

100 HIGHWAY 'P'

A TRACT OF LAND BEING LOT 10 OF VILLAS OF CAPRI CORRECTED PLAT AS RECORDED IN PLAT BOOK 50, PAGE 6 LOCATED IN THE S.E. 1/4 OF SECTION 17, TOWNSHIP 47 NORTH, RANGE 3 EAST OF THE 5TH PRINCIPAL MERIDIAN
CITY OF O'FALLON, ST. CHARLES COUNTY, MISSOURI

GRADING PERMIT PLANS

GENERAL NOTES:

1) Subject property is Zoned C-2 General Business District

Front Yard: Not less than twenty-five (25) feet, excluding all signs, pump islands, and canopies of gasoline service stations.

Side Yards: No side yard is required except that where a side line of a lot in this district abuts the side line of a lot in any residential or office district, a side yard shall then be provided the same as required in the district it abuts. A side yard of not less than twenty-five (25) feet shall be provided on the street side of a corner lot.

Rear Yards: No rear yard is required except that where a rear line of a lot in this district abuts lots zoned residential or office a rear yard of not less than ten (10) feet shall be provided.

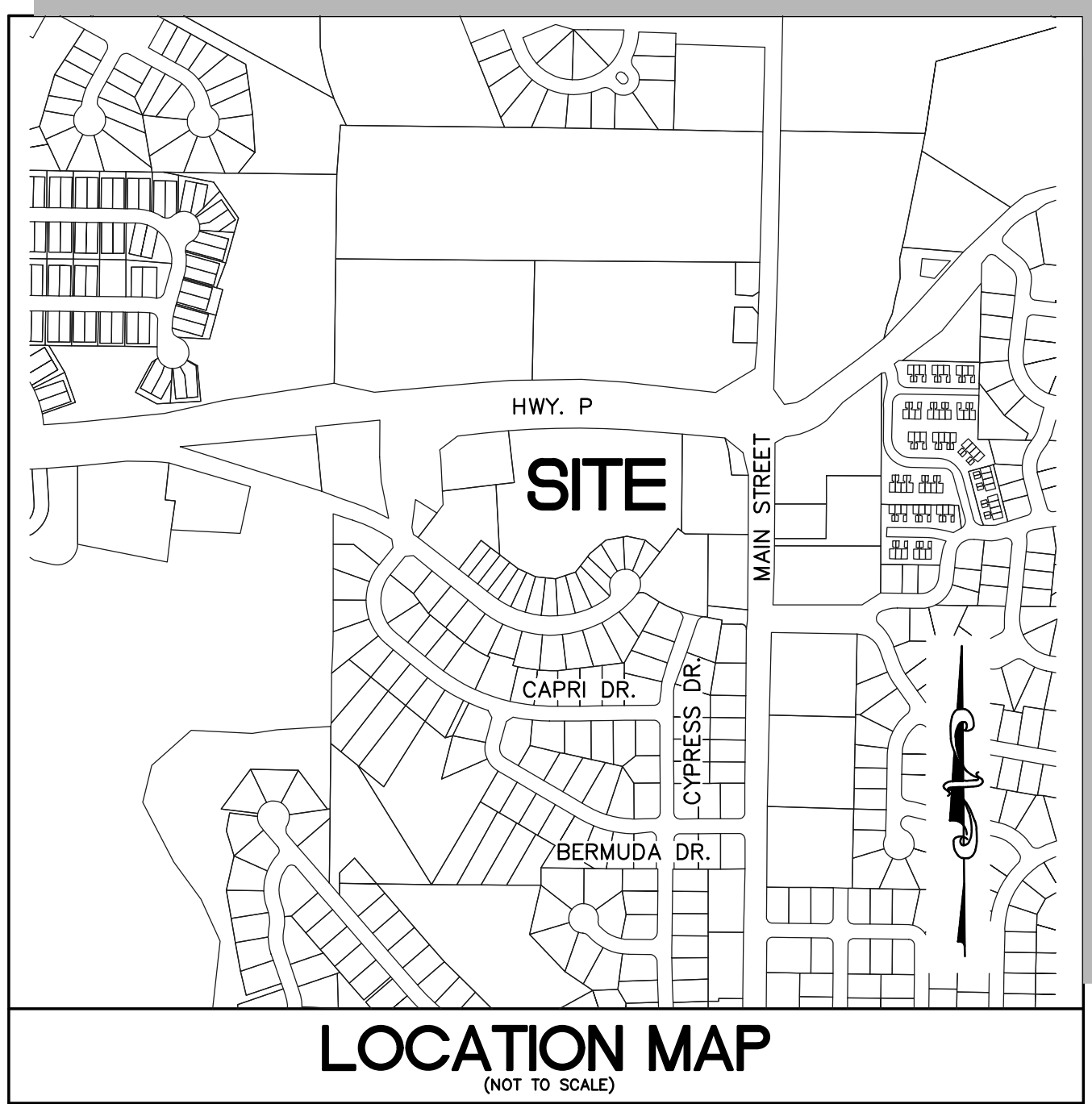
Height Requirements: Except as otherwise provided in Article VI of this Chapter, no building or structure should exceed fifty (50) feet or three (3) stories

Note: The above zoning provided by the City of O'Fallon and to verify the client should obtain a zoning endorsement from their title company.

2) Subject property lies within Flood Zone X (Areas of minimal flood hazard) according to the National Flood Insurance Rate Map Number 29183C0230G with and effective date of 1/20/2016.

3) Utilities shown hereon are shown from record and/or survey information. Information as shown for underground utilities has been compiled from field observations, the available records of the various utility companies concerned, and as marked in the field by the Missouri One Call System, 1 (800) 344-7483. There may exist utilities that are not shown hereon. It is the contractors responsibility to call the Missouri One Call System to verify utility locations before digging.

Missouri One Call ticket number 250560224 was obtained by Stock and Associates Consulting Engineers, Inc. for the preparation of this survey.



PERTINENT DATA

SITE ACREAGE = 5.900 Ac.±
OWNER = A&E ENTERTAINMENT LLC
PARCEL ID = 2-042D-C624-00-0010
PARCEL # = 73530
SITE ADDRESS = 100 HIGHWAY P
O'FALLON, MISSOURI 63368
EXISTING ZONING = C-2 "GENERAL BUSINESS DISTRICT"
FIRE DISTRICT = O'FALLON
SCHOOL DISTRICT = FORT ZUMWALT
SEWER DISTRICT = O'FALLON
WATER SERVICE = O'FALLON
GAS SERVICE = SPIRE ENERGY
ELECTRIC SERVICE = AmerenUE ELECTRIC COMPANY
PHONE SERVICE = CENTURYLINK
WATERSHED = PERUQUE CREEK
FEMA FLOOD MAP = 29183C0230G DATED 1/20/2016

MDNR PERMIT

MORA - 29244
EXPIRATION DATE: 02/07/2027

UTILITY/AGENCY CONTACTS

CITY = CITY OF O'FALLON
100 NORTH MAIN STREET
O'FALLON, MO 63366
UTILITY LOCATES
PH: (636) 281-2858
TRAFFIC LOCATES
PH: (636) 379-5062
ENGINEERING DIVISION
PH: (636) 379-5556
CONSTRUCTION INSPECTION DIVISION
PH: (636) 379-5596
FIRE = O'FALLON FIRE PROTECTION
111 LAURA K DRIVE
O'FALLON, MO 63366
CONTACT: THOMAS VINEYARD, FIRE CHIEF
PH: (636) 272-3453
GAS = SPIRE ENERGY
6400 GRAHAM ROAD
BERKELEY, MO 63134
CONTACT: RICHARD FROCK
PH: (816) 472-3489
richard.frock@spireenergy.com
ELECTRIC = AMEREN UE
200 CALLAHAN ROAD
WENTZVILLE, MO 63385
CONTACT: RANDY HUNT
PH: (636) 639-8310
rhunt@ameren.com
SANITARY = CITY OF O'FALLON
100 N. MAIN ST.
O'FALLON, MO 63366
CONTACT: 636-281-2858
STORM = CITY OF O'FALLON
100 N. MAIN ST.
O'FALLON, MO 63366
CONTACT: 636-379-3807
WATER = CITY OF O'FALLON
100 N. MAIN ST.
O'FALLON, MO 63366
CONTACT: 636-281-2858

SHEET INDEX

C1.0 TITLE & INDEX SHEET
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C3.0 EXISTING CONDITIONS PLAN
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C5.0 MASS GRADING PLAN
C6.0 CUT-FILL PLAN
C7.0 CONCEPT SITE PLAN

P&Z APPROVAL CONDITIONS

1. PROVIDE A COPY OF THE DNR LAND DISTURBANCE PERMIT AND A STORMWATER POLLUTION PREVENTION PLAN.
2. WHEN REQUIRED, OBTAIN APPROVAL FROM ALL RESPONSIBLE AGENCIES INCLUDING, BUT NOT LIMITED TO, THE APPROPRIATE FIRE PROTECTION DISTRICT, MODOT.

CITY OF O'FALLON
ENGINEERING DEPARTMENT
ACCEPTED FOR CONSTRUCTION
BY: Ryan Rockwell DATE: 12/19/2025
PROFESSIONAL ENGINEER'S SEAL
INDICATES RESPONSIBILITY FOR DESIGN
Approval conditional on all requirements from the Fire Department being met, once received.

LEGEND

	BENCH MARK		FIRE HYDRANT
	FOUND IRON ROD		FIRE DEPARTMENT CONNECTION
	FOUND IRON PIPE		WATER MANHOLE
	RIGHT OF WAY MARKER		WATER METER
	UTILITY POLE		WATER VALVE
	SUPPORT POLE		POST INDICATOR VALVE
	UTILITY POLE WITH LIGHT		CLEAN OUT
	LIGHT STANDARD		STORM MANHOLE
	ELECTRIC METER		GRATED MANHOLE
	ELECTRIC MANHOLE		STORMWATER INLET
	ELECTRIC PEDESTAL		GRATED STORMWATER INLET
	ELECTRIC SPLICE BOX		SANITARY MANHOLE
	GAS DROP		TREE
	GAS METER		BUSH
	GAS VALVE		TRAFFIC SIGNAL
	TELEPHONE MANHOLE		PARKING METER
	TELEPHONE PEDESTAL		STREET SIGN
	TELEPHONE SPLICE BOX		SPRINKLER
	CABLE TV PEDESTAL		MAIL BOX

ABBREVIATIONS

C.O.	-	CLEANOUT
DB.	-	DEED BOOK
E.	-	ELECTRIC
FL	-	FLOWLINE
FT	-	FEET
FND.	-	FOUND
G	-	GAS
M.H.	-	MANHOLE
N/F	-	NOW OR FORMERLY
PL	-	PLAT BOOK
PG.	-	PAGE
P.V.C.	-	POLYVINYL CHLORIDE PIPE
R.B.	-	RADIAL BEARING
R.C.P.	-	REINFORCED CONCRETE PIPE
SQ.	-	SQUARE
T	-	TELEPHONE CABLE
V.C.P.	-	VETRIFIED CLAY PIPE
W	-	WATER
(86"W)	-	RIGHT-OF-WAY WIDTH

CITY NOTE

PER CITY ORDINANCE 3429 AS SHOWN IN SECTION 500.420 OF THE MUNICIPAL CODE OF THE CITY OF O'FALLON AS FOLLOWS: CONSTRUCTION WORK SHALL ONLY BE ALLOWED DURING THE FOLLOWING HOURS: OCTOBER 1-MAY 31 7:00 A.M. to 7:00 P.M. MONDAY - SUNDAY; JUNE 1 - SEPTEMBER 30 6:00 A.M. to 8:00 P.M. MONDAY-FRIDAY, 7:00 A.M. to 8:00 P.M. SATURDAY AND SUNDAY. CONSTRUCTION WORK TO BE DONE OUTSIDE OF THESE HOURS REQUIRES PRIOR WRITTEN APPROVAL FROM THE CITY ADMINISTRATOR OR CITY ENGINEER.

