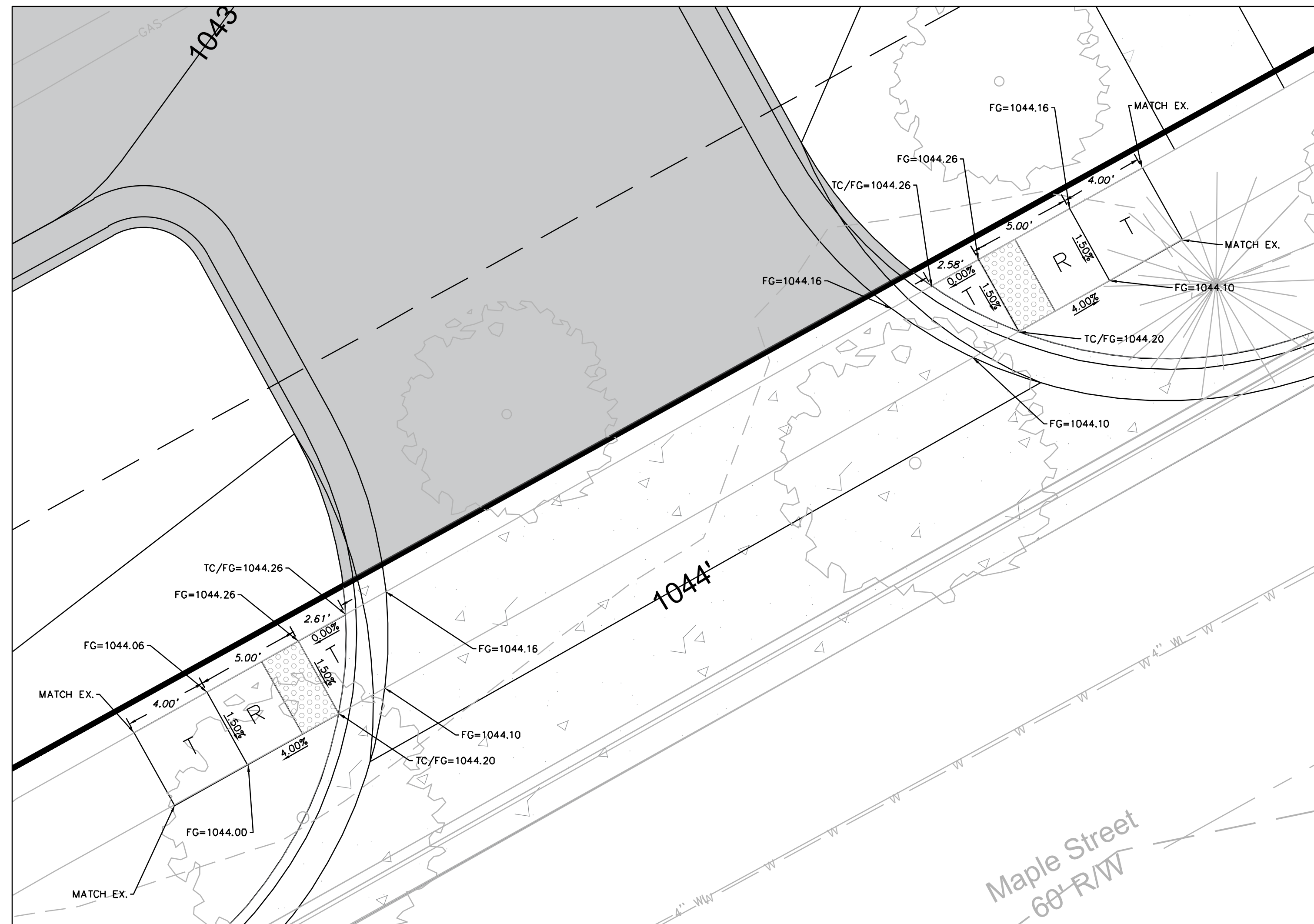
Matthew J. Schlacht
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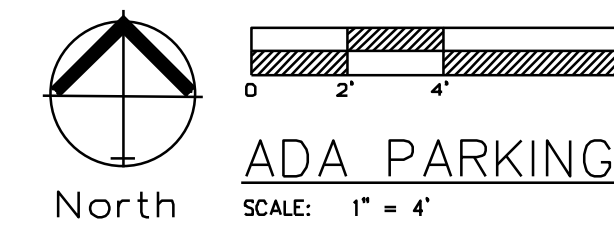
ADA RAMP SPOT ELEVATIONS

SCALE: 1" = 4'



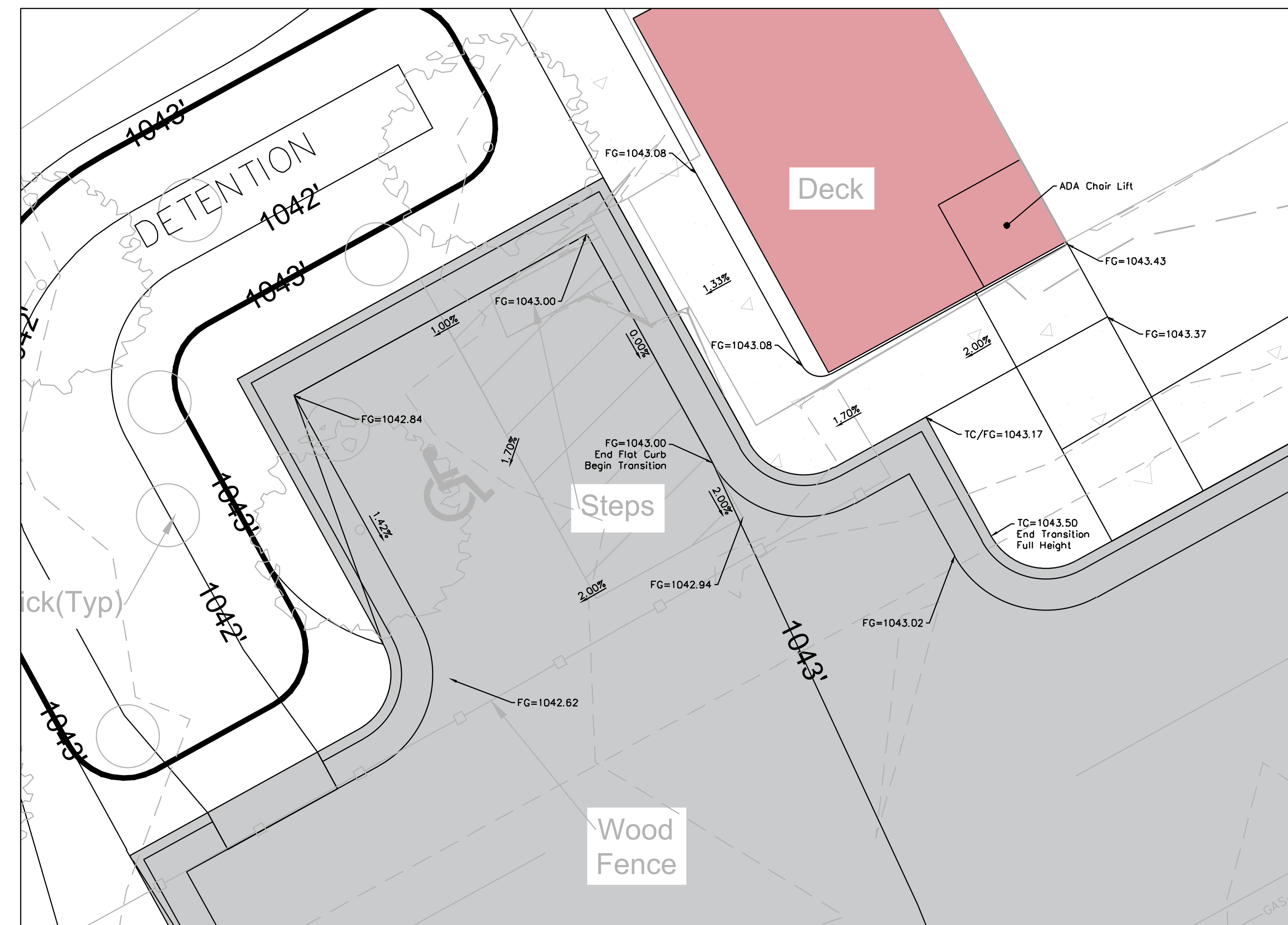
DETAIL 1

- Legend:**
- EX TC = Existing Top of Curb
 - EX FG = Existing Finished Grade
 - FG = Finished Grade
 - TC = Top of Curb
 - TC/FG = Top of Curb/Finished Grade

