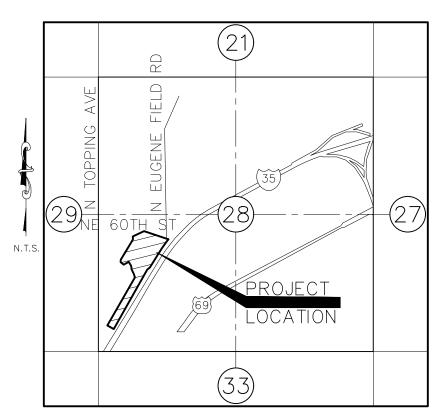
# 5870 NE OAK RIDGE DRIVE DEVELOPMENT PLAN

KANSAS CITY, CLAY COUNTY, MISSOURI SEC. 28, TWP 51 N, RNG 32 W



SECTION VICINITY MAP SEC. 28 - TWP 51N - RNG 32W CITY OF KANSAS CITY, MISSOURI

### BASIS OF BEARINGS

SHEET NUMBER

C001

C010

C100

C200

C300

C400

C500

C600

C1100

C1200 C1201

C1300

C1400

C1500

C1501

A - 201

L2

SOUTH 31°51'14" WEST ALONG THE EAST LINE OF LOT 1, TIMBER RIDGE DRIVING RANGE AS DETERMINED BY GLOBAL POSITIONING SYSTEM OBSERVATIONS USING MODOT VRS, 2018 GEOID, AND REFERENCED TO THE MISSOURI STATE PLANE COORDINATE SYSTEM, WEST ZONE (NAD83)

LIST TABLE

SHEET TITLE

COVER SHEET

300' SURROUNDING PROPERTY

DEMOLITION PLAN - PHASE 1

SITE AND DIMENSION PLAN - PHASE

GRADING PLAN - PHASE 1

EROSION CONTROL PLAN - PHASE

FINAL STREAM BUFFER PLAN

TREE PRESERVATION AND PROTECTION PLAN

DEMOLITION PLAN - PHASE 2

SITE AND DIMENSION PLAN 1 - PHASE 2

SITE AND DIMENSION PLAN 2 - PHASE 2

GRADING PLAN - PHASE 2

EROSION CONTROL PLAN - PHASE 2

UTILITY PLAN 1 - PHASE 2

UTILITY PLAN 2 - PHASE 2

EXTERIOR ELEVATIONS

LANDSCAPE PLANS 1

LANDSCAPE PLANS 2

### DATUM BENCHMARK

DATUM IS U.S. SURVEY FEET AND REFERS TO NAVD88 DATUM DERIVED FROM CONNECTIONS TO MODOT VRS. ORTHOMETRIC HEIGHT WAS CALCULATED USING THE GEOID18 MODEL.

60D NAIL MAG NAIL N=1103747.00' N=1104010.75' E=2786041.92' E = 2785913.44ELEV=830.62' ELEV=804.54'

### UTILITY INFORMATION

THE INFORMATION CONCERNING THE EXISTENCE, LOCATION, SIZE OR TYPE OF MATERIALS OF UNDERGROUND UTILITIES SHOWN HEREON, WHICH ARE NOT VISIBLE FROM THE SURFACE, HAS BEEN COMPILED FROM THE RECORDS OF THE VARIOUS UTILITY COMPANIES OR OTHER SOURCES OF INFORMATION ALONG WITH FIELD LOCATIONS OF PAINTED MARKINGS BY MISSOURI ONE CALL, TICKET NUMBER 210881989. THIS INFORMATION IS NOT TO BE CONSTRUED AS ACCURATE, COMPLETE NOR EXACT. ANY INFORMATION CONCERNING UNDERGROUND UTILITIES SHOWN HEREON MUST BE CONFIRMED BY THE DESIGN PROFESSIONAL PRIOR TO DESIGNING ANY IMPROVEMENTS WHICH MAY BE AFFECTED BY THIS INFORMATION OR BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION ACTIVITY.

### SAFETY NOTICE TO CONTRACTOR

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER KAW VALLEY ENGINEERING, INC NOR ITS PERSONNEL CAN OR DO WARRANTY THESE DESIGNS OR PLANS AS CONSTRUCTED, EXCEPT IN THE SPECIFIC CASES WHERE KAW VALLEY ENGINEERING PERSONNEL INSPECT AND CONTROL THE PHYSICAL CONSTRUCTION ON A CONTEMPORARY BASIS AT THE SITE.

### CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICTS PRIOR TO ANY CONSTRUCTION.

# PROPERTY

1804 SWIFT AVE., STA 101 KANSAS CITY, MO 64116 CONTACT: CHUCK V. CUDA PHONE: (816) 268-4493 EMAIL: cuda@opescre.com

8040 N. OAK TRAFFICWAY KANSAS CITY, MO. 64118 PHONE: 816-468-5858 EMAIL: cross@kveng.com

### PROPERTY ADDRESS:

5870 NE OAK RIDGE DRIVE KANSAS CITY, MISSOURI, 64119

### PROPERTY DESCRIPTION:

PART OF LOT 1, TIMBER RIDGE DRIVING RANGE, AS SUBDIVISION OF LAND IN KANSAS CITY, CLAY COUNTY, MISSOURSI, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHWEST CORNER OF LOT 1, TIMBER RIDGE DRIVING RANGE; THENCE SOUTH 0 DEGREES 09 MINUTES 46 SECONDS WEST 190.00 FEET (SOUTH O DEGREES 02 MINUTES 13 SECONDS WEST-PLAT) ALONG THE WEST LINE OF LOT 1, TO THE POINT OF BEGINNING OF THE TRACT OF LAND HEREINAFTÉR DESCRIBED: THENCE NORTH 64 DEGREES 45 MINUTES 45 SECONDS EAST 273.70 FEET; THENCE SOUTH 71 DEGREES 18 MINUTES 56 SECONDS EAST 570.50 FEET TO A POINT ON THE CENTERLINE OF EUGENE FIELD STREET, SAID POINT BEING ON THE NORTHWESTERLY RIGHT-OF-WAY LINE OF U.S. INTERSTATE HIGHWAY NO.35; THENCE SOUTHWESTERLY 330.12 FEET (BEING A 2939.79 FOOT RADIUS CURVE TO THE LEFT HAVING A CENTRAL ANGLE OF 6 DEGREES 26 MINUTES 02 SECONDS, AN ARC LENGTH OF 330.12 FEET AND AN INITIAL TANGENT BEARING OF SOUTH 38 DEGREES 17 MINUTES 18 SECONDS WEST) ALONG THE NORTHWESTERLY RIGHT-OF-WAY LINE OF U.S. INTERSTATE HIGHWAY NO.35; THENCE SOUTH 31 DEGREES 51 MINUTES 16 SECONDS WEST 418.40 FEET (SOUTH 31 DEGREES 51 MINUTES 14 SECONDS WEST-PLAT) ALONG THE NORTHWESTERLY RIGHT-OF-WAY LINE; THENCE SOUTH 51 DEGREES 30 MINUTES 30 SECONDS WEST 74.33 FEET (SOUTH 51 DEGREES 22 MINUTES 57 SECONDS WEST-PLAT) ALONG THE NORTHWESTERLY RIGHT-OF-WAY LINE; SOUTH 31 DEGREES 51 MINUTES 16 SECONDS WEST 297.16 FEET (SOUTH 31 DEGREES 51 MINUTES 14 SECONDS WEST-PLAT) ALONG THE NORTHWESTERLY RIGHT-OF-WAY LINE; THENCE NORTH 56 DEGREES 03 MINUTES 32 SECONDS WEST 142.08 FEET; THENCE NORTH 18 DEGREES 37 MINUTES 38 SECONDS WEST 39.10 FEET TO A POINT IN THE CENTERLINE OF AN EXISTING CREEK; THENCE NORTH 17 DEGREES 42 MINUTES 02 SECONDS WEST 49.34 FEET ALONG THE SAID CENTERLINE: THENCE NORTH 26 DEGREES 18 MINUTES 46 SECONDS WEST 101.52 FEET ALONG THE SAID CENTERLINE; THENCE NORTH 8 DEGREES 54 MINUTES 06 SECONDS WEST 84.02 FEET ALONG THE SAID CENTERLINE; THENCE NORTH 29 DEGREES 59 MINUTES 11 SECONDS WEST 100.34 FEET ALONG THE SAID CENTERLINE; THENCE SOUTH 61 DEGREES 27 MINUTES 36 SECONDS WEST 129.77 FEET ALONG THE SAID CENTERLINE; THENCE NORTH 51 DEGREES 33 MINUTES 40 SECONDS WEST 89.19 FEET ALONG THE SAID CENTERLINE TO A POINT ON THE WEST LINE OF LOT 1, TIMBER RIDGE DRIVING RANGE; THENCE NORTH 4 DEGREES 37 MINUTES 48 SECONDS EAST 59.25 FEET (NORTH 4 DEGREES 30 MINUTES 15 SECONDS EAST-PLAT) TO A WESTERLY CORNER OF LOT 1, THENCE NORTH 31 DEGREES 03 MINUTES 21 SECONDS EAST 522.99 FEET (NORTH 30 DEGREES 55 MINUTES 48 SECONDS EAST-PLAT) TO A WESTERLY CORNER OF LOT 1, SAID POINT BEING SOUTH 0 DEGREES 09 MINUTES 46 SECONDS WEST 255.32 FEET (SOUTH O DEGREES 02 MINUTES 13 SECONDS WEST 255.08 FEET-PLAT) FROM THE NORTHEAST CORNER OF LOT 1; THENCE O DEGREES 09 MINUTES 46 SECONDS EAST 65.32 FEET (NORTH O DEGREES 02 MINUTES 13 SECONDS EAST- PLAT) ALONG THE WEST LINE OF LOT 2 TO THE POINT OF BEGINNING, EXPECT THAT PART IN STREETS, ROADS, OR HIGHWAYS.

### DISTURBED AREA

PHASE 1 = 156,329 SQ.FT. / 3.59 ACRES PHASE 2 = 49,226 SQ.FT. / 1.13 ACRES TOTAL DISTURBED = 203,506 SQ.FT. / 4.67 ACRES

### DEVELOPMENT SUMMARY

- A. EXISTING ZONING OF PROPERTY AND ANY PROPOSED ZONING, INCLUDING TYPE OF ANY PLANNED DISTRICT REQUESTED. EXISTING: B3-2PROPOSED: B3-2
  - TOTAL LAND AREA: 594,221 SQ.FT. / 13.64 ACRES
- B. LAND AREA OR ACRES FOR EXISTING AND PROPOSED STREET RIGHT OF WAY. 0 (ZERO) NET LAND AREA: 594,221 SQ.FT. / 13.64 ACRES
- C. PROPOSED USE OR USES OF EACH BUILDING AND STRUCTURE. OUTDOOR SPORTS AND RECREATION.
- D. HEIGHT ABOVE GRADE OF BUILDING AND STRUCTURES AND NUMBER OF FLOORS OF EACH

HEIGHT OF MAIN BUILDING = 30'-5" NUMBER OF FLOORS = 1 (ONE)

- E. GROSS FLOOR AREA PER FLOOR (MAIN BLDG). 24,000 SQ. FT.
- F. BUILDING COVERAGE AND FLOOR AREA RATIO. 24,000 / 594,221 = 0.040
- G. RESIDENTIAL DEVELOPMENT SHALL, IN ADDITION, IDENTIFY GROSS AND NET DENSITY. N/A
- H. RATIO OF REQUIRED NUMBER OF PARKING SPACES FOR EACH USE AND AMOUNT OF REQUIRED. PROPOSED PARKING SPACES. SPORTS & REC: (THERE IS NO DEFINED PARKING REQUIREMENTS IN KCMO CODE.)
- REQUIRED SPACES = 9I. RATIO OF REQUIRED NUMBER OF SHORT TERM AND LONG TERM BICYCLE PARKING SPACES FOR
- EACH USE AND AMOUNT OF REQUIRED, PROPOSED SHORT TERM AND LONG TERM BICYCLE PARKING SPACES. SHORT TERM: 1 PER 10 OFF-STREET VEHICLE PARKING SPACES

REQUIRED SPACES=1 PROVIDED SPACES=1

Site Data | Proposed Phase 1 | Proposed Phase 2 B3-2 B3-2 7oning

	20111116	50 2	1		
	Gross Land Area (sqft)	594221	594221	594221	
	Gross Land Area (ac)	13.64	13.64	13.64	,
	Net Land Area (sqft)	594221	594221	594221	
	Net Land Area (ac)	13.64	13.64	13.64	
	Building Area (sqft)	0	0	24000	
7	Floor Area Ratio	0.000	0.000	0.040	
	Total Impervious Area (sqft)	4,635	4,635	33,851	
	Total Impervious Area (ac)	0.11	0.11	0.78	<b>)</b>

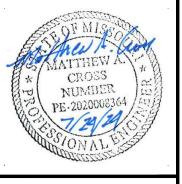
Stru	cture	Use	Square Footage
Proposed Indoo	or Sports Building	Sports & Rec Participation	24000
i ioposca maoc	n sports building	(Indoor/Outdoor)	24000

Building Data	Required	Proposed
Rear Setback	None	770ft.
Front Setback	None	124ft.
Side Setback	None	8ft.
Height	None	30ft.

Parking	Vehicle Spaces				Bike Spaces	
	Existing	Proposed	Total	Required	Required	Proposed
Total	0	9	9	88-420-08-A	1	1

### FLOOD STATEMENT:

THE ACCURACY OF ANY FLOOD HAZARD DATA SHOWN HEREON IS SUBJECT TO MAP SCALE UNCERTAINTY AND TO ANY OTHER UNCERTAINTY IN LOCATION OR ELEVATION ON THE REFERENCED FLOOD INSURANCE RATE MAP. THE SURVEYED PROPERTY LIES WITHIN FLOOD HAZARD ZONE "X, NON-SHADED, AREA OF MINIMAL FLOOD HAZARD" AS SAID PROPERTY PLOTS BY SCALE ON THE FLOOD INSURANCE RATE MAP FOR THE CITY OF KANSAS CITY, FLOOD MAP FOR THE SELECTED AREA IS NUMBER 29095C0134G, EFFECTIVE ON 01/20/2017.