UTILITY LOCATES

MISSOURI ONE-CALL
1 800 344-7483
CITY OF O'FALLON
TRAFFIC
(636) 379-5602
ENGINEERING
(636) 379-5556
CONSTRUCTION INSPECTION
(636) 379-5596



MODOT NETWORK BENCHMARK

The bearings shown hereon are grid bearings based on the Missouri Coordinate System of 1983, East Zone. Bearings were determined from project horizontal control points established in the project using Trimble GPS receivers utilizing real time kinematic GPS methods in reliance on the MoDOT GNSS RTK Network operated by the Missouri Department of Transportation. Elevations as provide by the MoDot Network are in the datum of NAVD83.

SITE BENCHMARK

BENCHMARK ELEVATION=492.26 (NAVD83)
CROSS LOCATED WITHIN THE CONCRETE ENTRANCE AT THE NORTHEAST CORNER OF THE PROPERTY, LOCATED SOUTH, 73.8 FEET FROM EDGE OF PAVEMENT OF HIGHWAY 'P' AND 46.4 FEET EAST FROM A UTILITY POLE.

UTILITY NOTE:

UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS, RECORDS AND INFORMATION, AND, THEREFORE DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NON-EXISTENCE, SIZE, TYPE, NUMBER, OR LOCATION OF THESE FACILITIES, STRUCTURES AND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS. THE UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY GRADING, EXCAVATION OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY FROM COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319 RSMo.

DISCLAIMER

STOCK AND ASSOCIATES CONSULTING ENGINEERS, INC. AND THE UNDERSIGNED ENGINEER HAVE NO RESPONSIBILITY FOR SERVICES PROVIDED BY OTHERS TO IMPLEMENT THE IMPROVEMENTS SHOWN ON THIS PLAN AND ALL OTHER DRAWINGS WHERE THE UNDERSIGNED ENGINEER'S SEAL APPEARS. THE CONSTRUCTION MEANS AND METHODS ARE THE SOLE RESPONSIBILITY OF THE OWNER AND CONTRACTOR. STOCK AND ASSOCIATES CONSULTING ENGINEERS, INC. HAS NO RESPONSIBILITY TO VERIFY FINAL IMPROVEMENTS AS SHOWN ON THIS PLAN UNLESS SPECIFICALLY ENGAGED AND AUTHORIZED TO DO SO BY THE OWNER OR CONTRACTOR.

PREPARED BY:

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Consulting Engineers, Inc.

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PREPARED FOR:

A&E ENTERTAINMENT LLC
715 WAYLAND DRIVE
O'FALLON, MO 63366
C/O MR. BRIAN PRATT - PRINCIPAL
C/O MR. NATHAN BURNETT
C/O MS. LARA DeBOLD

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GRADING PERMIT PLANS FOR:

100 HIGHWAY 'P' PROJECT

100 HIGHWAY 'P'
O'FALLON, MISSOURI 63368

DATE:



GEORGE M. STOCK E-25116
CIVIL ENGINEER
CERTIFICATE OF AUTHORITY
NUMBER: 000996

REVISIONS:

NO.	DATE	REVISION
1	2025-12-10	REVISED PER CITY COMMENTS

DRAWN BY: J.M.B.	CHECKED BY: G.M.S.
DATE: 10/27/2025	JOB NO: 224-7735
S.C.C. HAT #	HAT S.U.P. #
M.D.N.R. #	
MORA-29244	
SHEET NO:	TITLE & INDEX SHEET
	C1.0

GENERAL NOTES

1. BOUNDARY AND TOPOGRAPHIC SURVEY BY STOCK AND ASSOCIATES.
2. ALL UTILITIES SHOWN HAVE BEEN LOCATED BY THE ENGINEER FROM AVAILABLE RECORDS. THEIR LOCATION SHOULD BE CONSIDERED APPROXIMATE. THE CONTRACTOR HAS THE RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES, PRIOR TO CONSTRUCTION, TO HAVE EXISTING UTILITIES FIELD LOCATED.
3. NO SLOPES SHALL EXCEED 3 (HORIZONTAL):1 (VERTICAL).
4. ALL SLOPES TO BE STABILIZED IMMEDIATELY AFTER COMPLETION OF GRADING.
5. ALL PROPOSED UTILITIES AND/OR UTILITY RELOCATIONS SHALL BE LOCATED UNDERGROUND.
6. ALL CONSTRUCTION AND MATERIALS USED SHALL CONFORM TO CURRENT CITY OF O'FALLON STANDARDS.
7. IF MATERIALS SUCH AS TREES, ORGANIC DEBRIS, RUBBLE, FOUNDATIONS AND OTHER DELETERIOUS MATERIAL ARE NOT TO BE REUSED, THEY SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.
8. STORM WATER DETENTION PER THE CITY OF O'FALLON STORM WATER MANAGEMENT DESIGN STANDARDS AND DETAILS.
9. ALL FILL PLACED UNDER PROPOSED STORM AND SANITARY SEWER, PROPOSED ROADS, AND/OR PAVED AREAS SHALL BE COMPACTED TO 90% OF MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED AASHTO T-180 COMPACTION TEST OR 95% OF MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST AASHTO T-99. ALL FILL PLACED IN PROPOSED ROADS SHALL BE COMPACTED FROM THE BOTTOM OF THE FILL UP. ALL TESTS SHALL BE VERIFIED BY A SOILS ENGINEER CONCURRENT WITH GRADING AND BACKFILLING OPERATIONS. MOISTURE CONTENT OF THE SOIL IN FILL AREAS IS TO CORRESPOND TO THE COMPACTIVE EFFORT AS DEFINED BY THE STANDARD OR MODIFIED PROCTOR TEST. OPTIMUM MOISTURE CONTENT SHALL BE DETERMINED USING THE SAME TEST THAT WAS USED FOR DETERMINATION OF OPTIMUM MOISTURE CONTENT. THE CITY OF O'FALLON PRIOR TO THE PLACEMENT OF FILL, PROOF ROLLING MAY BE REQUIRED TO VERIFY SOIL STABILITY AT THE DISCRETION OF THE CITY OF O'FALLON.
10. DEVELOPER MUST SUPPLY CITY CONSTRUCTION INSPECTORS WITH SOIL REPORTS PRIOR TO OR DURING SITE SOIL TESTING. REPORTS MUST CONTAIN THE FOLLOWING INFORMATION:
- MAXIMUM DRY DENSITY
 - OPTIMUM MOISTURE CONTENT
 - MAXIMUM/MINIMUM ALLOWABLE MOISTURE CONTENT
 - CURVE MUST BE PLOTTED SHOWING DENSITY FROM A MINIMUM OF 90% COMPACTION AND ABOVE DETERMINED BY THE "MODIFIED AASHTO-180 COMPACTION TEST" OR FROM A MINIMUM OF 95% AS DETERMINED BY THE "STANDARD PROCTOR TEST AASHTO T-99, METHOD C" (ASTM D-698). PROCTOR TYPE MUST BE DESIGNATED ON DOCUMENT.
 - CURVE MUST HAVE ATLEAST 5 DENSITY POINTS
 - SPECIFIC GRAVITY
 - NATURAL MOISTURE CONTENT
 - LIQUID LIMIT
 - PLASTIC LIMIT
11. ALL PAVED ROADWAYS GOING ON AND OFFSITE WILL BE KEPT FREE OF DIRT, ROCKS, GRAVEL OR OTHER MATERIALS DURING CONSTRUCTION.
12. RIP RAP SHOWN AT FLARED ENDS WILL BE EVALUATED IN THE FIELD BY THE ENGINEER, CONTRACTOR AND CITY INSPECTOR AFTER INSTALLATION FOR EFFECTIVENESS AND FIELD MODIFIED IF NECESSARY TO REDUCE EROSION ON AND OFF SITE.
13. BRICK SHALL NOT BE USED IN THE CONSTRUCTION OF STORM SEWER STRUCTURES.
14. CONTRACTOR TO FOLLOW GEOTECHNICAL ENGINEER RECOMMENDATIONS
15. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ANY ROCK ENCOUNTERED. CONTRACTOR SHOULD FAMILIARIZE THEMSELVES WITH ALL THE GEOTECHNICAL REPORTS LISTED ABOVE AND REVIEW THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
16. TRAFFIC CONTROL IS TO BE PER MODOT OR MUTCD, WHICHEVER IS MORE STRINGENT.
17. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT TITLED "GEOTECHNICAL EXPLORATION BURNETT MIXED USE REPLEX O'FALLON, MISSOURI (MT JOB NO. 151) 2024 PREPARED BY MIDWEST TESTING, AND ALL ITS SUPPLEMENTAL PROVISIONS FOR ADDITIONAL EARTHWORK REMEDIATION, SUBGRADE PREPARATION, BACKFILL AND PAVEMENT RECOMMENDATIONS.
18. CITY APPROVAL OF THE CONSTRUCTION SITE PLANS DOES NOT MEAN THAT ANY BUILDING CAN BE CONSTRUCTED ON THE LOTS WITHOUT MEETING THE BUILDING SETBACKS AS REQUIRED BY THE ZONING CODE.
19. PERMITTEE SHALL ASSUME COMPLETE RESPONSIBILITY FOR CONTROLLING ALL SILTATION AND EROSION OF THE PROJECT AREA. THE PERMITTEE SHALL USE WHATEVER MEANS NECESSARY TO CONTROL EROSION AND SILTATION INCLUDING, BUT NOT LIMITED TO, STAKED STRAW BALES AND/OR SILTATION FABRIC FENCES (POSSIBLE METHODS OF CONTROL ARE DETAILED IN THE PLAN). CONTROL SHALL COMMENCE WITH THE CLEARING OPERATIONS AND BE MAINTAINED THROUGHOUT THE PROJECT UNTIL ACCEPTANCE OF THE WORK BY THE CITY OF O'FALLON AND AS NECESSARY BY MODOT. THE PERMITTEE'S RESPONSIBILITIES INCLUDE ALL DESIGN AND IMPLEMENTATION AS REQUIRED TO PREVENT EROSION AND THE DEPOSITING OF SILT. THE CITY OF O'FALLON AND AS REQUIRED BY MODOT MAY AT THEIR OPTION DIRECT THE PERMITTEE IN HIS METHODS AS DEEMED FIT TO PROTECT PROPERTY AND IMPROVEMENTS. ANY DEPOSITING OF SILT OF MUD ON NEW OR EXISTING PAVEMENT SHALL BE REMOVED IMMEDIATELY. ANY DEPOSITING OF SILTS OR MUD IN NEW OR EXISTING STORM SEWERS OR SWALES SHALL BE REMOVED AFTER EACH RAIN AND AFFECTED AREAS CLEANED TO THE SATISFACTION OF THE CITY OF O'FALLON AND AS REQUIRED BY MODOT.
20. ALL EROSION CONTROL SYSTEMS ARE INSPECTED AND CORRECTED WEEKLY, ESPECIALLY WITHIN 48 HOURS OF ANY RAINSTORM RESULTING IN ONE-HALF INCH OF RAIN OR MORE. ANY SILT OR DEBRIS LEAVING THE SITE AND AFFECTING PUBLIC RIGHTS-OF-WAYS OR STORM WATER DRAINAGE FACILITIES SHALL BE CLEANED UP WITHIN 24 HOURS AFTER THE END OF THE STORM.
21. ANY EXISTING WELLS AND/OR SPRINGS WHICH MAY EXIST ON THE PROPERTY MUST BE SEALED IN A MANNER ACCEPTABLE TO THE CITY OF O'FALLON CONSTRUCTION INSPECTION DEPARTMENT AND FOLLOWING MISSOURI DEPARTMENT OF NATURAL RESOURCES STANDARDS AND SPECIFICATIONS.
22. ALL INSTALLATIONS AND CONSTRUCTION SHALL CONFORM TO THE APPROVED ENGINEERING DRAWINGS. HOWEVER IF THE DEVELOPER CHOOSES TO MAKE MINOR MODIFICATIONS IN DESIGN AND/OR SPECIFICATIONS DURING CONSTRUCTION, HE/SHE SHALL MAKE SUCH CHANGES AT HIS/HER OWN RISK, WITHOUT ANY ASSURANCE THAT THE CITY ENGINEER WILL APPROVE THE COMPLETED INSTALLATION OR CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO NOTIFY THE CITY ENGINEER OF ANY CHANGES FROM THE APPROVED DRAWINGS. THE DEVELOPER MAY BE REQUIRED TO CORRECT THE INSTALLED IMPROVEMENTS SO AS TO CONFORM TO THE APPROVED ENGINEERING DRAWINGS. THE DEVELOPER MAY REQUEST A LETTER FROM THE CONSTRUCTION INSPECTION DIVISION REGARDING ANY FIELD CHANGES APPROVED BY THE CITY INSPECTORS.
23. CLEARING LIMITS SHALL BE VISIBLY MARKED IN THE FIELD PRIOR TO REMOVAL OF TREES.
24. IF WATER IS NOT AVAILABLE, A WATER TRUCK WILL BE PROVIDED.