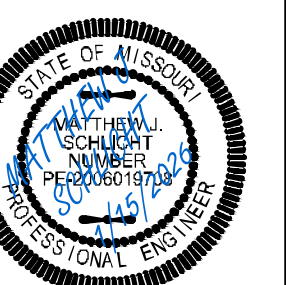


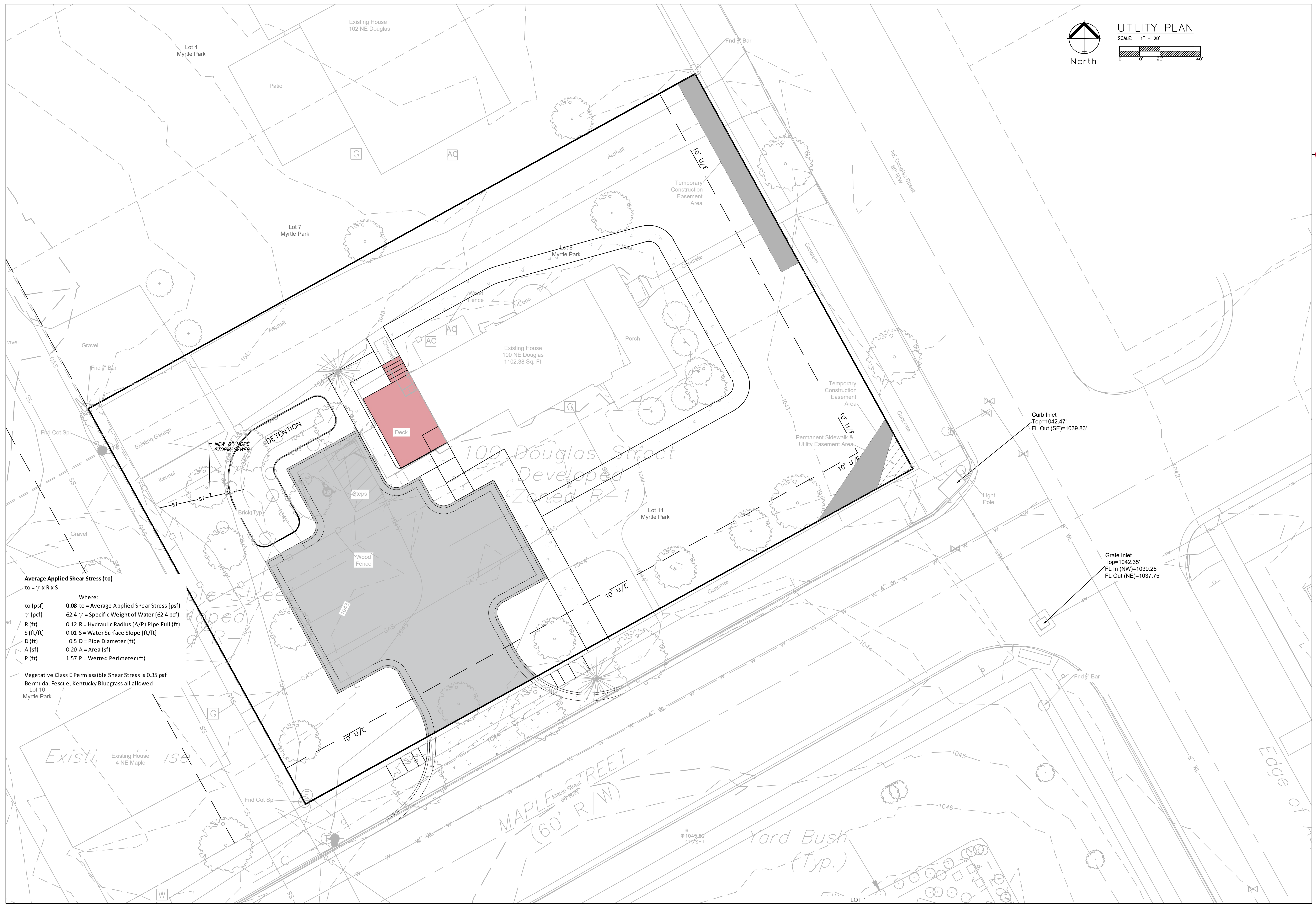
ADA PARKING SPOT ELEVATIONS

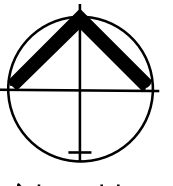
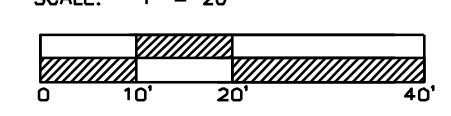
SCALE: 1" = 4'



DETAIL 2






UTILITY PLAN
 SCALE: 1" = 20'


Average Applied Shear Stress (τ_o)
 $\tau_o = \gamma \times R \times S$

Where:

- τ_o (psf) 0.08 τ_o = Average Applied Shear Stress (psf)
- γ (pcf) 62.4 γ = Specific Weight of Water (62.4 pcf)
- R (ft) 0.12 R = Hydraulic Radius (A/P) Pipe Full (ft)
- S (ft/ft) 0.01 S = Water Surface Slope (ft/ft)
- D (ft) 0.5 D = Pipe Diameter (ft)
- A (sf) 0.20 A = Area (sf)
- P (ft) 1.57 P = Wetted Perimeter (ft)

Vegetative Class E Permissible Shear Stress is 0.35 psf
 Bermuda, Fescue, Kentucky Bluegrass all allowed



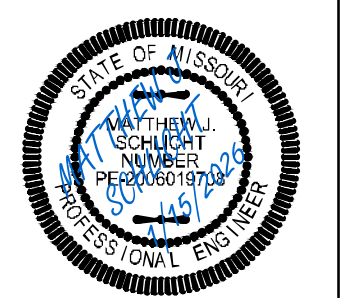
Professional Registration
 Missouri
 Engineering 2006002186-D
 Surveying 200600319-D
 Kansas
 Engineering E-1655
 Surveying LS-216
 Oklahoma
 Engineering 6254
 Nebraska
 Engineering CA2821

Project:
 100 NE DOUGLAS STREET
 LSHO
 Issue Date: June 24, 2025

Utility Plan
 Final Development Plans for:
 100 NE DOUGLAS STREET
 Lee's Summit, Jackson County, Missouri

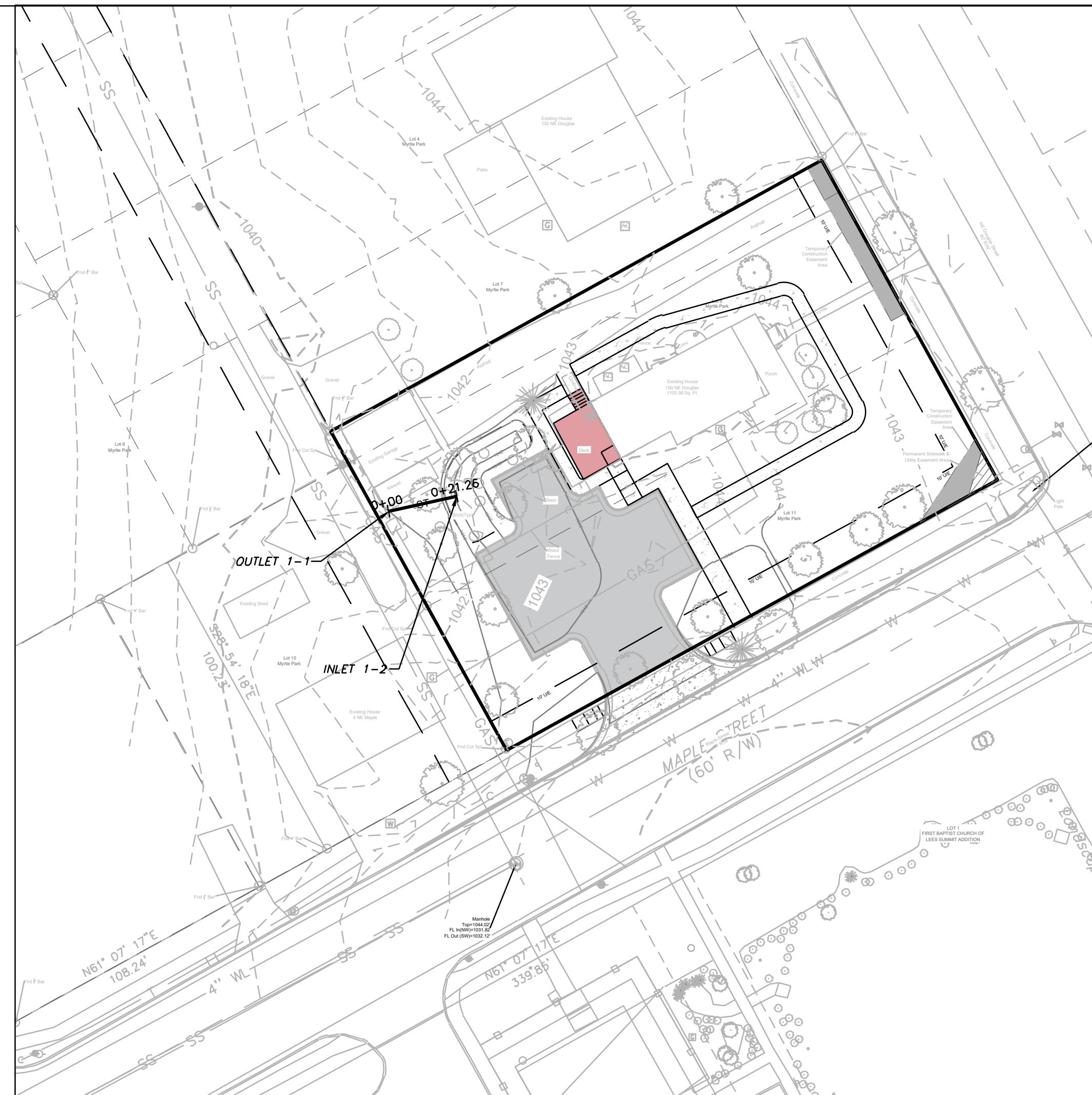
Project:
 100 NE DOUGLAS STREET
 LSHO
 Issue Date: June 24, 2025

Utility Plan
 Final Development Plans for:
 100 NE DOUGLAS STREET
 Lee's Summit, Jackson County, Missouri

