LAKEWOOD BUSINESS CENTER **ON I-470 - PLAT S**

TOTAL DISTURBED AREA: 3.98 ac

WATERSHED: MAY BROOK-LITTLE BLUE RIVER

FLOODPLAIN NOTE:

MASS GRADING, EROSION, AND SEDIMENT CONTROL PLANS

Part of Section 20, Township 48 N, Range 31 W LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

WETLAND NOTE:

WETLANDS PRESENT ON SITE AS DETERMINED BY THE WATER RESOURCES DELINEATION AND SHOWN WITHIN THESE PLANS. REFER TO REPORT

CONSTRUCTION AND DESIGN NOTES:

DESIGN AND CONSTRUCTION MANUAL. SEE SHEET C-112 FOR TYPICAL SECTION AND PAVEMENT OPTIONS.

2. INDUSTRIAL LOCAL STREETS SHALL BE PER APWA STANDARD FOR 60' R/W SECTION 5200 TABLE LS-1.

3. STORM SEWER PIPE SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) AS APPROVED BY THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL 4. CURB INLETS SHALL BE PER CITY OF LEE'S SUMMIT STANDARD DRAWING NO. STM-1. JUNCTION BOXES SHALL BE PER CITY OF LEE'S SUMMIT STANDARD DRAWING NO. STM-3. FLARED END SECTIONS SHALL BE PER CITY OF LEE'S SUMMIT STANDARD DRAWING NO. STM-5.

GENERAL NOTES:

- PLAN SHOWS MINIMUM EROSION CONTROL MEASURES TO BE PROVIDED. ADDITIONAL SITE SPECIFIC MEASURES MAY BE NECESSARY AND SHALL BE PROVIDED BY THE DEVELOPER / OWNER, AT THE CONTRACTOR'S EXPENSE.
- 15. ANY EXISTING OR NEW STORM SEWER INLETS IN USE DURING DEMOLITION, GRADING OR CONSTRUCTION SHALL HAVE INLET PROTECTION. 16. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND QUANTITIES SHOWN ON THESE PLANS AND SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO COMMENCING ANY RELATED WORK.
- 17. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING THE LOCATION OF ALL EXISTING UTILITIES AND UNDERGROUND INSTALLATIONS. INCLUDING SERVICE CONNECTIONS. IN ADVANCE OF EXCAVATION OR TRENCHING, AND PROTECT THE SAME AS REQUIRED TO MAINTAIN
- 18. THE CONTRACTOR SHALL USE HIS OWN INFORMATION AND NOT RELY UPON ANY INFORMATION SHOWN ON THE DRAWINGS CONCERNING EXISTING UNDERGROUND INSTALLATIONS.
- 19. ANY DELAY, ADDITIONAL WORK, OR EXTRA COST TO THE CONTRACTOR CAUSED BY OR RESULTING FROM DAMAGE TO EXISTING UNDERGROUND INSTALLATIONS SHALL NOT CONSTITUTE A CLAIM FOR EXTRA WORK, ADDITIONAL PAYMENT, OR DAMAGES. ALL DAMAGE TO EXISTING UTILITIES INCLUDING SERVICE CONNECTIONS SHALL RE REPAIRED BY AND AT THE EXPENSE OF THE CONTRACTOR.
- 20. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES AND OBTAIN ALL NECESSARY INSPECTIONS THROUGHOUT THE CONSTRUCTION ACTIVITIES.
- 21. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS. INCLUDING BUT NOT LIMITED TO ALL UTILITIES. STORM DRAINAGE. AND SIGNS AS REQUIRED, ALL WORK SHALL BE IN ACCORDANCE WITH THE GOVERNING AUTHORITIES' SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN THE CONTRACTOR'S CONTRACT WITH THE OWNER.
- 22. REMOVAL OF EXISTING PAVING AND/OR BORING AT THE CONTRACTOR'S DISCRETION SHALL BE INCLUDED AS A PART OF ALL UTILITY INSTALLATIONS WHERE APPLICABLE AT THE CONTRACTOR'S EXPENSE AS WELL AS REPLACEMENT/REPAIR OF ALL DISTURBED MATERIALS IN ACCORDANCE WITH LOCAL
- 23. THE CONTRACTOR SHALL COORDINATE ALL UTILITY WORK, INCLUDING DEMOLITION AND REMOVAL, WITH THE APPROPRIATE UTILITY COMPANIES AND SERVICE PROVIDERS PRIOR TO DISCONTINUATION OF SERVICE. UTILITIES NOT NOTED FOR DEMOLITION SHALL REMAIN IN SERVICE AT ALL TIMES. 24. THE CONTRACTOR SHALL MAINTAIN EXISTING UTILITY SERVICE TO ALL ADJOINING PROPERTIES UNTIL THE RELOCATED UTILITIES ARE INSPECTED AND
- 25. ALL EXISTING UTILITIES SHALL BE REMOVED BACK TO THE CLOSEST STRUCTURE AND CAPPED AT THAT LOCATION.
- 26. REMOVE ALL TREES, GRASS, WEEDS, ROOTS, AND OTHER DEBRIS FROM THE AREA TO BE EXCAVATED, FILLED OR GRADED. 27. IF EXCAVATED MATERIAL IS UNSUITABLE FOR COMPACTION, AS DETERMINED BY THE GEOTECHNICAL ENGINEER, THE CONTRACTOR SHALL FURNISH **SUITABLE BORROW.**
- 28. ALL SLOPES, CUT OR FILL, SHALL BE GRADED TO MAXIMUM FINISH SLOPE OF THREE (3) FEET HORIZONTAL TO ONE (1) FOOT VERTICAL. NO GRADED
- SLOPE SHALL EXCEED 3:1 WITHOUT SPECIFIC SLOPE PLANTING OR REINFORCEMENT.
- 29. SITE SHALL BE GRADED TO ASSURE DRAINAGE OF WATER FROM ALL SURFACES. 30. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL SURFACE AND GROUNDWATER CONTROL MEASURES.
- 31. GRADES NOT OTHERWISE INDICATED ON THE PLANS SHALL BE UNIFORM LEVELS OR SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE GIVEN.
- ABRUPT CHANGES IN SLOPES SHALL BE WELL ROUNDED. 32. STORM DRAINAGE SYSTEMS WITHIN THE PROJECT AREA ARE TO BE COMPLETELY CLEANED AT THE COMPLETION OF THE PROJECT.
- 33. EXISTING TREES WHERE INDICATED SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES. ALL TREE PROTECTION FENCING TO BE INSPECTED DAILY AND ALL GRADING ACTIVITIES TO REMAIN OUTSIDE THE DRIP LINES.
- 34. ALL TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO GRADING. 35. ALL SOILS UNDERCUTTING, OVER EXCAVATION, UNDER DRAIN INSTALLATION, AND ROCK FILLS SHALL BE DETERMINED AND DIRECTED BY THE SOILS ENGINEER.
- 36. FILL AREAS TO BE COMPACTED TO 95% STANDARD PROCTOR MINIMUM UNLESS OTHERWISE INDICATED BY GEOTECHNICAL ENGINEER.
- 37. UNLESS OTHERWISE INDICATED, ALL DISTURBED SOIL AREAS TO RECEIVE 6 INCHES OF TOPSOIL AND TO BE SEEDED AND MULCHED.