S.W.P.P.P. NOTE:

SEE SHEET C3.0 FOR S.W.P.P.P. BMP LOCATIONS

EMERGENCY CONTACT INFORMATION

SPECIAL INSPECTOR

OWNER/OFFICIAL IN CHARGE

JOE FISCHER
STOCK & ASSOCIATES
257 CHESTERFIELD BUSINESS PKWY
ST. LOUIS, MO 63005
636.530.9100 (OFFICE)

CHARLIE HARRIS
KEYSTONE CONSTRUCTION
673 SPIRIT VALLEY WEST DRIVE
CHESTERFIELD, MO 63005
618.340.6114 (24-HOUR)

EXISTING SITE RUNOFF COEFFICIENT: 0.10
PROPOSED SITE RUNOFF COEFFICIENT: 0.15
SITE SOILS: HYDROLOGIC SOIL GROUP: C & D

BMP QUANTITIES

TYPE	BMP	QUANTITY	10% SURPLUS	TOTAL	UNIT	USAGE
SEEDING/SODDING/MULCH	60-20	3,65	0.37	4.02	AC.	PERMANENT
CHECK DAM	ESC-11	1	1	2	EACH	TEMPORARY
CONSTRUCTION ROAD	ESC-4	-	-	-	-	TEMPORARY
WASHDOWN STATION	ESC-4	1	-	1	EACH	TEMPORARY
CONSTRUCTION ENTRANCE	ESC-4	1	-	1	EACH	TEMPORARY
INLET PROTECTION-GUTTER	ESC-17	2	1	3	EACH	TEMPORARY
INLET PROTECTION-DROP	ESC-14	2	1	3	EACH	TEMPORARY
SILT FENCE	ESC-5	935	95	1,030	LF	TEMPORARY

TOTAL AREA : 5.900 Ac.

TOTAL AREA DISTURBED
BY GRADING: 3.65 ± ACS

EROSION AND SEDIMENT CONTROL NOTES

1. INSTALLATION OF PERIMETER SEDIMENT CONTROL SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING THE SITE.
2. INSPECTION OF SILTATION CONTROL DEVICES SHALL TAKE PLACE ONCE EVERY SEVEN DAYS AND WITHIN 48 HOURS OF ANY 0.25"/24 HOUR RAIN OR GREATER RAIN EVENT. ANY SILT OR DEBRIS LEAVING THE SITE AND AFFECTING PUBLIC RIGHT-OF-WAY OR STORM DRAINAGE FACILITIES SHALL BE CLEANED UP WITHIN 24 HOURS AFTER THE END OF THE STORM.
3. NO GRADED AREAS ARE TO REMAIN BARE FOR OVER 14 DAYS WITHOUT BEING SEEDED AND MULCHED PER SPECIFICATIONS. IF SEASONAL CONDITIONS PROHIBIT SEEDING, MULCHING OR MATTING SHALL BE USED.
4. ALL SLOPES OR DRAINAGE CHANNELS, ONCE CONSTRUCTED TO FINAL GRADE, SHALL BE SEEDED AND MULCHED PER SPECIFICATIONS WITHIN SEVEN (7) DAYS.
5. SILT FENCES SHALL BE INSTALLED IMMEDIATELY AROUND EACH STORM SEWER STRUCTURE ONCE FINAL CONSTRUCTION OF EACH INDIVIDUAL STRUCTURE IS COMPLETE.
6. ALL SILTATION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.
7. EROSION CONTROL SHALL NOT BE LIMITED TO WHAT IS SHOWN ON THE PLAN. WHATEVER MEANS NECESSARY SHALL BE TAKEN TO PREVENT SILTATION AND EROSION FROM ENTERING NATURAL STREAMS AND ADJACENT ROADWAYS, PROPERTIES, AND DITCHES.
8. WHEN DEEMED NECESSARY, POSITIVE STEPS SHOULD BE EXPOSED TO PREVENT THIS SOIL FROM DAMAGING ADJACENT PROPERTY AND SILTING UP ALL STORM DRAINAGE SYSTEMS WHETHER ON OR OFF SITE.
9. LOCATIONS AND DETAILS FOR ALL SILTATION CONTROL DEVICES SHALL FOLLOW "ST. CHARLES COUNTY SOIL AND WATER CONSERVATION DISTRICT EROSION AND SEDIMENT CONTROL" GUIDELINES.

1. PERIMETER SILTATION CONTROL AND CONSTRUCTION ENTRANCES TO BE INSTALLED.
2. BEGIN PLACING AGGREGATE BASE IN PARKING AREAS ONCE AREA HAS REACHED FINAL GRADE TO PREVENT EROSION.
3. PLACE SILT FENCE AROUND EACH STORM SEWER STRUCTURE AS IT IS COMPLETED.
4. IMMEDIATELY SEED AREAS UPON REACHING FINAL GRADE THAT ARE TO BE PERMANENTLY SEEDED.

TEMPORARY ACCESS ROADS AND PARKING AREAS SPECIFICATIONS

1. TEMPORARY ROADS SHALL FOLLOW THE CONTOUR OF THE NATURAL TERRAIN TO THE EXTENT POSSIBLE. SLOPES SHOULD NOT EXCEED 10 PERCENT.
2. GRADES SHOULD BE SUFFICIENT TO PROVIDE DRAINAGE, BUT SHOULD NOT EXCEED 10 PERCENT.
3. ROADBEDS SHALL BE AT LEAST 24 FEET WIDE.
4. ALL CUTS AND FILLS SHALL BE 3:1 OR FLATTER TO THE EXTENT POSSIBLE.
5. DRAINAGE DITCHES SHALL BE PROVIDED AS NEEDED.
6. THE ROADBED OR PARKING SURFACE SHALL BE CLEARED OF ALL VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
7. A 10-INCH COURSE OF 2" MINUS AGGREGATE SHALL BE APPLIED IMMEDIATELY AFTER GRADING OR THE COMPLETION OF UTILITY INSTALLATION WITHIN THE RIGHT-OF-WAY. FILTER FABRIC MAY BE APPLIED TO THE ROADBED FOR ADDITIONAL STABILITY IN ACCORDANCE WITH FABRIC MANUFACTURER'S SPECIFICATIONS.

VEGETATION

ALL ROADSIDE DITCHES, CUTS, FILLS AND DISTURBED AREAS ADJACENT TO PARKING AREAS AND ROADS SHALL BE STABILIZED WITH APPROPRIATE TEMPORARY OR PERMANENT VEGETATION ACCORDING TO THE APPLICABLE STANDARDS AND SPECIFICATIONS.

MAINTENANCE

BOTH TEMPORARY AND PERMANENT ROADS AND PARKING AREAS MAY REQUIRE PERIODIC TOP DRESSING WITH NEW GRAVEL. SEEDED AREAS ADJACENT TO THE ROADS AND PARKING AREAS SHALL BE CHECKED PERIODICALLY TO ENSURE THAT A VIGOROUS STAND OF VEGETATION IS MAINTAINED. ROADSIDE DITCHES AND OTHER DRAINAGE STRUCTURES SHOULD BE CHECKED REGULARLY TO ENSURE THAT THEY DO NOT BECOME CLOGGED WITH SILT OR OTHER DEBRIS.

ALL EROSION CONTROL SYSTEMS SHALL BE INSPECTED AND NECESSARY CORRECTIONS MADE WITHIN 24 HOURS OF ANY RAINSTORM RESULTING IN 1/4 INCH OF RAIN OR MORE.

VEGETATION ESTABLISHMENT

TILLAGE PREPARATIONS

- TILL TOP 4" OF SOIL

FERTILIZER

- PER SOIL TEST OR FOLLOWING TABLE:

	N	P	K	LIME
TEMPORARY SEEDING	0.7	0.7	0.7	14 ENM+
PERMANENT	1.0	1.4	1.4	14 ENM+

- SOIL TEST RESULTS TAKE PRECEDENCE, DUE TO HIGHLY VARIABLE SOIL PH.