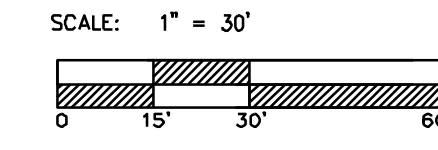


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 OK PE 25226
 NE PE E-14325

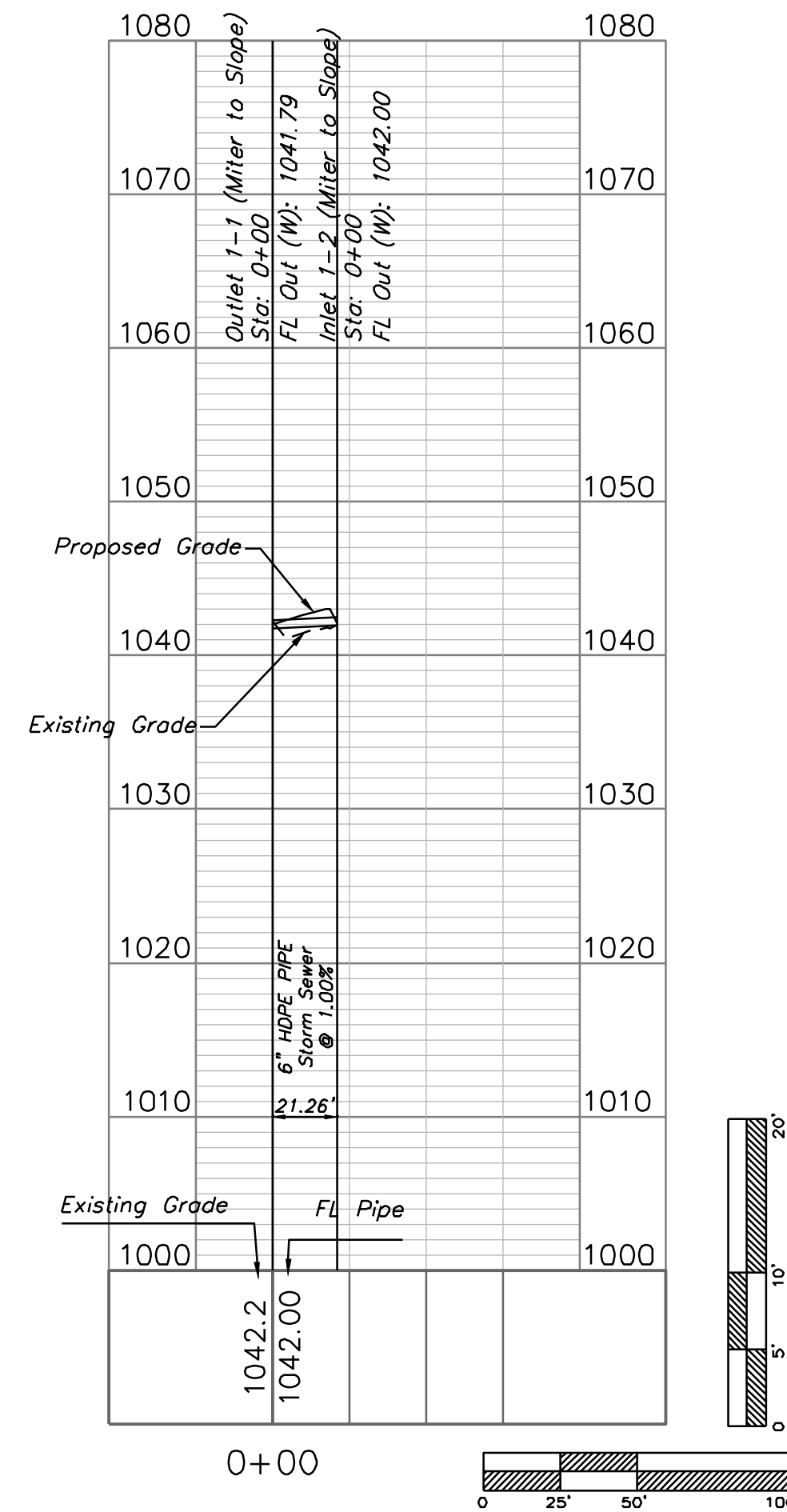
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STORM SEWER PLAN AND PROFILE



STORM LINE 1



Professional Registration
 Missouri
 Engineering 200502186-D
 Surveying 200508318-D
 Kansas
 Engineering E-1695
 Surveying LS-218
 Oklahoma
 Engineering 6254
 Nebraska
 Engineering CA2821

100 NE DOUGLAS STREET
 Lee's Summit, Jackson County, Missouri

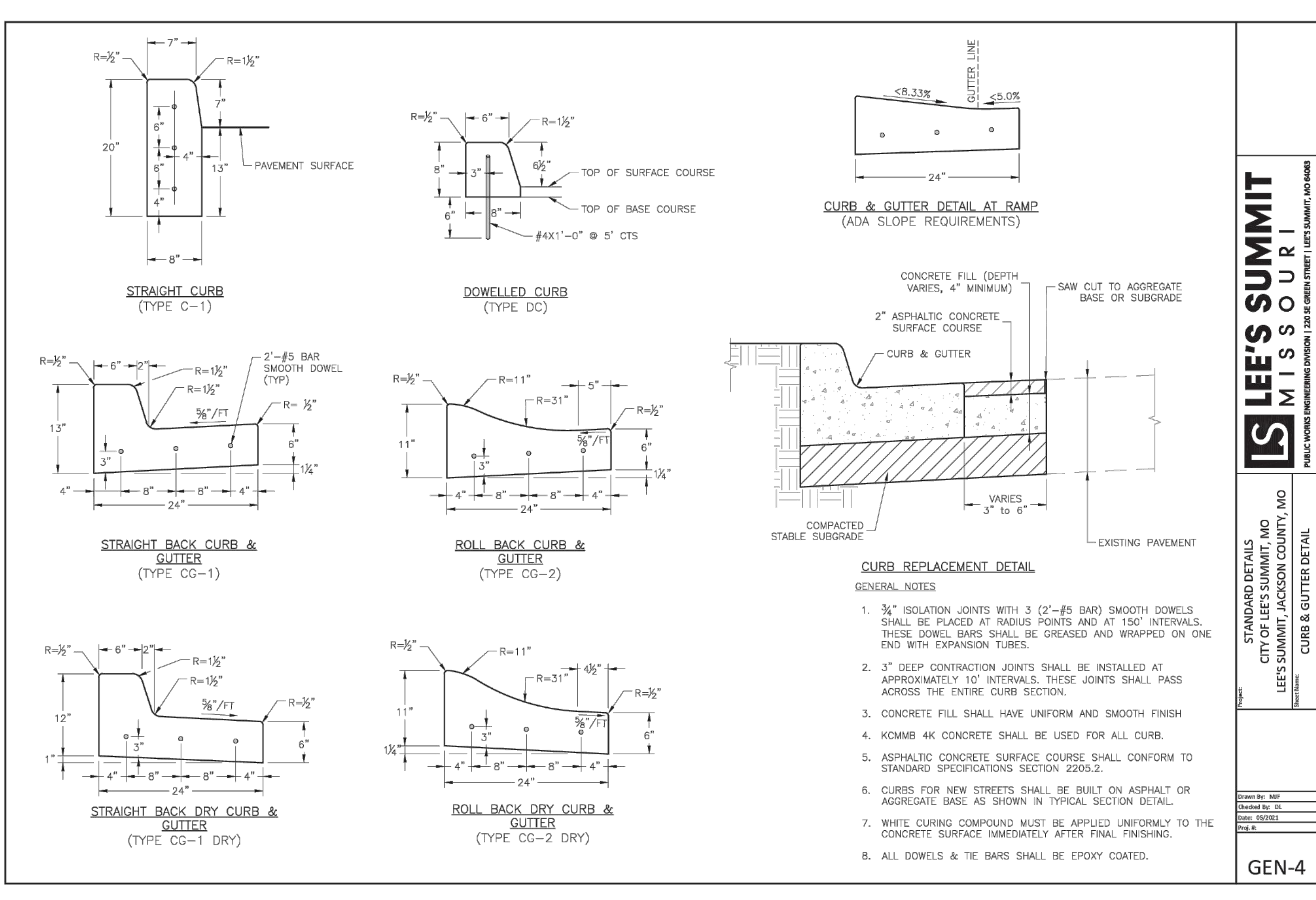
Project:
 100 NE DOUGLAS
 LSMD
 Issue Date:
 June 24, 2025

Storm Sewer Plan and Profile
 Final Development Plans for:
 100 NE DOUGLAS STREET
 Lee's Summit, Jackson County, Missouri