VICINITY MAP



NORTH

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UTILITY CONTACTS:

816-471-5275 **SPIRE** 800-582-1234 COMCAST 816-795-1100 AT&T 816-325-5610 **SPECTRUM** 816-358-5360 **CITY OF LEE'S SUMMIT PUBLIC WORKS** 816-969-1800 CITY OF LEE'S SUMMIT PUBLIC WORKS INSPECTIONS 816-969-1800 **CITY OF LEE'S SUMMIT WATER UTILITIES** 816-969-1900

UTILITY NOTE:

THE UTILITIES AS SHOWN IN THESE DRAWINGS WERE DEVELOPED FROM THE INFORMATION AVAILABLE. IT IS NOT IMPLIED NOR INTENDED TO BE THE COMPLETE INVENTORY OF UTILITIES IN THIS AREA. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL UTILITIES (WHETHER SHOWN OR NOT) AND PROTECT SAID UTILITIES FROM ANY DAMAGE.

SHEET INDEX:

C-050	COVER SHEET
C-051	EROSION CONTROL PHASE 1
C-052	EROSION CONTROL PHASE 2
C-053	EROSION CONTROL PHASE 3
C-054	MASS GRADING AND EROSION AND SEDIMENT CONTROL
C-055	PHASE 1 GRADING PLAN
C-056	MASS GRADING PLAN
0.004.000	EDOCION CONTROL DETAIL C

BENCHMARK:

LEGAL:

LENGTH OF 45.17 FEET: THENCE ALONG A COMPOUND CURVE TO THE LEFT. HAVING A RADIUS OF 480.00 LENGTH OF 6.44 FEET; THENCE NORTH 88°23'00" WEST, 934.92 FEET; THENCE ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 25.00 FEET, A CURVE LENGTH OF 39.07 FEET, A CHORD BEARING OF SOUTH 46°50'51" WEST, AND A CHORD LENGTH OF 35.21 FEET, TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF NE HAGEN ROAD, AS NOW ESTABLISHED; THENCE ALONG SAID EAST RIGHT-OF-WAY LINE, NORTH 02°04'42" EAST, 84.80 FEET. TO THE SOUTHWEST CORNER OF LOT 27, LAKEWOOD BUSINESS CENTER ON I-470 PLAT K. A SUBDIVISION IN SAID CITY OF LEE'S SUMMIT: THENCE ALONG THE SOUTH LINE OF SAID LOT 27, SOUTH 88°23'00" EAST, 404.01 FEET, TO THE SOUTHEAST CORNER THEREOF; THENCE ALONG THE EAST LINE OF SAID LOT 27, NORTH 01°38'44" EAST, 370.07 FEET, TO THE SOUTHWEST CORNER OF TRACT C, LAKEWOOD BUSINESS CENTER ON I-470 - PLAT R, A SUBDIVISION IN SAID CITY OF LEE'S SUMMIT; THENCE ALONG THE SOUTH LINE OF SAID TRACT C. SOUTH 88°21'07" EAST. 889.46 FEET. TO THE SOUTHEAST CORNER THEREOF AND BEING A POINT ON THE WEST LINE OF SAID LAKEWOOD BUSINESS CENTER ON 1-470. LOTS 23A AND 23B; THENCE ALONG SAID WEST LINE, SOUTH 01°47'11" WEST, 415.53 FEET, TO THE POINT OF BEGINNING AND CONTAINS 9.49 ACRES. MORE OR LESS.

ENGINEER'S CERTIFICATION:

I HEREBY CERTIFY THAT THIS PROJECT HAS BEEN DESIGNED AND THESE PLANS PREPARED IN ACCORDANCE WITH THE CURRENT DESIGN CRITERIA OF THE CITY OF LEE'S SUMMIT, MISSOURI AND THE STATE OF MISSOURI. I **FURTHER CERTIFY THAT THESE PLANS WERE IN** ACCORDANCE TO AASHTO STANDARDS.

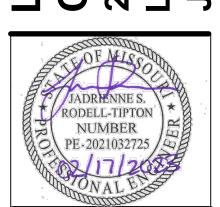
SIGNATURE	DATE
CITY OF L	.EE'S SUMMIT, MISSOUF
APPROVED	DATE:

CITY ENGINEER



ORTH OAK SAFETY STORAGE

GRAIN VALLEY, MO 64029 316) 229-8115



JADRIENNE S RODELL-TIPTON, PE PE-2021032725 (MISSOURI #)

