# LOT 10 LAKEWOOD BUSINESS PARK

LOT 10 I-470 BUSINESS & TECHNOLOGY CENTER 2601 NE MCBAINE DRIVE LEE'S SUMMIT, MO 64064

# ISSUED FOR: FINAL DEVELOPMENT PLAN CITY COMMENTS #03 - 01/12/2022



STRUCTURAL

S100

MP002

M-101

M-102

P-102

E-001

E-002

E-003

PLUMBING

ELECTRICAL

MECHANICAL

STRUCTURAL GENERAL NOTES

FOUNDATION PLAN

FOUNDATION PLAN

MECHANICAL PLAN WEST

MECHANICAL PLAN EAST

PLUMBING PLAN WEST

PLUMBING PLAN EAST

PHOTOMETRIC PLAN

PHOTOMETRIC PLAN

**ELECTRICAL PLAN - WEST** 

ELECTRICAL PLAN - EAST

## **GENERAL NOTES**

- ARCHITECT) WITHIN THE SET OF DOCUMENTS ISSUED BY THE ARCHITECT. IT IS EXPRESSLY UNDERSTOOD, THAT BY SUCH ISSUANCE, THE ARCHITECT ASSUMES NO LIABILITY FOR THE SERVICES OF SAID CONSULTANTS
- 3. ALL WORK AND MATERIALS SHALL CONFORM TO THE APPLICABLE CODES LISTED IN THE
- 4. UNLESS OTHERWISE INDICATED ON THESE DRAWINGS AND SPECIFICATIONS AS BEING N.I.C. OR EXISTING, ALL ITEMS, MATERIALS, ETC. AND INSTALLATIONS OF THE SAME ARE A PART OF THE CONTRACT DEFINED BY THESE DRAWINGS AND SPECIFICATIONS AND THEIR INTENT.
- 5. CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS AND COMPLY WITH SAFETY REGULATIONS AND RESTRICTIONS AS REQUIRED FOR WORKERS AND PEDESTRIAN PROTECTION DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT. PROVIDE PROTECTION AS REQUIRED TO PREVENT ANY DAMAGE TO EXISTING CONSTRUCTION WITHIN AND ADJACENT TO JOB SITE. WHERE DAMAGE OCCURS, THE CONTRACTOR SHALL REPAIR OR REPLACE DAMAGED AREA AND/OR MATERIAL AS REQUIRED TO THE OWNER'S APPROVAL AT NO ADDITIONAL COST. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND MAY NOT BE LIMITED TO NORMAL WORKING HOURS. PROVIDE SECURITY FENCE AND GATES AS NECESSARY AROUND THE AREA WITHIN THE SCOPE OF WORK.
- 6. IF THERE ARE TRENCHES OR EXCAVATION 5'-0" OR MORE IN DEPTH INTO WHICH A PERSON IS REQUIRED TO DESCEND, CONTRACTOR SHALL OBTAIN NECESSARY PERMIT FROM THE APPROPRIATE LOCAL GOVERNING AGENCY.
- 7. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, UTILITIES, OTHER SERVICES AND RELATED TASKS NECESSARY FOR PROPER EXECUTION OF THE CONSTRUCTION REQUIRED BY CONTRACT DOCUMENTS.
- 8. ANY REVISION OR ADDITIONAL WORK REQUIRED BY FIELD CONDITIONS OR LOCAL GOVERNING AUTHORITIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL PERMITS. LICENSES, INSPECTIONS AND TESTING INDICATED ON THE PLANS AND BY SPECIFICATIONS OR REQUIRED BY THE SOILS REPORT AND/OR REQUIRED BY ANY GOVERNMENT AGENCY.
- 10. CONTRACTOR SHALL VERIFY THE SIZE AND LOCATION OF ALL UTILITY LINES AND STUBS TO THE BUILDING(S) AS MAY BE INDICATED ON THE PLANS.
- 11. NO ADDITIONAL ROOF OPENING OR ROOF MOUNTED EQUIPMENT IS ALLOWED BEYOND THAT WHICH IS SHOWN ON THESE PLANS WITHOUT WRITTEN CONSENT OF THE ARCHITECT AND
- SPECIFICALLY DETAILED AND/OR APPROVED BY THE ARCHITECT AND STRUCTURAL ENGINEER

12. NO STRUCTURAL MEMBER SHALL BE CUT FOR PIPES, HVAC DUCTS, ETC., UNLESS

- 13. ALL SHOP WELDING TO BE DONE IN A CERTIFIED LICENSED SHOP. ALL FIELD WELDING SHALL BE DONE ONLY BY CERTIFIED WELDERS UNDER CONTINUOUS INSPECTION WITH CERTIFICATE ISSUED AS REQUIRED BY BUILDING OFFICIAL.
- 14. WHERE LARGER STUDS OR FURRING IS REQUIRED TO COVER DUCTS, PIPING, CONDUIT, ETC. THE LARGER SIZE STUD OR FURRING SHALL EXTEND THE FULL LENGTH OF THE SURFACE WHERE THE FURRING OCCURS.
- 15. NO HAZARDOUS MATERIALS WILL BE STORED AND/OR USED WITHIN THE BUILDING WHICH EXCEED THE QUANTITIES ALLOWED BY CODE.
- 16. INSTALLATION OF ANY BUILDING INSULATION WHICH CONTAINS OR UTILIZES AN OZONE DEPLETING COMPOUND IS PROHIBITED.
- 17. NO BUILDING OR PORTION OF A BUILDING SHALL BE OCCUPIED OR USED FOR STORAGE PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.
- 18. THE BUILDING AND FACILITIES MUST BE ACCESSIBLE TO AND FUNCTIONAL FOR THE PHYSICALLY DISABLED IN ACCORDANCE WITH AMERICANS WITH DISABILITIES ACT (ADA) AND ALL OTHER STATE/FEDERAL GOVERNING AGENCIES.

## **CONSTRUCTION NOTES**

- 3. MINOR DETAILS NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER CONSTRUCTION OF ANY PART OF THE WORK SHALL BE INCLUDED AS IF THEY WERE INDICATED IN THE DRAWINGS.
- 4. REFERENCING OF DRAWINGS IS FOR CONVENIENCE ONLY AND DOES NOT LIMIT APPLICATION OF ANY DRAWING.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL CONDITIONS AND MATERIALS WITHIN THE PROPOSED CONSTRUCTION AREAS. THE CONTRACTOR SHALL DESIGN AND INSTALL ADEQUATE SHORING AND BRACING FOR ALL STRUCTURAL OR REMOVAL TASKS. THE CONTRACTOR SHALL HAVE SOLE RESPONSIBILITY FOR ANY DAMAGE OR INJURIES CAUSED BY OR DURING THE EXECUTION OF THE WORK.
- 6. NOTES APPEAR ON VARIOUS SHEETS FOR VARIOUS SYSTEMS AND MATERIALS. SHEETS ARE TO BE OWNER REVIEWED AND NOTES ON ANY ONE SHEET ARE TO BE APPLIED TO RELATED SYSTEMS AND MATERIALS DEPICTED ON OTHER DRAWINGS.
- 7. DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO THOSE THAT ARE. WHERE SPECIFIC DIMENSIONS, DETAILS, OR DESIGN INTENT CANNOT BE DETERMINED, CONSULT THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.
- 8. THE CONTRACTOR SHALL LAY OUT HIS OWN WORK, AND SHALL PROVIDE ALL DIMENSIONS REQUIRED FOR OTHER TRADES.
- 9. THE CONTRACTOR SHALL DO ALL CUTTING, PATCHING AND REPAIRING AS REQUIRED TO PERFORM ALL OF THE WORK INDICATED ON THE DRAWINGS, AND ALL OTHER WORK THAT MAY BE REQUIRED TO COMPLETE THE JOB.
- 10. GUTTER AND DOWNSPOUT SIZING PER OWNER'S CONTRACTOR.

## INSTRUCTION TO CONTRACTOR

- 1. THE INTENT OF THE SET OF CONTRACT DOCUMENTS IS TO INCLUDE ALL ITEMS NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK BY THE CONTRACTOR AS BINDING PERFORMANCE. THE CONTRACTOR SHALL BE REQUIRED ONLY TO THE EXTENT CONSISTENT WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS REASONABLY INFERABLE FROM THEM AS BEING NECESSARY TO PRODUCE THE INDICATED RESULTS.
- 2. ORGANIZATION OF THE SPECIFICATIONS INTO DIVISIONS, SECTIONS AND ARTICLES, ARRANGEMENT OF DRAWINGS SHALL NOT CONTROL THE CONTRACTOR, IN DIVIDING THE WORK AMONG SUBCONTRACTORS OR IN ESTABLISHING THE EXTENT OF WORK TO BE PERFORMED BY ANY TRADE.
- 3. UNLESS OTHERWISE STATED IN THE CONTRACT DOCUMENTS, WORDS WHICH HAVE WELL-KNOWN TECHNICAL OR CONSTRUCTION INDUSTRY MEANINGS ARE USED IN THE CONTRACT DOCUMENTS IN ACCORDANCE WITH SUCH RECOGNIZED MEANINGS.
- 4. GENERAL CONTRACTOR AND ELECTRICAL SUBCONTRACTOR TO FULLY COORDINATE ALL ELECTRICAL DEVICE BODIES AND COVER PLATES PER THE SPECIFICATIONS. DEVICE BODIES AND COVER PLATES ARE COLOR COORDINATED WITH SPECIALTY FINISHES. PROVIDE DEVICE BODY AND COVER PLATES TO THE ARCHITECT FOR OWNER REVIEW AND APPROVAL.
- 5. GENERAL CONTRACTOR TO FULLY COORDINATE WITH MECHANICAL/PLUMBING SUBCONTRACTORS. ALL FIXTURE/DEVICE COLORS WHERE FIXTURE/DEVICE UNITS ARE PLACED WITHIN WALLS AND CEILING ASSEMBLIES VS ADJACENT MATERIAL FINISH COLOR.