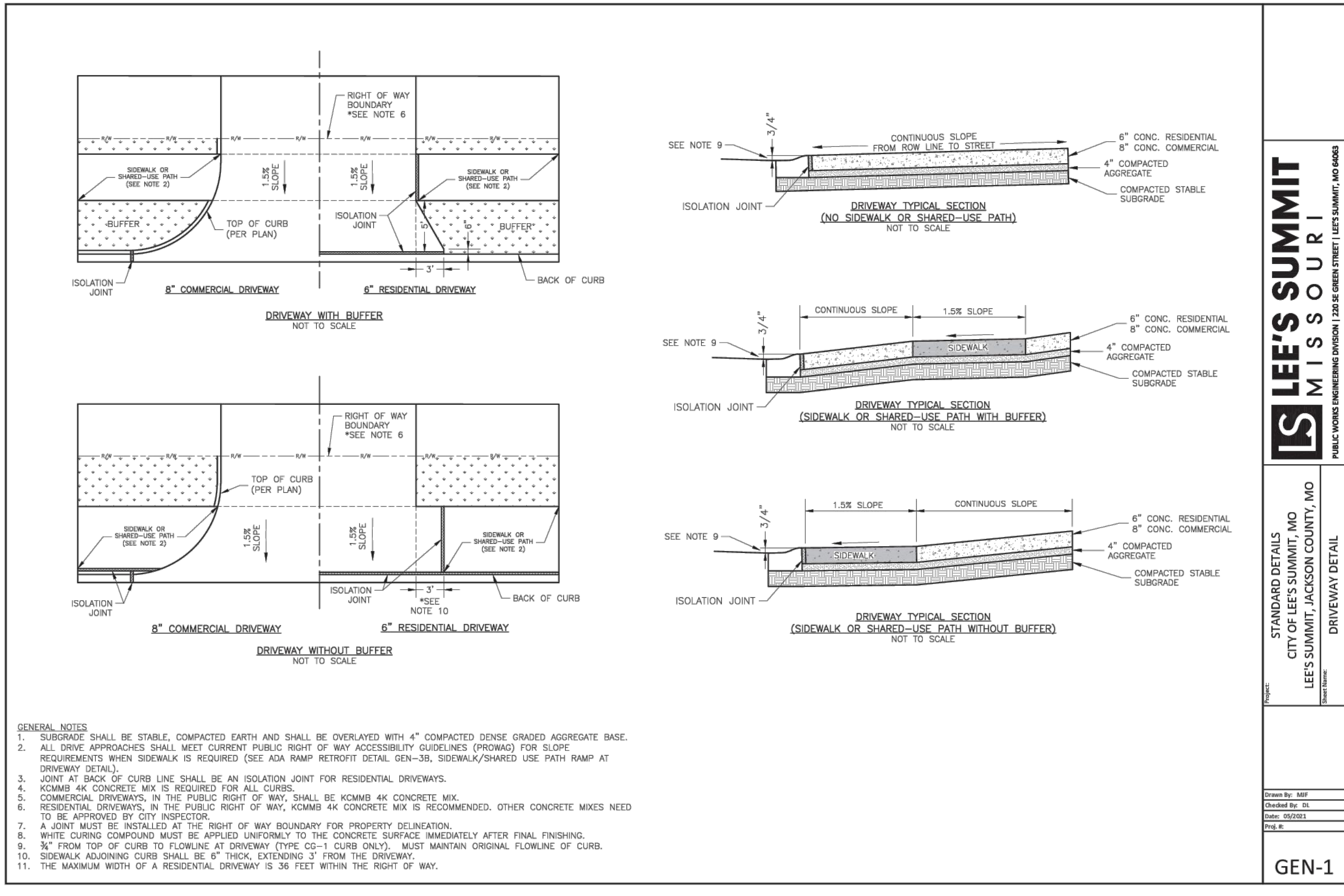
Matthew J. Schlicht
 MO PE 2006019708
 KS PE 19071
 OK PE 25226
 NE PE E-14335

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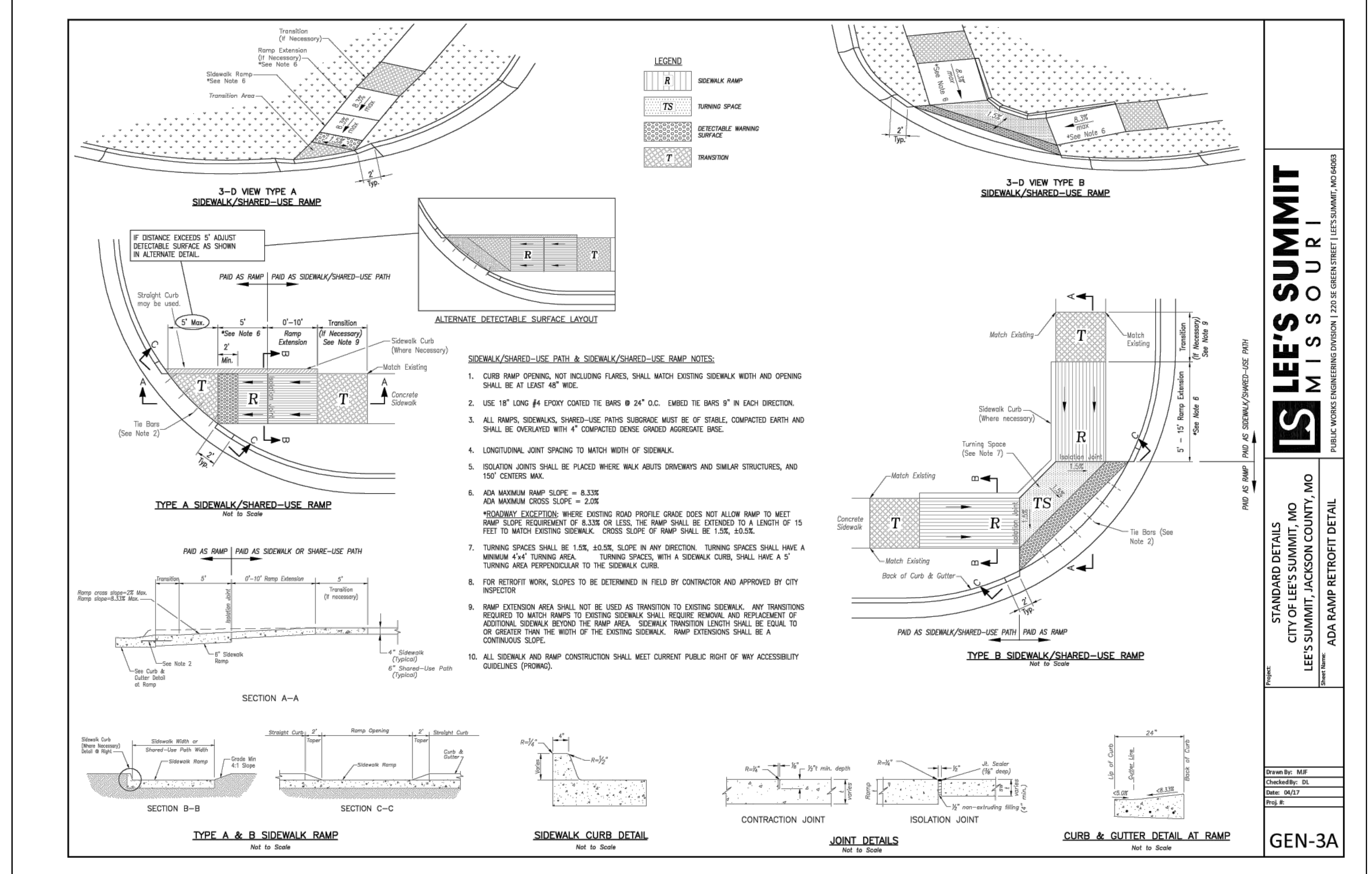
LEE'S SUMMIT MISSOURI
 PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64683

STANDARD DETAILS
 CITY OF LEE'S SUMMIT, MO
 LEE'S SUMMIT, JACKSON COUNTY, MO
 CURB & GUTTER DETAIL
 GEN-4



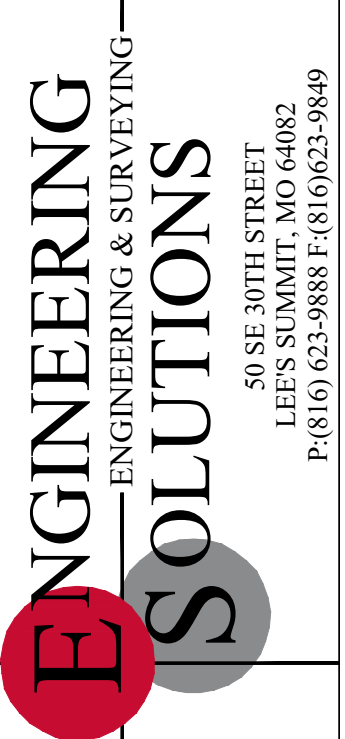
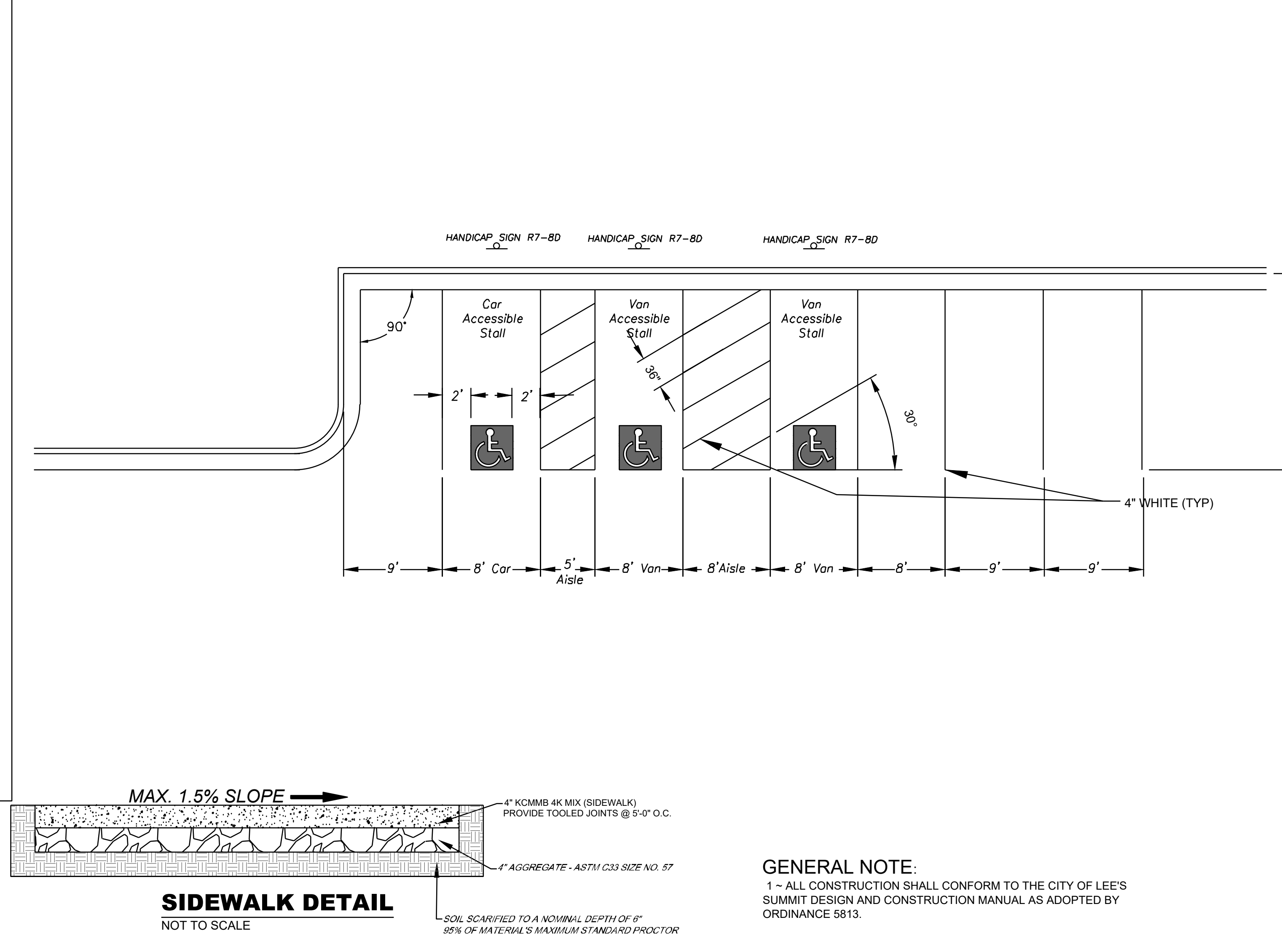
LEE'S SUMMIT MISSOURI
 PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64683