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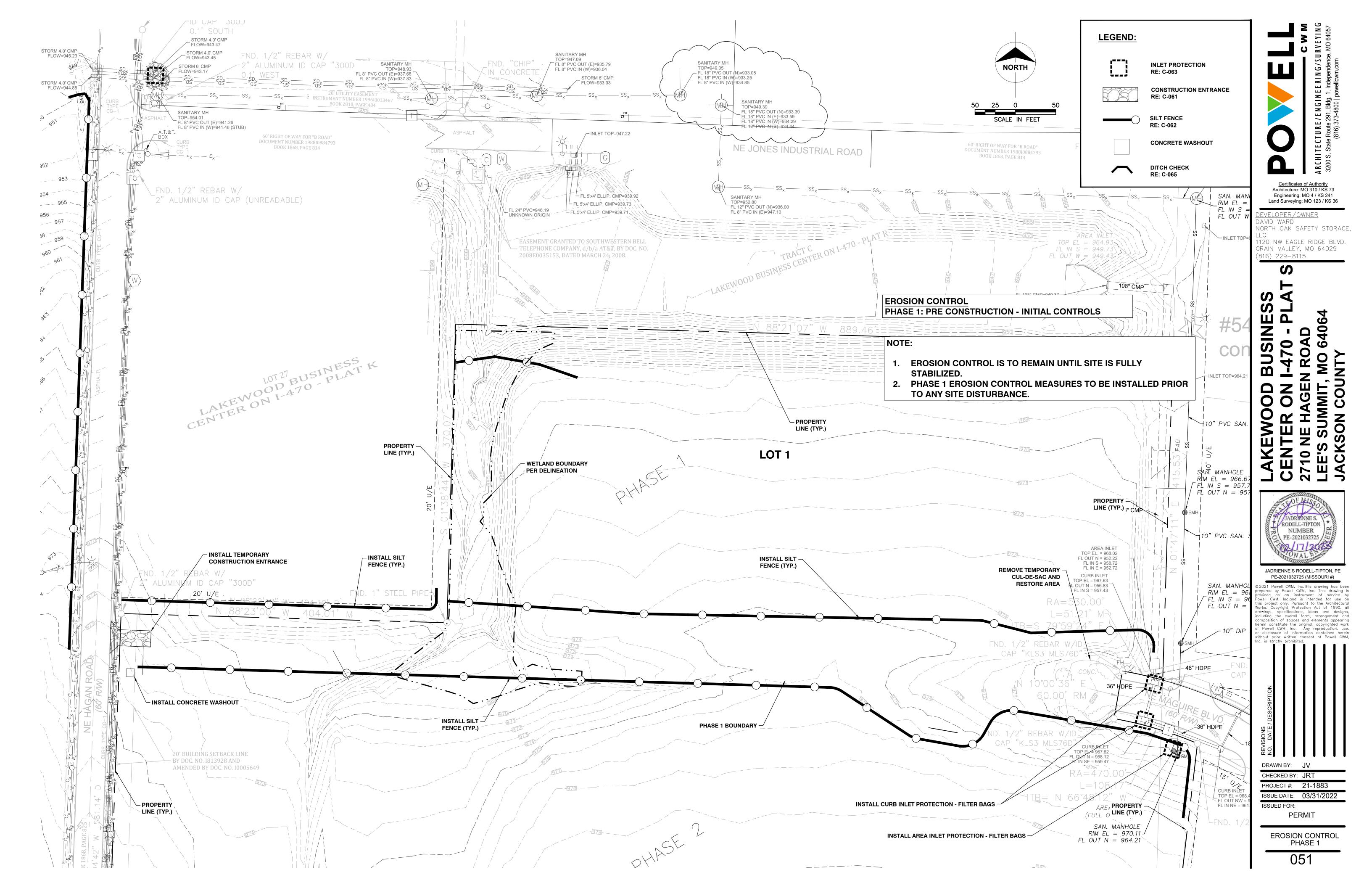
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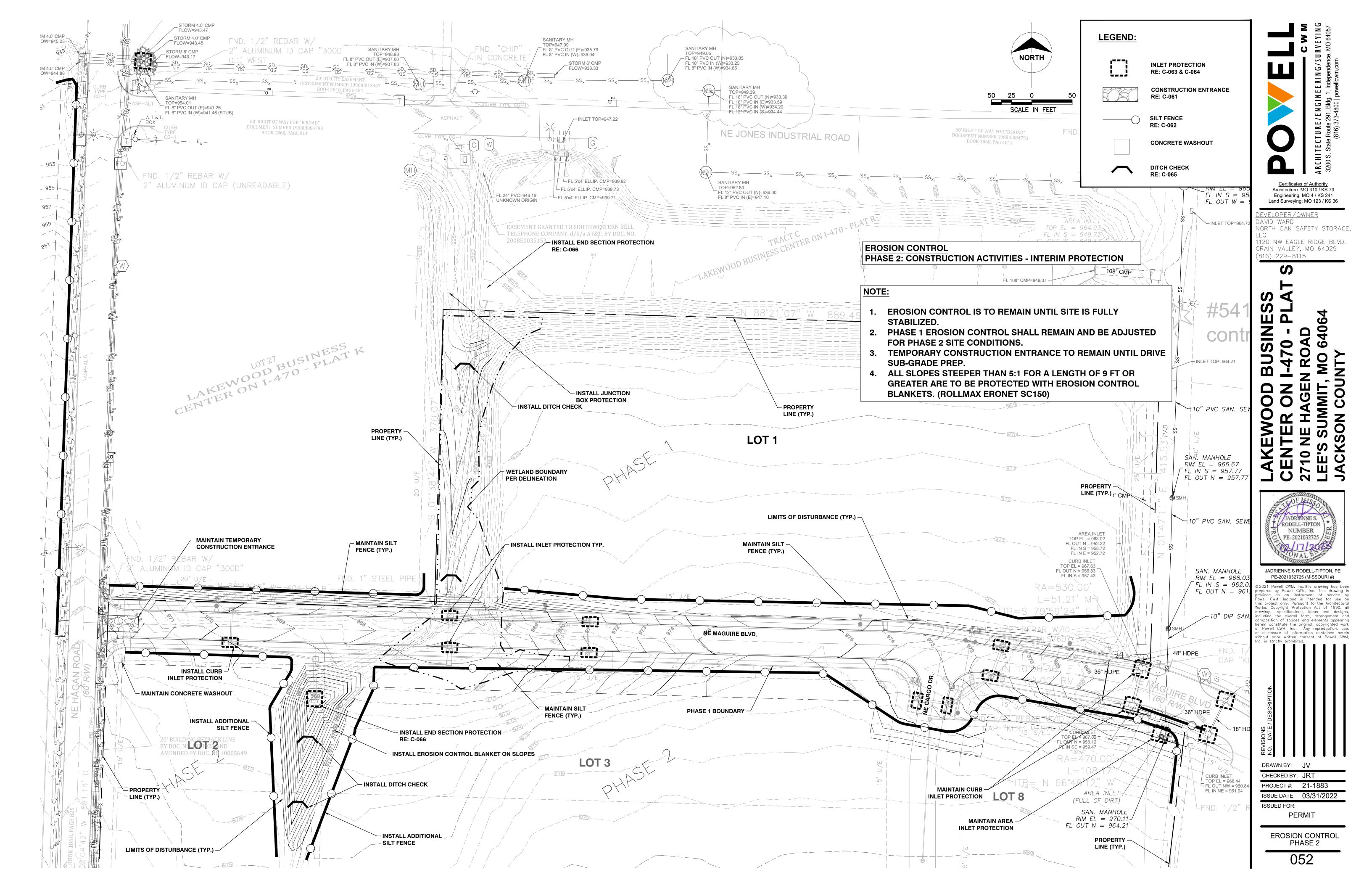
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