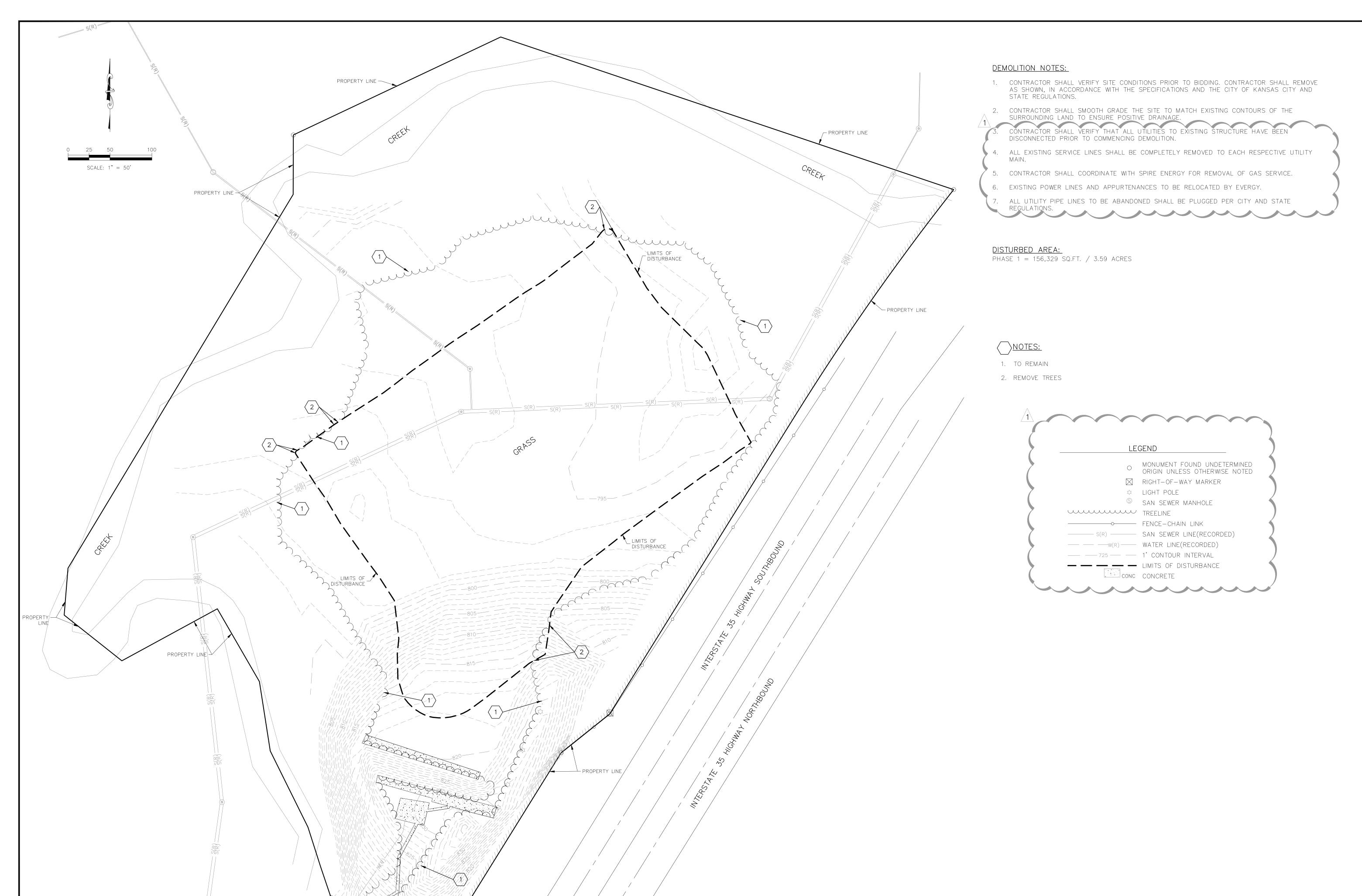
MATTHEW A. CROSS ENGINEER MO # 2020008364

ENGINEERING



DESIGNER DRAWN

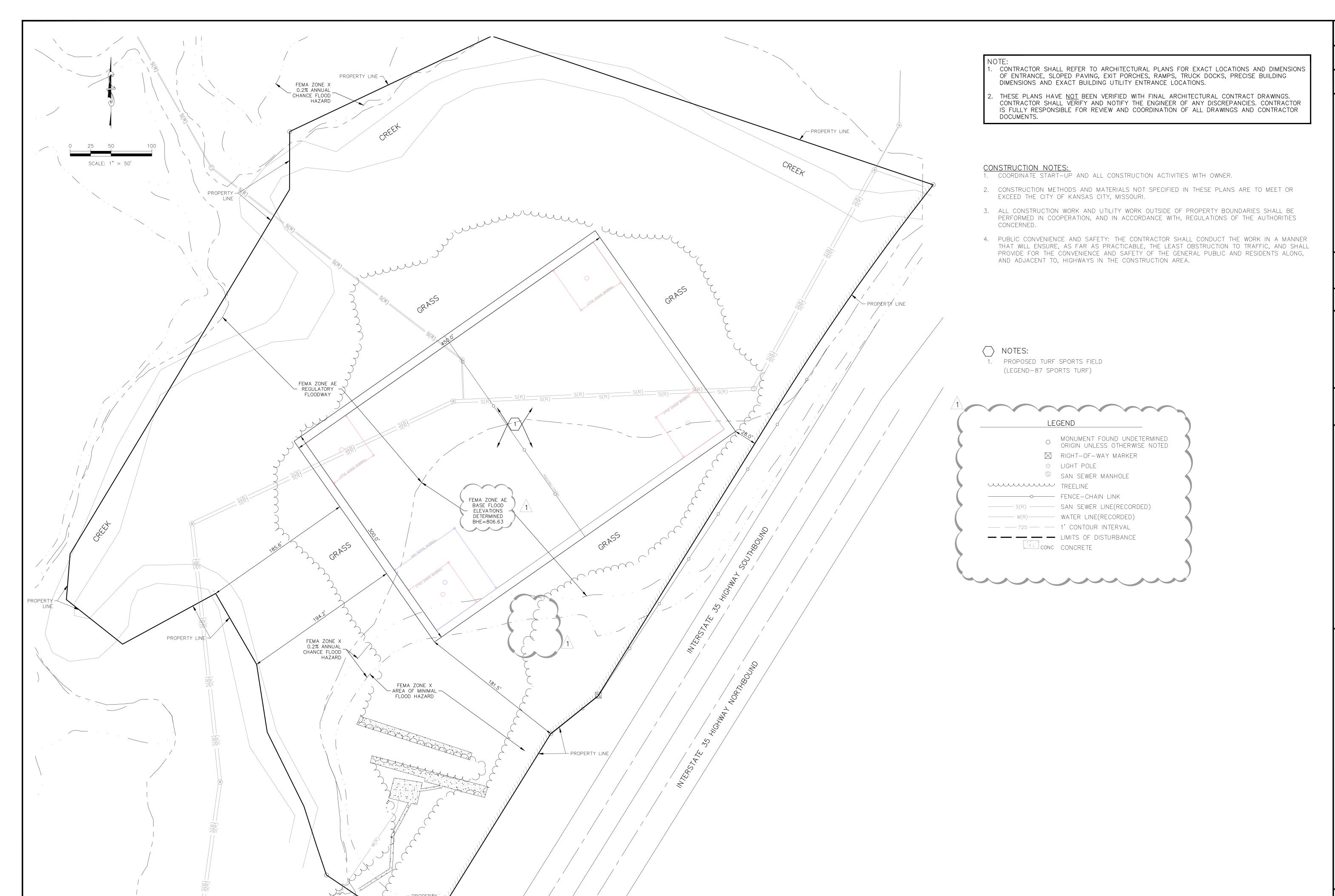




MATTHEW A. CROSS ENGINEER MO # 2020008364

ENGINEERING

B23D4618 DESIGNER DRAWN BY



THIS DRAWING SHALL NOT RE LITHITED BY ANY PERSON FIRM OR CORPORATION IN WHOLF OR IN PART WITHOLIT THE SPECIFIC PERMISSION OF KAW VALLEY ENGINEERING INC

24/24 PER CITY COMMENTS

23/24 PER CITY COMMENTS

(13/24 PER CITY COMMENTS

(01/24 INITIAL SUBMITTAL

ATE DESCRIPTION

DSN D'A

MATTHEW A. "CROSS NUMBER PE-2020008364 AD

MATTHEW A. CROSS ENGINEER MO # 2020008364

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ALLEY ENGINEERING

C., IS AUTHORIZED TO OFFER ENGINEERING
CERTIFICATE OF AUTHORITY # 000842.

KAW VALLEY ENGINEERING, INC.

: DR 54119

70 NE OAK RIDGE DR NSAS CITY, MO, 64119 VELOPMENT PLAN TE AND DIMENSION PLAN -

PROJ. NO.

B23D4618

DESIGNER DRAWN BY

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SHEET REV



I. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRANCE, SLOPED PAVING, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.

THESE PLANS HAVE <u>NOT</u> BEEN VERIFIED WITH FINAL ARCHITECTURAL CONTRACT DRAWINGS. CONTRACTOR SHALL VERIFY AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES. CONTRACTOR IS FULLY RESPONSIBLE FOR REVIEW AND COORDINATION OF ALL DRAWINGS AND CONTRACT

**GRADING NOTES:** 

- 1. THE CONSTRUCTION AREA SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL AND ORGANIC MATTER FROM ALL AREAS TO BE OCCUPIED BY BUILDING AND PAVING. TOPSOIL FOR REPLACEMENT ON SLOPES MAY BE STOCKPILED ON SITE. EXCESS TOPSOIL MAY BE WASTED IN FILL SLOPES PROVIDED THAT NO TOPSOIL WILL BE WASTED WITHIN 10 FEET OF THE EDGE OF THE BUILDING OR PARKING AREA. BURNING OF TIMBER WILL NOT BE PERMITTED UNLESS APPROVAL IS OBTAINED FROM GOVERNING OFFICIALS. STRIPPING EXISTING TOPSOIL AND ORGANIC MATTER SHALL BE TO A MINIMUM DEPTH OF 6 INCHES.
- 2. AREAS TO RECEIVE FILL SHALL BE SCARIFIED AND THE TOP 8-INCH DEPTH COMPACTED TO 95% STANDARD PROCTOR DENSITY. ANY UNSUITABLE AREAS SHALL BE UNDERCUT AND REPLACED WITH SUITABLE MATERIAL BEFORE ANY FILL MATERIAL CAN BE APPLIED.
- 3. OFF-SITE FILL MATERIAL SHALL HAVE A PLASTICITY INDEX OF 25 OR LESS, A LIQUID LIMIT OF 45 OR LESS AND CONTAIN NO ROCK LARGER THAN FOUR INCHES. OFF—SITE FILL MATERIAL SHALL BE APPROVED BY THE OWNER PRIOR TO BRINGING ON SITE.
- 4. EARTHWORK UNDER THE BUILDING SHALL COMPLY WITH THE PROJECT ARCHITECTURAL PLANS. OTHER FILL MATERIAL SHALL BE MADE IN LIFTS NOT TO EXCEED EIGHT INCHES DEPTH COMPACTED TO 95% STANDARD PROCTOR DENSITY. FILL MATERIAL MAY INCLUDE ROCK FROM ON-SITE EXCAVATION IF CAREFULLY PLACED SO THAT LARGE STONES ARE WELL DISTRIBUTED AND VOIDS ARE COMPLETELY FILLED WITH SMALLER STONES, EARTH, SAND OR GRAVEL TO FURNISH A SOLID EMBANKMENT. NO ROCK LARGER THAN THREE INCHES IN ANY DIMENSION NOR ANY SHALE SHALL BE PLACED IN THE TOP 12 INCHES OF EMBANKMENT.
- 5. AREAS THAT ARE TO BE CUT TO SUBGRADE LEVELS SHALL BE PROOF ROLLED WITH A MODERATELY HEAVY LOADED DUMP TRUCK OR SIMILAR APPROVED CONSTRUCTION EQUIPMENT TO DETECT UNSUITABLE SOIL CONDITIONS.
- 6. IN ALL AREAS OF EXCAVATION, IF UNSUITABLE SOIL CONDITIONS ARE ENCOUNTERED, A QUALIFIED GEOTECHNICAL ENGINEER SHALL RECOMMEND TO THE OWNER THE METHODS OF UNDERCUTTING AND REPLACEMENT OF PROPERLY COMPACTED, APPROVED FILL MATERIAL. ALL PROOFROLLING AND UNDERCUTTING SHOULD BE PERFORMED DURING A PERIOD OF DRY WEATHER.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
- 8. ALL SLOPES ARE TO BE 3:1 OR FLATTER UNLESS OTHERWISE INDICATED.
- 9. ALL SLOPES EXCEEDING 3:1 SHALL BE PROTECTED BY RIP RAP, CONCRETE PAVING, OR OTHER METHODS INDICATED ON THESE PLANS, THAT WILL PREVENT EROSION AND PLACED SUCH THAT THE SURFACE IS FLUSH WITH SURROUNDING GROUND AND SHAPED TO CHANNEL WATER IN DIRECTIONS INDICATED.
- 10. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH AND FOUR INCHES OF TOPSOIL APPLIED. IF ADEQUATE TOPSOIL IS NOT AVAILABLE ON—SITE. THE CONTRACTOR SHALL PROVIDE TOPSOIL. APPROVED BY THE OWNER, AS NEEDED. THE AREA SHALL THEN BE SEEDED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON SHALL BE CORRECTED. BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER PRIOR TO FINAL ACCEPTANCE OF
- 11. CONTRACTOR SHALL USE SILT FENCE, BALES OF HAY OR OTHER MEANS OF CONTROLLING EROSION ALONG THE EDGE OF THE PROPERTY OR OTHER BOTTOM OF SLOPE LOCATIONS.
- 12. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS.
- 13. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES TO THE ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASES OF THIS PROJECT.
- 14. IT IS NOT THE DUTY OF THE ENGINEER OR THE OWNER TO REVIEW THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE AT ANY TIME DURING CONSTRUCTION.

F DISCREPANCIES EXIST BETWEEN THE GRADING NOTES HEREON, AND THE RECOMMENDATIONS OUTLINED IN THE PROJECT GEOTECHNICAL REPORT, THE RECOMMENDATIONS OUTLINED IN THE GEOTECHNICAL REPORT SHALL GOVERN.