# SHEET INDEX

### SHEET NAME G-100-BP COVER SHEET - BUILDING PERMIT G-100-FDP COVER SHEET - FINAL DEV. PLAN | X | D C-001 | X | X | X | X DEMOLITION PLAN **EROSION CONTROL PLAN PHASE** $X \mid X \mid X \mid X$ **EROSION CONTROL PLAN PHASE 2** $X \mid X \mid X \mid X$ C-123 **EROSION CONTROL PLAN PHASE 3 EROSION CONTROL DETAILS** | X | X | X | X **EROSION CONTROL DETAILS** $X \mid X \mid X \mid X$ C-201 DIMENSION PLAN | x | x | x | D C-202 ADA RAMP DETAILS XX C-301 GRADING PLAN C-302 ADA RAMP GRADING DETAILS | X | XC-401 UTILITY PLAN | X | X | X | X STORM PROFILES C-421 DRAINAGE AREA MAF | X | X | X | X C-501 DETAILS | X | X | X | X LANDSCAPE L-100 LANDSCAPE PLAN | X | X | X | ARCHITECTURAL LIFE SAFETY AND CODE SHEET | X | X | X | ROOF DRAINAGE PLAN | X | X | X OVERALL MAIN LEVEL FLOOR PLAN | X | X | X | MAIN LEVEL FLOOR PLAN - AREA A X X X XMAIN LEVEL FLOOR PLAN - AREA B A-130 ENLARGED PLANS | X | X | X A-200 ROOF PLAN | X | X | X | A-301 **EXTERIOR ELEVATIONS** | X | X | X A-400 WALL SECTIONS & DETAILS | X | X | X | A-401 PERSPECTIVES | X | X | X |

MECHANICAL AND PLUMBING SPECIFICATIONS AND SYMBOLS X X X

MECHANICAL AND PLUMBING SCHEDULES AND DETAILS

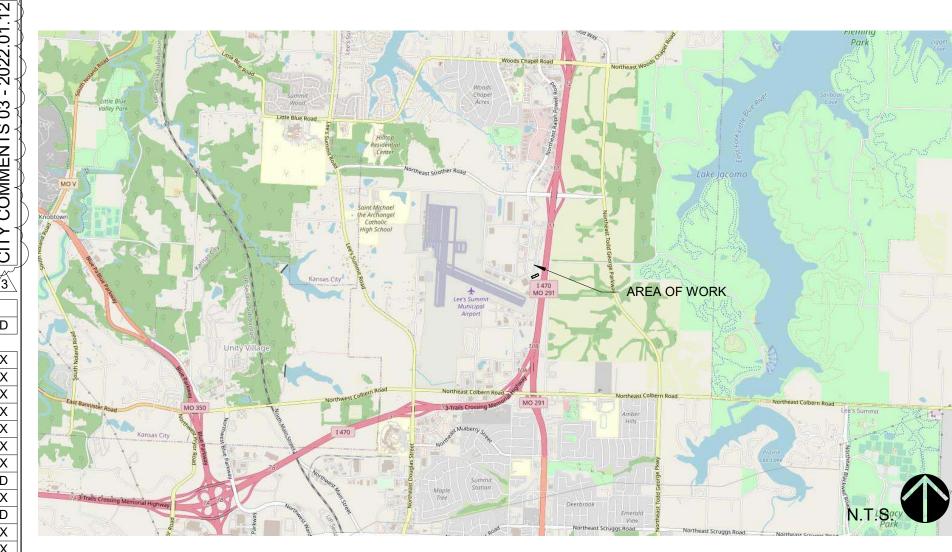
ELECTRICAL SPECIFICATIONS AND SYMBOLS

ELECTRICAL EQUIPMENT POWER PLAN - WEST

ELECTRICAL EQUIPMENT POWER PLAN - EAST

ELECTRICAL SCHEDULES AND DIAGRAMS

# **VICINITY MAP**



## PROJECT DIRECTORY

## **OWNER**

DAVID WARD WARD DEVELOPMENT 1120 EAGLE RIDGE BLVD GRAIN VALLEY, MO 64029 PHONE: 816-229-8115 EMAIL: DAVID@SAFETYMINISTORAGE.COM

## STRUCTURAL ENGINEER



 $X \mid X \mid X$ 

| X | X | X

| X | X | X |

| X | X | X |

| X | X | X |

 $X \mid X \mid X$ 

X X X

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| X | X | X | X

STAND SEI 8234 ROBINSON ST. OVERLAND PARK, KS 66204 PAUL SPEARS, STRUCT. ENGINEER (913) 214-2169

## MECHANICAL / ELECTRICAL / PLUMBING ENGINEER



1901 NW BLUE PKWY, 3RD FLOOR UNITY VILLAGE, MO 64065 NAME: PHONE: (816) 272-5289 JSMOTHERS@JSCENGINEERS.COM

## **ARCHITECT / CIVIL ENGINEER**



ARCHITECTURE/ENGINEERING/SURVEYING

3200 S. State Route 291, Bldg. 1, Independence, MO 64057

NICK CURTIS, ARCHITECT 816.373.4800 NCURTIS@POWELLCWM.COM

TOBY WILLIAMS, CIVIL ENGINEER 816.373.4800 TWILLIAMS@POWELLCWM.COM



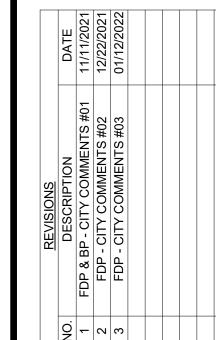
EMAIL:

JUSTIN SMOTHERS, MEP ENGINEER

CONSTRUCTION As Noted on Plans Review Development Services Departmer Lee's Summit. Missouri 01/14/2022

RELEASED FOR

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DRAWN BY: NC CHECKED BY: NC ISSUE DATE: 2021.09.24

**ISSUED FOR:** PERMIT

COVER SHEET FINAL DEV. PLAN

# Lot 10 I-470 BUSINESS AND TECHNOLOGY CENTER

## **GENERAL NOTES**

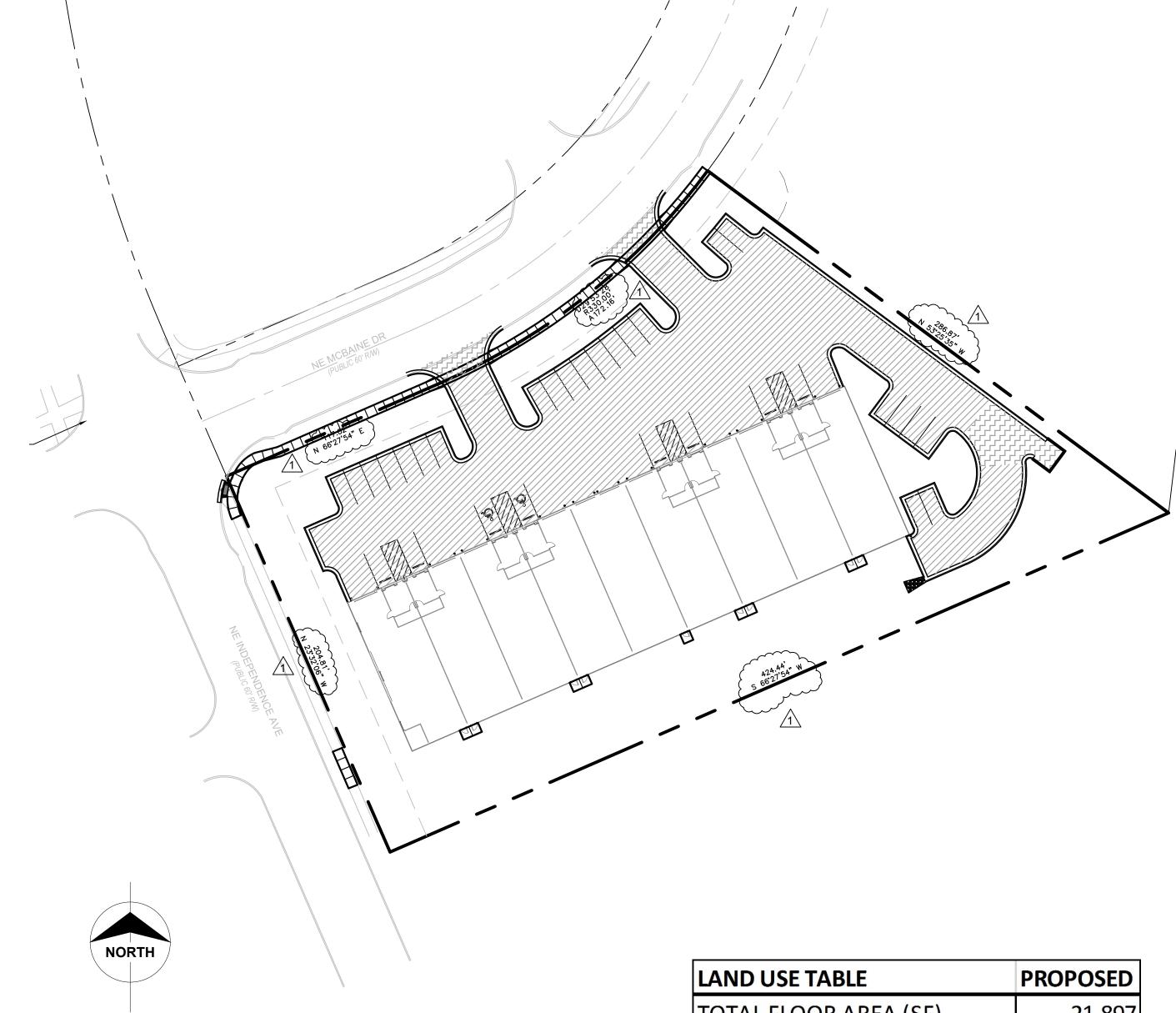
- THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO ALL APPLICABLE STANDARDS AND SPECIFICATIONS OF THE PUBLIC WORKS DEPARTMENT OF THE CITY OF LEE'S SUMMIT, MISSOURI, IN CURRENT USAGE AND ALL SUPPLEMENTS THERE TO.
- 2. REFER TO THE CURRENT VERSION OF THE KC METRO CHAPTER AMERICAN PUBLIC WORKS ASSOCIATION, STANDARD SPECIFICATIONS & INSTALLATION FOR THE GUIDING REFERENCE AS WELL
- DO NOT SCALE THESE DRAWINGS.
- 4. NO GEOLOGICAL INVESTIGATION WAS PERFORMED ON THIS SITE.
- CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS, BONDS, AND INSURANCE REQUIRED BY THE CITY
- THE UTILITY LOCATIONS SHOWN ON THESE PLANS ARE TAKEN FROM UTILITY COMPANY RECORDS AND ARE APPROXIMATE ONLY. THEY DO NOT CONSTITUTE ACTUAL FIELD LOCATIONS. THE CONTRACTOR
- CLEARING AND GRUBBING OPERATIONS AND DISPOSAL OF ALL DEBRIS THEREFROM SHALL BE PERFORMED BY THE CONTRACTOR IN STRICT ACCORDANCE WITH ALL STATE AND LOCAL CODES.
- 8. THE DEVELOPER / OWNER SHALL CONTROL EROSION AND SILTATION DURING ALL PHASES OF CONSTRUCTION, AND SHALL KEEP THE STREETS CLEAN OF MUD AND DEBRIS.
- 9. ALL EXCESS MATERIAL SHALL BE REMOVED LEGALLY FROM SITE AND DISPOSED OF OFF SITE.
- 10. TRAFFIC CONTROL AND MAINTENANCE OF TRAFFIC DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF
- 11. EROSION CONTROL MEASURES SHALL BE PROVIDED AT ALL LOCATIONS WHERE DRAINAGE IS LEAVING THE PROJECT SITE. THE EROSION CONTROL 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.
- 12. ANY EXISTING OR NEW STORM SEWER INLETS IN USE DURING DEMOLITION, GRADING OR CONSTRUCTION SHALL HAVE INLET PROTECTION.
- 13. THE CONTRACTOR SHALL FIELD VERIFY ALL SITE CONDITIONS AND SHALL REPORT ANY DISCREPANCIES BETWEEN ACTUAL AND PLAN SHOWN CONDITIONS TO THE ENGINEER PRIOR TO BEGINNING
- 14. 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.
- 15. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING THE LOCATION OF ALL EXISTING UTILITIES AND UNDERGROUND INSTALLATIONS, INCLUDING SERVICE CONNECTIONS, IN ADVANCE OF
- 16. THE CONTRACTOR SHALL USE HIS OWN INFORMATION AND NOT RELY UPON ANY INFORMATION
- SHOWN ON THE DRAWINGS CONCERNING EXISTING UNDERGROUND INSTALLATIONS FROM DAMAGE TO EXISTING UNDERGROUND INSTALLATIONS SHALL NOT CONSTITUTE A CLAIM FOI 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.
- 18. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO BEGINNING CONSTRUCTION
- 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. ADDITIONALLY, ALL EXISTING UTILITY
- 21. 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
- 26. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION SCHEDULES AND ACTIVITIES WITH THE APPROPRIATE UTILITY OWNER AND ADJACENT PROPERTY OWNERS TO MINIMIZE DISRUPTION TO ADJACENT PROPERTY OWNERS INCLUDING VEHICULAR ACCESS.
- 27. 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.
- THE RELOCATED UTILITIES ARE INSPECTED AND APPROVED. 29. ALL EXISTING UTILITIES SHALL BE REMOVED BACK TO THE CLOSEST STRUCTURE AND CAPPED AT THAT
- LOCATION UNLESS OTHERWISE INDICATED IN THESE PLANS. 30. REMOVE ALL TREES, GRASS, WEEDS, ROOTS, AND OTHER DEBRIS FROM THE AREA TO BE EXCAVATED,
- FILLED OR GRADED. 31. IF EXCAVATED MATERIAL IS UNSUITABLE FOR COMPACTION, AS DETERMINED BY THE GEOTECHNICAL ENGINEER, THE CONTRACTOR SHALL FURNISH SUITABLE BORROW
- 32. 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.
- 33. SITE SHALL BE GRADED TO ENSURE DRAINAGE OF WATER FROM ALL SURFACES. 34. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL SURFACE AND GROUNDWATER CONTROL
- 35. 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.
- 36. STORM DRAINAGE SYSTEMS WITHIN THE PROJECT AREA ARE TO BE COMPLETELY CLEANED AT THE
- 37. 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
- 38. ALL TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO GRADING.
- 39. ALL SOILS UNDERCUTTING, OVER EXCAVATION, UNDER DRAIN INSTALLATION, AND ROCK FILLS SHALL BE DETERMINED AND DIRECTED BY THE SOILS ENGINEER.
- 40. FILL AREAS TO BE COMPACTED TO 95% STANDARD PROCTOR MINIMUM UNLESS OTHERWISE INDICATED BY GEOTECHNICAL ENGINEER.
- 41. UNLESS OTHERWISE INDICATED, ALL DISTURBED SOIL AREAS TO RECEIVE 6 INCHES OF TOPSOIL AND TO
- BE SEEDED AND MULCHED. 42. THE CONTRACTOR SHALL PERFORM ALL CUTTING, PATCHING, AND REPAIRING AS REQUIRED TO PERFORM ALL OF THE WORK INDICATED ON THE DRAWINGS, AND ALL OTHER WORK THAT MAY BE REQUIRED TO COMPLETE THE JOB.