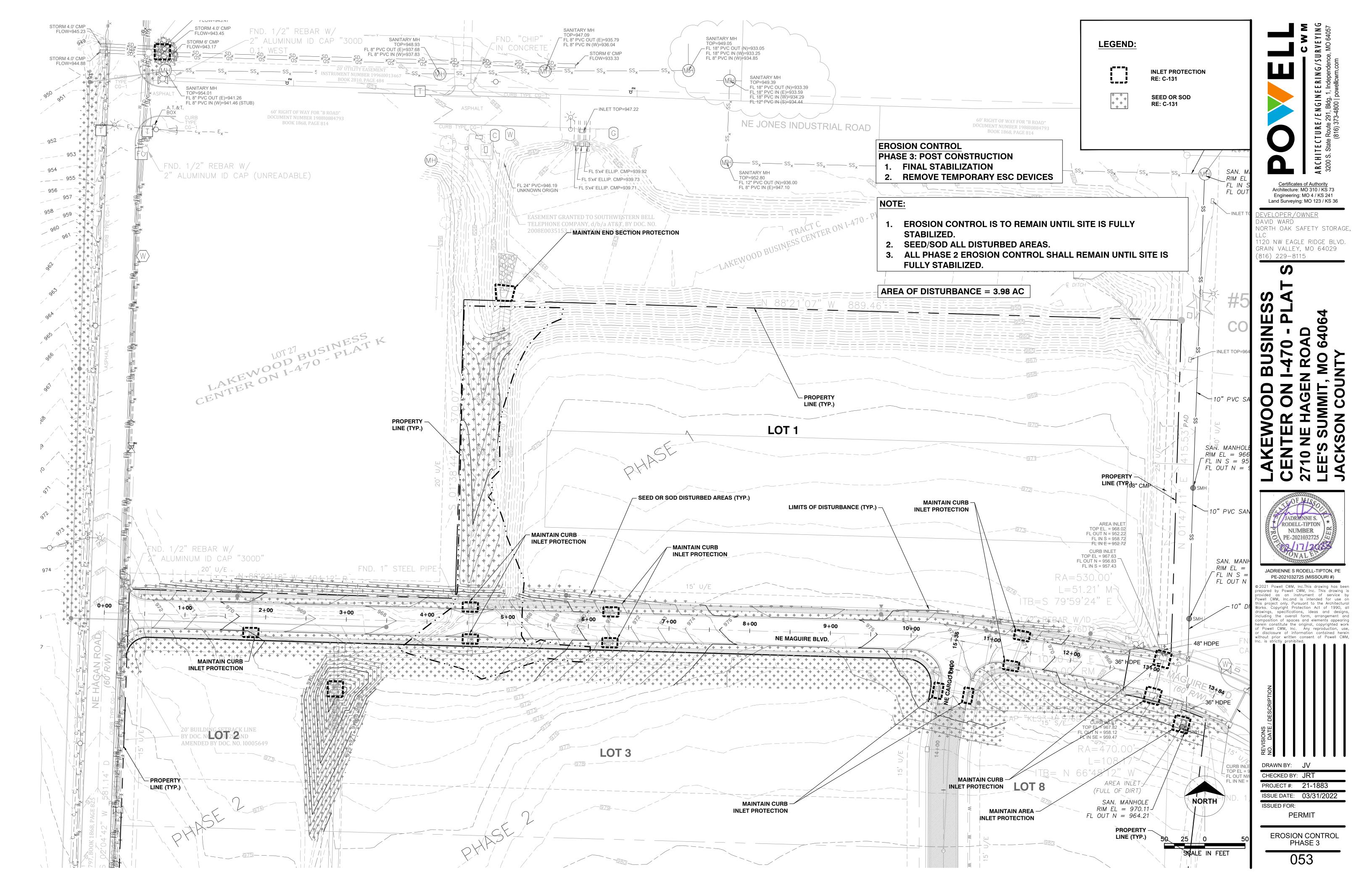
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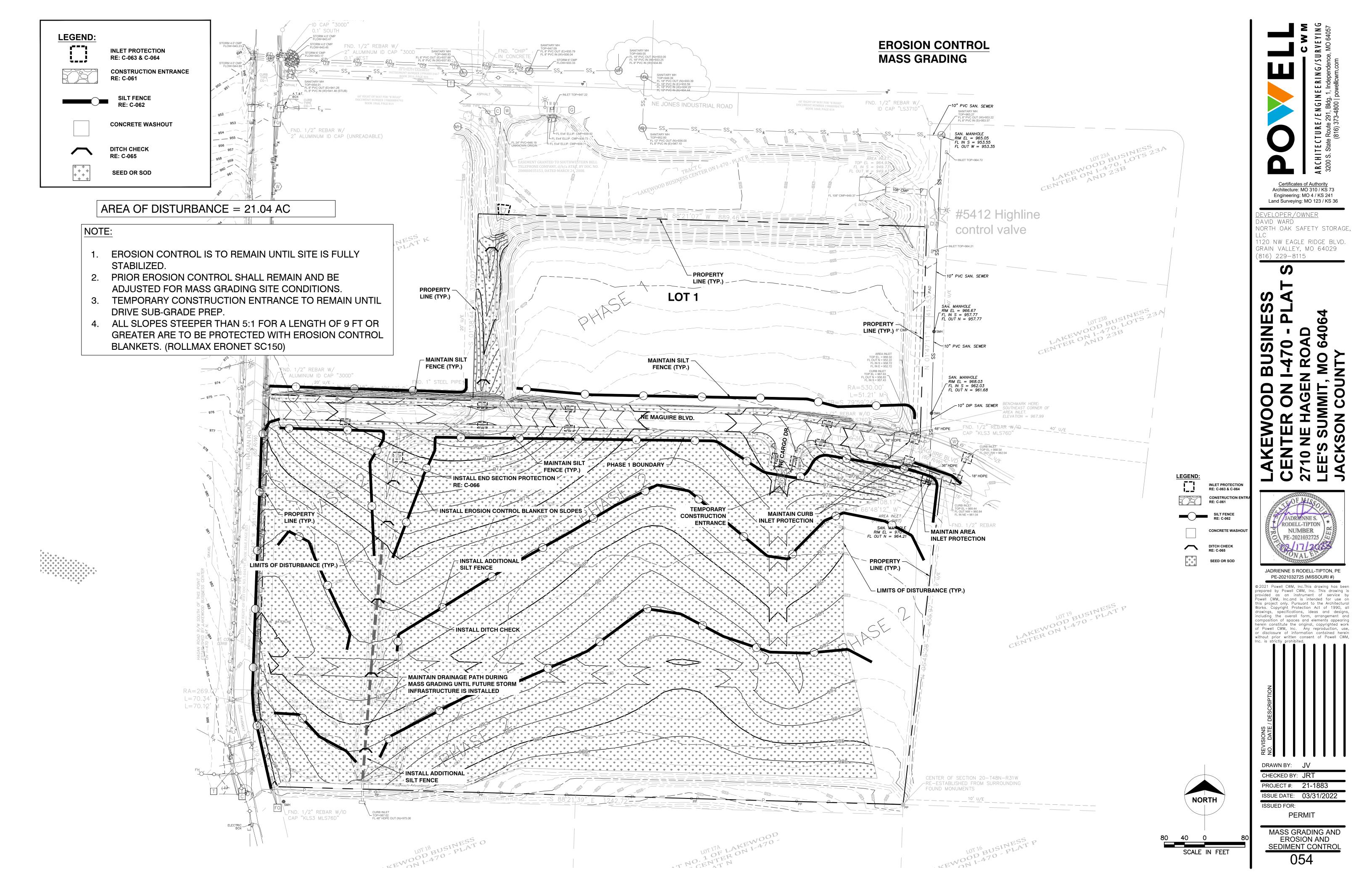
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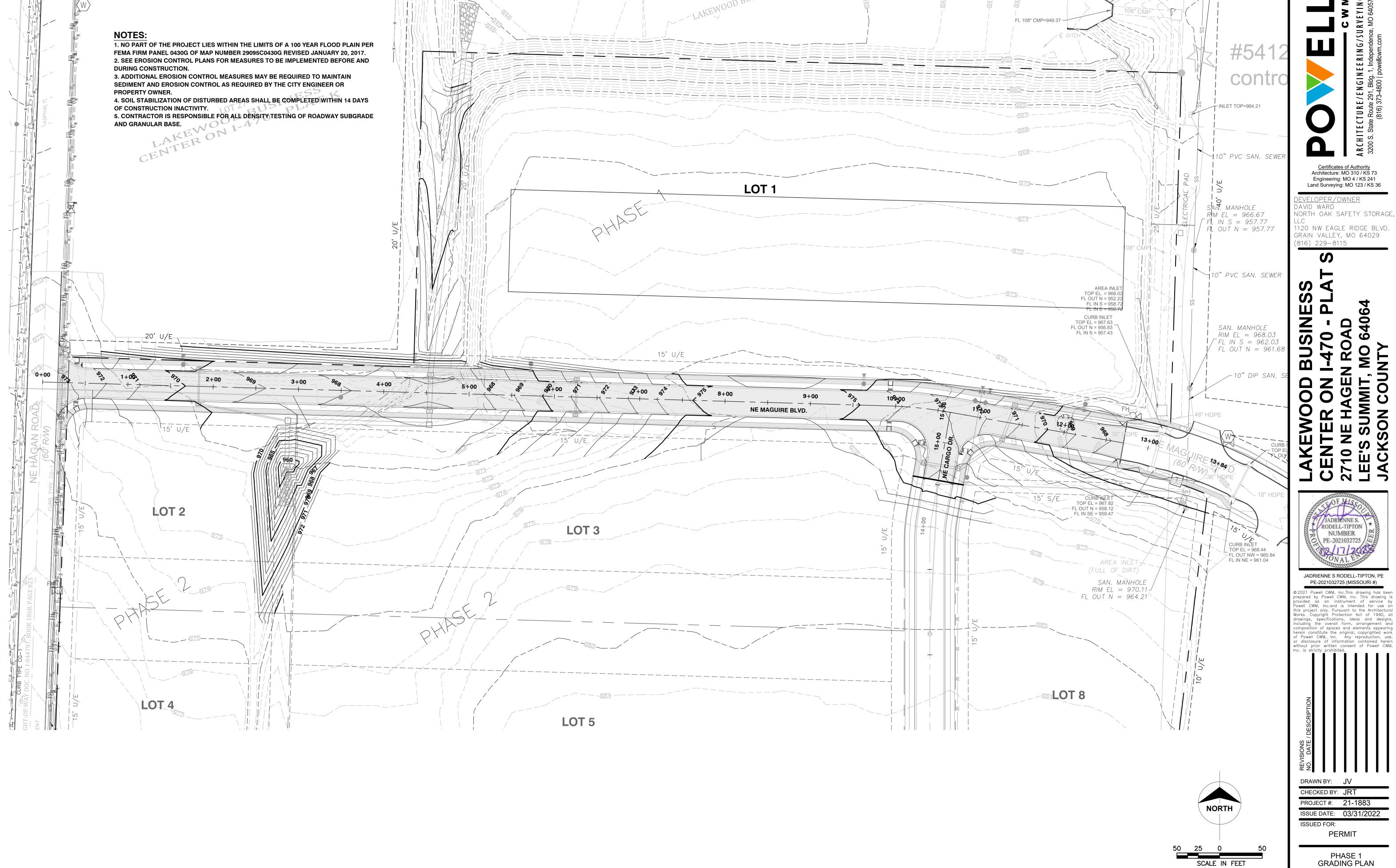
COVER SHEET