HE COORDINATES PROVIDED ON THIS PLAN ARE FOR NFORMATION AND CHECKING PURPOSES ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALCULATE CONSTRUCTION STAKING COORDINATES ACCORDING TO THE DIMENSIONS SHOWN ON THESE PLANS. CONTRACTOR SHALL VERIFY THE ACCURACY OF THE COORDINATES SHOWN HEREON BEFORE CONSTRUCTION.

LEGEND (PROPOSED)

(ME) MATCH EXISTING /82.92 SPOT ELEVATION

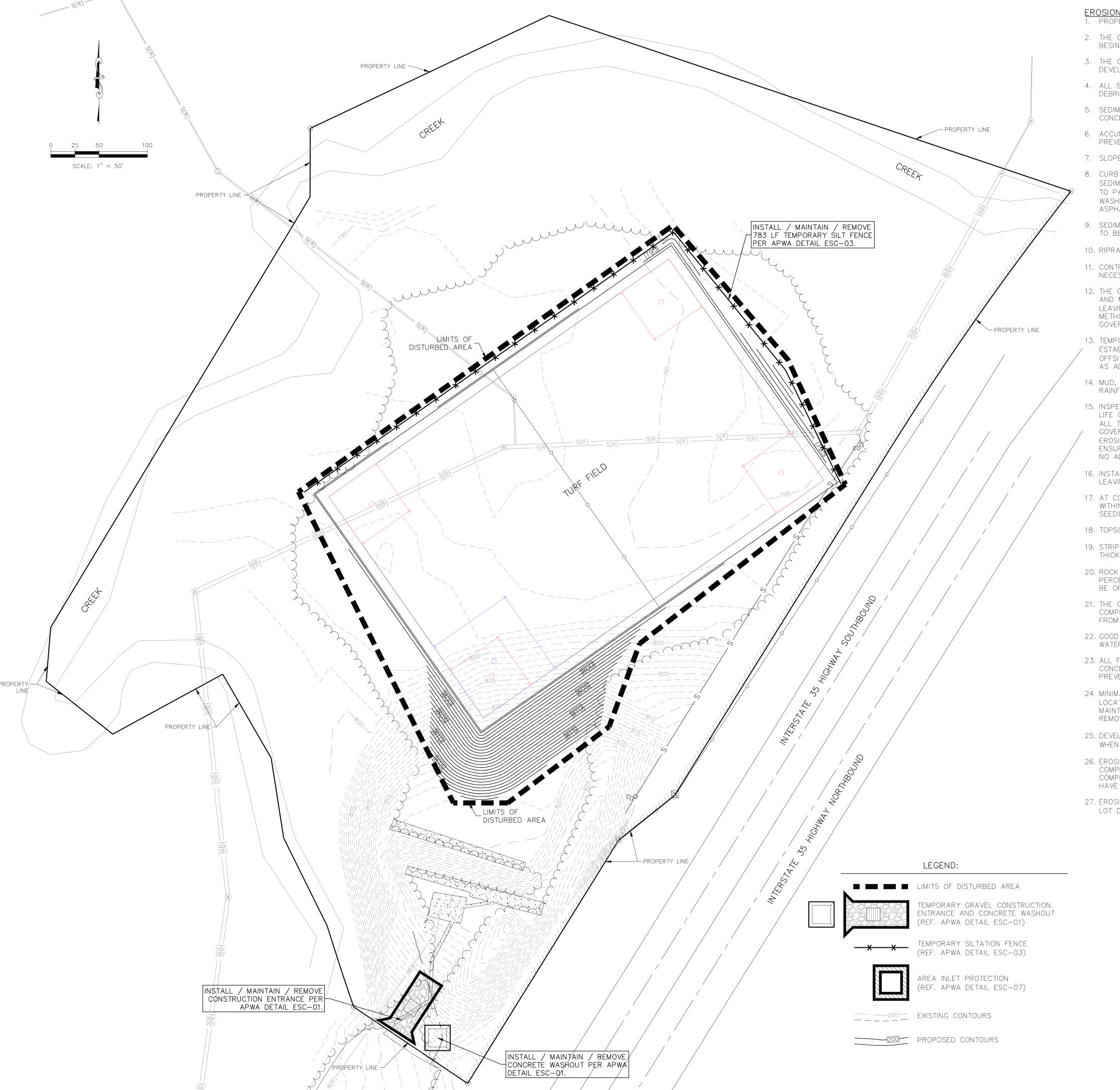
FINISHED 1' CONTOUR INTERVALS 890 EXISTING 1' CONTOUR INTERVALS



MATTHEW A. CROSS ENGINEER MO # 2020008364

GINEERING

DESIGNER DRAWN



### EROSION CONTROL NOTES:

1. PROPERTY LINE IS LIMITS OF CONSTRUCTION EXCEPT AS SHOWN.

- 2. THE CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE DRAWINGS PRIOR TO BEGINNING EARTHWORK OPERATIONS AND DURING APPROPRIATE PHASING AS CONSTRUCTION PROGRESSES.
- 3. THE CONTRACTOR SHALL MAINTAIN ALL SILT CONTROL MEASURES DURING CONSTRUCTION. BUILDERS AND OR DEVELOPER TO MAINTAIN EROSION CONTROL AND SILT CONTROL UPON COMPLETION OF THIS PROJECT.
- 4. ALL SILT SHALL REMAIN ON SITE AND SURROUNDING STREETS SHALL BE KEPT CLEAR OF ALL MUD AND
- 5. SEDIMENTATION BARRIERS ARE TO BE INSTALLED AS SHOWN AND AT ANY ADDITIONAL AREAS OF CONCENTRATED FLOWS NOT SHOWN ON PLANS.
- 6. ACCUMULATED SEDIMENT SHALL BE REMOVED AND THE SEDIMENTATION BARRIERS MAINTAINED AS NEEDED TO PREVENT SEDIMENTATION BYPASS OF THE BARRIER.
- 7. SLOPES ARE TO BE LEFT IN A ROUGH CONDITION DURING GRADING.
- 8. CURB INLET SEDIMENTATION BARRIERS ARE TO BE INSTALLED AROUND INLETS AND WEIRS WHERE SEDIMENTATION IS A CONCERN. INLET BARRIERS SHALL BE FILTERS, OR SILT FENCE, OR STRAW BALES (PRIOR TO PAVING PLACEMENT). AFTER PAVEMENT IS IN PLACE, PROVIDE FILTER PROTECTION THAT CANNOT BE WASHED INTO INLETS OR WASHED AWAY. STRAW/HAY BALES WILL NOT BE ALLOWED ON CONCRETE OR ASPHALT PAVING.
- 9. SEDIMENT IS TO BE REMOVED FROM STORM WATER DRAINAGE SYSTEMS. ALL SEDIMENT CONTROL MEASURES TO BE INSPECTED AND REPAIRED IMMEDIATELY AND ON A REGULAR BASIS AFTER ALL RAIN STORMS.
- 10. RIPRAP IS TO BE INSTALLED AT AREAS OF CONCENTRATED FLOW (I.E. CULVERT OUTLETS).
- 11. CONTRACTOR IS RESPONSIBLE FOR INSTALLING ANY ADDITIONAL EROSION CONTROL AS HE/SHE DEEMS NECESSARY TO PREVENT SEDIMENT FROM ENTERING STORM DRAINS, STREETS, AND WATERWAYS.
- 12. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS, TOOLS, EQUIPMENT AND LABOR AS NECESSARY TO INSTALL AND MAINTAIN ADEQUATE EROSION AND SILTATION CONTROLS REQUIRED TO PREVENT SOIL EROSION FROM LEAVING THE PROJECT SITE. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO ENSURE THAT METHODS UTILIZED ARE ADEQUATE AND COMPLY WITH REQUIREMENTS OF THE SPECIFICATIONS AND GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK.
- 13. TEMPORARY SEDIMENT FENCE EROSION CONTROL MEASURES TO REMAIN UNTIL ADEQUATE VEGETATION IS ESTABLISHED. ON PROJECTS THAT ARE NOT EXPECTING IMMEDIATE DEVELOPMENT (I.E. - INTERCEPTOR SEWERS, OFFSITE IMPROVEMENTS, ETC.) EROSION CONTROL MEASURES ARE TO BE REMOVED BY CONTRACTOR AS SOON AS ADEQUATE VEGETATION IS ESTABLISHED.
- 14. MUD, SILT, AND DEBRIS SHALL BE CLEANED UP AT THE CONCLUSION OF EACH WORKING DAY, OR AFTER EACH RAINFALL.
- 15. INSPECTION, MAINTENANCE AND REPAIR OF EROSION CONTROL DEVICES SHALL BE ON GOING THROUGHOUT THE LIFE OF INFRASTRUCTURE AND BUILDING CONSTRUCTION TO KEEP THE DEVICES IN OPERABLE CONDITION AT ALL TIMES. ADDITIONAL MEASURES SHALL BE INSTALLED AS REQUIRED BY ACTUAL FIELD CONDITIONS AND/OR GOVERNING INSPECTION AGENCIES. NOTE: ALTHOUGH EXTENSIVE EFFORT IS PUT INTO THE DESIGN OF THE EROSION CONTROL PLAN BY THE ENGINEER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR/DEVELOPER TO ENSURE THAT ANY ADDITIONAL REQUIRED EROSION CONTROL MEASURES ARE INSTALLED AND MAINTAINED AT NO ADDITIONAL COST TO THE OWNER.
- 16. INSTALL AND MAINTAIN CONSTRUCTION ENTRANCE(S) AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING THE SITE AND AS SHOWN ON PLANS.
- 17. AT COMPLETION OF SITE GRADING AND OTHER RELATED CONSTRUCTION ACTIVITIES, ALL DISTURBED AREAS WITHIN THE PROJECT SITE SHALL BE SEEDED, SODDED, OR LANDSCAPED, FLAT LOTS WILL NOT REQUIRE SEEDING BUT ALL SLOPES, DISTURBED AREAS AND STREET RIGHT-OF-WAYS WILL BE SEEDED.
- 18. TOPSOIL IS TO BE PLACED IN AREAS UNSUITABLE FOR VEGETATIVE GROWTH.
- 19. STRIP TOPSOIL PRIOR TO EXCAVATION, STOCKPILE AND SPREAD ONTO DISKED SUBGRADE (4" MIN) A THICKNESS OF 4 INCHES.
- 20. ROCK LINING (RIPRAP) SHALL BE DURABLE STONE CONTAINING A COMBINED TOTAL OF NOT MORE THAN 10 PERCENT OF EARTH, SAND, SHALE AND NON-DURABLE ROCK. AT LEAST 60 PERCENT OF THE MASS SHALL BE OF PIECES HAVING A MINIMUM WEIGHT OF 150 POUNDS OR MORE PER CUBIC FOOT.
- 21. THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY FOR RESOLVING COMPLAINTS IN THE EVENT THAT COMPLAINTS OR DAMAGE CLAIMS ARE FILED DUE TO DAMAGES OCCURRING, ADJACENT TO OR DOWNSTREAM FROM PROPERTY, BY SEDIMENT RESULTING FROM EROSION ON THE PROJECT SITE.
- 22. GOOD HOUSEKEEPING PRACTICES SHALL BE MAINTAINED ON SITE TO KEEP SOLID WASTE FROM ENTRY INTO
- 23. ALL FUELING FACILITIES PRESENT ON SITE SHALL ADHERE TO APPLICABLE FEDERAL AND STATE REQUIREMENTS CONCERNING UNDERGROUND STORAGE, ABOVE GROUND STORAGE AND DISPENSERS, INCLUDING SPILL PREVENTION, CONTROL AND COUNTER MEASURES.
- 24. MINIMAL WASHING OF CONCRETE EQUIPMENT ALLOWED (CHUTE, TOOLS, ETC.) AT A CONTRACTOR DEFINED LOCATION. CONCRETE WASHOUT OF THE DRUM IS NOT ALLOWED. ANY PIT/WASHOUT AREA NEEDS TO BE MAINTAINED IN A NON-DISCHARGING MANNER AND ANY WASTE RESIDUE WILL NEED TO BE CLEANED OUT AND REMOVED AT THE END OF PROJECT.
- 25. DEVELOPER IS RESPONSIBLE FOR HAVING LOT BUILDERS FOLLOW THE GUIDELINES OF "CONTROLLING EROSION WHEN BUILDING YOUR HOME" PROVIDED BY MISSOURI DEPARTMENT OF HEALTH AND ENVIRONMENT.
- 26. EROSION CONTROL STRAW/FIBER WATTLES TO BE INSTALLED 1'-0" BEHIND CURB & GUTTER UPON COMPLETION OF BACKFILL OF CURB IN ALL AREAS WHERE SLOPES FROM LOT DRAIN TOWARDS CURB. UPON COMPLETION OF FINAL GRADING THE TOES OF ALL EMBANKMENTS IN EXCESS OF TWO FEET IN HEIGHT WILL HAVE EROSION CONTROL SEDIMENT FENCE INSTALLED.
- 27. EROSION CONTROL SEDIMENT FENCE OR OTHER STRUCTURE MUST BE PLACED TO CONTROL RUNOFF DURING LOT DEVELOPMENT (BY OTHERS).