## **CONSTRUCTION NOTES**

- ALL WORK PERFORMED SHALL BE IN ACCORDANCE WITH THE BUILDING CODE OF THE AUTHORITY HAVING JURISDICTION AND THE RULES AND REGULATIONS OF ALL AGENCIES, DEPARTMENTS AND COMMISSIONS HAVING JURISDICTION. WHERE DISCREPANCIES OCCUR AND/OR WHERE THERE ARE CONFLICTS OR OMISSIONS IN THE DRAWINGS AND APPLICATIONS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY AND REFRAIN FROM STARTING AND COMPLETING SUCH WORK, OR DEPENDENT WORK, UNTIL TOLD BY THE ARCHITECT TO PROCEED.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS IN THE FIELD PRIOR TO COMMENCING WORK, AND SHALL REPORT TO THE ARCHITECT ANY CONDITION OR DISCREPANCY BETWEEN DRAWINGS AND FIELD CONDITIONS REQUIRING MODIFICATIONS BEFORE PROCEEDING WITH THE WORK.
- MINOR DETAILS NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER CONSTRUCTION OF ANY PART OF THE WORK SHALL BE INCLUDED AS IF THEY WERE INDICATED IN THE DRAWINGS
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- THE CONTRACTOR SHALL LAY OUT HIS OWN WORK, AND SHALL PROVIDE ALL DIMENSIONS
- THE CONTRACTOR SHALL DO ALL CUTTING, PATCHING AND REPAIRING AS REQUIRED TO PERFORM ALL OF THE WORK INDICATED ON THE DRAWINGS, AND ALL OTHER WORK THAT MAY BE REQUIRED TO COMPLETE THE JOB.

# FINAL DEVELOPMENT PLAN

LEE'S SUMMIT, JACKSON COUNTY, MISSOURI



LAND USE TABLE	PROPOSED
TOTAL FLOOR AREA (SF)	21,897
NUMBER OF DWELLING UNITS	0
LAND AREA (AC)	1.79
REQUIRED PARKING SPACES	28
PROVIDED PARKING SPACES	31
IMPERVIOUS COVERAGE (AC)	1.26
FLOOR AREA RATIO (FAR)	0.281

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**NOTES:** 

LEGAL DESCRIPTION

LOT 10, I-470 BUSINESS AND TECHNOLOGY CENTER, A

SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

**DEVELOPER:** 

**Ward Development** 

**Grain Valley, MO** 

816-229-8115

1120 NW Eagle Ridge Blvd.

**David Ward** 

Site is located within an area of minimal flood hazard (Flood Zone X) in FEMA FIRM Panel number 29095C0430G (effective 1/20/2017).

- No oil or gas wells are present on site per Missouri DNR record.
- Requirements of the City of Lee's Summit Design and **Construction Manual shall govern.**

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C-001	Cover Sheet
C-101	Demolition Plan
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C-122	Erosion Control Plan Phase 2
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C-132	<b>Erosion Control Details</b>
C-201	Dimension Plan
{ C-202	ADA Ramp Details
C-301	Grading Plan
{ C-302	ADA Ramp Grading Details
C-401	Utility Plan
C-411	Storm Profiles
C-421	Drainage Area Map
C-501	Details
C-502	Details }
{ C-503	Details \\ \frac{2^{1\infty}}{}
L-100	Landscape Plan

# UTILITIES

**EVERGY** 1200 Main St. PO Box 418679 Kansas City, MO 64141

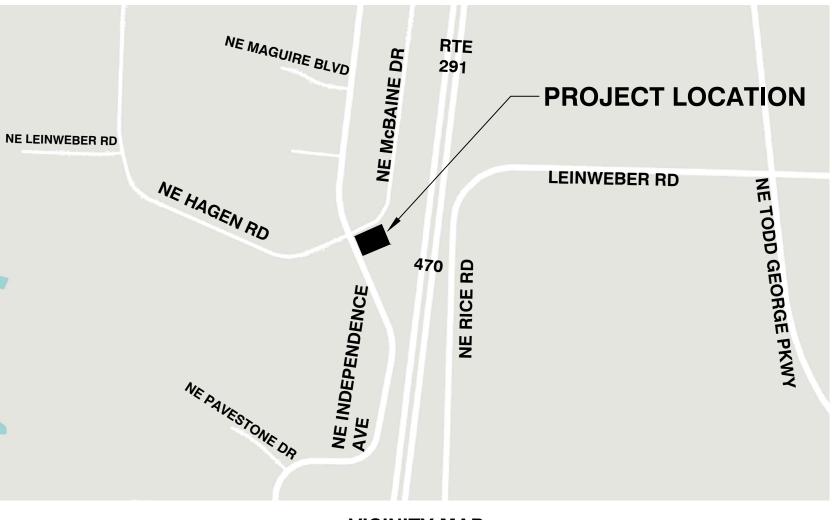
3025 SE Clover Dr. Lee's Summit, MO 64082 800.582.1234

CITY OF LEE'S SUMMIT 220 SE Green St Lee's Summit, MO 64063 816.969.1800

AT&T 215 N Spring St. Independence, MO 64050 816.325.5610

**SPECTRUM** 6550 Winchester Ave Kansas City, MO 64133 816.358.5360

MISSOURI ONE CALL 1.800.344.7483



**VICINITY MAP NOT TO SCALE** 

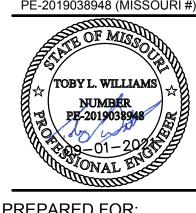
CONSTRUCTION As Noted on Plans Review **Development Services Departmen** Lee's Summit, Missouri

Engineering: MO 4 / KS 241 Land Surveying: MO 123 / KS 36

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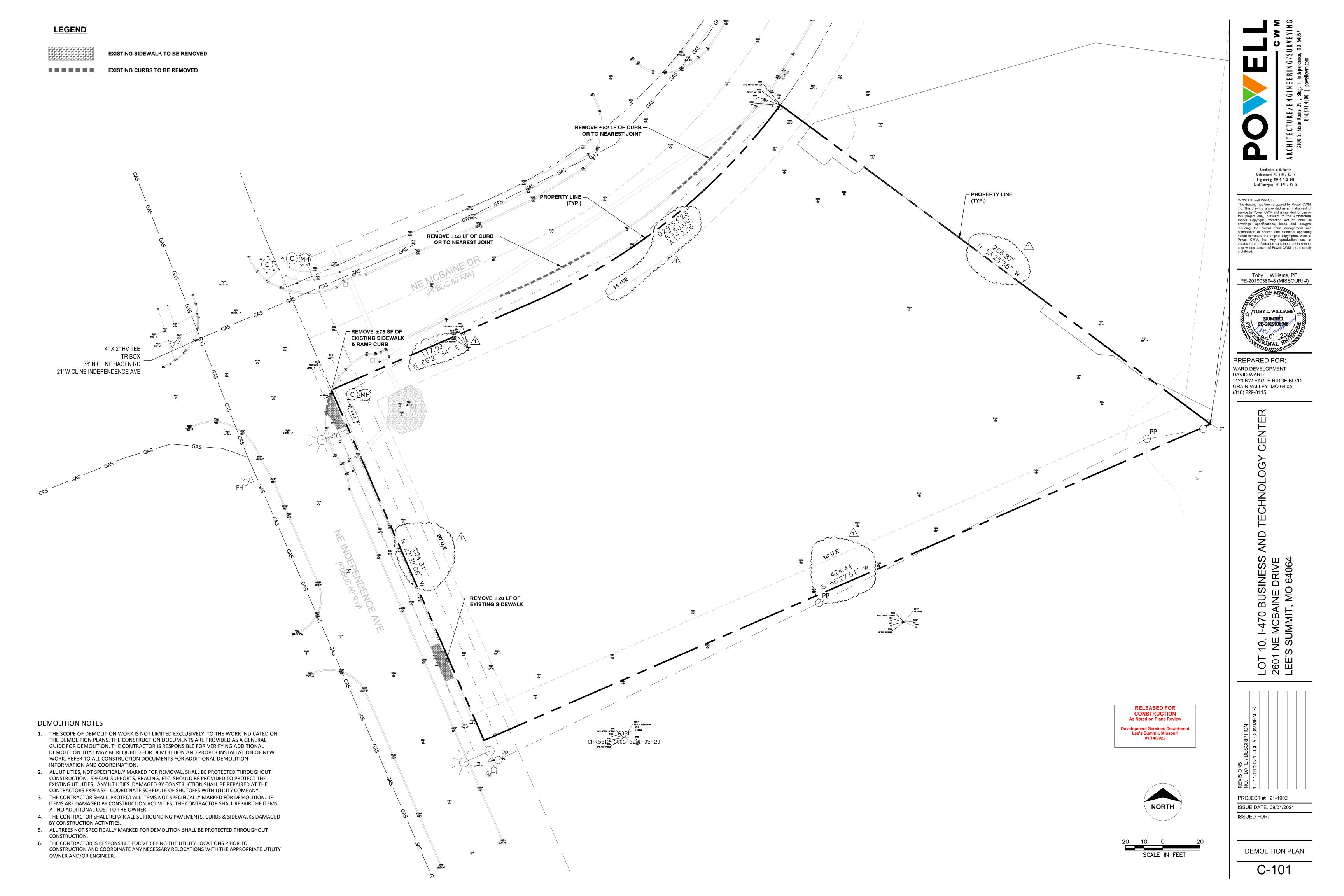
Toby L. Williams, PE PE-2019038948 (MISSOURI #)