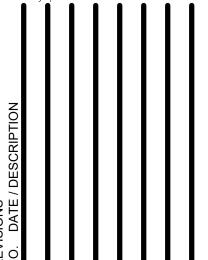




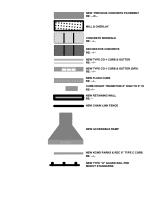


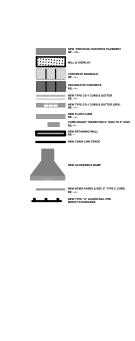






PHASE 1 GRADING PLAN





Certificates of Authority
Architecture: MO 310 / KS 73
Engineering: MO 4 / KS 241
Land Surveying: MO 123 / KS 36

NORTH OAK SAFETY STORAGE,

1120 NW EAGLE RIDGE BLVD. GRAIN VALLEY, MO 64029

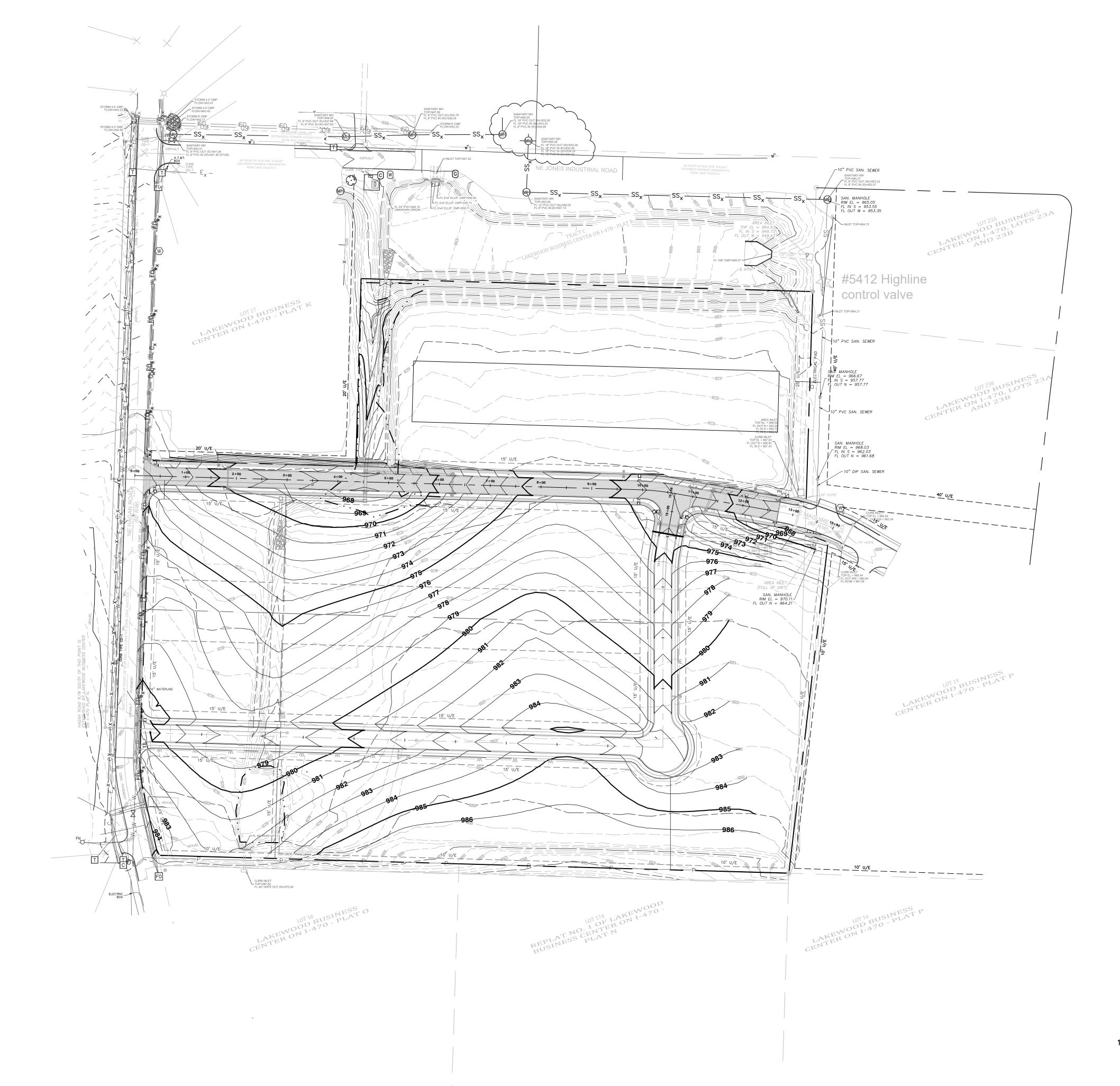
RODELL-TIPTON NUMBER

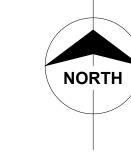
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<u>DEVELOPER/OWNER</u> DAVID WARD

(816) 229-8115





SCALE IN FEET

MASS GRADING PLAN

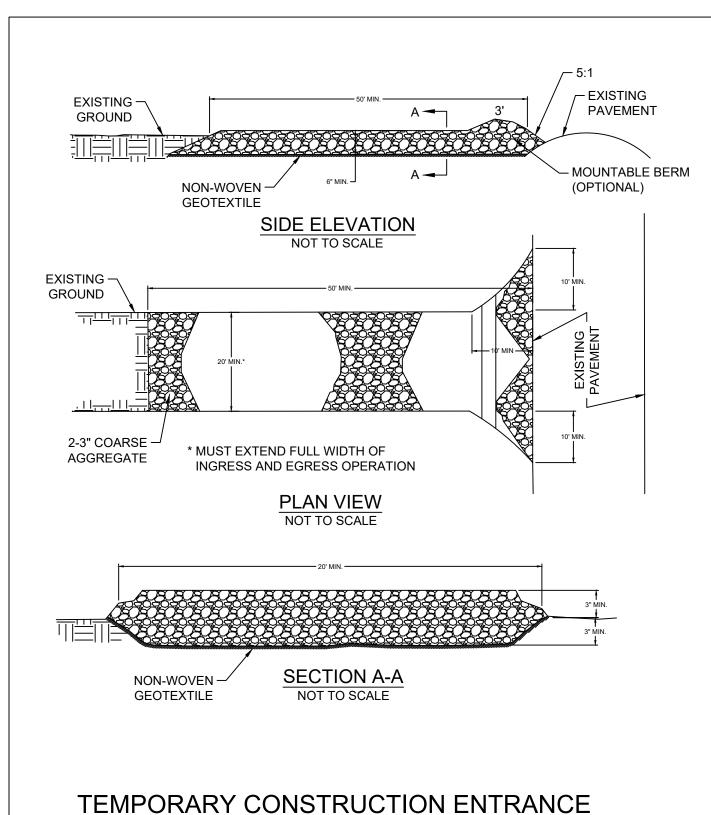
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TEMPORARY CONSTRUCTION ENTRANCE PAD NOTES:

A) INSTALLATION:

- AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS. IF POSSIBLE, LOCATE WHERE PERMANENT ROADS WILL EVENTUALLY BE CONSTRUCTED.
- REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
- 3. IF SLOPE TOWARDS THE PUBLIC ROAD EXCEEDS 2%, CONSTRUCT A 6- TO 8-INCH HIGH RIDGE WITH 3H:1V SIDE SLOPES ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE EDGE OF THE PUBLIC ROAD TO DIVERT RUNOFF AWAY FROM IT.
- 4. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES ALONG PUBLIC ROADS.
- 5. PLACE STONE TO DIMENSIONS AND GRADE AS SHOWN ON PLANS. LEAVE SURFACE SMOOTH AND
- 6. DIVER ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL
- 7. IF WET CONDITIONS ARE ANTICIPATED, PLACE GEOTEXTILE FABRIC ON THE GRADED FOUNDATION TO IMPROVE STABILITY.