JED	JED	JED	JAD	DSN DWN C	
MAC	MAC	MAC	MAC	NSO	
TS	TS	TS			
07/24/24 PER CITY COMMENTS	07/23/24 PER CITY COMMENTS	06/13/24 PER CITY COMMENTS	05/01/24 INITIAL SUBMITTAL	DATE DESCRIPTION	
07/24/24	07/23/24	06/13/24	05/01/24	DATE	
3	2	<u></u>	0	REV	
AT	MI MI	W. W.	(in		



MATTHEW A. CROSS ENGINEER MO # 2020008364

GINEERING

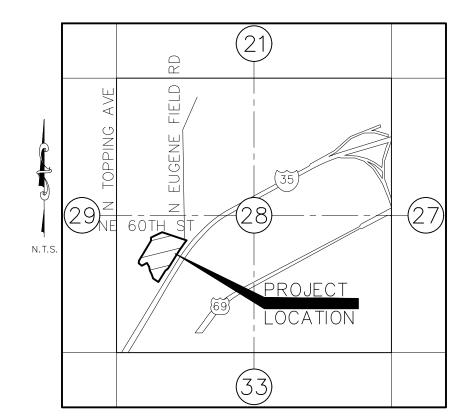


DESIGNER DRAWN E

THIS DRAWING SHALL NOT RE LITHLIZED BY ANY PERSON FIRM OR CORPORATION IN WHOLF OR IN PART WITHOLIT THE SPECIFIC PERMISSION OF KAW VALLEY ENGINEERING. INC

# FINAL STREAM BUFFER PLAN

SEC 28 - T51N - R32W KANSAS CITY, PLATTE COUNTY, MISSOURI



SECTION VICINITY MAP SEC. 28 - TWP 51N - RNG 32W CITY OF KANSAS CITY, MISSOURI

### LEGEND CREEK CENTERLINE --- ORDINARY HIGH WATER LIMITS OF SUB-DRAINAGE AREA ----- LIMITS OF STREAMSIDE ZONE LIMITS OF OUTER ZONE LIMITS OF EXISTING SUB-DRAINAGE AREA — — — EXISTING EASEMENT LINE ----- CENTERLINE OF EXISTING EASEMENT LINE THE FIELD DELINEATED MATURE RIPARIAN VEGETATIVE LIMITS AREA WITH MATURE RIPARIAN VEGETATION OR SLOPES OF 15% OR GREATER

AREA OF DISTURBANCE WITHIN OUTER ZONE

NOTES:

1. THERE IS BOTH A FLOODPLAIN AND FLOODWAY ASSOCIATED WITH THIS PROPERTY.

### FLOOD STATEMENT:

THE ACCURACY OF ANY FLOOD HAZARD DATA SHOWN HEREON IS SUBJECT TO MAP SCALE UNCERTAINTY AND TO ANY OTHER UNCERTAINTY IN LOCATION OR ELEVATION ON THE REFERENCED FLOOD INSURANCE RATE MAP. THE SURVEYED PROPERTY LIES WITHIN FLOOD HAZARD ZONE "X, NON-SHADED, AREA OF MINIMAL FLOOD HAZARD" AS SAID PROPERTY PLOTS BY SCALE ON THE FLOOD INSURANCE RATE MAP FOR THE CITY OF KANSAS CITY, FLOOD MAP FOR THE SELECTED AREA IS NUMBER 29095C0134G, EFFECTIVE ON 01/20/2017.

- TIMBER RIDGE DRIVING RANGE RECORDED WITH DOC NO. L82761 IN BK. D,
- MAPLE PARK GARDENS RECORDED WITH DOC NO. 00312.D IN BK. B AT
- SURVEY PERFORMED BY KAW VALLEY ENGINNERRING, WITH PROJECT NO. B21S4185, DATED MAY 6, 2021.

### BASIS OF BEARINGS:

SOUTH 31°51'14" WEST ALONG THE EAST LINE OF LOT 1, TIMBER RIDGE DRIVING RANGE AS DETERMINED BY GLOBAL POSITIONING SYSTEM OBSERVATIONS USING MODOT VRS, 2018 GEOID, AND REFERENCED TO THE MISSOURI STATE PLANE COORDINATE SYSTEM, WEST ZONE (NAD83).

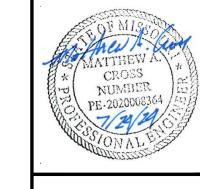
DATUM IS U.S. SURVEY FEET AND REFERS TO NAVD88 DATUM DERIVED FROM CONNECTIONS TO NATIONAL CORS NETWORK VIA GPS STATIC SESSIONS ON PROJECT CONTROL PROCESSED WITH THE NATIONAL GEODETIC SURVEY'S OPUS PROJECTS UTILITY. ORTHOMETRIC HEIGHT WAS CALCULATED USING THE GEOID12B MODEL.

**CONTROL POINTS:** CP#103 MAG NAIL 60D NAIL N=1104010.75' N=1103747.00'

E=2785913.44'

ELEV=804.54'





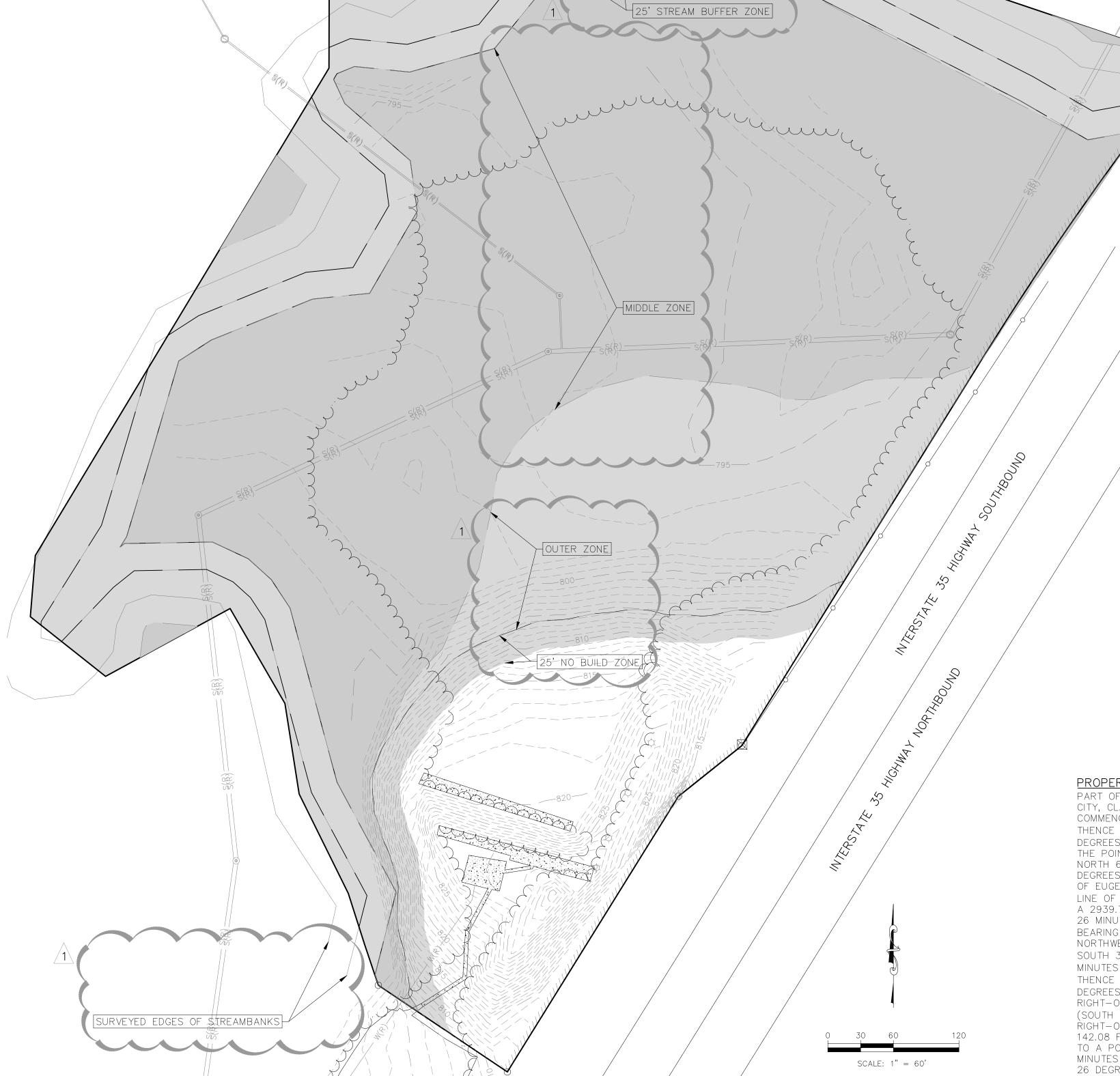
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MATTHEW A. CROSS ENGINEER MO # 2020008364

ENGINEERING

DESIGNER DRAWN E

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# STREAM SIDE ZONE = 2.82 ACRES

STREAM BUFFER DATA

MIDDLE ZONE = 8.65 ACRES OUTER ZONE = 2.17 ACRES OUTER ZONE USED FOR DEVELOPMENT = 1.08 ACRES (49.8%) AREA OF MATURE RIPARIAN VEGETATION AND STEEP = 0.46 ACRES

SLOPES IN THE OUTER ZONE AREA OF PROPOSED CLEARING AND = 1.08 ACRES GRADING IN THE OUTER ZONE

PERCENTAGE OF OUTER ZONE TO BE CLEARED = 49.8%

5330 OAK RIDGE REALTY, LLC 1804 SWIFT AVE., STA 101 KANSAS CITY. MO 64116 CONTACT: CHUCK V. CUDA PHONE: (816) 268-4493 EMAIL: cuda@opescre.com

### PREPARED BY:

KAW VALLEY ENGINEERING 8040 N. OAK TRAFFICWAY KANSAS CITY, MO. 64118 CONTACT: MATT CROSS, PE PHONE: 816-468-5858 EMAIL: cross@kveng.com

### PROPERTY DESCRIPTION:

PART OF LOT 1, TIMBER RIDGE DRIVING RANGE, AS SUBDIVISION OF LAND IN KANSAS CITY, CLAY COUNTY, MISSOUR5I, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHWEST CORNER OF LOT 1, TIMBER RIDGE DRIVING RANGE; THENCE SOUTH 0 DEGREES 09 MINUTES 46 SECONDS WEST 190.00 FEET (SOUTH 0 DEGREES 02 MINUTES 13 SECONDS WEST-PLAT) ALONG THE WEST LINE OF LOT 1, TO THE POINT OF BEGINNING OF THE TRACT OF LAND HEREINAFTER DESCRIBED: THENCE NORTH 64 DEGREES 45 MINUTES 45 SECONDS EAST 273.70 FEET; THENCE SOUTH 71 DEGREES 18 MINUTES 56 SECONDS EAST 570.50 FEET TO A POINT ON THE CENTERLINE OF EUGENE FIELD STREET, SAID POINT BEING ON THE NORTHWESTERLY RIGHT-OF-WAY LINE OF U.S INTERSTATE HIGHWAY NO.35; THENCE SOUTHWESTERLY 330.12 FEET (BEING A 2939.79 FOOT RADIUS CURVE TO THE LEFT HAVING A CENTRAL ANGLE OF 6 DEGREES 26 MINUTES 02 SECONDS, AN ARC LENGTH OF 330.12 FEET AND AN INITIAL TANGENT BEARING OF SOUTH 38 DEGREES 17 MINUTES 18 SECONDS WEST) ALONG THE NORTHWESTERLY RIGHT-OF-WAY LINE OF U.S. INTERSTATE HIGHWAY NO.35; THENCE SOUTH 31 DEGREES 51 MINUTES 16 SECONDS WEST 418.40 FEET (SOUTH 31 DEGREES 51 MINUTES 14 SECONDS WEST-PLAT) ALONG THE NORTHWESTERLY RIGHT-OF-WAY LINE; THENCE SOUTH 51 DEGREES 30 MINUTES 30 SECONDS WEST 74.33 FEET (SOUTH 51 DEGREES 22 MINUTES 57 SECONDS WEST-PLAT) ALONG THE NORTHWESTERLY RIGHT-OF-WAY LINE; SOUTH 31 DEGREES 51 MINUTES 16 SECONDS WEST 297.16 FEET (SOUTH 31 DEGREES 51 MINUTES 14 SECONDS WEST-PLAT) ALONG THE NORTHWESTERLY RIGHT-OF-WAY LINE; THENCE NORTH 56 DEGREES 03 MINÚTES 32 SECONDS WEST 142.08 FEET; THENCE NORTH 18 DEGREES 37 MINUTES 38 SECONDS WEST 39.10 FEET TO A POINT IN THE CENTERLINE OF AN EXISTING CREEK; THENCE NORTH 17 DEGREES 42 MINUTES 02 SECONDS WEST 49.34 FEET ALONG THE SAID CENTERLINE: THENCE NORTH 26 DEGREES 18 MINUTES 46 SECONDS WEST 101.52 FEET ALONG THE SAID CENTERLINE; THENCE NORTH 8 DEGREES 54 MINUTES 06 SECONDS WEST 84.02 FEET ALONG THE SAID CENTERLINE; THENCE NORTH 29 DEGREES 59 MINUTES 11 SECONDS WEST 100.34 FEET ALONG THE SAID CENTERLINE; THENCE SOUTH 61 DEGREES 27 MINUTES 36 SECONDS WEST 129.77 FEET ALONG THE SAID CENTERLINE; THENCE NORTH 51 DEGREES 33 MINUTES 40 SECONDS WEST 89.19 FEET ALONG THE SAID CENTERLINE TO A POINT ON THE WEST LINE OF LOT 1, TIMBER RIDGE DRIVING RANGE; THENCE NORTH 4 DEGREES 37 MINUTES 48 SECONDS EAST 59.25 FEET (NORTH 4 DEGREES 30 MINUTES 15 SECONDS EAST-PLAT) TO A WESTERLY CORNER OF LOT 1, THENCE NORTH 31 DEGREES 03 MINUTES 21 SECONDS EAST 522.99 FEET (NORTH 30 DEGREES 55 MINUTES 48 SECONDS E=2786041.92' EAST-PLAT) TO A WESTERLY CORNER OF LOT 1, SAID POINT BEING SOUTH O DEGREES ELEV=830.62' 09 MINUTES 46 SECONDS WEST 255.32 FEET (SOUTH 0 DEGREES 02 MINUTES 13 SECONDS WEST 255.08 FEET-PLAT) FROM THE NORTHEAST CORNER OF LOT 1; THENCE O DEGREES 09 MINUTES 46 SECONDS EAST 65.32 FEET (NORTH O DEGREES 02 MINUTES 13 SECONDS EAST- PLAT) ALONG THE WEST LINE OF LOT 2 TO THE POINT OF BEGINNING, EXPECT THAT PART IN STREETS, ROADS, OR HIGHWAYS.