STANDARD DETAILS
 CITY OF LEE'S SUMMIT, MO
 LEE'S SUMMIT, JACKSON COUNTY, MO
 DRIVEWAY DETAIL
 GEN-1



LEE'S SUMMIT MISSOURI
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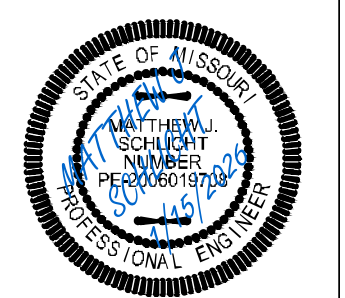
STANDARD DETAILS
 CITY OF LEE'S SUMMIT, MO
 LEE'S SUMMIT, JACKSON COUNTY, MO
 ADA RAMP RETROFIT DETAIL
 GEN-3A



Professional Registration
 Missouri
 Engineering 200502186-D
 Surveying 2005030318-D
 Kansas
 Engineering E-1695
 Surveying LS-218
 Oklahoma
 Engineering 6254
 Nebraska
 Engineering CA2821

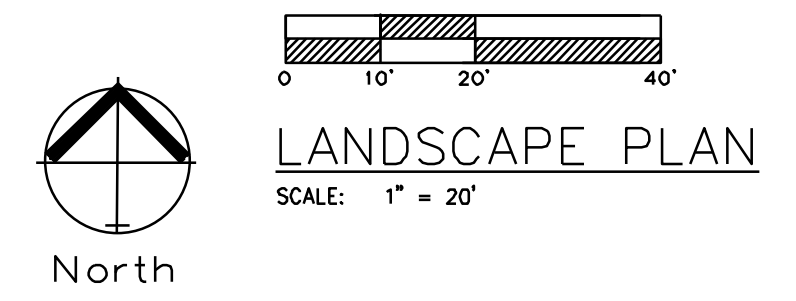
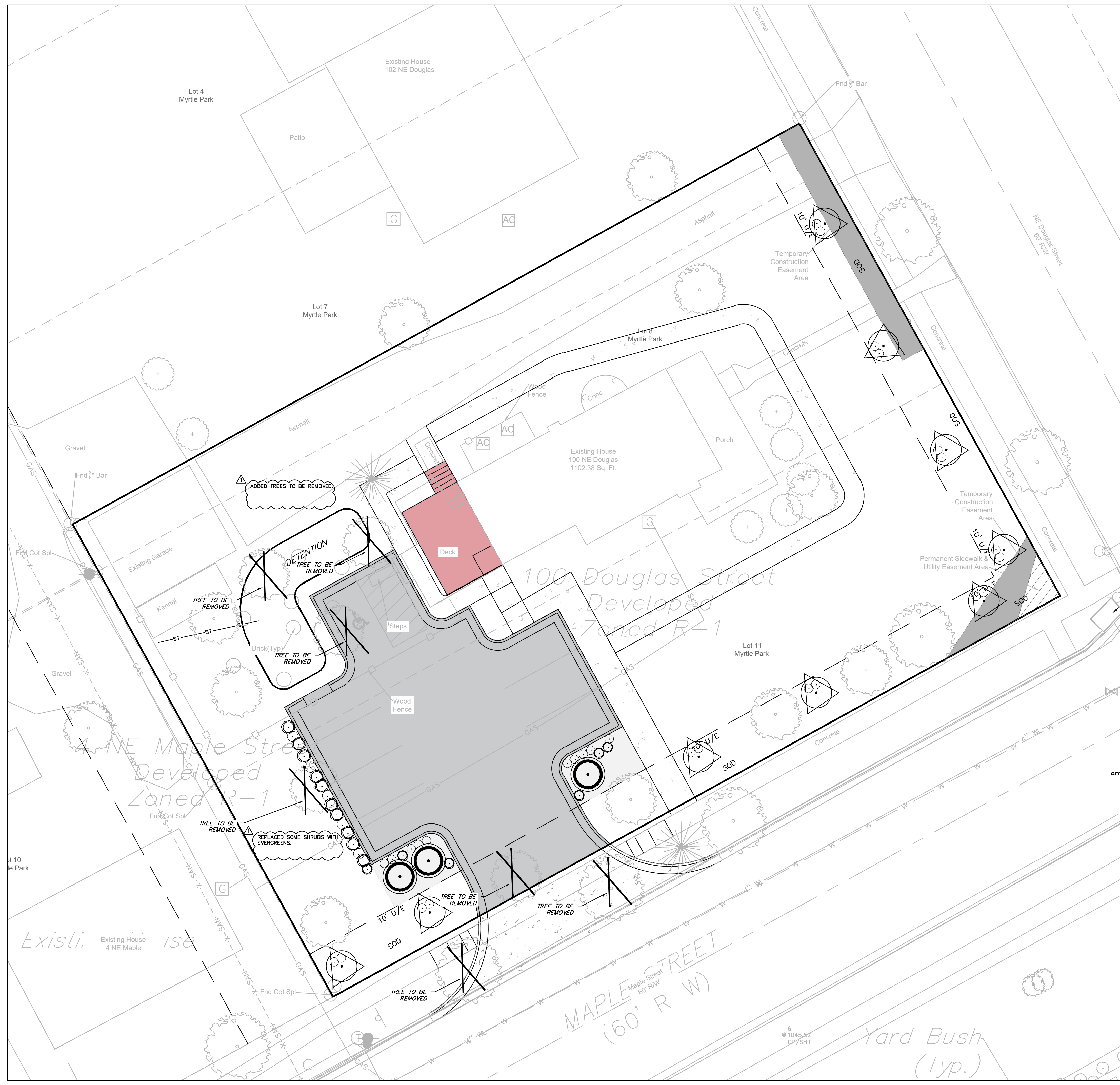
Project:
 100 NE DOUGLAS STREET
 Lee's Summit, Jackson County, Missouri
 Issue Date:
 June 24, 2025

Standard Details
 Final Development Plans for:
 100 NE DOUGLAS STREET
 Lee's Summit, Jackson County, Missouri



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 NE PE E-14335

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LANDSCAPE WORKSHEET			
	ORDINANCE REQUIREMENT	REQUIRED FOR THIS SITE	PROPOSED LANDSCAPE
14.090.A.1 Street Frontage Trees (Maple St)	1 tree per 30 feet of street frontage	140 ft. of street frontage /30= 5 trees required	5 Trees Provided
14.090.A.3 Street Frontage Shrubs (Maple St)	1 shrub per 20 feet of street frontage	140 ft. of street frontage /20= 7 shrubs required	10 shrubs provided
14.090.A.1 Street Frontage Trees (NE Douglas St)	1 tree per 30 feet of street frontage	111 ft. of street frontage /30= 4 trees required	4 Trees Provided
14.090.A.3 Street Frontage Shrubs (NE Douglas St)	1 shrub per 20 feet of street frontage	111 ft. of street frontage /20= 6 shrubs required	8 shrubs provided
14.090.B.1 Open Yard Shrubs	2 shrubs per 5000 sq. ft. of total lot area excluding building and parking	18,948 sq. ft. of total lot area minus 5,364 sq. ft. of bldg. & parking= 13,584 sq. ft. /5,000 x 2 = 6 shrubs	6 shrubs
14.090.B.3 Open Yard Trees	1 tree per 5000 sq. ft. of total lot area excluding building and parking.	18,948 sq. ft. of total lot area minus 5,364 sq. ft. of bldg. & parking= 13,584 sq. ft. /5,000 = 3 trees	3 Provided
14.110. Parking Lot Landscape	5% of entire parking area (spaces, aisles & drives); 1 island at end of every parking bay, min. 9' wide	3,606 sq. ft. of parking area x .05 = 180 sq. ft. of landscape parking lot islands required	306 sq. ft.
14.120 Screening of Parking Lot, Road	12 shrubs per 40 linear feet (must be 2.5 feet tall; berms may be combined with shrubs)	34 linear feet/40 x 12	10 shrubs provided

*STREET SHRUBS ARE SATISFIED WITH PARKING LOT SCREENING REQUIREMENTS.