SEEDING RATES

TEMPORARY		150 LBS. / ACRE
WHEAT OR RYE		
PERMANENT		150 LBS. / ACRE
FESCUES		6 LBS / 1000 S.F.
KENTUCKY BLUEGRASS/		8 LBS / 1000 S.F.
PERENNIAL RYEGRASS		
FINE FESCUE	MARCH 1 – JUNE 1	
SEEDING PERIODS	AUGUST 1 – OCTOBER 1	
LISTED LEGUMES/GRASSES	MARCH 15 – NOVEMBER 1	
WHEAT/RYE		

STRAW BALE SILTATION CONTROL SPECIFICATIONS

SHEET FLOW APPLICATIONS

1. BALES SHALL BE PLACED IN A SINGLE ROW, LENGTHWISE ON THE CONTOUR, WITH BOTH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.
2. ALL BALES SHALL BE EITHER WIRE-BOUND OR STRING-TIED. STRAW BALES SHALL BE INSTALLED SO THAT BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES (IN ORDER TO PREVENT DETERIORATION OF THE BINDINGS). SEE DETAIL SHOWN ON SHEET C4.1).
3. THE BARRIER SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED THE WIDTH OF A BALE AND THE LENGTH OF THE PROPOSED BARRIER TO A MINIMUM DEPTH OF 4 INCHES. AFTER THE BALES ARE STAKED AND CHINKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AGAINST THE BARRIER. BACKFILL SOIL SHALL CONFORM TO THE GROUND LEVEL ON THE DOWNHILL AND SHALL BE BUILT UP TO 4 INCHES AGAINST THE UPHILL SIDE OF THE BARRIER (SEE DETAIL SHOWN ON SHEET C4.1).
4. EACH BALE SHALL BE SECURELY ANCHORED BY AT LEAST TWO STAKES OR REBARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE TO FORCE THE BALES TOGETHER. STAKES OR REBARS SHALL BE DRIVEN DEEP ENOUGH INTO THE GROUND TO SECURELY ANCHOR THE BALES.
5. THE GAPS BETWEEN BALES SHALL BE CHINKED (FILLED BY WEDGING) WITH STRAW TO PREVENT WATER FROM ESCAPING BETWEEN THE BALES. (LOOSE STRAW SCATTERED OVER THE AREA IMMEDIATELY UPHILL FROM A STRAW BALE BARRIER TENDS TO INCREASE BARRIER EFFICIENCY).
6. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
7. STRAW BALE BARRIERS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS, BUT NOT BEFORE THE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.

CHANNEL FLOW APPLICATIONS

1. BALES SHALL BE PLACED IN A SINGLE ROW, LENGTHWISE, ORIENTED PERPENDICULAR TO THE CONTOUR, WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.
2. THE REMAINING STEPS FOR INSTALLING A STRAW BALE BARRIER FOR SHEET FLOW APPLICATIONS APPLY HERE, WITH THE FOLLOWING ADDITION.
3. THE BARRIER SHALL BE EXTENDED TO SUCH A LENGTH THAT THE BOTTOMS OF THE END BALES ARE HIGHER IN ELEVATION THAN THE TOP OF THE LOWEST MIDDLE BALE (SEE DETAIL) TO ASSURE THAT SEDIMENT-LADEN RUNOFF WILL FLOW EITHER THROUGH OR OVER THE BARRIER BUT NOT AROUND IT.
4. MAINTENANCE
1. STRAW BALE BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
2. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED FENCE, END RUNS AND UNDERCUTTING BENEATH FENCE.
3. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF SILT FENCE SHALL BE ACCOMPLISHED PROMPTLY.
4. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
5. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE STRAW BALE BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

SILT FENCE SPECIFICATIONS

1. SILT FENCE TO BE WOVEN GEOTEXTILE FABRIC MIRAFI 100X OR EQUAL.
2. FABRIC TO BE SUPPORTED BY METAL TEE POST WITH SPADE BASE SPACED ON 5' CENTERS WITH 6 X 8/10 X 10 GAGE WELDED WIRE FENCE. SEE DETAIL SHOWN ON SHEET C5.
3. FABRIC SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED A MINIMUM OF 6 INCHES DEEP FOR THE LENGTH OF THE FENCE. THE EXCAVATED SOIL SHALL BE BACKFILLED AGAINST THE FENCE. SEE DETAIL THIS SHEET.
4. FENCE HEIGHT SHALL BE A MINIMUM OF 4 FEET IN HEIGHT, WITH THE FABRIC INSTALLED ON THE FENCE ON THE UPSTREAM SIDE.
5. SILT FENCES SHALL BE USED ONLY ON SHEET FLOW CONDITIONS.
6. SILT FENCES SHALL BE INSTALLED AROUND ALL STORM SEWER STRUCTURES.

MAINTENANCE

1. SILT FENCE BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
2. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED BALES, END RUNS AND UNDERCUTTING BENEATH BALES.
3. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BALES SHALL BE ACCOMPLISHED PROMPTLY.
4. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
5. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

EARTHWORK NOTES

BULK CUT: 17,000 CUBIC YARDS

BULK FILL: 0 CUBIC YARDS (INCLUDES 15% SHRINKAGE)

NET: 17,000 CUBIC YARDS (EXPORT)

THE ENGINEER HAS MADE THE FOLLOWING ASSUMPTIONS IN THE ABOVE STATED QUANTITIES:

15% SHRINKAGE APPLIED TO FILL MATERIAL.

NO TOPSOIL REMOVAL

NO SPOILS FOR WALLS/UTILITIES/FOOTINGS/FOUNDATIONS/PADS/ETC. INCLUDED.

THE ENGINEER HAS CALCULATED THE ABOVE QUANTITIES OF EARTHWORK TO BE REGARDED AS AN ESTIMATE OF THE BULK MOVEMENT OR REDISTRIBUTION OF SOILS ON THIS PROJECT. AS AN ESTIMATE, THESE QUANTITIES ARE INTENDED FOR GENERAL USE, AND THE ENGINEER ASSUMES NO LIABILITY FOR COST OVERRUNS DUE TO EXCESS EXCAVATED MATERIALS OR SHORTAGES OF FILL.

NOTE

SWPPP INSPECTIONS MUST BE SCHEDULED AT LEAST ONCE PER WEEK AND NO LATER THAN 48 HOURS AFTER A RAINFALL THAT CAUSES STORMWATER RUNOFF TO OCCUR ON-SITE.

NOTIFICATION

IN THE EVENT OF SILT RUNOFF FROM THE SUBJECT PROPERTY ONTO OFFSITE PROPERTY OWNERS:

- 1.) THE CONTRACTOR SHALL NOTIFY OFFSITE PROPERTY OWNER AND OBTAIN CONSENT TO REMOVE SEDIMENT AND RESTORE TO ORIGINAL CONDITION.
- 2.) THE SPECIAL INSPECTOR MUST DOCUMENT ANY SILT RUNOFF FROM THE SITE AND REPORT WHEN THE CLEAN-UP HAS BEEN COMPLETED ON THE ST. CHARLES COUNTY SWPPP INSPECTION REPORT. ALL REPORTS MUST BE SUBMITTED TO THE MISSOURI DEPARTMENT OF NATURAL RESOURCES, CITY OF O'FALLON AND/OR ST. CHARLES COUNTY DEPARTMENT OF PUBLIC WORKS.

GRADING NOTES

1. ON-SITE GRADING WILL UTILIZE STANDARD GRADING EQUIPMENT TO ACHIEVE THE PROPOSED GRADES SHOWN ON THIS PLAN.

2. ALL GRADING OPERATIONS SUBJECT TO THE CONDITIONS AND RECOMMENDATIONS OF THE GEOTECHNICAL REPORT PREPARED BY MIDWEST TESTING.

GENERAL NOTES

1. Driveway locations shall not interfere with the sidewalk handicap ramps, or curb inlet sumps
2. Sidewalks, curb ramps, ramps and accessible parking spaces shall be constructed in accordance with the current approved "American with Disabilities Act Accessibility Guidelines" (ADAAG) along with the required grades, construction materials, specifications and signage. If any conflict occurs between the above information and the plans, the ADAAG guidelines shall take precedence and the contractor prior to any construction shall notify the Project Engineer.
- 2.1. Truncated domes for curb ramps located in public right of way shall meet PROWAG requirements and shall be constructed using red pre-cast truncated domes per pavement details.
3. Any proposed pavilions or playground areas will need a separate permit from the Building Division.
4. The Contractor is responsible to call Missouri One Call and The City of O'Fallon for the location of utilities. Contact the City of O'Fallon (636) 379-3814 for the location of City maintained cable for street lights and traffic signals, all other utilities call Missouri One Call 1-800-DIG-RITE. 1-800-344-7483
5. All proposed utilities and/or utility relocations shall be located underground.
6. All proposed fencing requires a separate permit through the Building Safety Division.
7. All construction operations and work zone traffic control within the right of way will follow MoDOT or M.U.T.C.D. standards whichever is more stringent.
8. (INTENTIONALLY OMITTED)
9. All subdivision identification or directional sign(s) must have the locations and sizes approved and permitted separately through the Planning and Development Division.
10. Materials such as trees, organic debris, rubble, foundations, and other deleterious material shall be removed from the site and disposed of in compliance with all applicable laws and regulations. If the material listed previously are reused, a letter from a soil Engineer must clarify amount, location, depth, etc. and be approved with the construction plans. Landfill tickets for such disposal shall be maintained on file by the developer. Burning on site shall be allowed only by permit from the local fire district. If a burn pit is proposed the location and mitigation shall be shown on the grading plan and documented by the soils engineer.
11. Twenty-four (24) hours prior to starting any of the work covered by the above plans and after approval thereof, the developer shall make arrangements with the Construction Inspection Office to provide for inspection of the work, sufficient in the opinion of the City Engineer, to assure compliance with the plans and specifications as approved.
12. The City Engineer or their duly authorized representative shall make all necessary inspections of City infrastructure, escrow items or infrastructure located on the approved plans.
13. All installations and construction shall conform to the approved engineering drawings. However, if the developer chooses to make minor modifications in design and/or specifications during construction, he/she shall make such changes at his/her own risk, without any assurance that the City Engineer will approve the completed installation or construction. It shall be the responsibility of the developer to notify the City Engineer of any changes from the approved drawings. The developer may be required to correct the installed improvements so as to conform to the approved engineering drawings. The developer may request a letter from the Construction Inspection Division regarding any field changes approved by the City Inspectors.
14. City approval of the construction site plans does not mean that any building can be constructed on the lots without meeting the building setbacks as required by the zoning code.