	Tree P	e Preservation and Protection						
		Tree Canopy (sqft)	Tree Canopy (ac)					
	Existing	262172	6.02					
	Removed	29668	0.68					
	Preserved	232504	5.34					

### GENERAL NOTES

- 1. PROPERTY ADDRESS: 5870 NORTHEAST OAK RIDGE DRIVE, KANSAS CITY, MISSOURI 64119
- 2. GROSS LAND AREA: 13.64 ACRES, MORE OR LESS.
- 3. THE SURVEY WAS EXECUTED IN ACCORDANCE WITH LAWS AND STANDARDS FOR THE STATE OF
- 4. THE PROPERTY HAS DIRECT ACCESS TO NORTHEAST OAK RIDGE DRIVE, A DEDICATED PUBLIC STREET.
  5. NO MITIGATION SHALL BE REQUIRED IF CONTIGUOUS TREE CANOPY COVER REMOVED IS LESS THAN
  - ONE ACRE.

NOTES:

- 1 TREES TO REMAIN
- 2 REMOVE TREES

LEGEND

TREE LINE

EXISTING 1' CONTOUR INTERVALS

TREE CANOPY TO BE REMOVED

3 07/24/24 PER CITY COMMENTS
2 07/23/24 PER CITY COMMENTS
1 06/13/24 PER CITY COMMENTS
0 05/01/24 INITIAL SUBMITTAL

REV DATE DESCRIPTION
DSN D



MATTHEW A. CROSS ENGINEER MO # 2020008364

8040 N. OAK TRAFFICWAY
KANSAS CITY, MISSOURI 64118
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kc@kveng.com | www.kveng.com

VALLEY ENGINEERING
INC., IS AUTHORIZED TO OFFER ENGINEERING
ATF CFRIFICATE OF AUTHORITY # 000842

KAW VALLEY ENGINEERING, INC., IS A SERVICES BY MISSOUR! STATE CERTIF EXPIRES 12/31/25

RIDGE DR 7, MO, 64119 NT PLAN

CANDER ON BORGER DEVELOPMENT OF THE PROPERTY O

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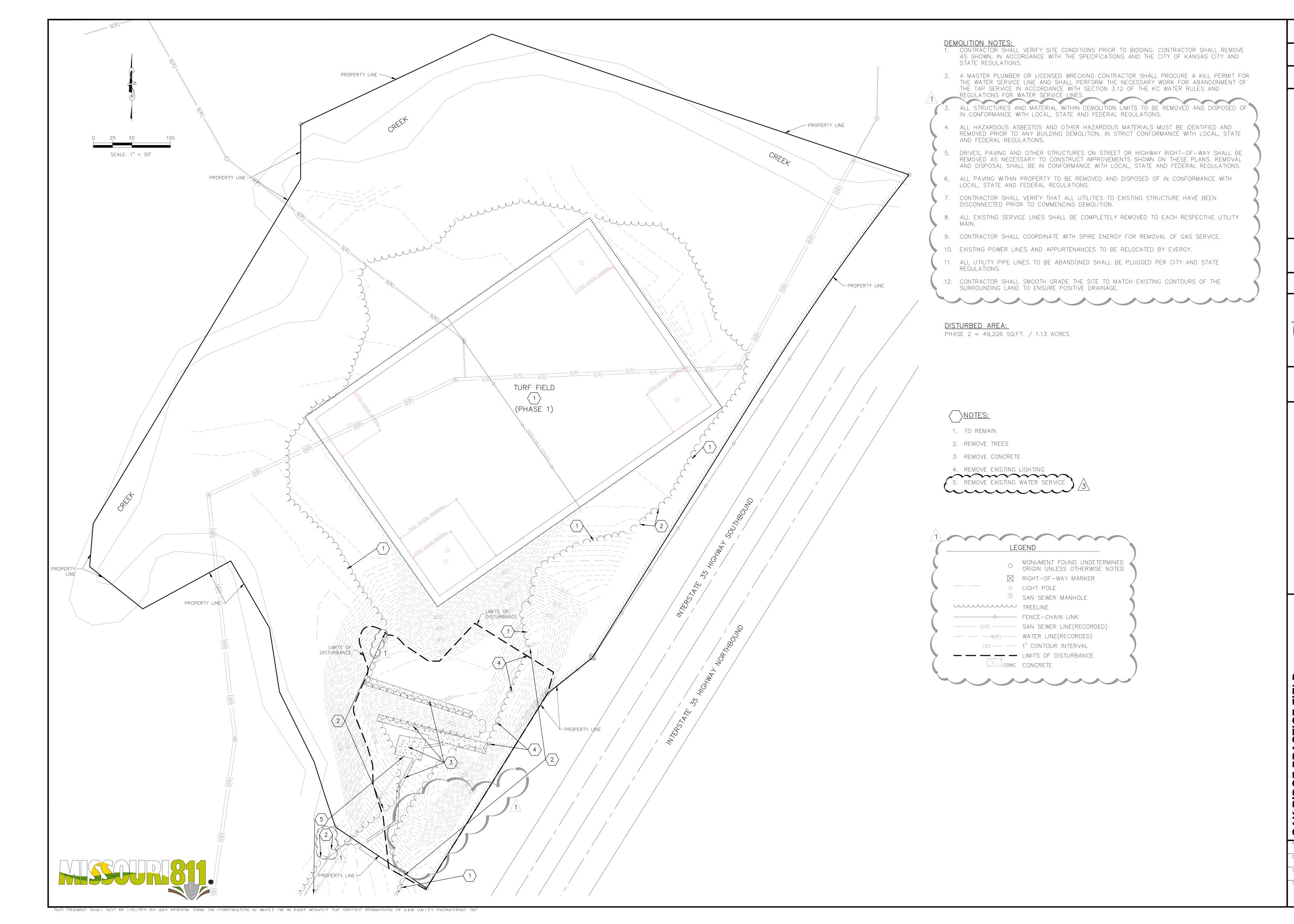
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CFN

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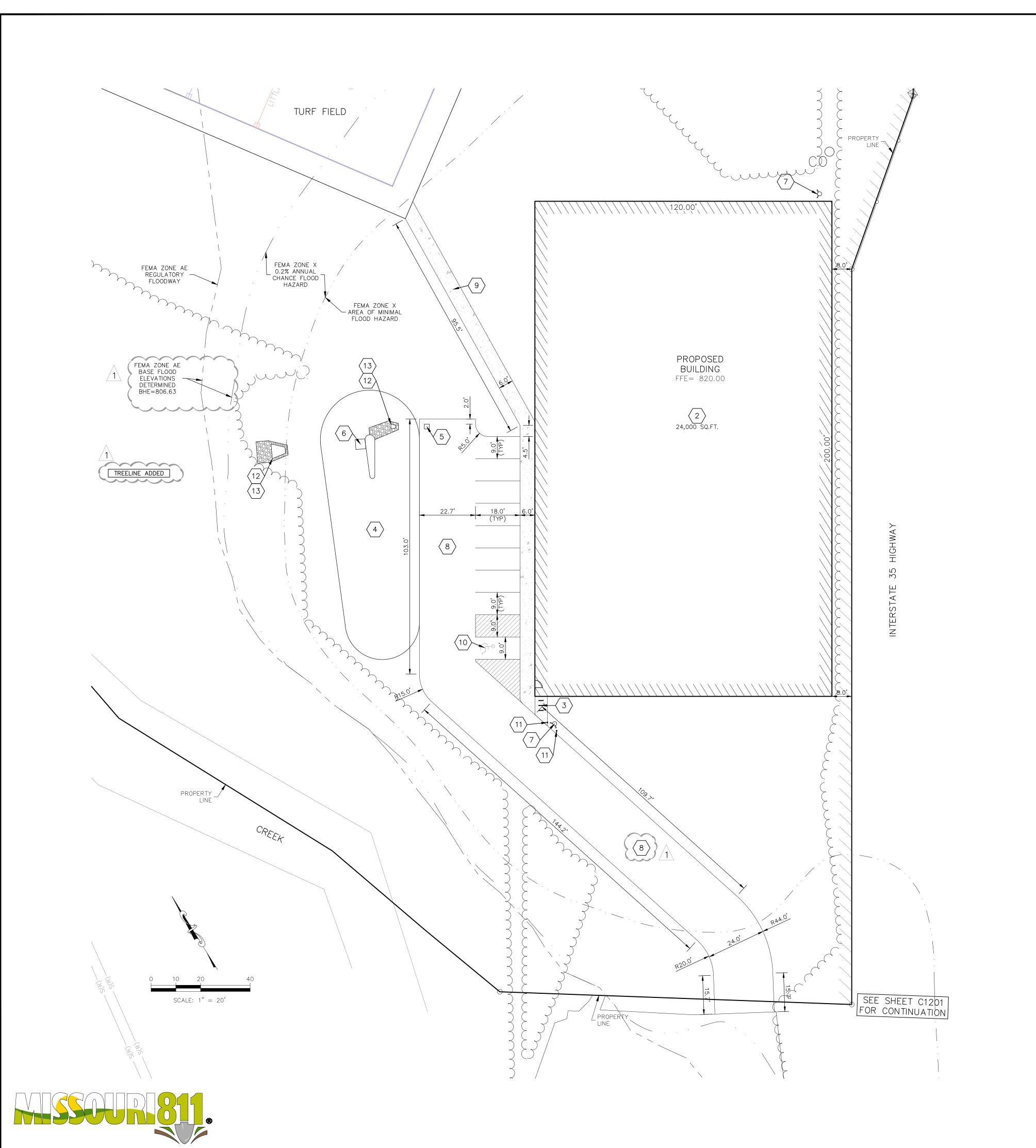
MATTHEW A. CROSS ENGINEER MO # 2020008364

ENGINEERING

B23D4618

DESIGNER DRAWN BY

C1100



1. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRANCE, SLOPED PAVING, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.

2. THESE PLANS HAVE <u>NOT</u> BEEN VERIFIED WITH FINAL ARCHITECTURAL CONTRACT DRAWINGS. CONTRACTOR SHALL VERIFY AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES. CONTRACTOR IS FULLY RESPONSIBLE FOR REVIEW AND COORDINATION OF ALL DRAWINGS AND CONTRACTOR DOCUMENTS.

3. ALL DIMENSIONS ARE TO BACK OF CURB UNLESS NOTED OTHERWISE.

4. ALL DIMENSIONS ARE PERPENDICULAR TO PROPERTY LINE.

**CONSTRUCTION NOTES:** 

1. COORDINATE START-UP AND ALL CONSTRUCTION ACTIVITIES WITH OWNER.

- 2. CONSTRUCTION METHODS AND MATERIALS NOT SPECIFIED IN THESE PLANS ARE TO MEET OR EXCEED THE CITY OF KANSAS CITY, MISSOURI.
- 3. ALL CONSTRUCTION WORK AND UTILITY WORK OUTSIDE OF PROPERTY BOUNDARIES SHALL BE PERFORMED IN COOPERATION, AND IN ACCORDANCE WITH, REGULATIONS OF THE AUTHORITIES
- 4. PUBLIC CONVENIENCE AND SAFETY: THE CONTRACTOR SHALL CONDUCT THE WORK IN A MANNER THAT WILL ENSURE, AS FAR AS PRACTICABLE, THE LEAST OBSTRUCTION TO TRAFFIC, AND SHALL PROVIDE FOR THE CONVENIENCE AND SAFETY OF THE GENERAL PUBLIC AND RESIDENTS ALONG, AND ADJACENT TO, HIGHWAYS IN THE CONSTRUCTION AREA.
- 5. ALL DIMENSIONS SHOWN ARE TO THE BACK OF CURB UNLESS OTHERWISE NOTED.
- 6. ACCESSIBLE STALLS SHOWN WITH A "V" SHALL BE 16'-0" MIN. AND SHALL HAVE A SIGN DESIGNATING "VAN-ACCESSIBLE". SEE DETAIL 10 AND 120.
- 7. CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL. ALL TRAFFIC CONTROL DEVICES, INSTALLATION, AND OPERATIONS, SHALL CONFORM WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
- 8. PAINT FOR STRIPING ON PUBLIC STREETS, HIGHWAYS, AND ENTRANCES, SHALL BE REFLECTORIZED PAINT CONFORMING TO THE SPECIFICATIONS OR REQUIREMENTS OF THE AUTHORITY GOVERNING THE STREET OR HIGHWAY.
- 9. ALL WATER SERVICE INSTALLATIONS INCLUDING BACKFLOW DEVICES ARE SUBJECT TO FIELD VERIFICATION AND APPROVAL BY THE WATER DEPARTMENT INSPECTOR.