REVISD SHRUB TYPE.

PLANTING SCHEDULE:
 IS FOR PHASE 1 ONLY; AT FULL BUILD THE UNIFIED DEVELOPMENT ORDINANCE REQUIREMENTS SHALL BE MET.

SYMBOL	QUANT.	KEY	NAME	SIZE
tree	--	TA	AMERICAN BASSWOOD LINDEN TILIA AMERICANA	3.0" CAL
evergreen	16	SR	SKYROCKET JUNIPER JUNIPERUS SCOPULORUM "SKYROCKET"	8' HL
tree	3	RB	OKLAHOMA REDBUD CERCIS RENIFORMIS "OKLAHOMA"	3.0" CAL
shrub	39	VI	FIRE CHIEF Arborvitae	2 Gallon Pot
ornamental tree	9	SC	SPRING SNOW CRABAPPLE MALUS SP "SPRING SHOW"	1.5" CAL
tree	--	CG	COLORADO GREEN SPRUCE PICEA PUNGENS	2.5" CAL

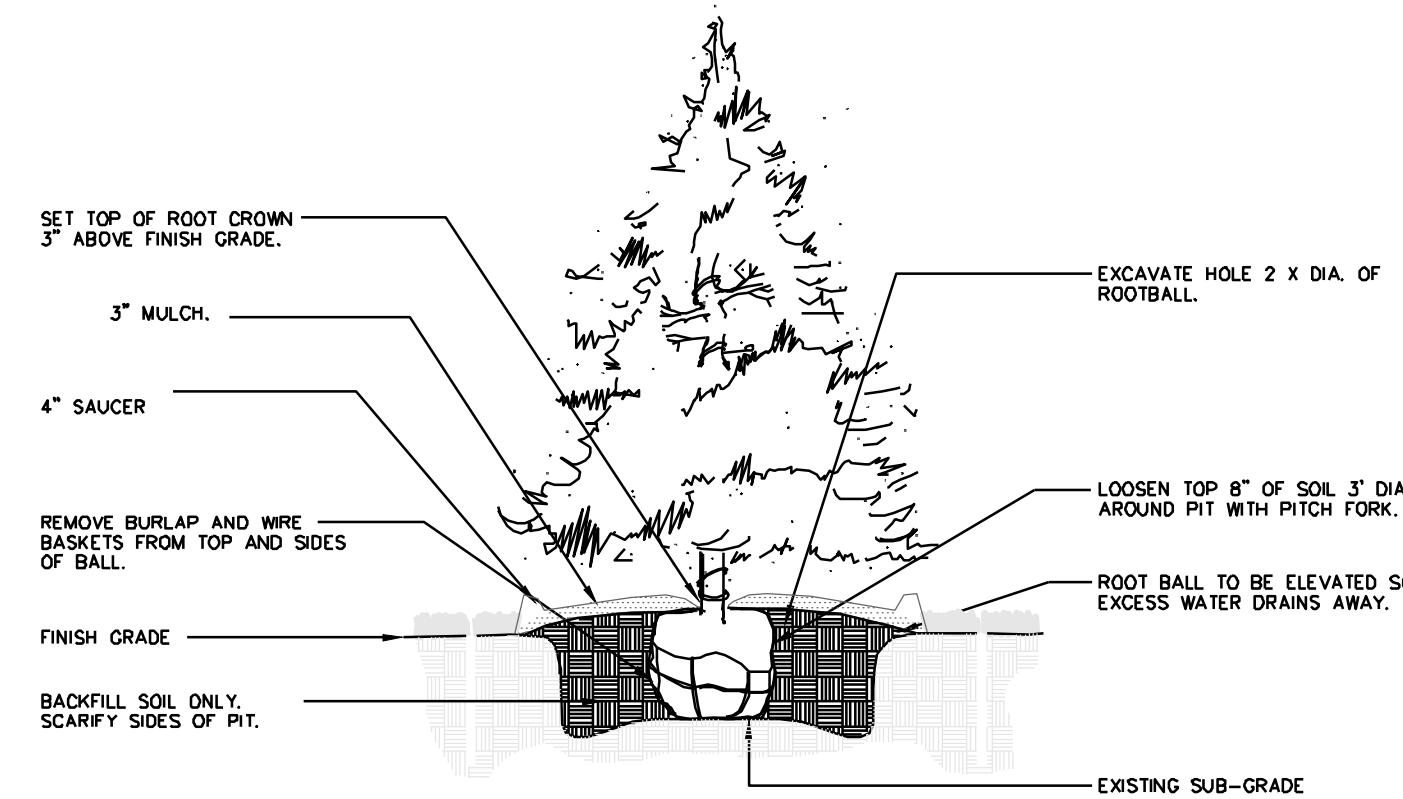
REVISD ORNAMENTAL TREES NUMBER IN TABLE.

REPLACED SOME SHRUBS WITH EVERGREENS.