Grading Notes

1. Developer must supply City Construction Inspectors with an Engineer's soil reports prior to and during site grading. The soil report will be required to contain the following information on soil test curves (Proctor reports) for projects within the City:
- 1.1. Maximum dry density
 - 1.2. Optimum moisture content
 - 1.3. Maximum and minimum allowable moisture content
 - 1.4. Curve must be plotted to show density from a minimum of 90% Compaction and above as determined by the "Modified AASHTO T-180 Compaction Test" (A.S.T.M.-D-1157) or from a minimum of 95% as determined by the "Standard Proctor Test ASHTO T-99, Method C" (A.S.T.M.-D-698). Proctor type must be designated on document.
 - 1.5. Curve must have at least 5 density points with moisture content and sample locations listed on document
 - 1.6. Specific gravity
 - 1.7. Natural moisture content
 - 1.8. Liquid limit
 - 1.9. Plastic limit

- Be advised that if this information is not provided to the City's Construction Inspector the City will not allow grading or construction activities to proceed on any project site.
2. All fill placed in areas other than proposed storm sewers, sanitary sewers, proposed roads, and paved areas shall be compacted from the bottom of the fill up in 8" lifts and compacted to 90% maximum density as determined by Modified AASHTO T-180 compaction test, or 95% of maximum density as determined by the Standard Proctor Test AASHTO T-99. Ensure the moisture content of the soil in fill areas corresponds to the compactive effort as defined by the Standard or Modified Proctor Test. Optimum moisture content shall be determined using the same test that was used for compaction. Soil compaction curves shall be submitted to the City of O'Fallon prior to the placement of fill.
3. The surface of the fill shall be finished so it will not impound water. If at the end of a days work it would appear that there may be rain prior to the next working day, the surface shall be finished smooth. If the surface has been finished smooth for any reason, it shall be scarified before proceeding with the placement of succeeding lifts. Fill shall not be placed on frozen ground, nor shall grading operations continue when the temperature is such as to permit the layer under placement to freeze.
4. All sediment and detention basins are to be constructed during the initial phase of the grading operation or in accordance with the approved SWPPP.
5. When grading operations are complete or suspended for more than 14 days, permanent grass must be established at sufficient density to provide erosion control on site. Between permanent grass seeding periods, temporary cover shall be provided according to Missouri Department of Natural Resources Protecting Water Quality – a field guide to erosion, sediment and stormwater best management practices for development sites in Missouri and Kansas.All finished grades (areas not to be disturbed by improvements) in excess of 20% slopes (5:1) shall be mulched and tacked at a rate of 100 pounds per 1000 square feet when seeded.
6. No slope shall exceed 3 (horizontal): 1 (vertical) unless otherwise approved by the soils report and specifically located on the plans and approved by the City Engineer.
7. All low places whether on site or off shall be graded to provide drainage with temporary ditches.
9. Any existing wells and/or springs which may exist on the property must be sealed in a manner acceptable to the City of O'Fallon Construction Inspection Department and following Missouri Department of Natural Resources standards and specifications.
9. (INTENTIONALLY OMITTED)
10. All trench back fills under paved areas shall be granular back fill, and compacted mechanically. All other trench back fills may be earth material (free of large clods, or stones) and compacted using either mechanical tamping or water jetting. Granular material and earth material associated with new construction outside of pavements may be jetted, taking care to avoid damage to newly laid sewers. The jetting shall be performed with a probe route on not greater than 7.5 foot centers with the jetting probe centered over and parallel with the direction of the pipe. Trench widths greater than 10 feet will require multiple probes every 7.5 foot centers.
- 10.1. Depth, Trench back fills less than 8 feet deep shall be probed to a depth extending half the depth of the trench back fill, but not less than 3 feet. Trench back fill greater than 8 feet in depth shall be probed to half the depth of the trench back fill but not greater than 8 feet.
- 10.2. Equipment, The jetting probe shall be metal pipe with an interior diameter of 1.5 to 2 inches.
- 10.3. Method, Jetting shall be performed from the lowest surface topographic point and proceed toward the highest point, and from the bottom of the trench back fill toward the surface. The flooding of each jetting probe shall be started slowly allowing slow saturation of the soil. Water is not allowed to flow away from the trench without first saturating the trench.
- 10.4. Surface Bridging, The contractor shall identify the locations of the surface bridging (the tendency for the upper surface to crust and arch over the trench rather than collapse and consolidate during the jetting process). The contractor shall break down the bridged areas using an appropriate method such as wheels or bucket of a backhoe. When surface crust is collapsed, the void shall be back filled with the same material used as trench back fill and re-jetted. Compaction of the materials within the sunken/jettied area shall be compacted such that no further surface subsidence occurs.
11. Site grading.
- 11.1. Within City right-of-way. Material is to be placed in eight (8) inch to twelve (12) inch loose lifts and compacted per the approved compaction requirements. One (1) compaction test will be performed every two hundred fifty (250) feet along the centerline for each lift.
- 11.2. Outside of City right-of-way. Material is to be placed in eight (8) inch to twelve (12) inch loose lifts and compacted per the approved compaction requirements. One (1) compaction test will be performed at two (2) foot vertical intervals and approximately every one thousand (1,000) cubic yards.
12. Access to the site from any other location other than the proposed construction entrance is strictly prohibited!

Erosion Control Notes

1. The Permittee shall assume complete responsibility for controlling all siltation and erosion of the project area. The Permittee shall use whatever means necessary to control erosion and siltation including, but not limited to, staked straw bales and/or siltation fabric fences (possible methods of control are detailed in the plan). Control shall commence with the clearing operations and be maintained throughout the project until acceptance of the work by City of O'Fallon and as needed by MoDOT. The Permittee's responsibilities include all design and implementation as required to prevent erosion and the depositing of silt. The City of O'Fallon and as required by MoDOT may at their option direct the Permittee in his methods as deemed fit to protect property and improvements. Any depositing of silt or mud on new or existing pavement shall be removed immediately. Any depositing of silts or mud in new or existing storm sewers and/or swales shall be removed after each rain event and cleared to the satisfaction of the City of O'Fallon and as required by MoDOT.
2. All erosion control systems are to be inspected and corrected weekly, especially within 48 hours of any rain storm resulting in one-quarter inch of rain or more. Any silt or debris leaving the site and affecting public right of way or storm water drainage facilities shall be cleaned up within 24 hours after the end of the storm.
3. Erosion control, seed, silt traps, sediment basin, etc.) shall be in accordance with Missouri Department of Natural Resources Protecting Water Quality – a field guide to erosion, sediment and stormwater best management practices for development sites in Missouri and Kansas.
4. This development is required to provide long term post construction BMP's such as; low impact design, source control and treatment controls that prevent water quality runoff to maximum extent practical in compliance with Phase II Illicit Storm Water Discharge Guidelines. (Ord. 5082, section 405.245)
5. Graded areas shall be seeded and mulched (strawed) within 14 days of stopping land disturbance activities. Unless it can be shown to the City Engineer that weather conditions are not favorable, vegetative growth is to be established within 6 weeks of stopping grading work on the project. The vegetative growth established shall be sufficient to prevent erosion and the standard shall be as required by EPA and DNR. (70% coverage per square foot) Ord. 6496, Section 405.095

PREPARED BY:

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e-mail: jennifer@stockassoc.com
Web: www.stockassoc.com

Stock & Associates
Consulting Engineers, Inc.

GRADING PERMIT PLANS FOR:

100 HIGHWAY 'P' PROJECT
100 HIGHWAY 'P'
O'FALLON, MISSOURI 63368

DATE:



GEORGE M. STOCK E-25116
CIVIL ENGINEER
CERTIFICATE OF AUTHORITY
NUMBER: 000996

REVISIONS:

1	2025-12-10 – REVISED PER CITY COMMENTS
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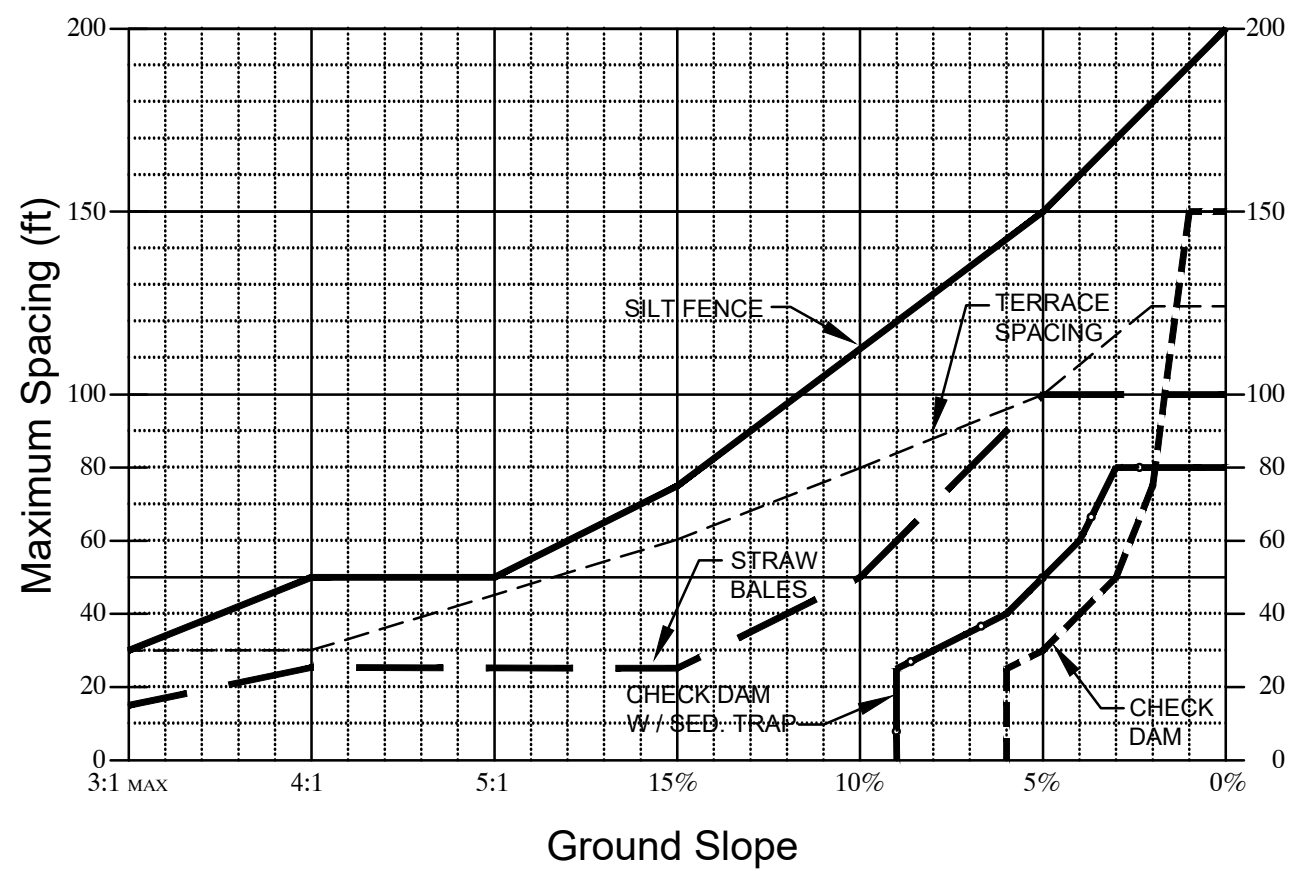
DRAWN BY: J.M.B.	CHECKED BY: C.M.S.
DATE: 10/27/2025	JOB #: 224-7735
S.C.C. HAT #	HAT S.U.P. #