NOTES:

1. EXISTING PRIVATE DRIVE

2. PROPOSED BUILDING

3. BICYCLE U-RACK

4. DETENTION POND (CONTRACTOR TO

MAINTAIN/CLEAN) 5. 2'X2' ROAD & HIGHWAY GRATE INLET

6. DETENTION RELEASE STRUCTURE

10. ADA ACCESSIBLE SPACE STRIPING 11. BOLLARD

12. RIP RAP AT FES

13. FLARED END SECTION

MONUMENT FOUND UNDETERMINED ORIGIN UNLESS OTHERWISE NOTED

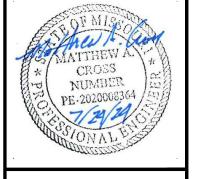
sq. ft. square feet HANDICAP PAINTED SYMBOL

(3) PARKING STALL COUNT

CONCRETE SURFACE

GRAVEL SURFACE

----725 --- 1' CONTOUR INTERVAL

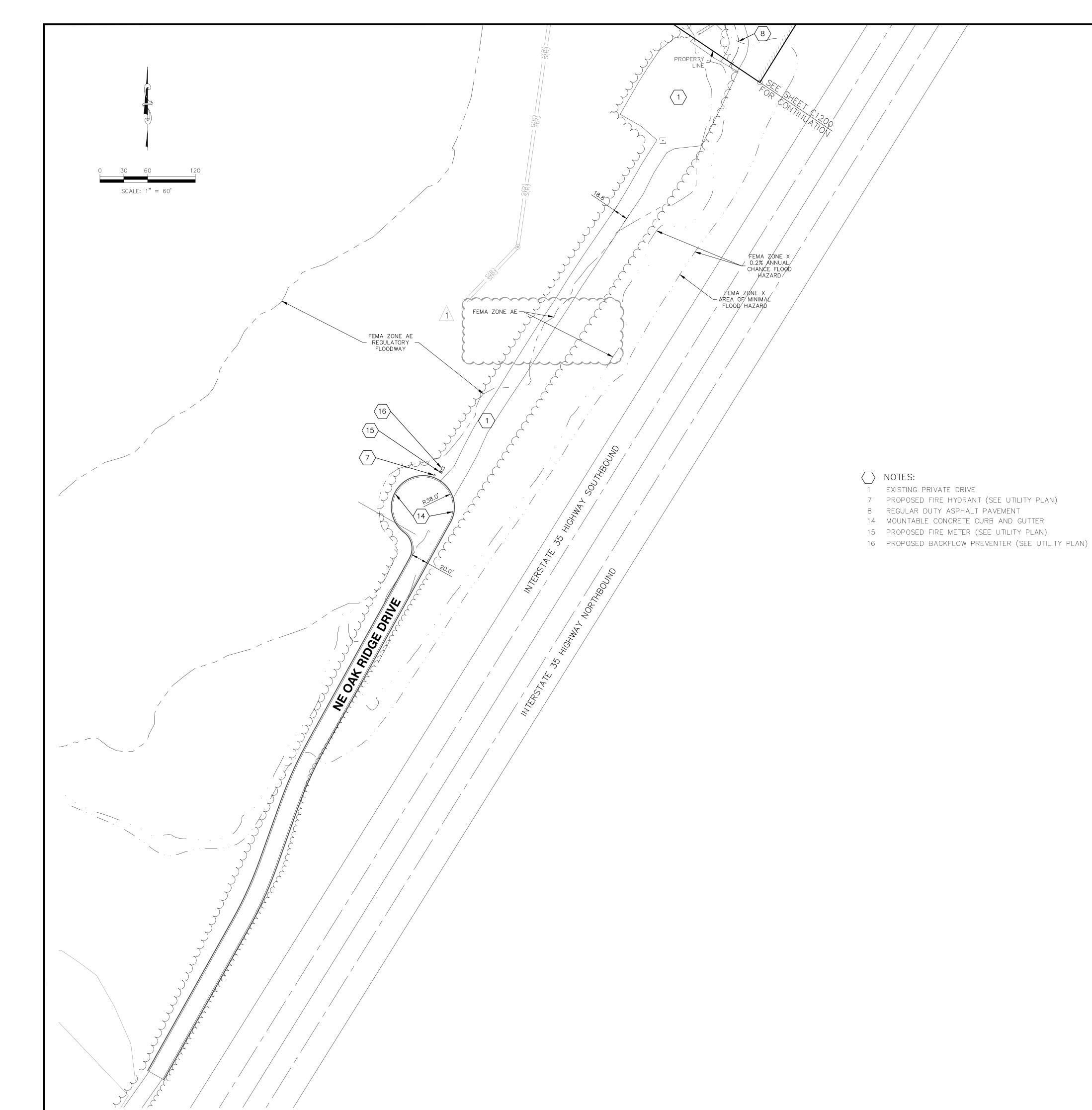


MATTHEW A. CROSS ENGINEER MO # 2020008364

ENGINEERING

B23D4618

DESIGNER DRAWN BY



NC

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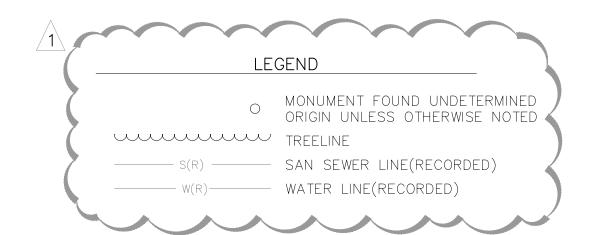
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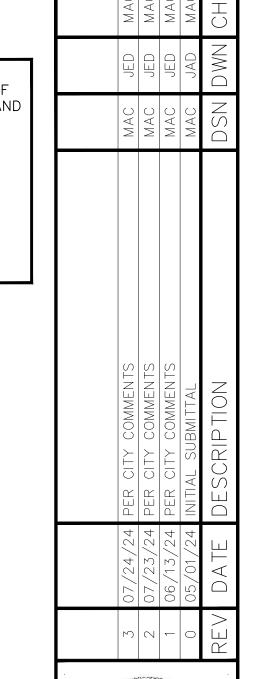
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ALLEY ENGINEERING

C., IS AUTHORIZED TO OFFER ENGINEERING
CERTIFICATE OF AUTHORITY # 000842.



KAW VALLEY

Y, MO, 64119 NT PLAN

370 NE OAK RIDGE DR ANSAS CITY, MO, 64119 EVELOPMENT PLAN

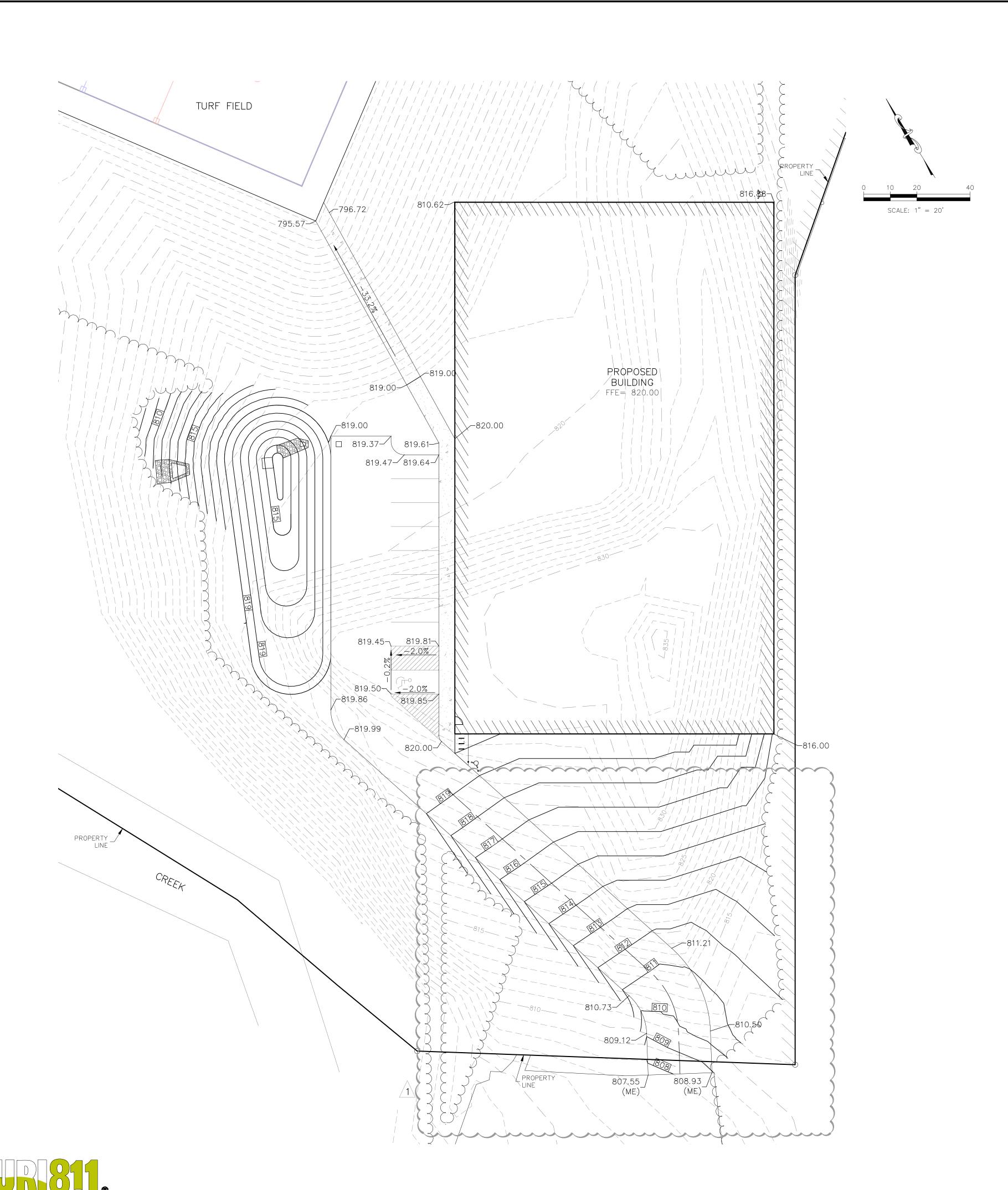
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B2

MAC DRAI

CFN
4618SP

4618SP

MSSOURIST.



### **GRADING NOTE**

- 1. THE CONSTRUCTION AREA SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL AND ORGANIC MATTER FROM ALL AREAS TO BE OCCUPIED BY BUILDING AND PAVING. TOPSOIL FOR REPLACEMENT ON SLOPES MAY BE STOCKPILED ON SITE. EXCESS TOPSOIL MAY BE WASTED IN FILL SLOPES PROVIDED THAT NO TOPSOIL WILL BE WASTED WITHIN 10 FEET OF THE EDGE OF THE BUILDING OR PARKING AREA. BURNING OF TIMBER WILL NOT BE PERMITTED UNLESS APPROVAL IS OBTAINED FROM GOVERNING OFFICIALS. STRIPPING EXISTING TOPSOIL AND ORGANIC MATTER SHALL BE TO A MINIMUM DEPTH OF 6 INCHES.
- 2. AREAS TO RECEIVE FILL SHALL BE SCARIFIED AND THE TOP 8—INCH DEPTH COMPACTED TO 95% STANDARD PROCTOR DENSITY. ANY UNSUITABLE AREAS SHALL BE UNDERCUT AND REPLACED WITH SUITABLE MATERIAL BEFORE ANY FILL MATERIAL CAN BE APPLIED.
- 3. OFF-SITE FILL MATERIAL SHALL HAVE A PLASTICITY INDEX OF 25 OR LESS, A LIQUID LIMIT OF 45 OR LESS AND CONTAIN NO ROCK LARGER THAN FOUR INCHES. OFF-SITE FILL MATERIAL SHALL BE APPROVED BY THE OWNER PRIOR TO BRINGING ON SITE.
- 4. EARTHWORK UNDER THE BUILDING SHALL COMPLY WITH THE PROJECT ARCHITECTURAL PLANS. OTHER FILL MATERIAL SHALL BE MADE IN LIFTS NOT TO EXCEED EIGHT INCHES DEPTH COMPACTED TO 95% STANDARD PROCTOR DENSITY. FILL MATERIAL MAY INCLUDE ROCK FROM ON-SITE EXCAVATION IF CAREFULLY PLACED SO THAT LARGE STONES ARE WELL DISTRIBUTED AND VOIDS ARE COMPLETELY FILLED WITH SMALLER STONES, EARTH, SAND OR GRAVEL TO FURNISH A SOLID EMBANKMENT. NO ROCK LARGER THAN THREE INCHES IN ANY DIMENSION NOR ANY SHALE SHALL BE PLACED IN THE TOP 12 INCHES OF EMBANKMENT.
- 5. AREAS THAT ARE TO BE CUT TO SUBGRADE LEVELS SHALL BE PROOF ROLLED WITH A MODERATELY HEAVY LOADED DUMP TRUCK OR SIMILAR APPROVED CONSTRUCTION EQUIPMENT TO DETECT UNSUITABLE SOIL CONDITIONS.
- 6. IN ALL AREAS OF EXCAVATION, IF UNSUITABLE SOIL CONDITIONS ARE ENCOUNTERED, A QUALIFIED GEOTECHNICAL ENGINEER SHALL RECOMMEND TO THE OWNER THE METHODS OF UNDERCUTTING AND REPLACEMENT OF PROPERLY COMPACTED, APPROVED FILL MATERIAL. ALL PROOFROLLING AND UNDERCUTTING SHOULD BE PERFORMED DURING A PERIOD OF DRY WEATHER.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
- 8. ALL SLOPES ARE TO BE 3:1 OR FLATTER UNLESS OTHERWISE INDICATED.
- 9. ALL SLOPES EXCEEDING 3:1 SHALL BE PROTECTED BY RIP RAP, CONCRETE PAVING, OR OTHER METHODS INDICATED ON THESE PLANS, THAT WILL PREVENT EROSION AND PLACED SUCH THAT THE SURFACE IS FLUSH WITH SURROUNDING GROUND AND SHAPED TO CHANNEL WATER IN DIRECTIONS INDICATED.
- 10. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH AND FOUR INCHES OF TOPSOIL APPLIED. IF ADEQUATE TOPSOIL IS NOT AVAILABLE ON—SITE, THE CONTRACTOR SHALL PROVIDE TOPSOIL, APPROVED BY THE OWNER, AS NEEDED. THE AREA SHALL THEN BE SEEDED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.
- 11. CONTRACTOR SHALL USE SILT FENCE, BALES OF HAY OR OTHER MEANS OF CONTROLLING EROSION ALONG THE EDGE OF THE PROPERTY OR OTHER BOTTOM OF SLOPE LOCATIONS.
- 12. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS.
- 13. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES TO THE ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASES OF THIS PROJECT.
- 14. IT IS NOT THE DUTY OF THE ENGINEER OR THE OWNER TO REVIEW THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE AT ANY TIME DURING CONSTRUCTION.

IF DISCREPANCIES EXIST BETWEEN THE GRADING NOTES HEREON, AND THE RECOMMENDATIONS OUTLINED IN THE PROJECT GEOTECHNICAL REPORT, THE RECOMMENDATIONS OUTLINED IN THE GEOTECHNICAL REPORT SHALL GOVERN.