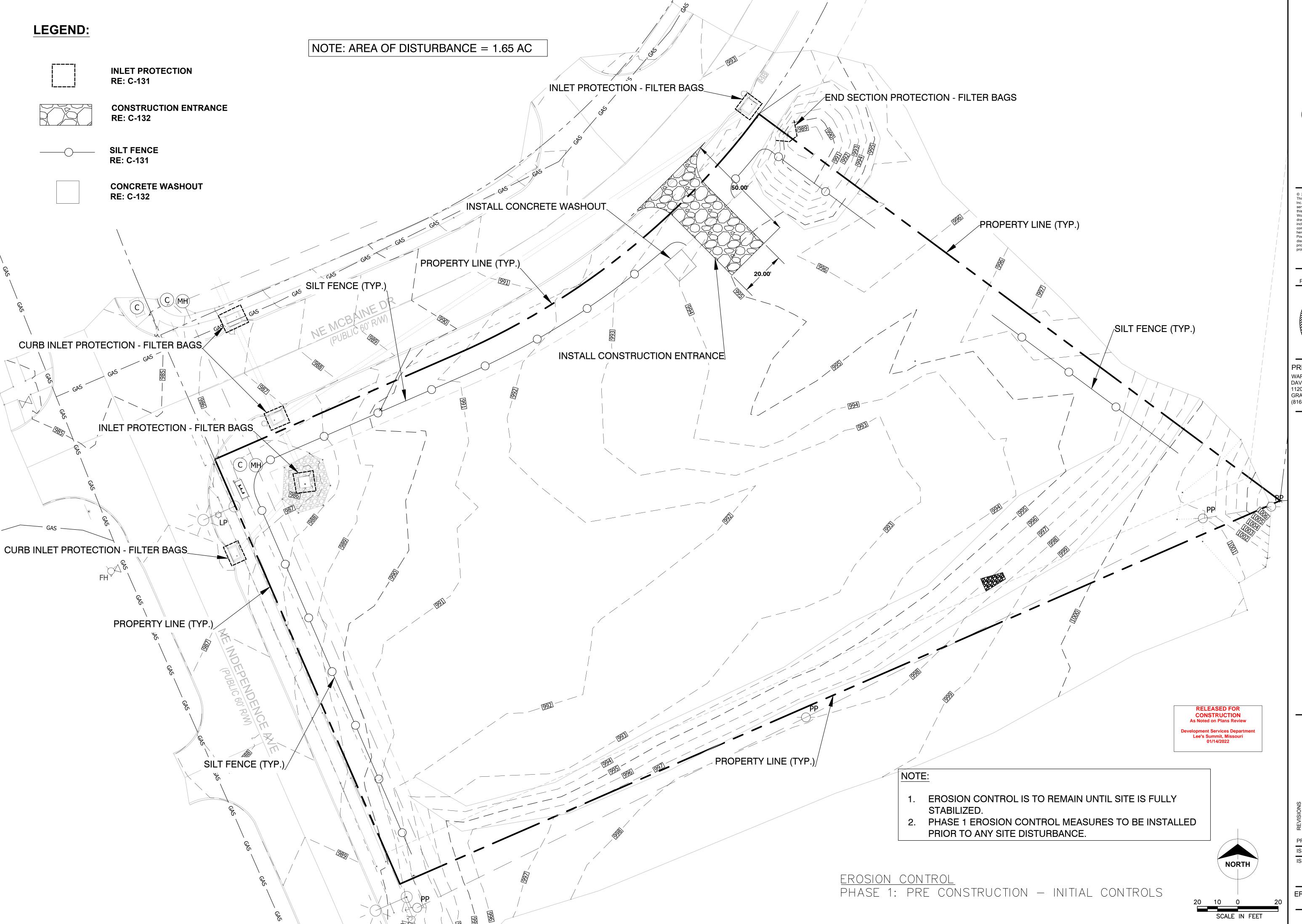


PREPARED FOR: WARD DEVELOPMENT DAVID WARD 1120 NW EAGLE RIDGE BLVD. GRAIN VALLEY, MO 64029 (816) 229-8115

PROJECT #: 21-1902 ISSUE DATE: 09/01/2021 ISSUED FOR:

**COVER SHEET** 



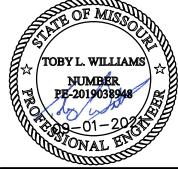




Certificates of Authority
Architecture: MO 310 / KS 73
Engineering: MO 4 / KS 241
Land Surveying: MO 123 / KS 36

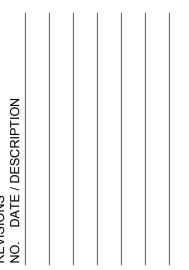
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Toby L. Williams, PE PE-2019038948 (MISSOURI#)



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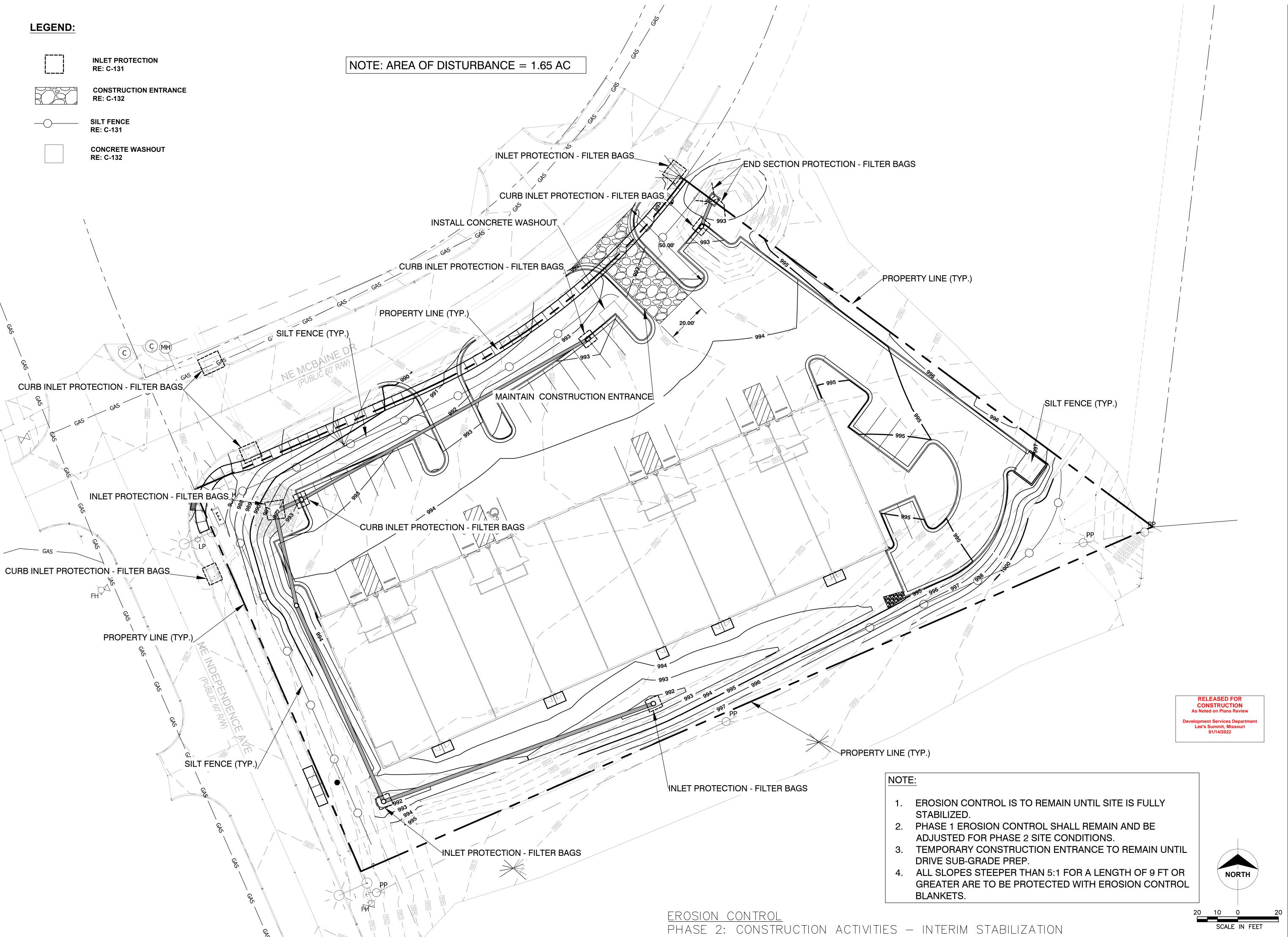
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ISSUE DATE: 09/01/2021 ISSUED FOR:

**FOR PERMIT** 

EROSION CONTROL PLAN PHASE 1

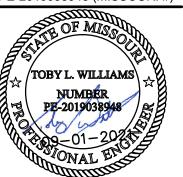




Certificates of Authority Architecture: MO 310 / KS 73 Engineering: MO 4 / KS 241 Land Surveying: MO 123 / KS 36

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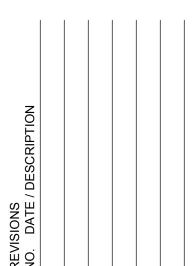
Toby L. Williams, PE PE-2019038948 (MISSOURI #)