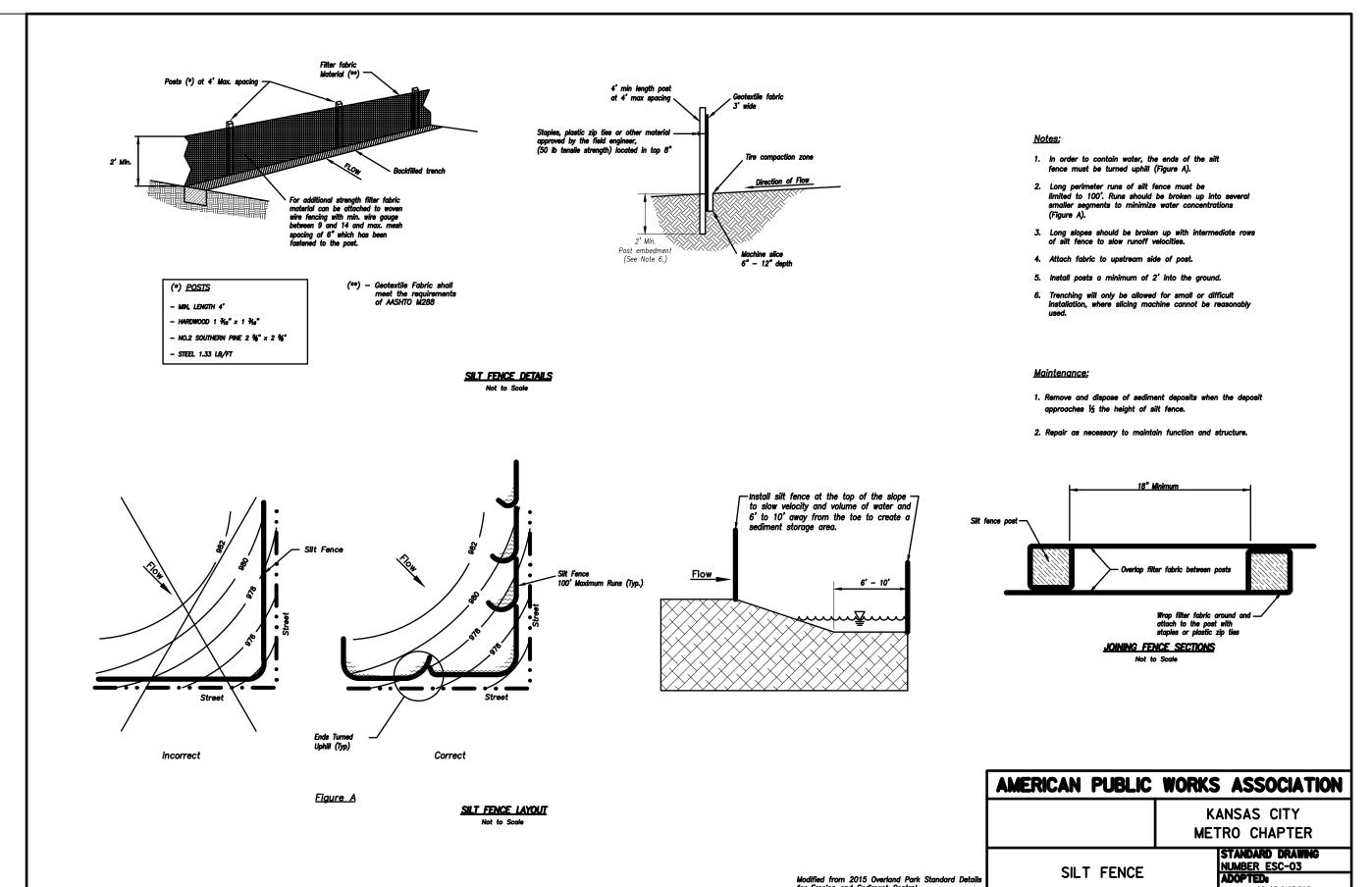
B) TROUBLESHOOTING:

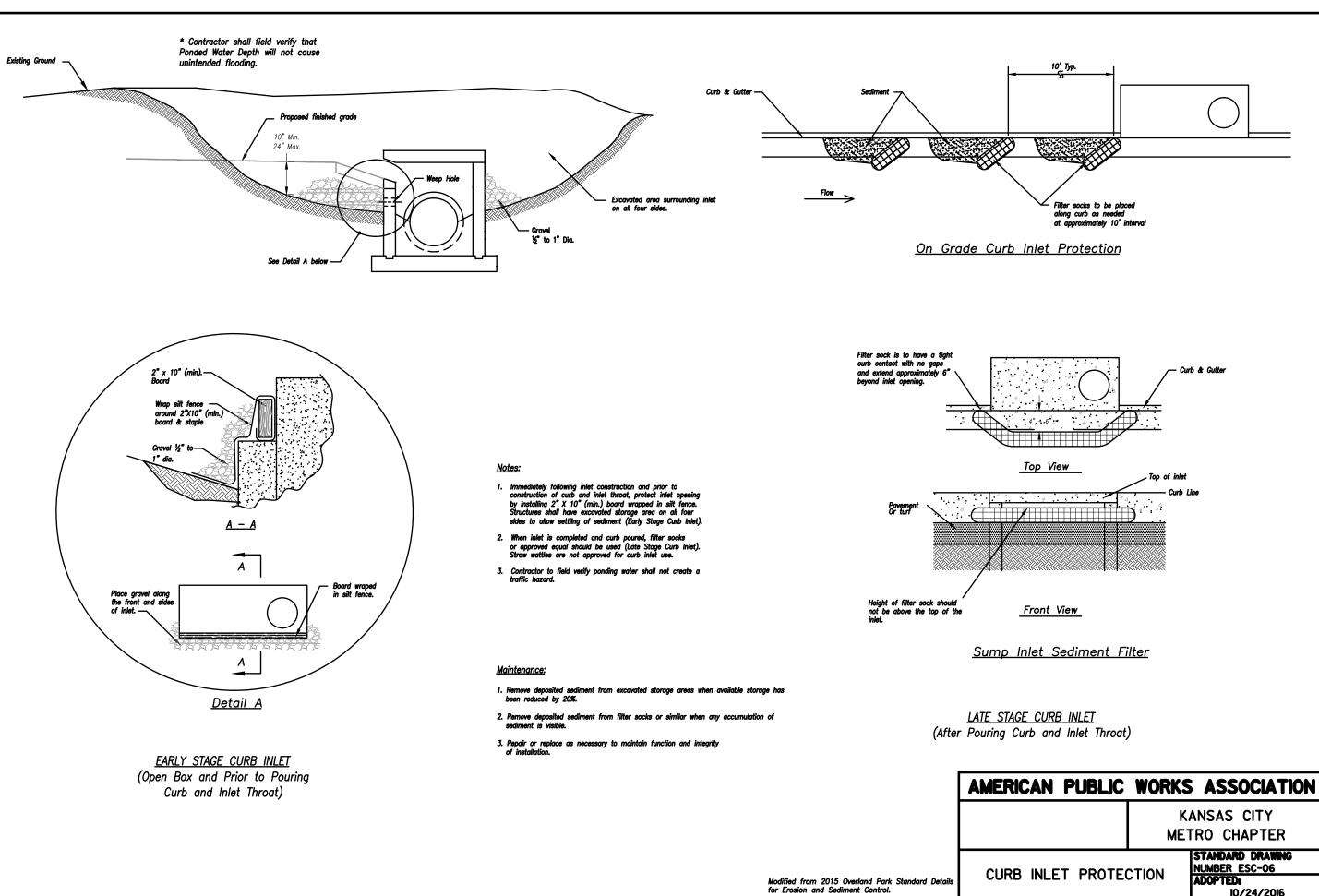
- 1. CONSULT WITH A QUALIFIED DESIGN PROFESSIONAL IF ANY OF THE FOLLOWING OCCUR:
- a. INADEQUATE RUNOFF CONTROL TO THE EXTENT THAT SEDIMENT WASHES ONTO PUBLIC ROAD - INSTALL DIVERSIONS OR OTHER RUNOFF CONTROL MEASURES.
- b. SMALL STONE, THIN PAD, OR ABSENCE OF GEOTEXTILE FABRIC RESULTS IN RUTS AND MUDDY CONDITIONS AS STONE IS PRESSED INTO SOIL - INCREASE STONE SIZE OR PAD THICKNESS OR ADD GEOTEXTILE FABRIC.
- c. PAD TOO SHORT FOR HEAVY CONSTRUCTION TRAFFIC EXTEND PAD BEYOND THE MINIMUM 50-FOOT LENGTH AS NECESSARY.