MDNR #: MORA-29244

SHEET TITLE
SPECIFICATIONS &
GENERAL NOTES

SHEET NO.:

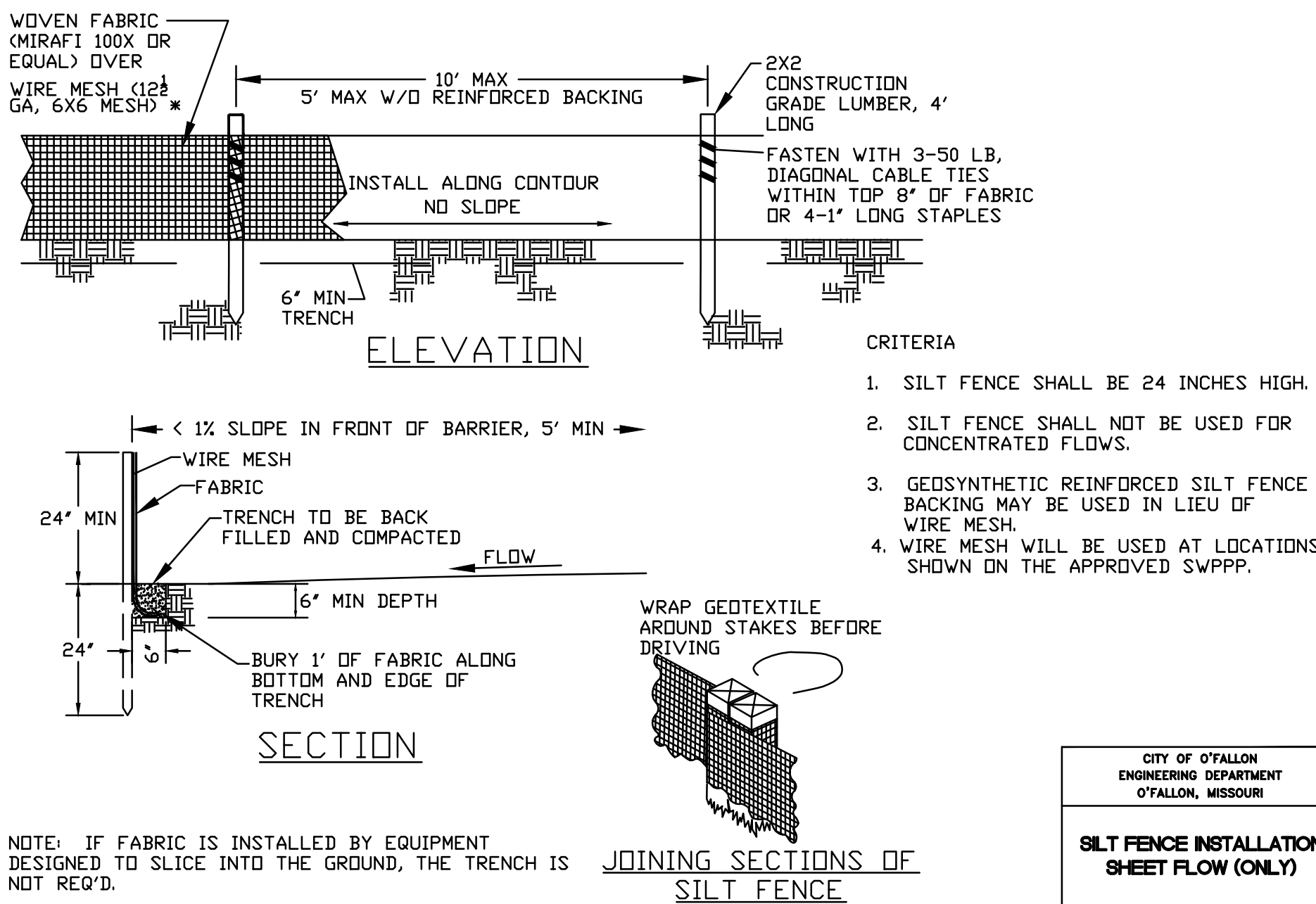
C2.0



- DESIGN CRITERIA**
1. SILT FENCE FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 2. STRAW BALE BARRIERS FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 3. REFER TO INDIVIDUAL ESC FIGURE FOR INSTALLATION.
 4. TERRACING INCLUDES LOGS, WATTLES & FILTER SOCKS.

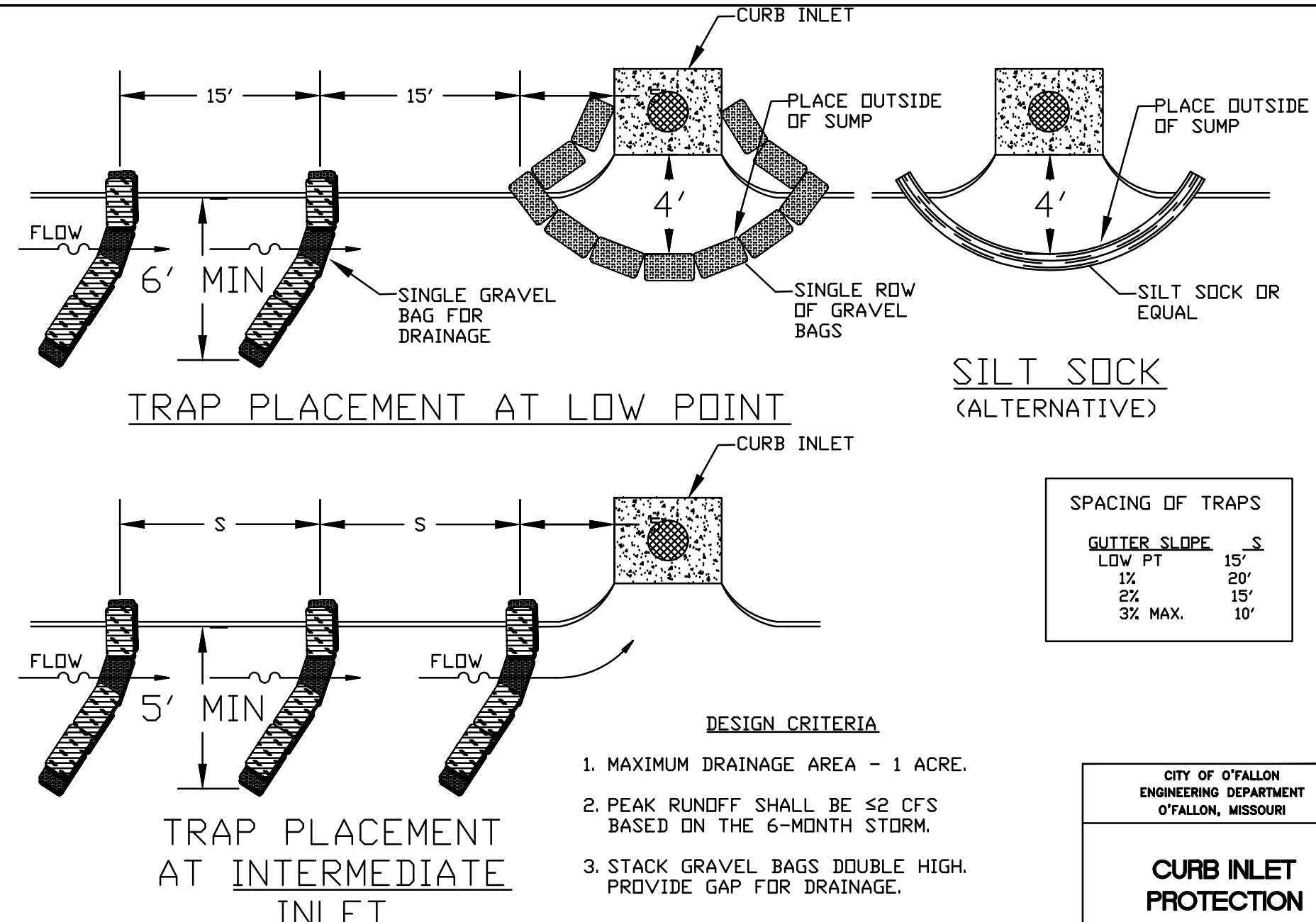
CITY OF OTTALON
ENGINEERING DEPARTMENT
OTTALON, MISSOURI

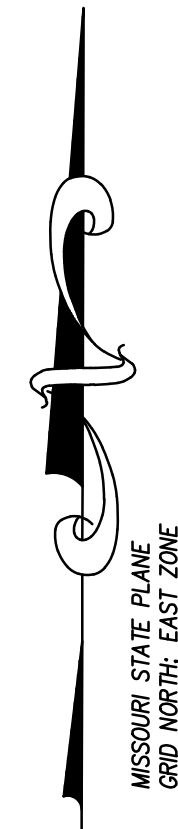
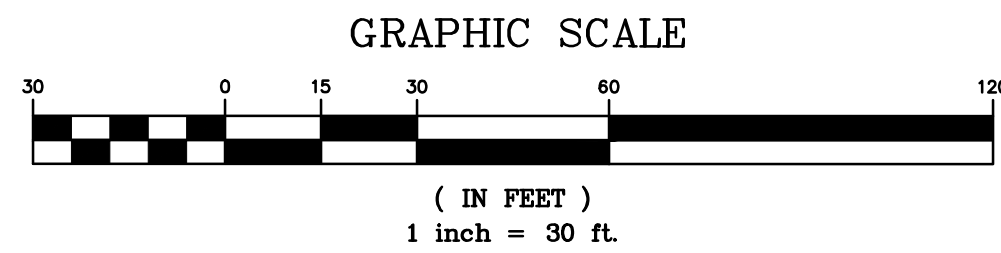
**SPACING CHART
FOR ESC DEVICES**