PREPARED FOR:
WARD DEVELOPMENT
DAVID WARD
1120 NW EAGLE RIDGE BLVD.
GRAIN VALLEY, MO 64029
(816) 229-8115

SS AND TECHNOLOGY CENTE

2601 NE MCBAINE DRIVE LEE'S SUMMIT, MO 64064



OJECT#: 21-1902

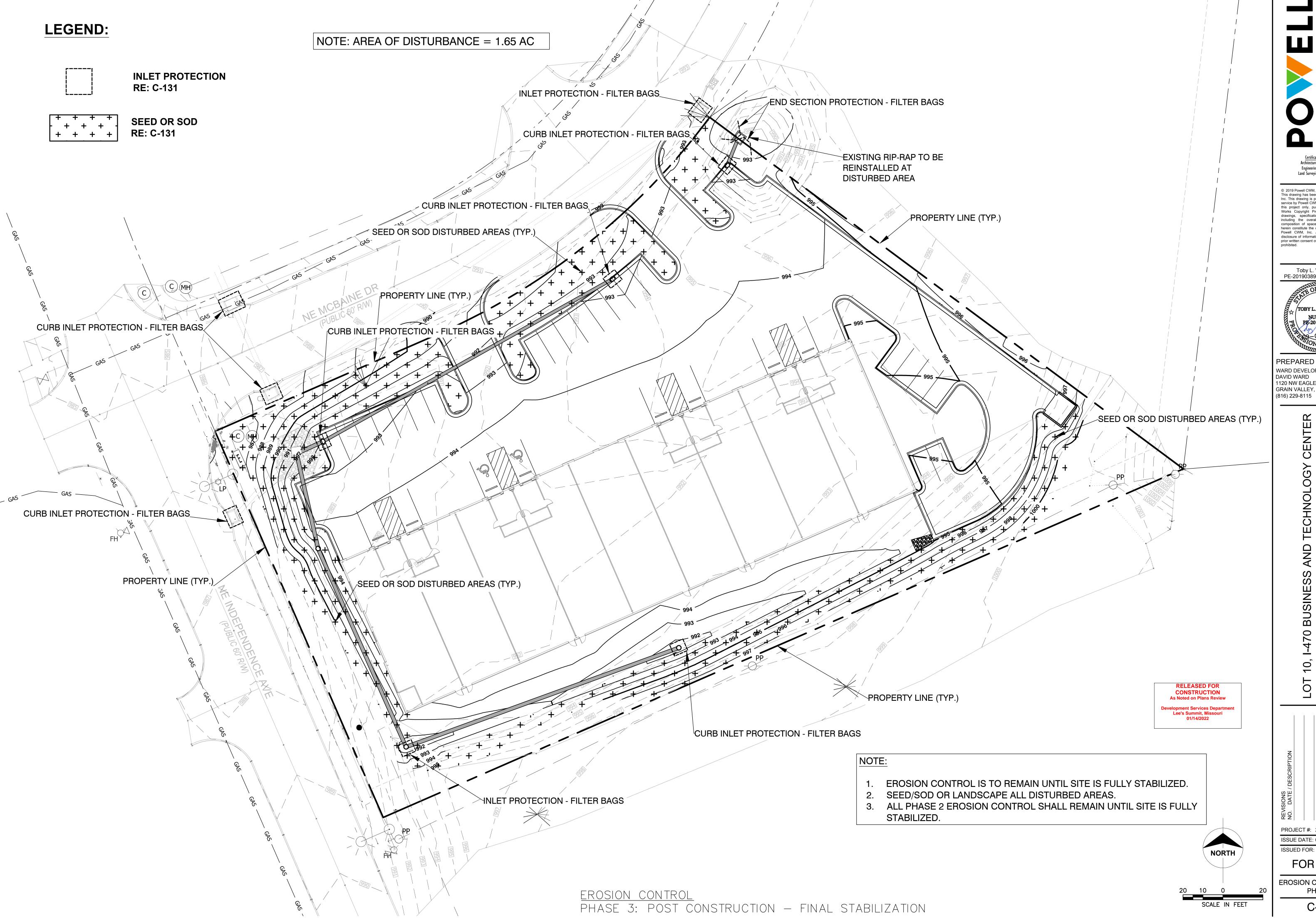
PROJECT #: 21-1902

ISSUE DATE: 09/01/2021

ISSUED FOR:

FOR PERMIT

EROSION CONTROL PLAN PHASE 2

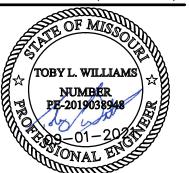




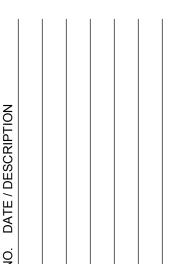
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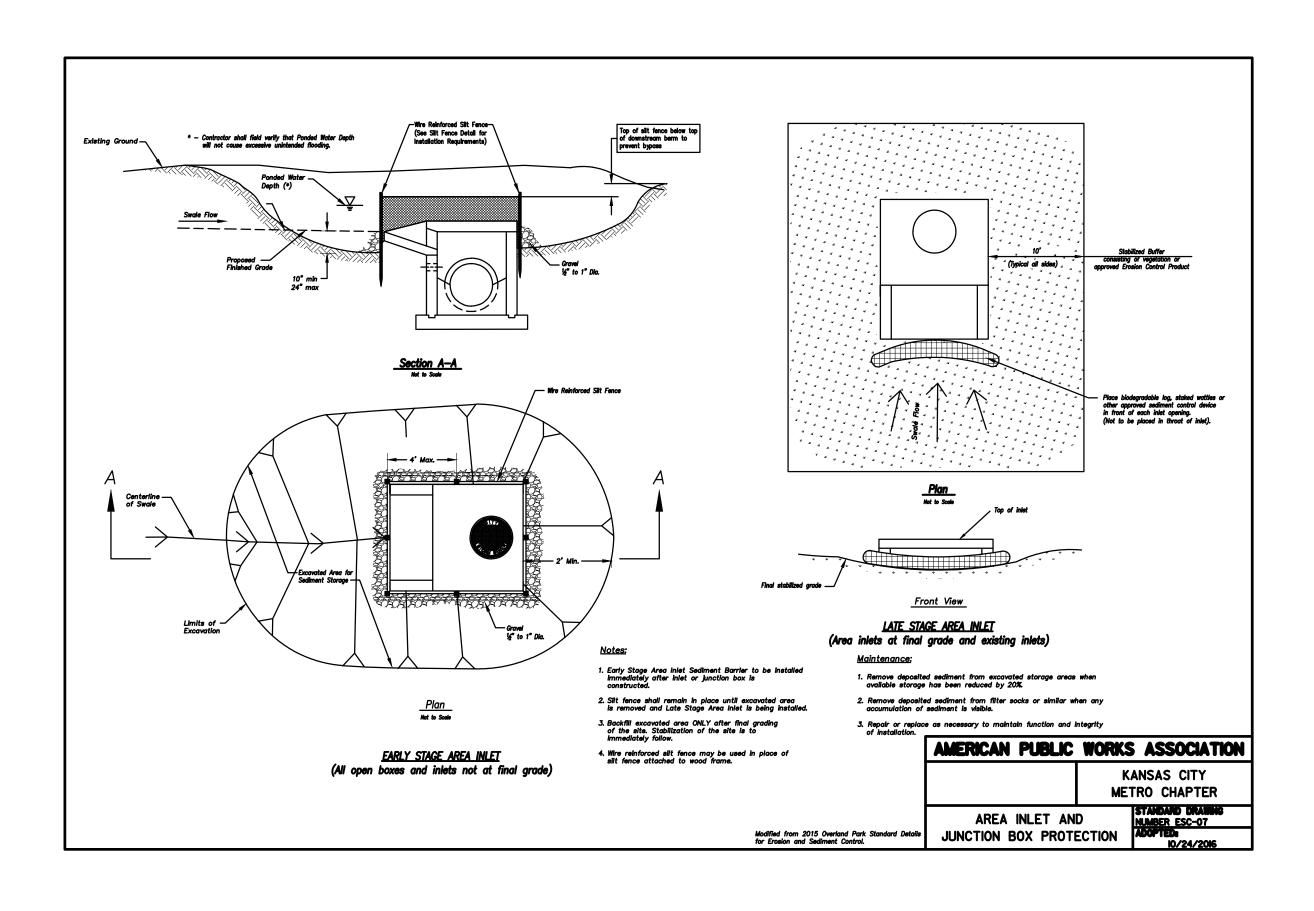
PREPARED FOR: WARD DEVELOPMENT DAVID WARD 1120 NW EAGLE RIDGE BLVD. GRAIN VALLEY, MO 64029 (816) 229-8115

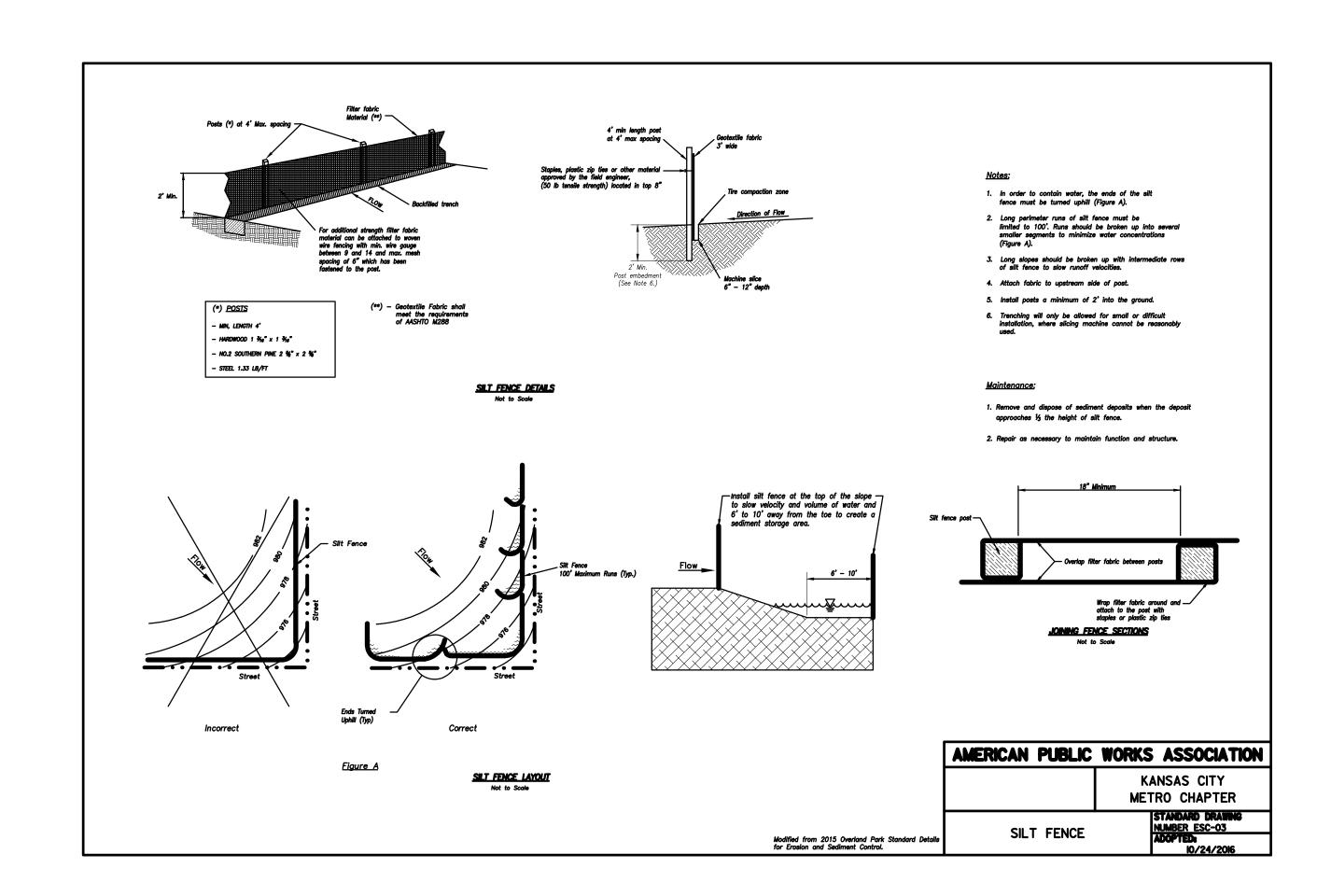


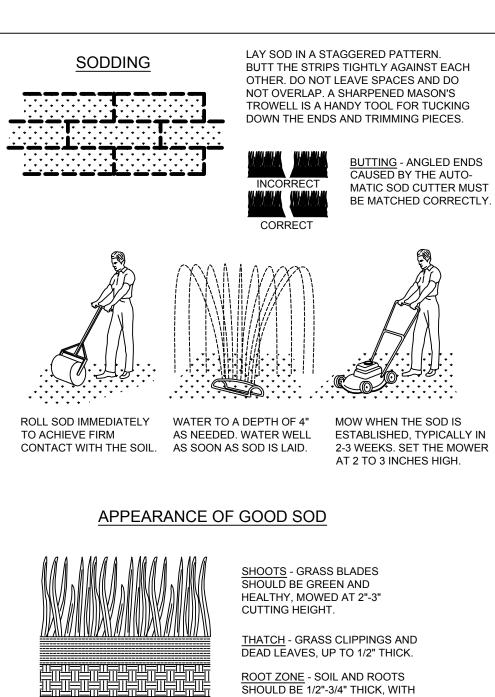
ISSUE DATE: 09/01/2021

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EROSION CONTROL PLAN PHASE 3

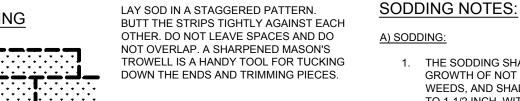




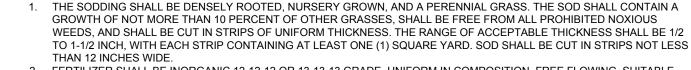


SODDING

PER APWA DRAWING ESC-02



DENSE ROOT MAT FOR STRENGTH.