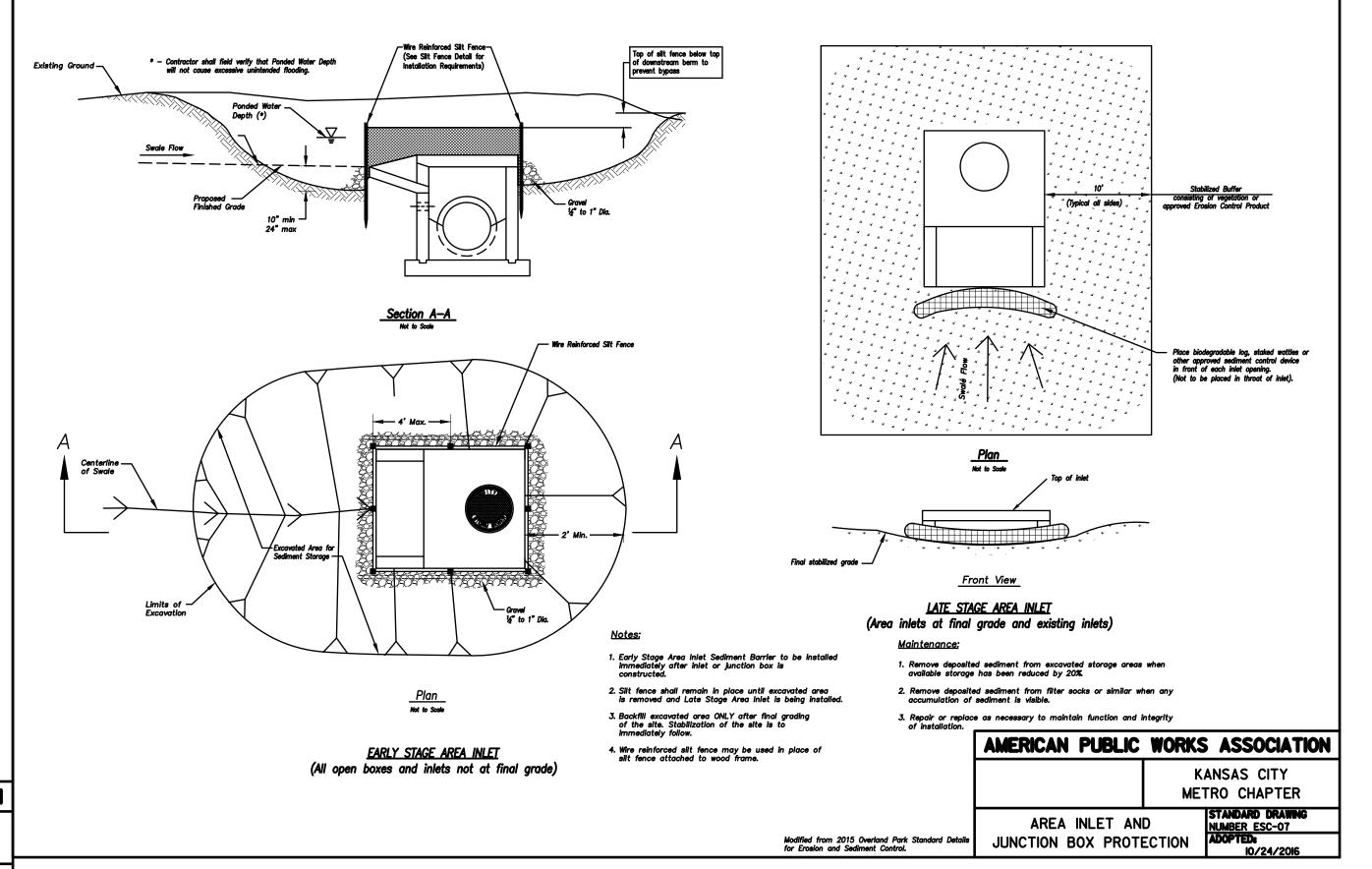
C) INSPECTION AND MAINTENANCE:

- 1. INSPECT STONE PAD AND SEDIMENT DISPOSAL AREA WEEKLY AND AFTER 1/2-INCH OR GREATER STORM EVENTS.
- 2. RESHAPE PAD AS NEEDED FOR PROPER DRAINAGE AND RUNOFF CONTROL.
- 3. TOPDRESS WITH CLEAN 2- AND 3-INCH STONE AS NEEDED.
- IMMEDIATELY REMOVE MUD OR SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROAD. REPAIR ANY BROKEN ROAD PAVEMENT IMMEDIATELY.
- 5. REMOVE ALL TEMPORARY ROAD MATERIALS FROM AREAS WHERE PERMANENT VEGETATION WILL BE ESTABLISHED.