LEGEND (PROPOSED)

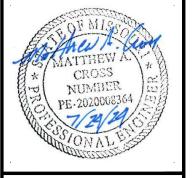
(ME) MATCH EXISTING

-82.92 SPOT ELEVATION
TOP OF PAVEMENT

\_\_\_\_\_ FINISHED 1' CONTOUR INTERVALS

890 EXISTING 1' CONTOUR INTERVALS

07/24/24PER CITY COMMENTSMACJE07/23/24PER CITY COMMENTSMACJE06/13/24PER CITY COMMENTSMACJE05/01/24INITIAL SUBMITTALMACJADATEDESCRIPTIONDW



MATTHEW A. CROSS ENGINEER MO # 2020008364

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ACTICE FIELD

70 NE OAK RIDGE DR ANSAS CITY, MO, 64119 EVELOPMENT PLAN

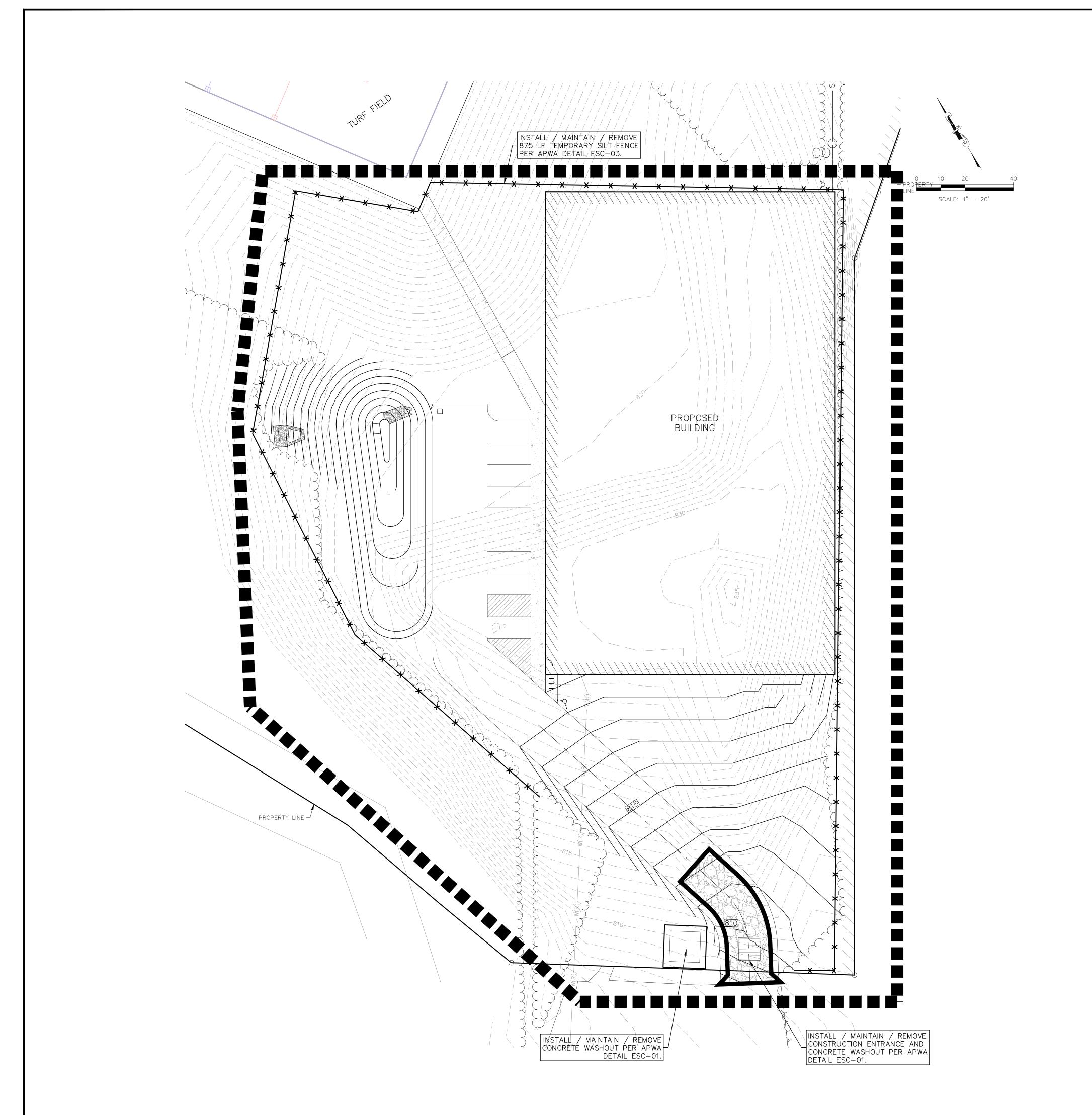
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ESIGNER DRAWN BY

MAC JED

21300

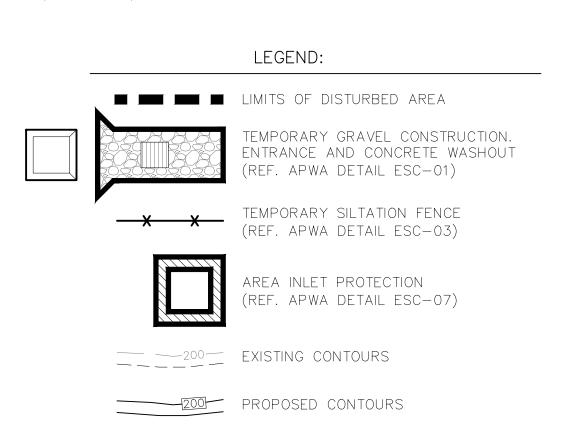
NG SHALL NOT RE LITHITED RY ANY PERSON FIRM OR CORPORATION IN WHOLE OR IN PART WITHOLIT THE SPECIFIC PERMISSION OF KAW VALLEY ENGINEERING INC



### **EROSION CONTROL NOTES:**

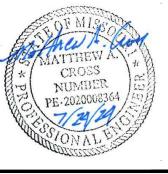
1. PROPERTY LINE IS LIMITS OF CONSTRUCTION EXCEPT AS SHOWN.

- 2. THE CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE DRAWINGS PRIOR TO BEGINNING EARTHWORK OPERATIONS AND DURING APPROPRIATE PHASING AS CONSTRUCTION PROGRESSES.
- 3. THE CONTRACTOR SHALL MAINTAIN ALL SILT CONTROL MEASURES DURING CONSTRUCTION. BUILDERS AND OR DEVELOPER TO MAINTAIN EROSION CONTROL AND SILT CONTROL UPON COMPLETION OF THIS PROJECT.
- 4. ALL SILT SHALL REMAIN ON SITE AND SURROUNDING STREETS SHALL BE KEPT CLEAR OF ALL MUD AND
- 5. SEDIMENTATION BARRIERS ARE TO BE INSTALLED AS SHOWN AND AT ANY ADDITIONAL AREAS OF CONCENTRATED FLOWS NOT SHOWN ON PLANS.
- 6. ACCUMULATED SEDIMENT SHALL BE REMOVED AND THE SEDIMENTATION BARRIERS MAINTAINED AS NEEDED TO PREVENT SEDIMENTATION BYPASS OF THE BARRIER.
- 7. SLOPES ARE TO BE LEFT IN A ROUGH CONDITION DURING GRADING.
- 8. CURB INLET SEDIMENTATION BARRIERS ARE TO BE INSTALLED AROUND INLETS AND WEIRS WHERE SEDIMENTATION IS A CONCERN. INLET BARRIERS SHALL BE FILTERS, OR SILT FENCE, OR STRAW BALES (PRIOR TO PAVING PLACEMENT). AFTER PAVEMENT IS IN PLACE, PROVIDE FILTER PROTECTION THAT CANNOT BE WASHED INTO INLETS OR WASHED AWAY. STRAW/HAY BALES WILL NOT BE ALLOWED ON CONCRETE OR ASPHALT PAVING.
- 9. SEDIMENT IS TO BE REMOVED FROM STORM WATER DRAINAGE SYSTEMS. ALL SEDIMENT CONTROL MEASURES TO BE INSPECTED AND REPAIRED IMMEDIATELY AND ON A REGULAR BASIS AFTER ALL RAIN STORMS.
- 10. RIPRAP IS TO BE INSTALLED AT AREAS OF CONCENTRATED FLOW (I.E. CULVERT OUTLETS).
- 11. CONTRACTOR IS RESPONSIBLE FOR INSTALLING ANY ADDITIONAL EROSION CONTROL AS HE/SHE DEEMS NECESSARY TO PREVENT SEDIMENT FROM ENTERING STORM DRAINS, STREETS, AND WATERWAYS.
- 12. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS, TOOLS, EQUIPMENT AND LABOR AS NECESSARY TO INSTALL AND MAINTAIN ADEQUATE EROSION AND SILTATION CONTROLS REQUIRED TO PREVENT SOIL EROSION FROM LEAVING THE PROJECT SITE. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO ENSURE THAT METHODS UTILIZED ARE ADEQUATE AND COMPLY WITH REQUIREMENTS OF THE SPECIFICATIONS AND GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK.
- 13. TEMPORARY SEDIMENT FENCE EROSION CONTROL MEASURES TO REMAIN UNTIL ADEQUATE VEGETATION IS ESTABLISHED. ON PROJECTS THAT ARE NOT EXPECTING IMMEDIATE DEVELOPMENT (I.E.— INTERCEPTOR SEWERS, OFFSITE IMPROVEMENTS, ETC.) EROSION CONTROL MEASURES ARE TO BE REMOVED BY CONTRACTOR AS SOON AS ADEQUATE VEGETATION IS ESTABLISHED.
- 14. MUD, SILT, AND DEBRIS SHALL BE CLEANED UP AT THE CONCLUSION OF EACH WORKING DAY, OR AFTER EACH RAINFALL.
- 15. INSPECTION, MAINTENANCE AND REPAIR OF EROSION CONTROL DEVICES SHALL BE ON GOING THROUGHOUT THE LIFE OF INFRASTRUCTURE AND BUILDING CONSTRUCTION TO KEEP THE DEVICES IN OPERABLE CONDITION AT ALL TIMES. ADDITIONAL MEASURES SHALL BE INSTALLED AS REQUIRED BY ACTUAL FIELD CONDITIONS AND/OR GOVERNING INSPECTION AGENCIES. NOTE: ALTHOUGH EXTENSIVE EFFORT IS PUT INTO THE DESIGN OF THE EROSION CONTROL PLAN BY THE ENGINEER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR/DEVELOPER TO ENSURE THAT ANY ADDITIONAL REQUIRED EROSION CONTROL MEASURES ARE INSTALLED AND MAINTAINED AT NO ADDITIONAL COST TO THE OWNER.
- 16. INSTALL AND MAINTAIN CONSTRUCTION ENTRANCE(S) AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING THE SITE AND AS SHOWN ON PLANS.
- 17. AT COMPLETION OF SITE GRADING AND OTHER RELATED CONSTRUCTION ACTIVITIES, ALL DISTURBED AREAS WITHIN THE PROJECT SITE SHALL BE SEEDED, SODDED, OR LANDSCAPED, FLAT LOTS WILL NOT REQUIRE SEEDING BUT ALL SLOPES, DISTURBED AREAS AND STREET RIGHT—OF—WAYS WILL BE SEEDED.
- 18. TOPSOIL IS TO BE PLACED IN AREAS UNSUITABLE FOR VEGETATIVE GROWTH.
- 19. STRIP TOPSOIL PRIOR TO EXCAVATION, STOCKPILE AND SPREAD ONTO DISKED SUBGRADE (4" MIN) A THICKNESS OF 4 INCHES.
- 20. ROCK LINING (RIPRAP) SHALL BE DURABLE STONE CONTAINING A COMBINED TOTAL OF NOT MORE THAN 10 PERCENT OF EARTH, SAND, SHALE AND NON-DURABLE ROCK. AT LEAST 60 PERCENT OF THE MASS SHALL BE OF PIECES HAVING A MINIMUM WEIGHT OF 150 POUNDS OR MORE PER CUBIC FOOT.
- 21. THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY FOR RESOLVING COMPLAINTS IN THE EVENT THAT COMPLAINTS OR DAMAGE CLAIMS ARE FILED DUE TO DAMAGES OCCURRING, ADJACENT TO OR DOWNSTREAM FROM PROPERTY, BY SEDIMENT RESULTING FROM EROSION ON THE PROJECT SITE.
- 22. GOOD HOUSEKEEPING PRACTICES SHALL BE MAINTAINED ON SITE TO KEEP SOLID WASTE FROM ENTRY INTO
- 23. ALL FUELING FACILITIES PRESENT ON SITE SHALL ADHERE TO APPLICABLE FEDERAL AND STATE REQUIREMENTS CONCERNING UNDERGROUND STORAGE, ABOVE GROUND STORAGE AND DISPENSERS, INCLUDING SPILL PREVENTION, CONTROL AND COUNTER MEASURES.
- 24. MINIMAL WASHING OF CONCRETE EQUIPMENT ALLOWED (CHUTE, TOOLS, ETC.) AT A CONTRACTOR DEFINED LOCATION. CONCRETE WASHOUT OF THE DRUM IS NOT ALLOWED. ANY PIT/WASHOUT AREA NEEDS TO BE MAINTAINED IN A NON-DISCHARGING MANNER AND ANY WASTE RESIDUE WILL NEED TO BE CLEANED OUT AND REMOVED AT THE END OF PROJECT.
- 25. DEVELOPER IS RESPONSIBLE FOR HAVING LOT BUILDERS FOLLOW THE GUIDELINES OF "CONTROLLING EROSION WHEN BUILDING YOUR HOME" PROVIDED BY MISSOURI DEPARTMENT OF HEALTH AND ENVIRONMENT.
- 26. EROSION CONTROL STRAW/FIBER WATTLES TO BE INSTALLED 1'-0" BEHIND CURB & GUTTER UPON COMPLETION OF BACKFILL OF CURB IN ALL AREAS WHERE SLOPES FROM LOT DRAIN TOWARDS CURB. UPON COMPLETION OF FINAL GRADING THE TOES OF ALL EMBANKMENTS IN EXCESS OF TWO FEET IN HEIGHT WILL HAVE EROSION CONTROL SEDIMENT FENCE INSTALLED.
- 27. EROSION CONTROL SEDIMENT FENCE OR OTHER STRUCTURE MUST BE PLACED TO CONTROL RUNOFF DURING LOT DEVELOPMENT (BY OTHERS).





3 07/24/24 PER CITY COMMENTS
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VALLEY ENGINEERING
NC., IS AUTHORIZED TO OFFER ENGINEERING
F CFRTIFICATE OF AUTHORITY # 000842

KAW VALLEY ENGINEERING, INC., SERVICES BY MISSOURI STATE (EXPIRES 12/31/25)

IDGE DR MO, 64119 PLAN

ANSAS CITY, MO, 6411

PROJ. NO.