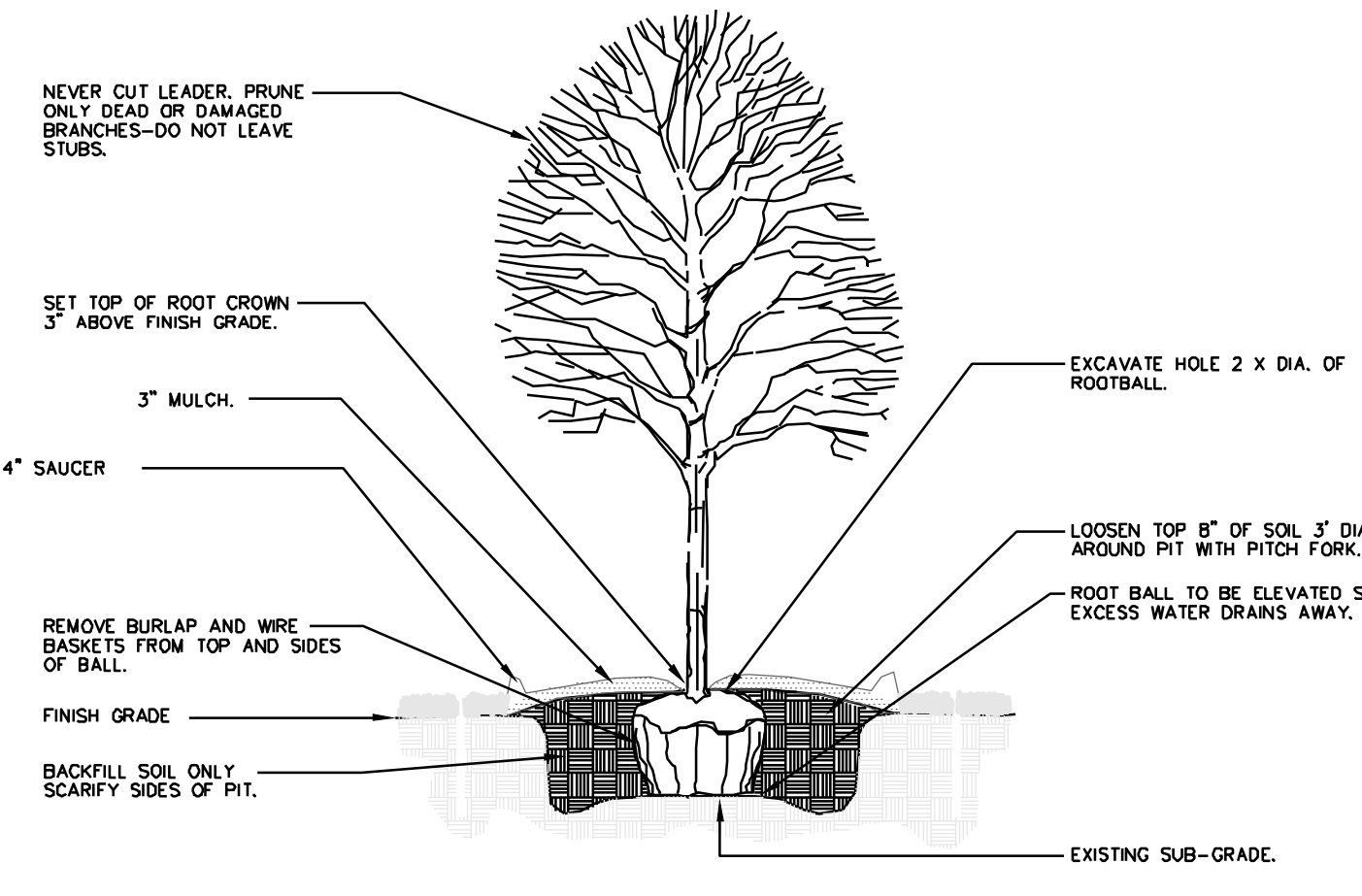


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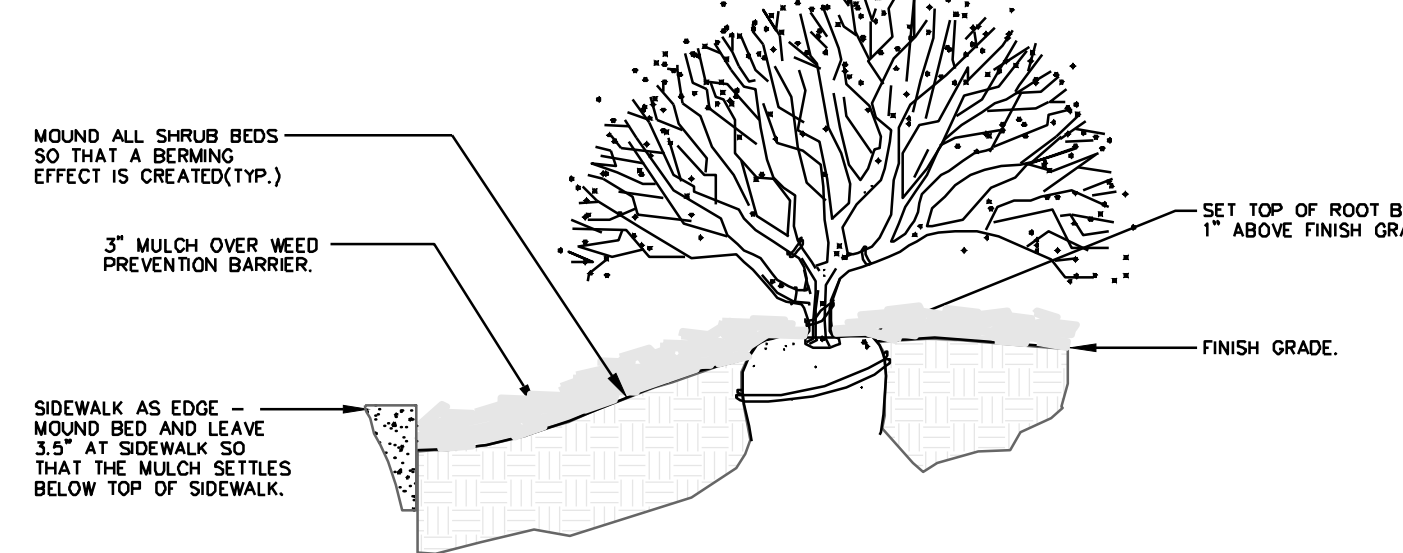
REVISIONS
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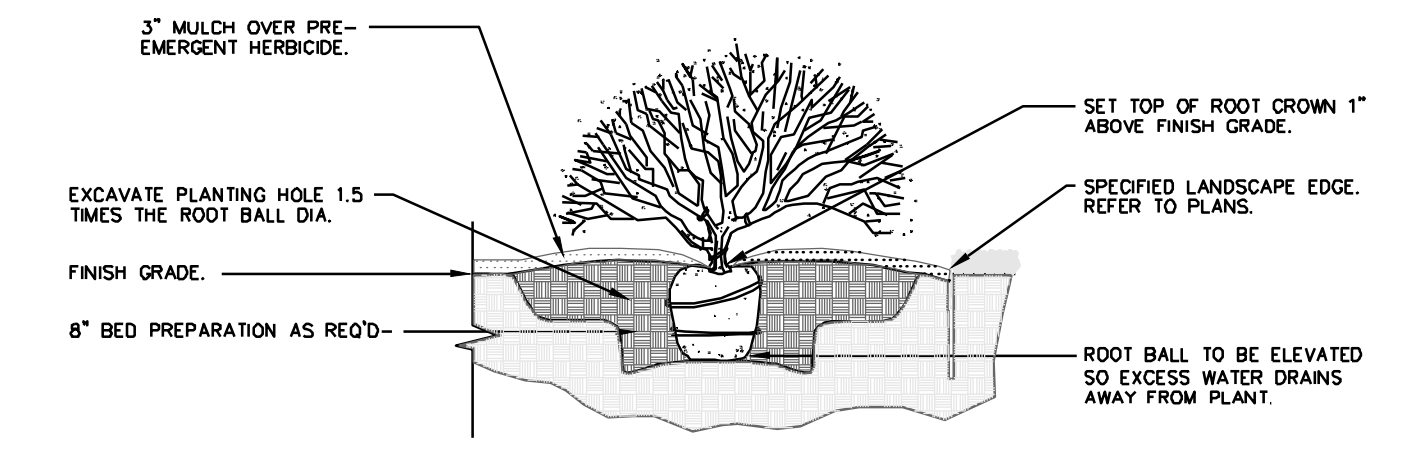
1 EVERGREEN TREE PLANTING NTA



2 DECIDUOUS TREE PLANTING NTA



3 SIDEWALK EDGE AT PLANT BED NTA



4 SHRUB PLANTING NTA

GENERAL LANDSCAPE NOTES:
PLANT MATERIAL

1. ALL PLANT MATERIAL SHALL BE FIRST CLASS REPRESENTATIVES OF SPECIFIED SPECIES, VARIETY OR CULTIVAR, IN HEALTHY CONDITION WITH NORMAL WELL DEVELOPED BRANCHES AND ROOT PATTERNS. PLANT MATERIAL MUST BE FREE OF OBJECTIONABLE FEATURES. PLANTS SHALL COMPLY IN ALL APPLICABLE RESPECTS WITH PROPER STANDARDS AS SET FORTH IN THE AMERICAN ASSOCIATION OF NURSERMEN'S "AMERICAN STANDARD OF NURSERY STOCK", ANSI Z601-2004.
2. SHRUBS SHALL BE CONTAINER GROWN AND WILL BE FREE OF DISEASE AND PESTS. NO BARE ROOT, ALL PLANT BEDS TO BE MULCHED TO A DEPTH OF 3" WITH DARK BROWN, HARDWOOD MULCH. PLANTING BEDS ARE TO BE FREE OF WEEDS AND GRASS. TREAT BEDS WITH A PRE-EMERGENT HERBICIDE PRIOR TO PLANTING AND MULCH PLACEMENT. APPLY IN ACCORDANCE WITH STANDARD TRADE PRACTICE.
3. HOLE AREA FOR TREE TO BE TWICE (2x) THE DIAMETER OF THE ROOT BALL AND ROOT BALL SHALL BE SLIGHTLY MOUNDED FOR WATER RUN-OFF.
4. ALL PLANT MATERIALS SHALL BE PROTECTED FROM THE DRYING ACTION OF THE SUN AND WIND AFTER BEING DUG WHILE BEING TRANSPORTED, AND WHILE AWAITING PLANTING. BALLS OF PLANTS WHICH CANNOT BE PLANTED IMMEDIATELY SHALL BE PROTECTED FROM DRYING ACTION BY COVERING THEM WITH MOST MULCH. PERIODICALLY APPLY WATER TO MULCH-COVERED BALLS TO KEEP MOST. IF PLANTING SHOULD OCCUR DURING GROWING SEASON, APPLY ANTI-DESICCANT TO LEAVES BEFORE TRANSPORT TO REDUCE THE LIKELIHOOD OF WINDBURN. REAPPLY ANTI-DESICCANT AFTER PLANTING TO REDUCE TRANSPIRATION. REMOVE TWINE AND BURLAP FROM ROOT BALLS' SOIL ON TOP OF CONTAINERIZED OR BALLED PLANTS IS TO BE REMOVED UNTIL ALL PLANTS' ROOT FLARES ARE EXPOSED. THIS IS THE NATIVE SOIL LINE AT WHICH PLANTING DEPTHS SHOULD BE MEASURED.
5. AFTER PLANTING IS COMPLETED, PRUNE MINIMALLY TO REMOVE DEAD OR INJURED TWIGS AND BRANCHES. PRUNE IN SUCH A MANNER AS NOT TO CHANGE THE NATURAL HABIT OR SHAPE OF THE PLANT. MAKE CUTS BACK TO BRANCH COLLAR, NOT FLUSH. DO NOT PAINT ANY CUTS WITH TREE PAINT. CENTRAL LEADERS SHALL NOT BE REMOVED.
6. GUARANTEE TREES, SHRUBS, GROUND COVER PLANTS FOR ONE CALENDAR YEAR FOLLOWING PROVISIONAL ACCEPTANCE OF THE OVERALL PROJECT. DURING THE GUARANTEE PERIOD, PLANTS THAT DIE DUE TO NATURAL CAUSES OR THAT ARE UNHEALTHY OR UNSIGHTLY IN CONDITION, SHALL BE REPLACED BY THE CONTRACTOR.

LAWN AND TURF AREAS

7. ALL LAWN AREAS TO BE SODDED AS SHOWN ON PLANS. SOD SHALL COMPLY WITH US DEPT. OF AGRICULTURE RULES AND REGULATIONS UNDER THE FEDERAL SEED ACT AND EQUAL IN QUALITY TO STANDARDS FOR CERTIFIED SEED. SOD SHALL BE HEALTHY, THICK TURF HAVING UNDERGONE A PROGRAM OF REGULAR FERTILIZING, MOWING AND WEED CONTROL. SEED AND SOD SHALL BE A TURF-TYPE TALL FESCUE (3 WAY) BLEND. SEED BLEND SHALL CONSIST OF THE FOLLOWING:

TURF-TYPE TALL FESCUE	90%
KENTUCKY BLUEGRASS	10%
8. ALL AREAS DISTURBED SHALL BE SODDED.