10/24/2016









Architecture: MO 310 / KS 73 Engineering: MO 4 / KS 241 Land Surveying: MO 123 / KS 36

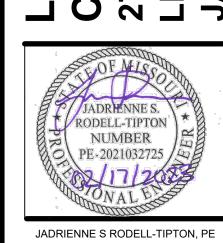
<u>Eveloper/owner</u> AVID WARD ORTH OAK SAFETY STORAGE,

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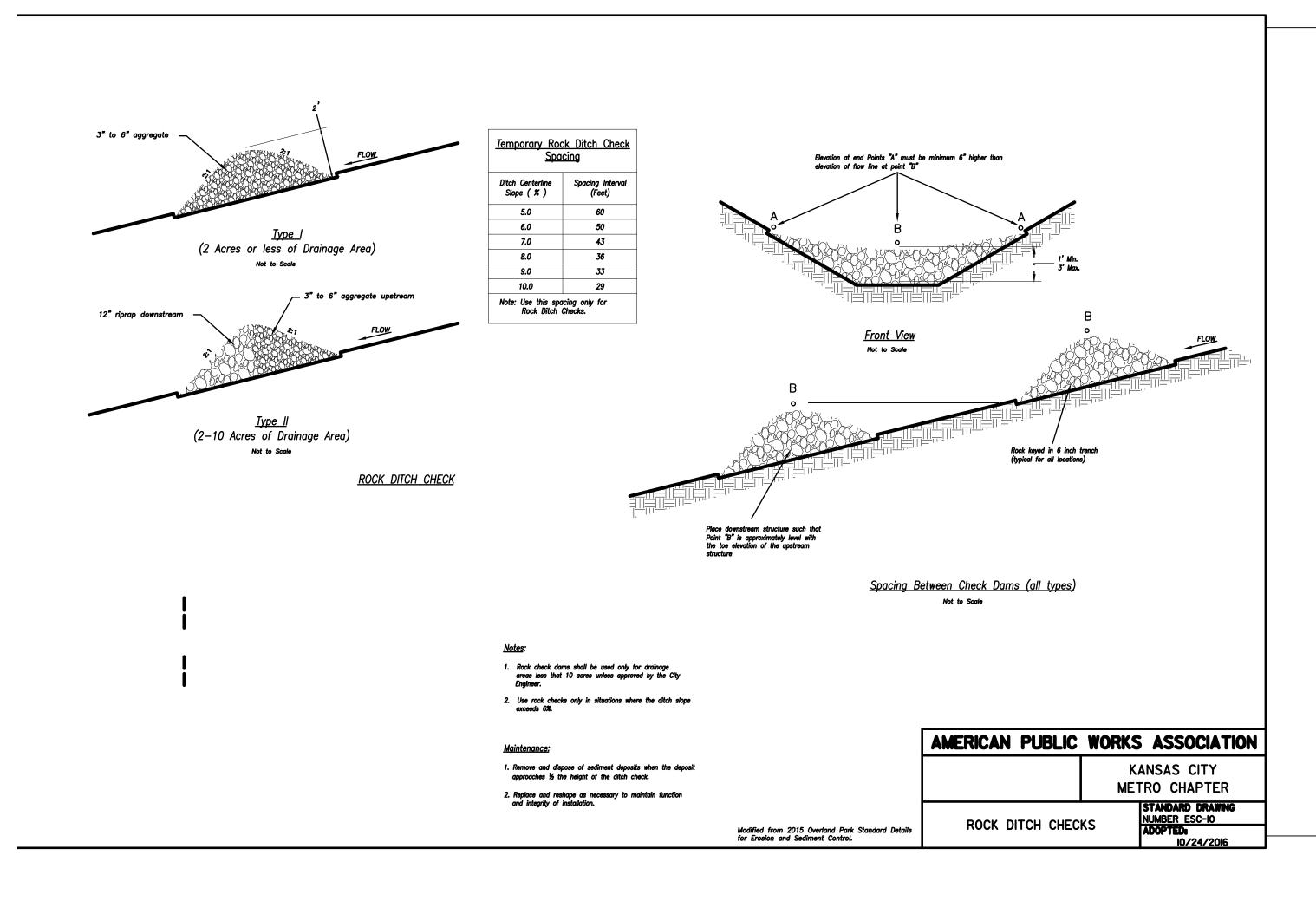
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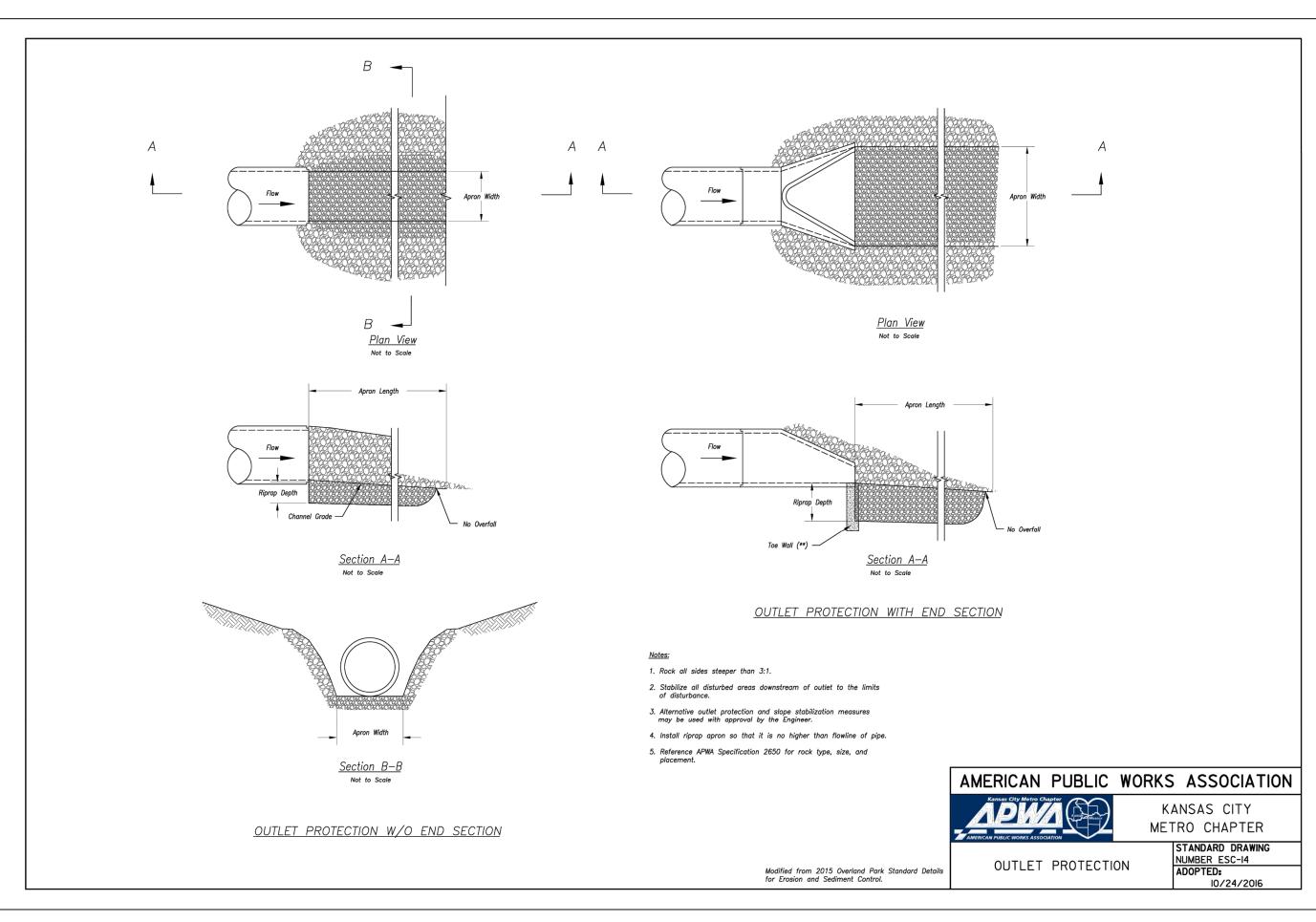
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EROSION CONTROL DETAILS -1





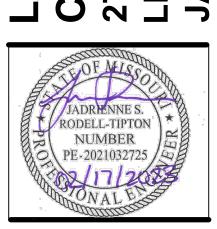


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