- TO 1-1/2 INCH, WITH EACH STRIP CONTAINING AT LEAST ONE (1) SQUARE YARD. SOD SHALL BE CUT IN STRIPS NOT LESS 2. FERTILIZER SHALL BE INORGANIC 12-12-12 OR 13-13-13 GRADE, UNIFORM IN COMPOSITION, FREE FLOWING, SUITABLE FOR APPLICATION WITH APPROVED EQUIPMENT, AND DELIVERED TO THE SITE IN CONVENIENT CONTAINERS, EACH
- FULLY LABELED. LABELS SHALL CONFORM TO APPLICABLE STATE FERTILIZER LAWS AND BEARING THE NAME, TRADE NAME OR TRADEMARK, AND WARRANTY OF THE PRODUCER. 3. BEFORE TILLING OPERATIONS, FERTILIZER SHALL BE SPREAD UNIFORMLY AT THE RATE OF 300 POUNDS PER ACRE.
- FERTILIZING RATE IS EQUIVALENT TO 3.5 POUNDS PER 500 SQUARE FEET. 4. THE SOD BED SHALL HAVE A UNIFORM SURFACE FREE FROM WASHES AND DEPRESSIONS. IT SHALL CONFORM TO THE FINISHED GRADE PROFILE AND CROSS SECTION SHOWN ON THE PLANS. THE SOIL, EXCEPT WHERE FRESH TOP SOIL HAS BEEN APPLIED AND COMPACTED, SHALL BE THOROUGHLY TILLED TO A DEPTH OF 2 INCHES.
- 5. FRESHLY GRADED AREAS WHICH HAVE SET LONG ENOUGH TO BECOME DRY AND CRUSTED OVER SHALL BE TILLED, AS SPECIFIED ABOVE, BEFORE PLACING SOD. 6. SOD SHALL NOT BE PLACED DURING A DROUGHT NOR ON FROZEN GROUND UNLESS AUTHORIZED BY THE ENGINEER.
- 7. SOD SHALL BE MOIST WHEN IT IS PLACED. SOD STRIPS SHALL BE LAID ALONG CONTOUR LINES, COMMENCING AT THE LOWEST POINT OF THE AREA AND WORKING UPWARD. THE TRANSVERSE JOINTS OF SOD STRIPS SHALL BE STAGGERED AND THE SOD CAREFULLY PLACED TO PRODUCE TIGHT JOINTS. THE SOD SHALL BE FIRMED AND WATERED IMMEDIATELY AFTER IT IS PLACED. THE FIRMING SHALL BE ACCOMPLISHED BY APPLICATION OF A ROLLER WEIGHING BETWEEN 60 AND 90 POUNDS PER LINEAL FOOT OF ROLLER.
- 8. ON 2H:1V SLOPES OR STEEPER THE SOD SHALL BE ANCHORED WITH 1/2-INCH SQUARE AY 8-INCH LONG WOODED PEGS DRIVEN INTO THE GROUND, 3 PEGS TO THE SQUARE YARD OR OTHER APPROVED CONFIGURATION. PEGGING SHALL BE DONE IMMEDIATELY AFTER SOD IS FIRMED. THE AREA SHALL BE CLEARED OF LOOSE SOD, EXCESS OR BROKEN ANCHORS. EXCESSIVE SOIL, AND OTHER FOREIGN MATERIALS.

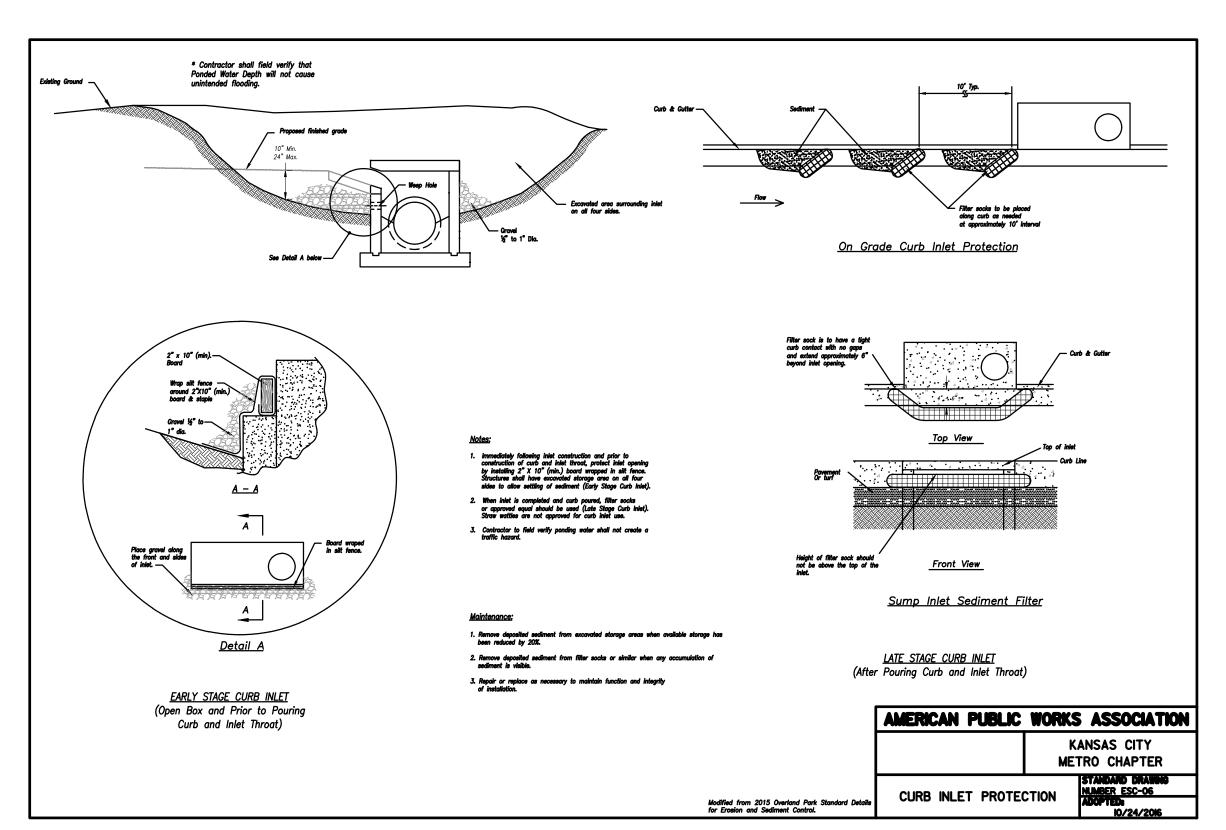
- 1. CONSULT WITH A QUALIFIED DESIGN PROFESSIONAL IF ANY OF THE FOLLOWING OCCUR: a. VARIATION IN TOPOGRAPHY ON SITE INDICATE THE SODDING MATERIALS WILL NOT FUNCTION AS INTENDED; CHANGES IN THE PLAN MAY BE NEEDED.
- b. DESIGN SPECIFICATIONS FOR SOD VARIETY CANNOT BE MET OR IRRIGATION NOT POSSIBLE; SUBSTITUTION OR SEEDING MAY BE REQUIRED.
- 2. COMMON PROBLEMS: a. SOD LAID ON POORLY PREPARED SOIL OR UNSUITABLE SURFACE DIES BECAUSE IT IS UNABLE TO ROOT - REMOVE
- DEAD SOD, PREPARE SURFACE, AND RESOD. b. SOD NOT ADEQUATELY IRRIGATED AFTER INSTALLATION CAUSES ROOT DIEBACK, GRASS TO NOT ROOT RAPIDLY,

AND DRYING OUT - IRRIGATE SOD AND UNDERLYING SOIL TO A DEPTH OF 4 INCHES AND KEEP MOIST UNTIL ROOTS

ARE ESTABLISHED. c. SOD NOT ANCHORED PROPERLY IS LOOSENED BY RUNOFF - REPLACE DAMAGED AREAS AND ANCHOR SOD. d. SLOW GROWTH DUE TO LACK OF NITROGEN CAUSES YELLOWING OF LEAF BLADES - REFERTILIZE SOD, BUT AVOID

## FERTILIZING COOL SEASON GRASSES FROM LATE MAY THROUGH JULY. C) INSPECTION AND MAINTENANCE:

1. SODDED AREA SHALL BE THOROUGHLY WATERED DAILY FOR A PERIOD OD FIFTEEN DAYS AFTER PLACING EXCEPT WHEN THOROUGHLY WETTED BY RAIN. ANY PORTION OF THE SOD THAT IS NOT IN GOOD GROWING CONDITION FOLLOWING THE FIRST FULL GROWING SEASON (SPRING TO FALL), SHALL BE REPLACED WITH FRESH LIVE SOD.