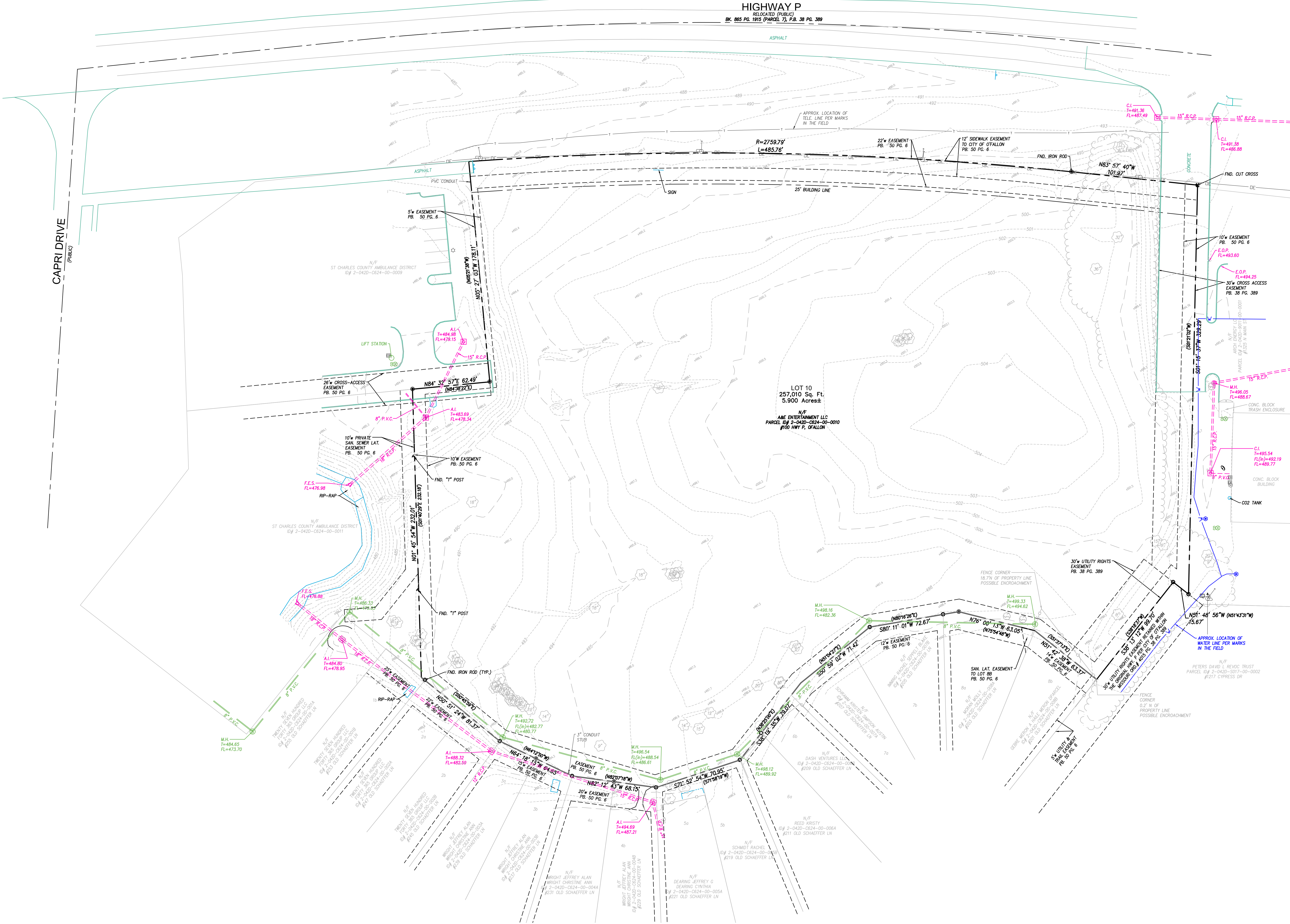
CITY OF OTTALON
ENGINEERING DEPARTMENT
OTTALON, MISSOURI

**SILT FENCE INSTALLATION
SHEET FLOW (ONLY)**





HIGHWAY P
RELOCATED (PUBLIC)
BK. 865 PG. 1915 (PARCEL 7), P.B. 38 PG. 389



PREPARED BY:

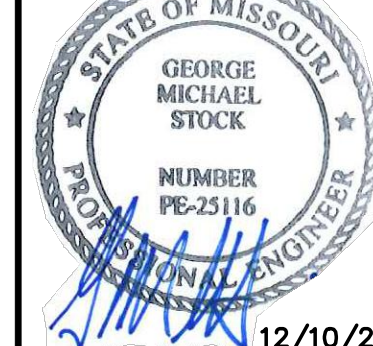
STOCK & ASSOCIATES
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GRADING PERMIT PLANS FOR:

100 HIGHWAY 'P' PROJECT

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OFALLON, MISSOURI 63368

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DATE: 10/27/2025 JOB NO: 224-7735

S.C.C. HAT # HAT SUP. #

M.D.N.R. # MOR-29244

SHEET TITLE:

EXISTING CONDITIONS PLAN

SHEET NO: C3.0

CONTRACTOR IS TO MAINTAIN STORMWATER POLLUTION PREVENTION PLAN BOOK ON-SITE AND VERIFY BY INSPECTIONS THAT ALL SILTATION & STORMWATER CONTROL IS MAINTAINED PROPERLY ON-SITE FOR THE DURATION OF CONSTRUCTION.

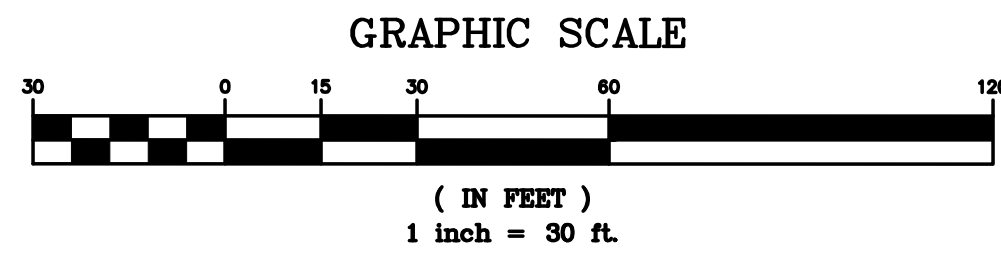
SWPPP NOTES

- 1.) ANY LAND CLEARING, CONSTRUCTION, OR DEVELOPMENT INVOLVING THE MOVEMENT OF EARTH SHALL BE IN ACCORDANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN, AND THE PERSON ISSUED A LAND DISTURBANCE PERMIT ASSUMES AND ACKNOWLEDGES RESPONSIBILITY FOR COMPLIANCE WITH SAINT CHARLES COUNTY LAND DISTURBANCE CODE AND THE APPROVED STORM WATER POLLUTION PLAN AT THE SITE OF THE PERMITTED ACTIVITY.
- 2.) PRIOR TO ANY MAJOR LAND DISTURBANCE ACTIVITY, A LAND DISTURBANCE PERMIT FROM THE STATE OF MISSOURI DEPARTMENT OF NATURAL RESOURCES IS REQUIRED.
- 3.) ALL BMP'S SHALL BE IN ACCORDANCE WITH ST. CHARLES COUNTY "DESIGN CRITERIA FOR THE PREPARATION OF IMPROVEMENT PLANS" STANDARD SPECIFICATIONS AND DETAILS DATED JANUARY 2021, OR CURRENT EDITION.

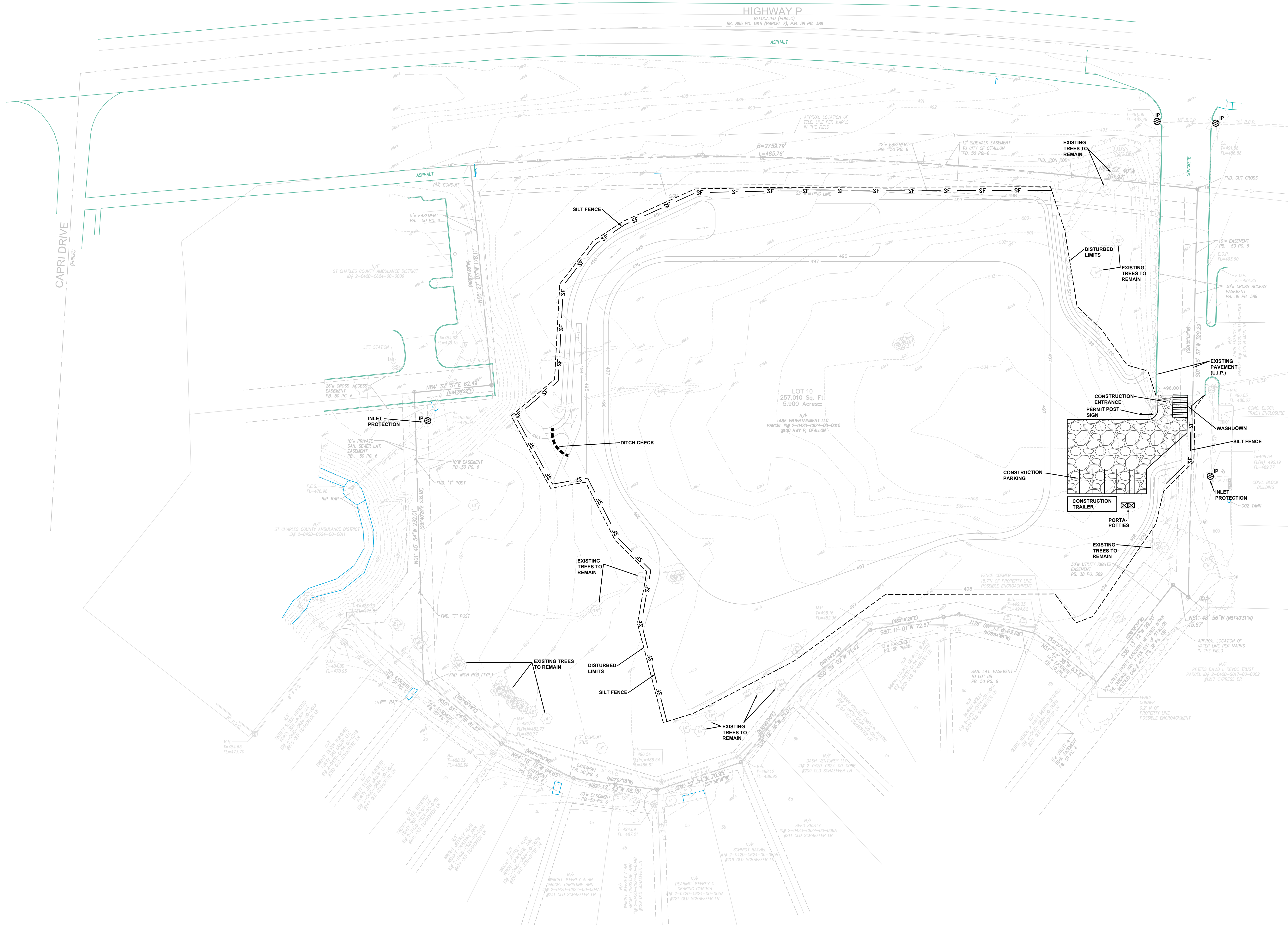
EROSION CONTROL LEGEND

- IP OP INLET/OUTLET PROTECTION
- CE CONSTRUCTION ENTRANCE
- WS WASHDOWN STATION
- SF SILTATION FENCE
- DISTURBED LIMITS

DISTURBED AREA
AREA = 3.65 AC.



MISSOURI STATE PLANE
GRID NORTH; EAST ZONE



PREPARED BY:

STOCK & ASSOCIATES
Consulting Engineers, Inc.