INSTALLATION

9. THE INSTALLATION OF ALL PLANT MATERIALS SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF THE CITY OF LEE'S SUMMIT, MO, AND LANDSCAPE INDUSTRY STANDARDS.
10. ALL LANDSCAPE AREAS TO BE FREE OF ALL BUILDING DEBRIS AND TRASH, BACK FILLED WITH CLEAN FILL SOIL AND TOP DRESSED WITH 4" OF TOPSOIL. TOPSOIL SHALL HAVE A pH RANGE OF 5.5 TO 7 AND A 4% ORGANIC MATERIAL MINIMUM. ASTM D5588.
11. PLANT BEDS TO BE "MOUNDED". ALL PLANT MATERIAL, PLANT BEDS, MULCH AND DUG EDGE ARE TO BE INSTALLED PER LANDSCAPE PLANS, DETAILS, AND MANUFACTURER'S RECOMMENDATIONS.
12. REESTABLISH FINISH GRADES TO WITHIN ALLOWABLE TOLERANCES ALLOWING 3/4" FOR SOD AND 3" FOR MULCH IN PLANT BEDS. HAND RAKE ALL AREAS TO SMOOTH EVEN SURFACES FREE OF DEBRIS, CLODS, ROCKS, AND VEGETATIVE MATTER GREATER THAN 1".
13. ALL PLANT BEDS, SHRUBS AND TREES SHALL BE MULCHED WITH 3" OF DARK BROWN, HARDWOOD MULCH, EXCEPT IF NOTED AS ROCK. DARK BROWN, HARDWOOD MULCH SHALL BE INSTALLED OVER DEWITT PRO 5 WEED CONTROL FABRIC IN PLANT BEDS ONLY.
14. CONTRACTOR IS RESPONSIBLE FOR INITIAL WATERING UPON INSTALLATION.
15. DUG EDGES ARE TO BE DUG WHERE MULCH BEDS ARE ADJACENT TO TURF AREAS. NO EDGING IS REQUIRED ADJACENT TO PAVEMENT OR CURB.
16. THE EXACT LOCATION OF ALL UTILITIES, STRUCTURES, AND UNDERGROUND UTILITIES SHALL BE DETERMINED AND VERIFIED ON SITE BY THE LANDSCAPE CONTRACTOR PRIOR TO INSTALLATION OF THE MATERIALS. DAMAGE TO EXISTING UTILITIES AND OR STRUCTURES SHALL BE REPLACED TO THEIR ORIGINAL CONDITION BY THE LANDSCAPE CONTRACTOR AT NO COST TO THE OWNER.
17. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR OBTAINING NECESSARY PERMITS AND APPROVALS AND RECD INSPECTIONS BY LEGAL AUTHORITIES.
18. PROVISIONS SHALL BE MADE FOR READILY ACCESSIBLE IRRIGATION WITHIN 100' MAX. OF ALL LANDSCAPED AREAS INCLUDING ALL PLANT BEDS, INDIVIDUAL TREES, AND TURF AREAS. ALL LAWN AREAS (AS SHOWN ON PLANS) WILL BE IRRIGATED BY AN AUTOMATIC SPRINKLER SYSTEM. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ALL IRRIGATION COMPONENTS, SLEEVING, PIPE, AND CONTROL. DESIGN DRAWINGS OF IRRIGATION SYSTEM SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT AND OWNER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
19. ANY SUBSTITUTIONS OR DEVIATIONS SHALL BE REQUESTED IN WRITING BY THE CONTRACTOR FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF PLANT MATERIALS. ALL PLANTS ARE TO BE LOCATED AS SPECIFIED ON DRAWINGS.

MAINTENANCE BY OWNER

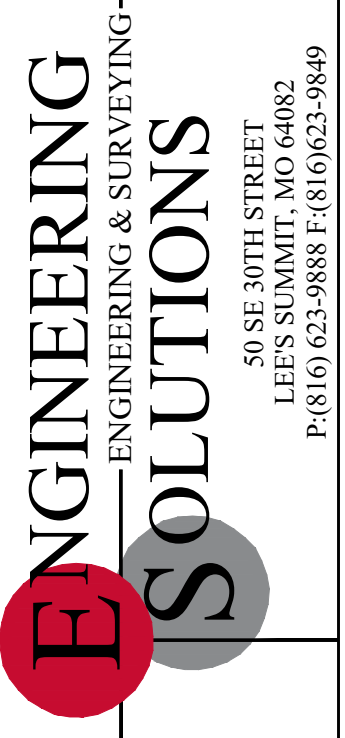
20. ALL SHRUBS ARE TO BE MAINTAINED IN THEIR NATURAL SHAPE TO ALLOW EVENTUAL GROWTH INTO A HEDGE.
21. MAINTAIN NATURAL HABIT OF ALL SPECIFIED PLANT MATERIAL.
22. NEW SOD TO BE THOROUGHLY WATERED UNTIL ROOTS "TAKE HOLD" OF SOD BED. CONTINUE WATERING AS REQUIRED, UNTIL COMPLETELY ESTABLISHED.

IRRIGATION PERFORMANCE SPECIFICATION:

THE FOLLOWING CRITERIA SHALL BE CONSIDERED MINIMUM STANDARDS FOR DESIGN AND INSTALLATION OF LANDSCAPE IRRIGATION SYSTEM:

1. GENERAL - IRRIGATION SYSTEM TO INCLUDE DRIP IRRIGATION OF SHRUB BEDS ADJACENT TO BUILDINGS, SPRAY HEADS IN THE PARKING ISLANDS, AND ROTORS AROUND THE PERIMETER OF THE PARKING LOTS. HEADS SHALL THROW AWAY FROM BUILDING AND ACID SPRAYING OVER SIDEWALKS.
2. IRRIGATION SYSTEM SHALL CONFORM TO ALL INDUSTRY STANDARDS AND ALL FEDERAL, STATE AND LOCAL LAWS GOVERNING DESIGN AND INSTALLATION.
3. WATERLINE TYP#, SIZE LOCATION, PRESSURE AND FLOW SHALL BE FIELD VERIFIED PRIOR TO SYSTEM DESIGN AND INSTALLATION.
4. ALL MATERIALS SHALL BE FROM NEW STOCK FREE OF DEFECTS AND CARRY A MINIMUM ONE YEAR WARRANTY FROM THE DATE OF SUBSTANTIAL COMPLETION.
5. THE IRRIGATION SYSTEM SHALL BE DESIGNED AND INSTALLED IN SUCH A WAY THAT ALL SYSTEM COMPONENTS OPERATE WITHIN THE GUIDELINES ESTABLISHED BY THE MANUFACTURER.
6. LAWN AREA AND SHRUB BEDS SHALL BE ON SEPARATE CIRCUITS.
7. PROVIDE WATER TAP, METER SET, METER VAULT AND ALL OTHER OPERATIONS NECESSARY TO PROVIDE WATER FOR IRRIGATION SHALL CONFORM TO LOCAL WATER GOVERNING AUTHORITY GUIDELINES AND STANDARDS.
8. BACKFLOW PREVENTION SHALL BE PROVIDED IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
9. IRRIGATION CONTROLLER TO BE LOCATED IN UTILITY ROOM INSIDE BUILDING, AS IDENTIFIED BY OWNER.
10. IRRIGATION CONTROLLER STATIONS SHALL BE LABELED TO CORRESPOND WITH THE CIRCUIT IT CONTROLS.
11. CONTRACTOR SHALL PROVIDE TO THE OWNER WRITTEN OPERATION INFORMATION FOR ALL SYSTEM COMPONENTS.
12. CONTRACTOR SHALL PROVIDE TO THE OWNER ALL KEYS, ACCESS TOOLS, WRENCHES AND ADJUSTING TOOLS NECESSARY TO GAIN ACCESS, ADJUST AND CONTROL THE SYSTEM.
13. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
14. AN AUTOMATIC RAIN SHUT-OFF OR MOISTURE DEVICE SHALL BE INSTALLED.
15. INSTALL SCHEDULE 40 PVC SLEEVES UNDER ALL CURBS, PAVING AND SIDEWALKS. SLEEVES TO BE TWICE THE SIZE OF THE LINE IT HOUSES.
16. INSTALL MANUAL DRAIN VALVES AT LOWEST POSSIBLE ELEVATION ON IRRIGATION MAIN TO ALLOW GRAVITY DRAINING OF MAIN DURING WINTER MONTHS. PROVIDE QUICK COUPLERS AT MULTIPLE LOCATIONS TO ALLOW FOR EASY "BLOWING OUT" OF LATERAL AND MAIN LINES.
17. ZONES OR NOZZLES SHALL BE DESIGNED WITH MATCHED PRECIPITATION RATES.
18. MINIMUM LATERAL DEPTH IS 15" AND MAIN DEPTH IS 18".
19. SUBMIT DESIGN DRAWING WITH BID TO ALLOW OWNER TO EVALUATE SYSTEM. INCLUDE CUT SHEETS OF ALL COMPONENTS AND ZONE TABLE ILLUSTRATING FLOWS AND ANTICIPATED PRESSURE AT FURTHEST HEAD.
20. AN "AS-BUILT" SCALED DRAWING SHALL BE PROVIDED TO THE OWNER BY THE CONTRACTOR AND SHALL INCLUDE UT NOT BE LIMITED TO THE FOLLOWING:
 - a. AS CONSTRUCTED LOCATION OF ALL COMPONENTS
 - b. COMPONENT NAME, MANUFACTURER, MODEL INFORMATION, SIZE AND QUANTITY
 - c. PIPE SIZE AND QUANTITY
 - d. INDICATION OF SPRINKLER HEAD SPRAY PATTERN
 - e. CIRCUIT IDENTIFICATION SYSTEM
 - f. DETAILED METHOD OF WINTERIZED SYSTEM

SUBMIT AS-BUILT DRAWING IN FULL SIZE DRAWING FORM AS WELL AS PDF ELECTRONIC FORMAT. (SCANNING FULL SIZE COPY OF PLAN IS ACCEPTABLE IF IT CAN BE PRINTED TO SCALE.)



Professional Registration
Missouri
Engineering 200502186-D
Surveying 2005008318-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6264
Nebraska
Engineering CA2821

100 NE DOUGLAS STREET
Lee's Summit, Jackson County, Missouri

Project: 100 NE DOUGLAS
LSMO
Issue Date: June 24, 2025

LANDSCAPE PLAN DETAILS
Final Development Plans for:
100 NE DOUGLAS STREET
Lee's Summit, Jackson County, Missouri



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NE PE E-14335

REVISIONS
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REV. 1/15/2026