B23D461

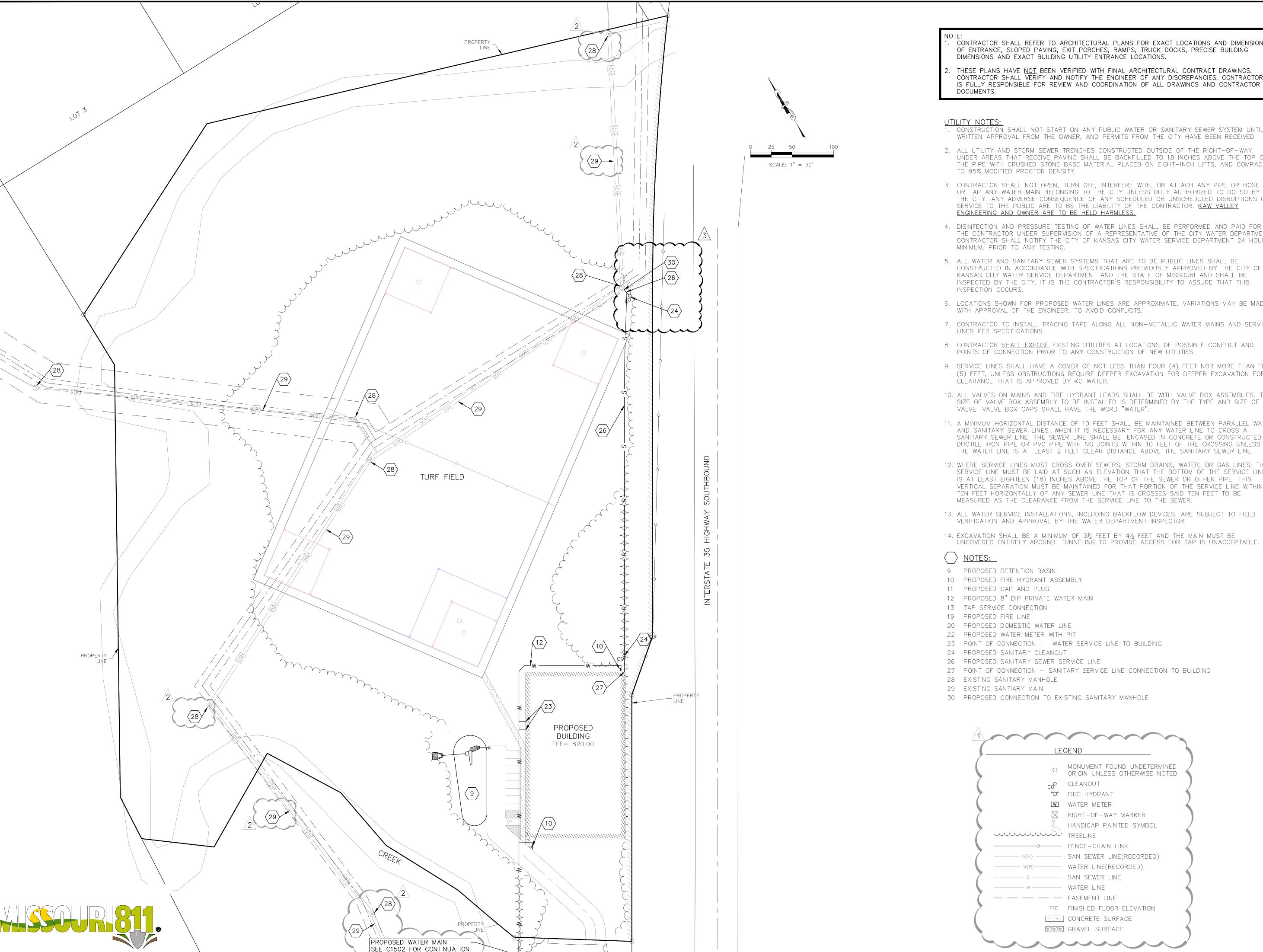
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THIS DRAWING SHALL NOT RE LITHITZED BY ANY PERSON FIRM OR CORPORATION IN WHOLF OR IN PART WITHOUT THE SPECIFIC PERMISSION OF KAW VALLEY ENGINEERING INC

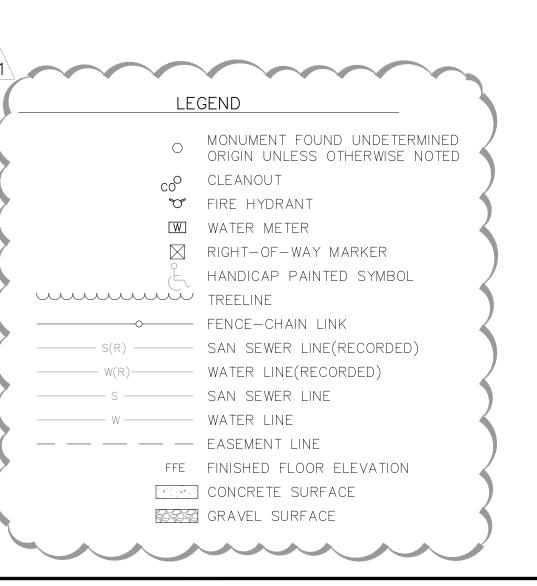


CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRANCE, SLOPED PAVING, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING

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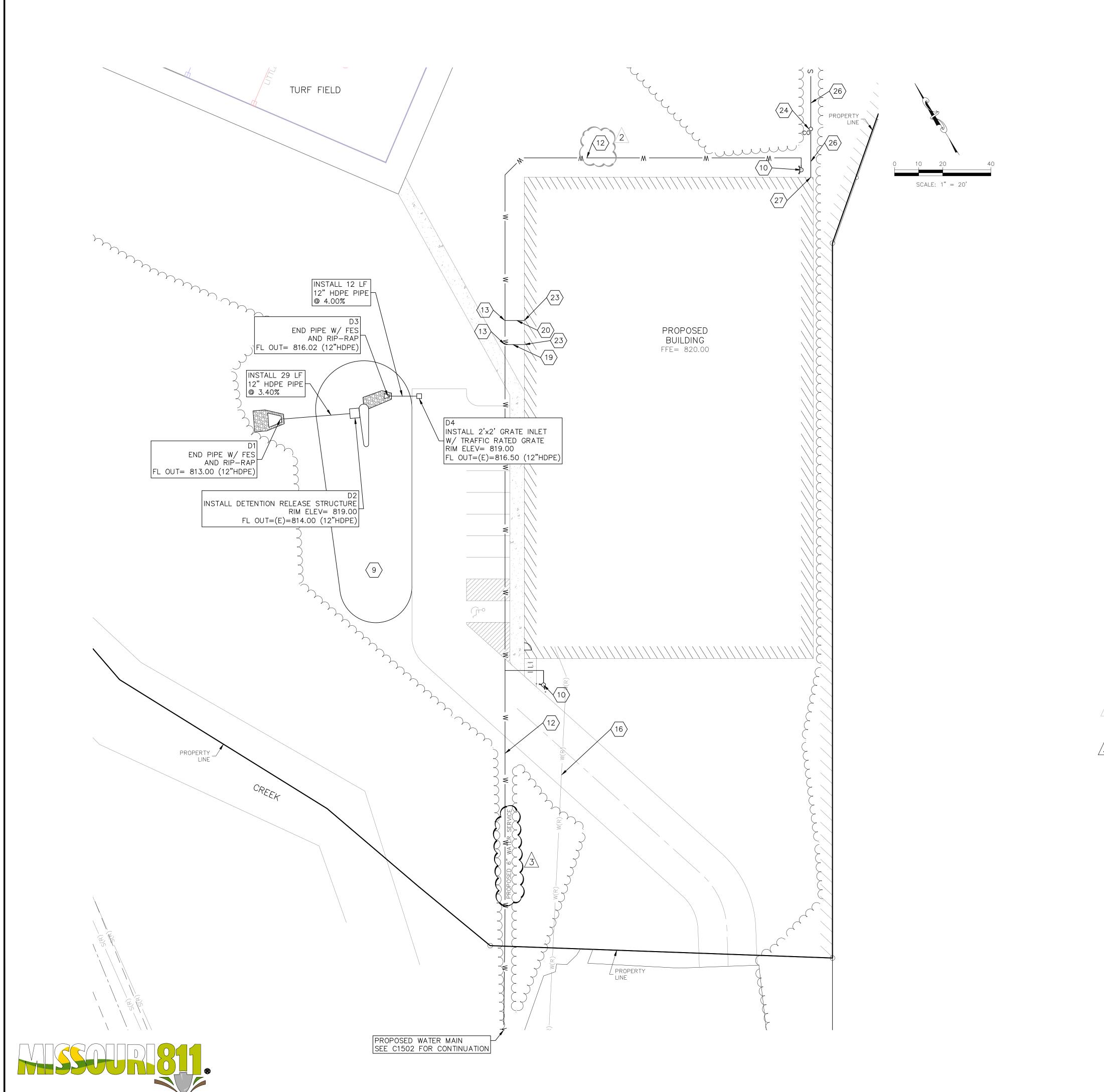
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## NOTES: PROPOSED DETENTION BASIN

O INSTALL FIRE HYDRANT ASSEMBLY

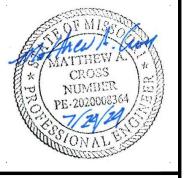
12 PROPOSED PRIVATE WATER SERVICE

## 13 TAP SERVICE CONNECTION 16 EXISTING WATER SERVICE TO BE KILLED BY CONTRACTOR 19 INSTALL FIRE LINE

- 20 INSTALL DOMESTIC WATER LINE
- 23 POINT OF CONNECTION WATER SERVICE LINE TO BUILDING
- 24 SANITARY CLEANOUT
- 25 3' DIAMETER CONCRETE SEWER MANHOLE
- 26 SANITARY SEWER SERVICE LINE
- 27 POINT OF CONNECTION SANITARY SERVICE LINE CONNECTION TO BUILDING



/24/24 PER CITY COMMENTS
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/01/24 INITIAL SUBMITTAL
ATE DESCRIPTION



MATTHEW A. CROSS ENGINEER MO # 2020008364

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kc@kveng.com | www.kveng.com

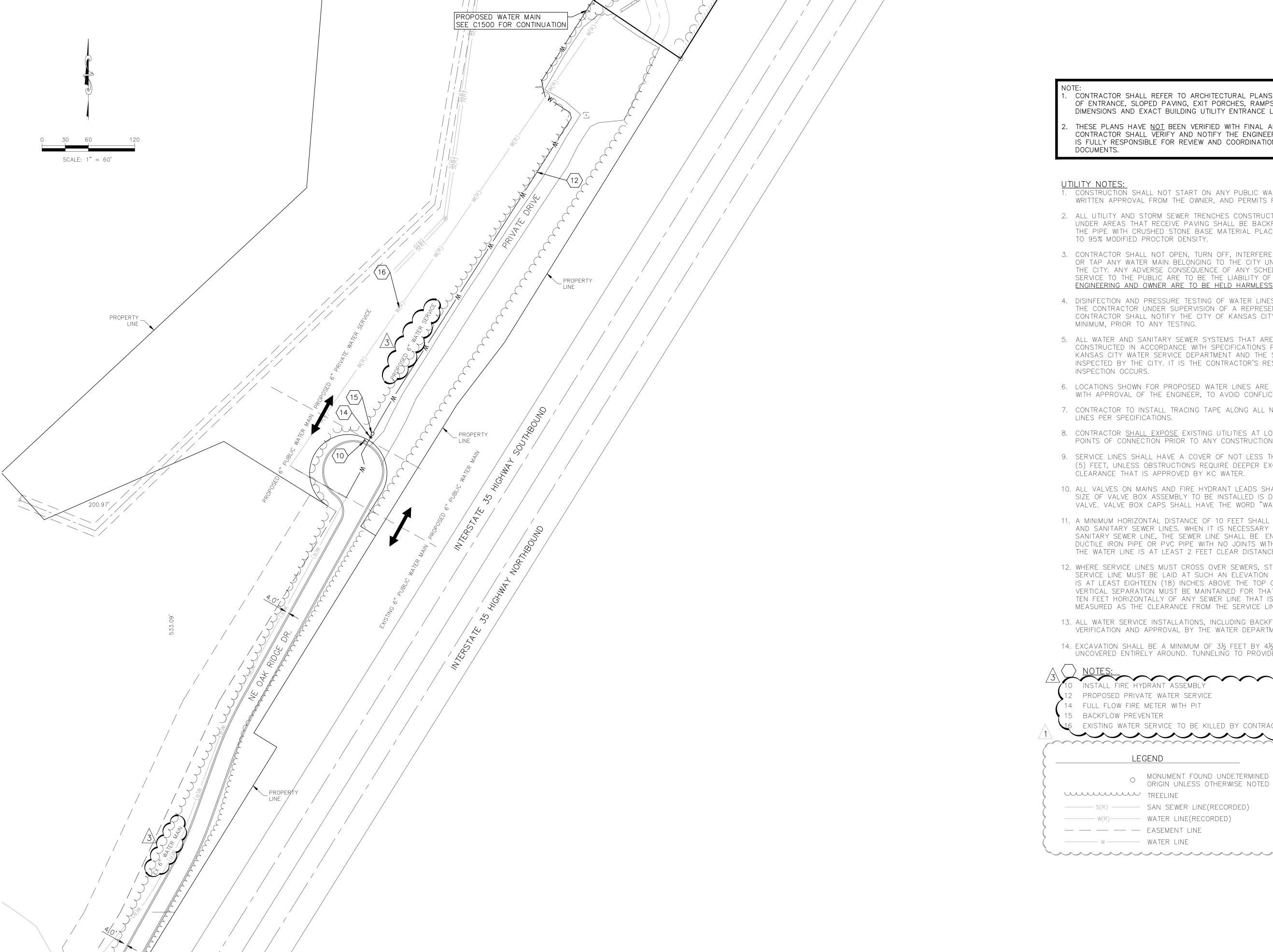
WALLEY ENGINEERING
INC., IS AUTHORIZED TO OFFER ENGINEERING
TE CERTIFICATE OF AUTHORITY # 000842.



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INSTALL FIRE HYDRANT ASSEMBLY 12 PROPOSED PRIVATE WATER SERVICE 14 FULL FLOW FIRE METER WITH PIT 15 BACKFLOW PREVENTER EXISTING WATER SERVICE TO BE KILLED BY CONTRACTOR

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TREELINE

S(R) SAN SEWER LINE(RECORDED)

— — — EASEMENT LINE

----- W ----- WATER LINE 

MATTHEW A. CROSS ENGINEER MO # 2020008364

GINEERING



DESIGNER DRAWN E

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