GRADING PERMIT PLANS FOR:

100 HIGHWAY 'P' PROJECT

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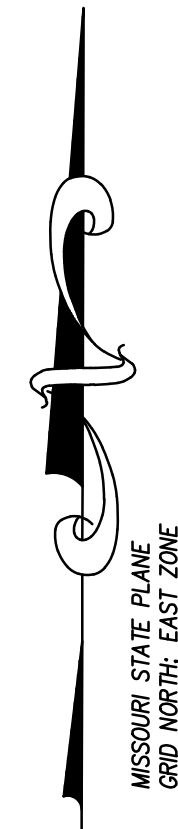
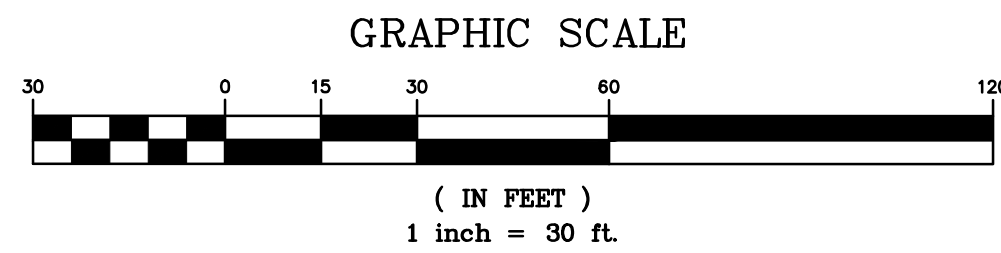
DATE: 10/27/2025 JOB NO: 224-7735

S.C.C. HAT # HAT SUP. #

MOBILE # 29244

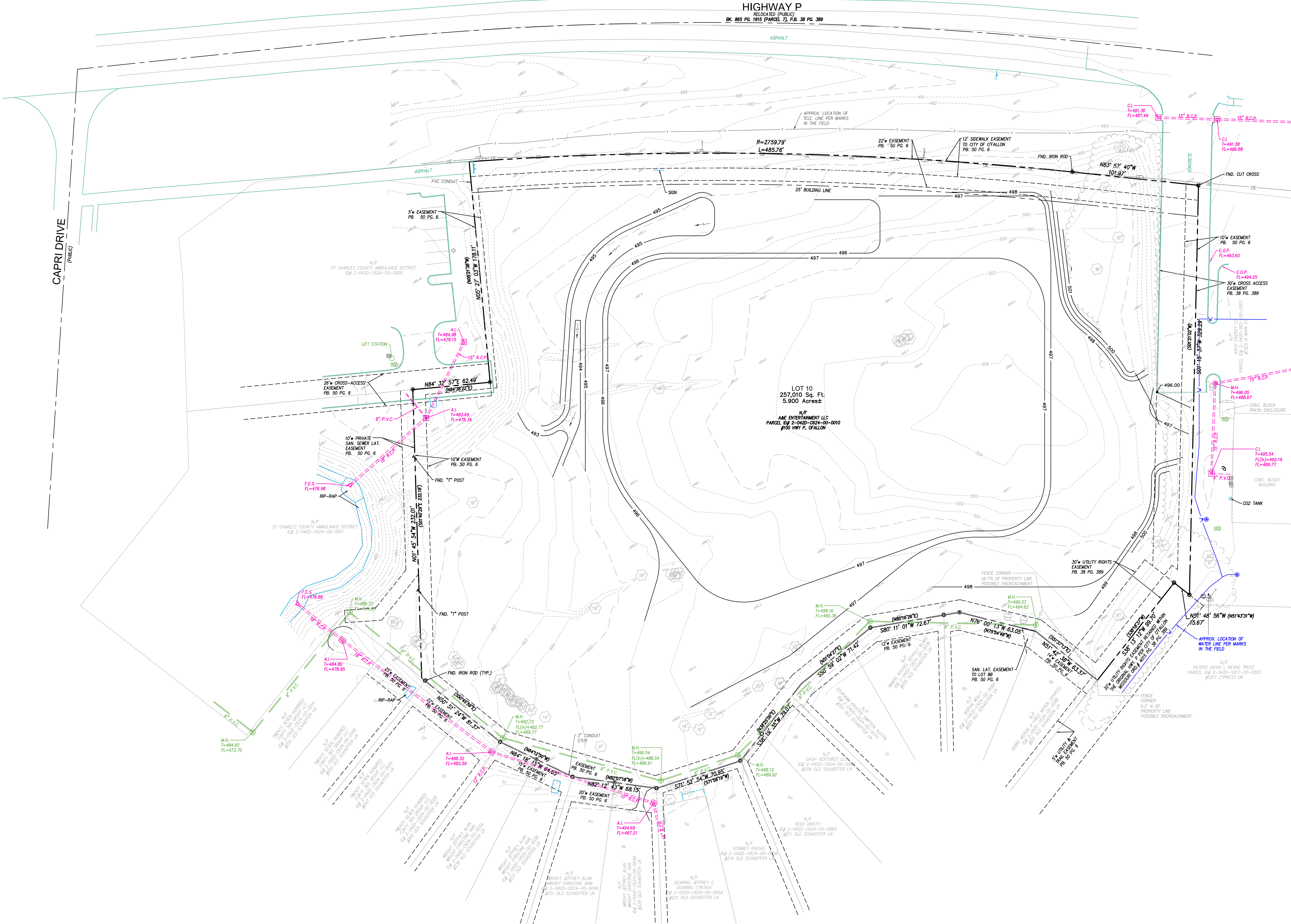
SHEET TITLE: STORMWATER POLLUTION PREVENTION PLAN

SHEET NO.: C4.0



HIGHWAY P
RELOCATED (PUBLIC)
BK. 865 PG. 1915 (PARCEL 7), P.B. 38 PG. 389

CAPRI DRIVE
(Public)



PREPARED BY:

STOCK & ASSOCIATES
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GRADING PERMIT PLANS FOR:

100 HIGHWAY 'P' PROJECT

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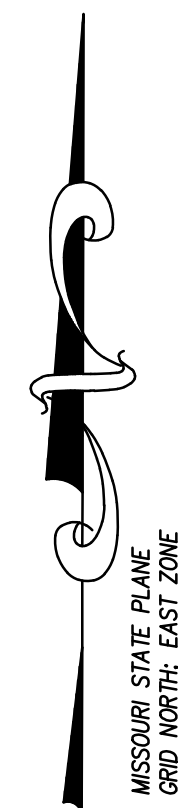
S.C.C. HAT # HAT SUP. #

M.D.N.R. # MOR-29244

SHEET TITLE:

MASS GRADING PLAN

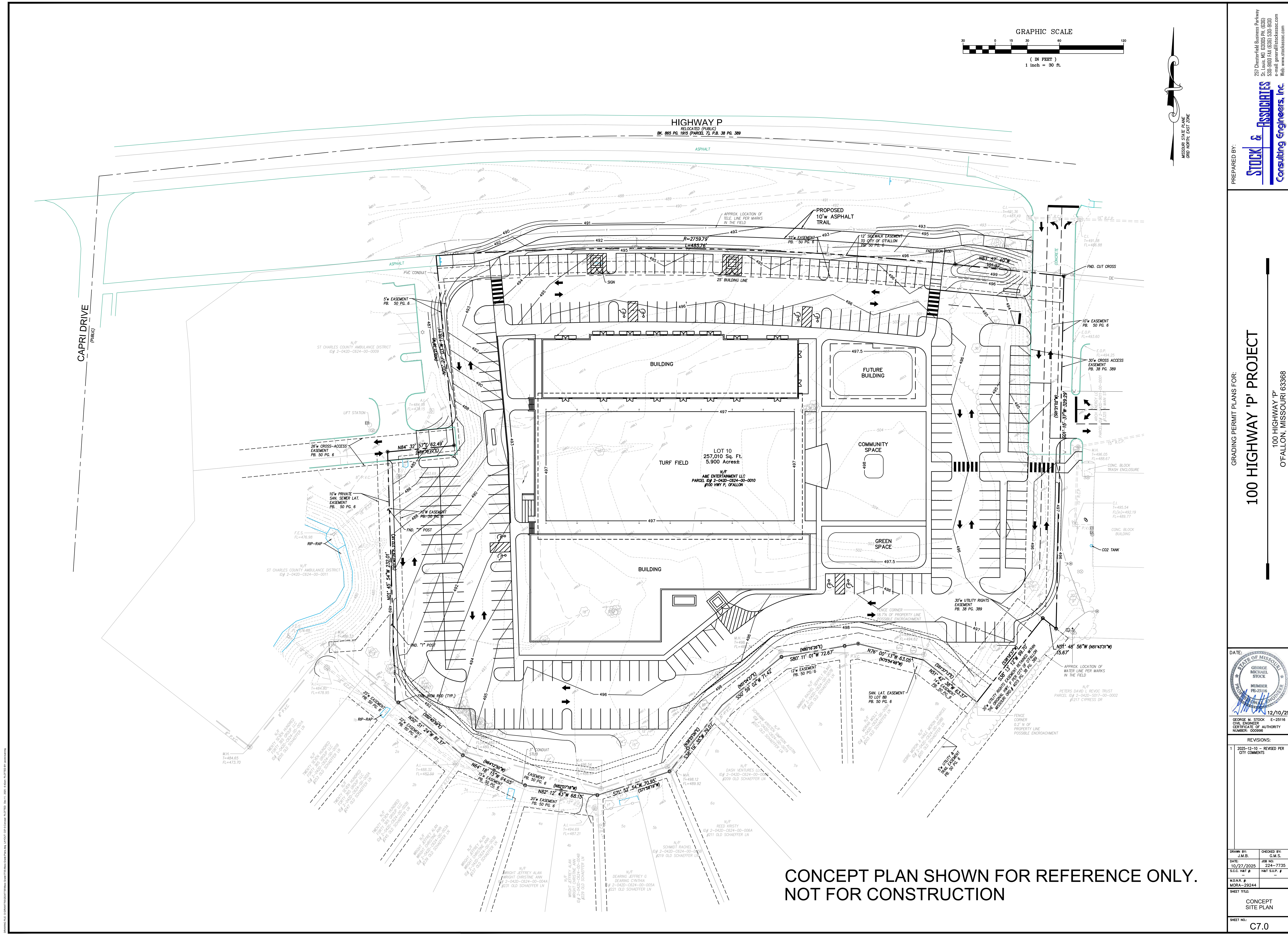
SHEET NO.: C5.0



STOCK & ASSOCIATES
Consulting Engineers, Inc.

100 HIGHWAY 'P'
D'FALLON, MISSOURI 63368





CONCEPT PLAN SHOWN FOR REFERENCE ONLY.
NOT FOR CONSTRUCTION

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10/27/2025	224-7735
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M.O.A.R. #	
MORA-29244	
SHEET TITLE:	
CONCEPT SITE PLAN	
SHEET NO.:	
C7.0	