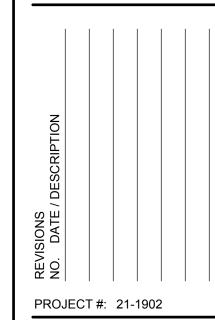
Certificates of Authority
Architecture: MO 310 / KS 73 Engineering: MO 4 / KS 241 Land Surveying: MO 123 / KS 36

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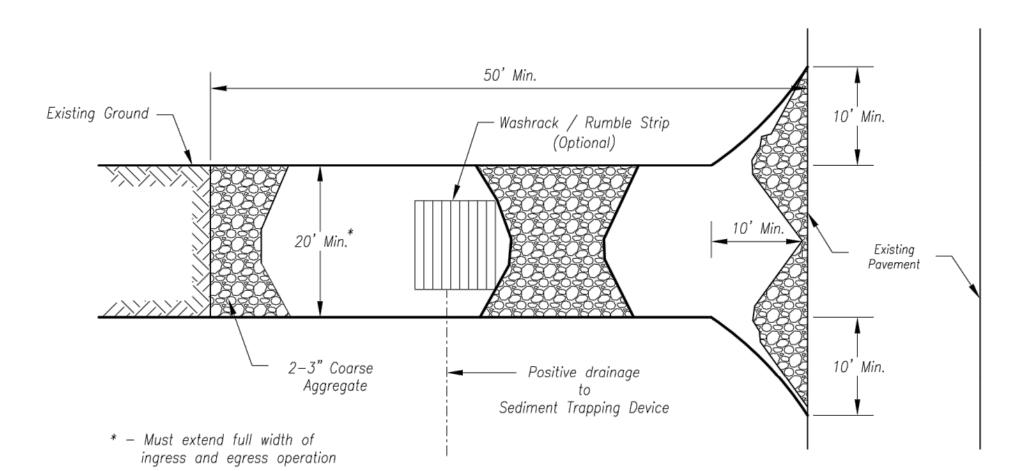


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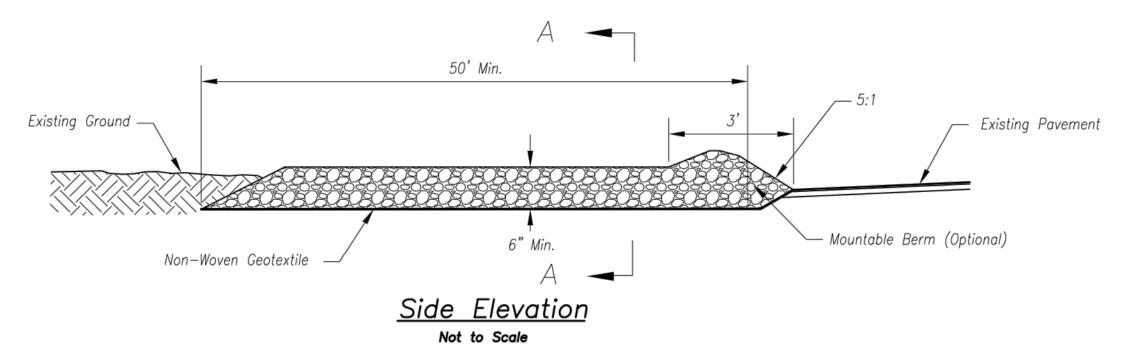
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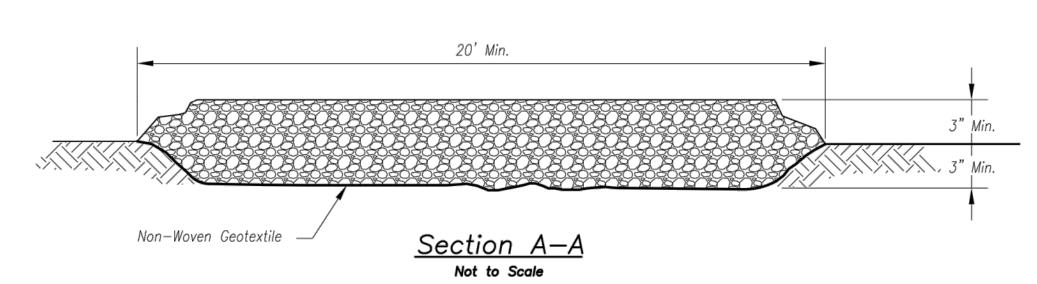
**EROSION CONTROL** 

**DETAILS** 



# Plan View Not to Scale





## Notes for Construction Entrance:

- Avoid locating on steep slopes, at curves on public roads, or downhill of disturbed area.
- 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 from it.
- 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 sloped for drainage.
- 6. Divert all surface runoff and drainage from the entrance to a sediment control device.
- 7. If conditions warrant, place geotextile fabric on the graded foundation to improve stability.

## Maintenance for Construction Entrance:

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

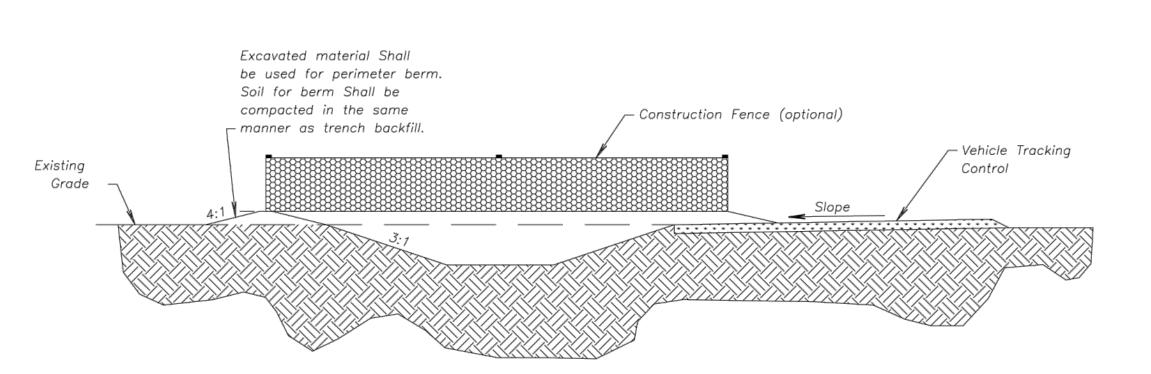
## CONSTRUCTION ENTRANCE

## Notes for Concrete Washout:

- Concrete washout areas shall be installed prior to any concrete placement on site.
- 2. Concrete washout area shall include a flat subsurface pit sized relative to the amount of concrete to be placed on site. The slopes leading out of the subsurface pit shall be 3:1. The vehicle tracking pad shall be sloped towards the concrete washout area.
- Vehicle tracking control is required at the access point to all concrete washout areas.
- 4. Signs shall be placed at the construction site entrance, washout area and elsewhere as necessary to clearly indicate the location(s) of the concrete washout area(s) to operators of concrete truck and pump rigs.
- A one-piece impervious liner may be required along the bottom and sides of the subsurface pit in sandy or gravelly soils.

## Maintenance for Concrete Washout:

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



## CONCRETE WASHOUT

Construction Entrance modified from 2015 Overland Park Standard Details

for Erosion and Sediment Control; Concrete Washout modified from 2009

City of Great Bend Standard Drawings.

RELEASED FOR
CONSTRUCTION
As Noted on Plans Review

Development Services Departmen
Lee's Summit, Missouri
01/14/2022

# AMERICAN PUBLIC WORKS ASSOCIATION



KANSAS CITY METRO CHAPTER

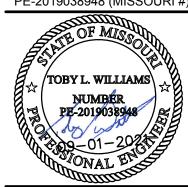
CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT

STANDARD DRAWING
NUMBER ESC-01
ADOPTED:
10/24/2016

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

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BUSINESS AND TECHNOLOGY CENTER AINE DRIVE

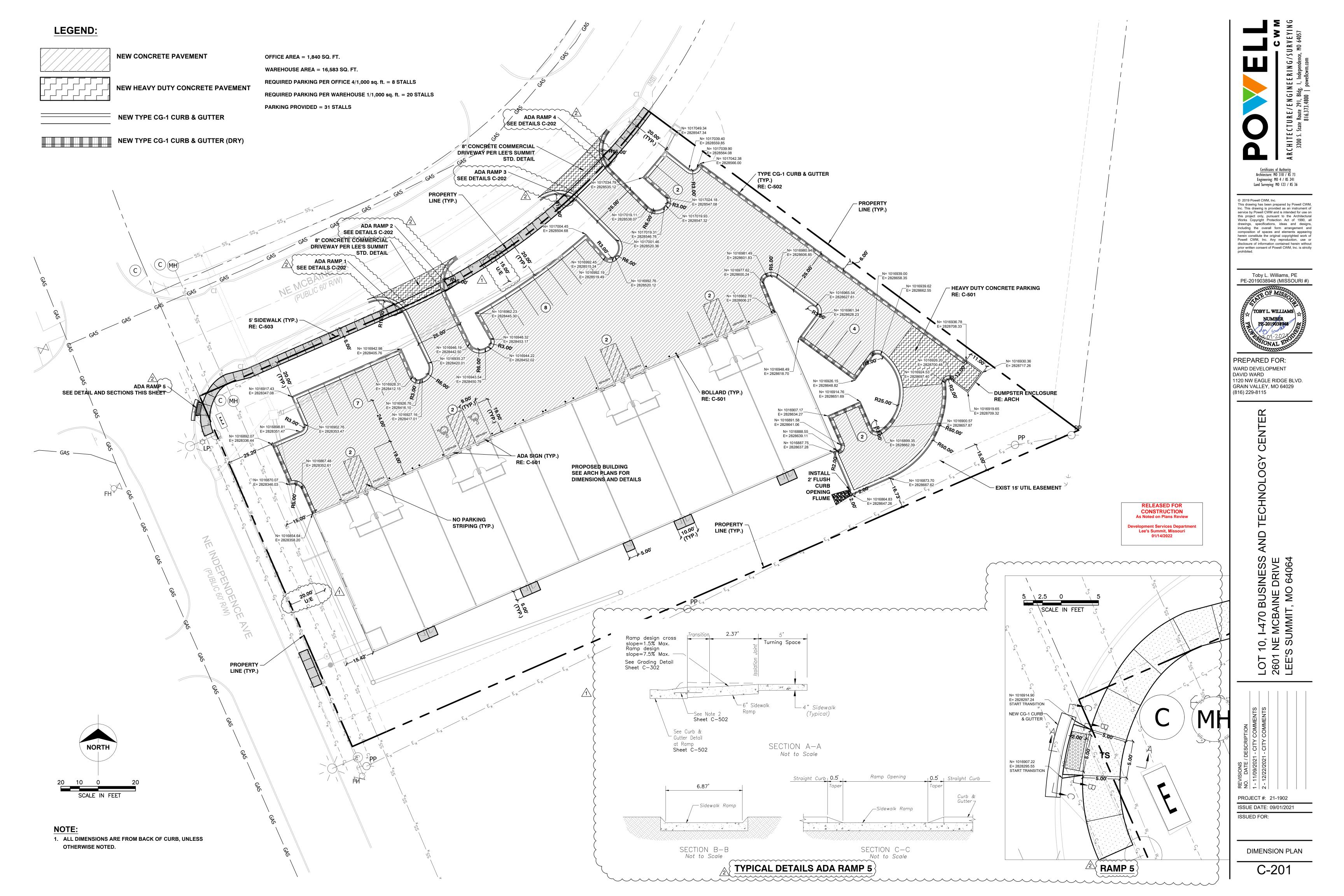
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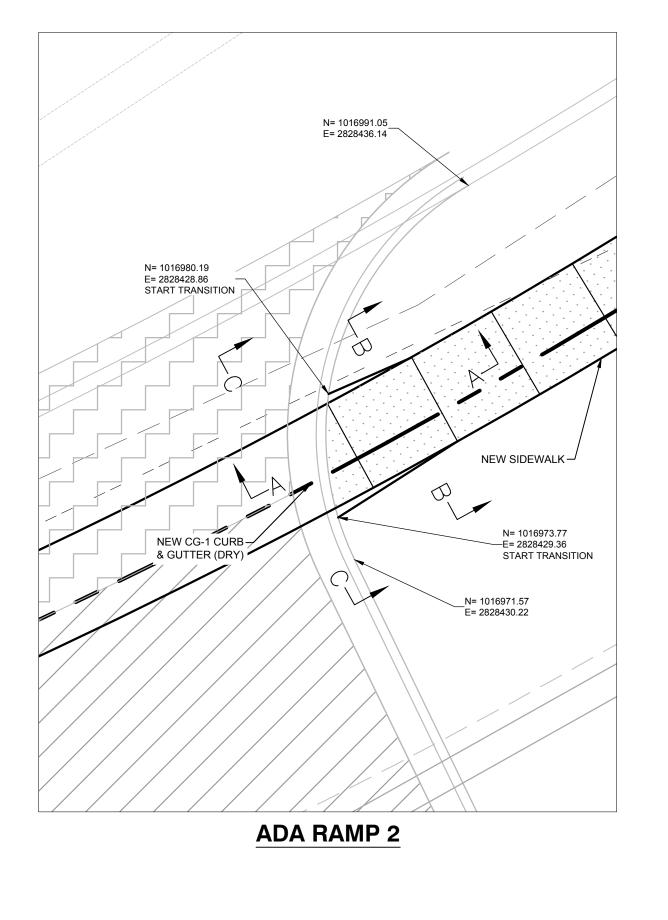
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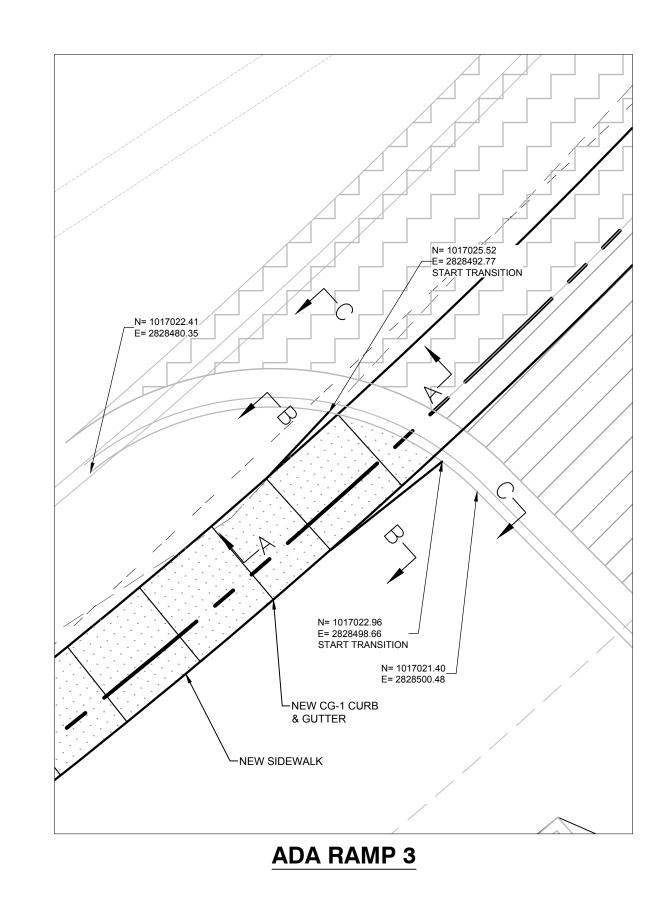
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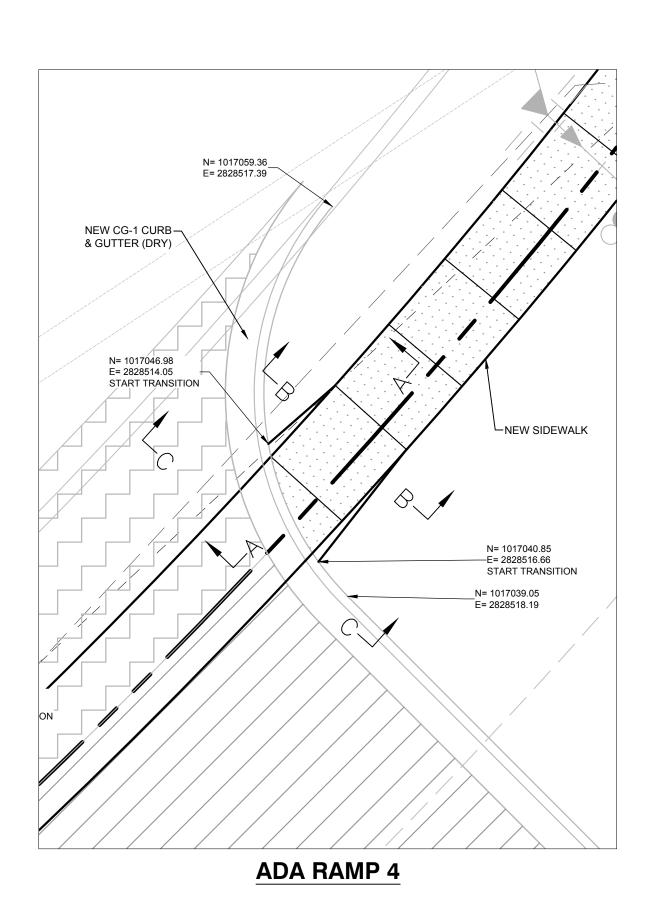
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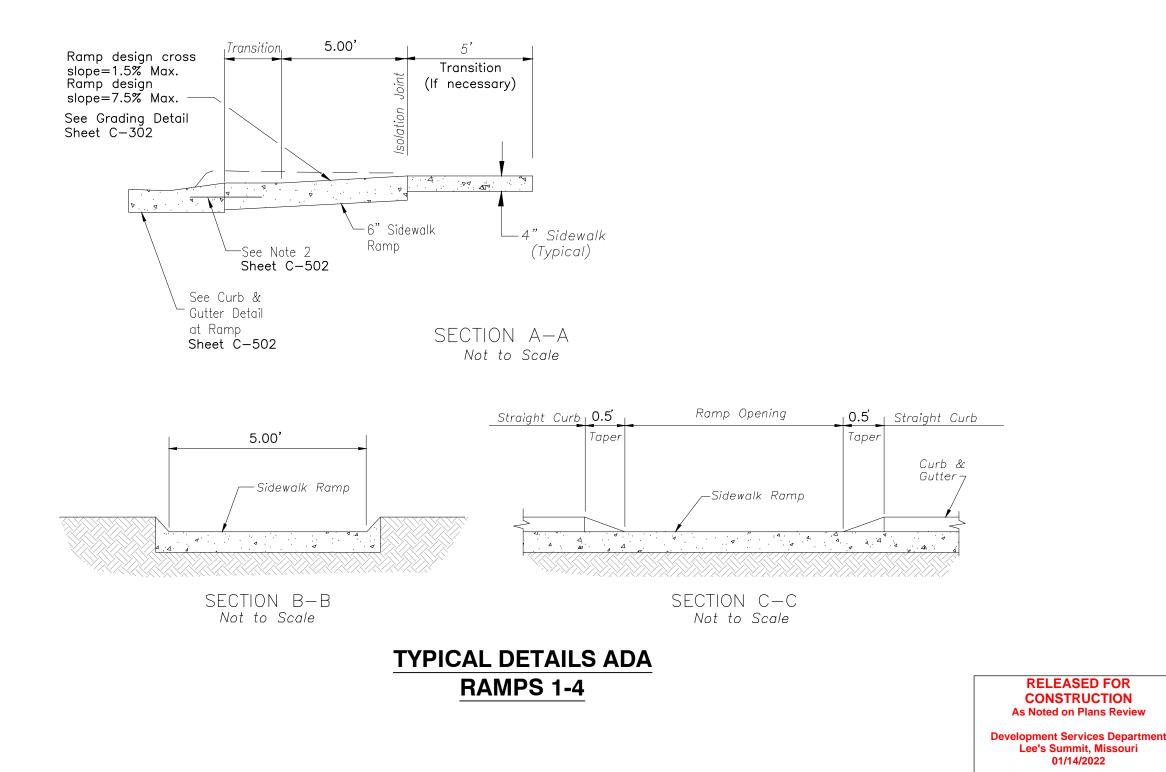
EROSION CONTROL DETAILS

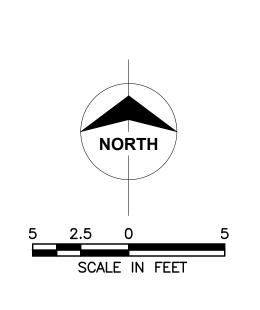












REMOVED DIMENSIONS AND ADDED TO C-302 TO CORRELATE WITH SPOT ELEVATIONS

ADA RAMP DETAILS

PROJECT #: 21-1902 ISSUE DATE: 09/01/2021

ISSUED FOR:

Certificates of Authority
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Toby L. Williams, PE

PE-2019038948 (MISSOURI #)

PREPARED FOR:

WARD DEVELOPMENT

1120 NW EAGLE RIDGE BLVD. GRAIN VALLEY, MO 64029

LOT 10, I-470 BUSINESS AND TECHNOLOO 2601 NE MCBAINE DRIVE LEE'S SUMMIT, MO 64064

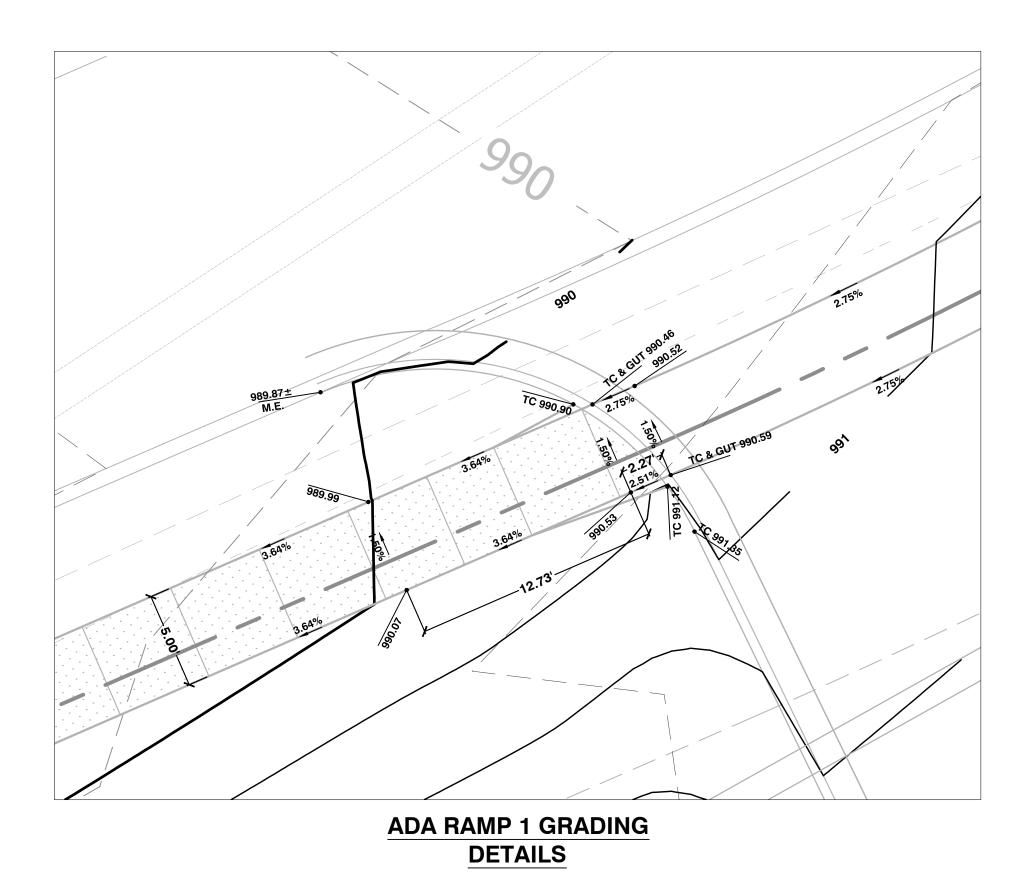
DAVID WARD

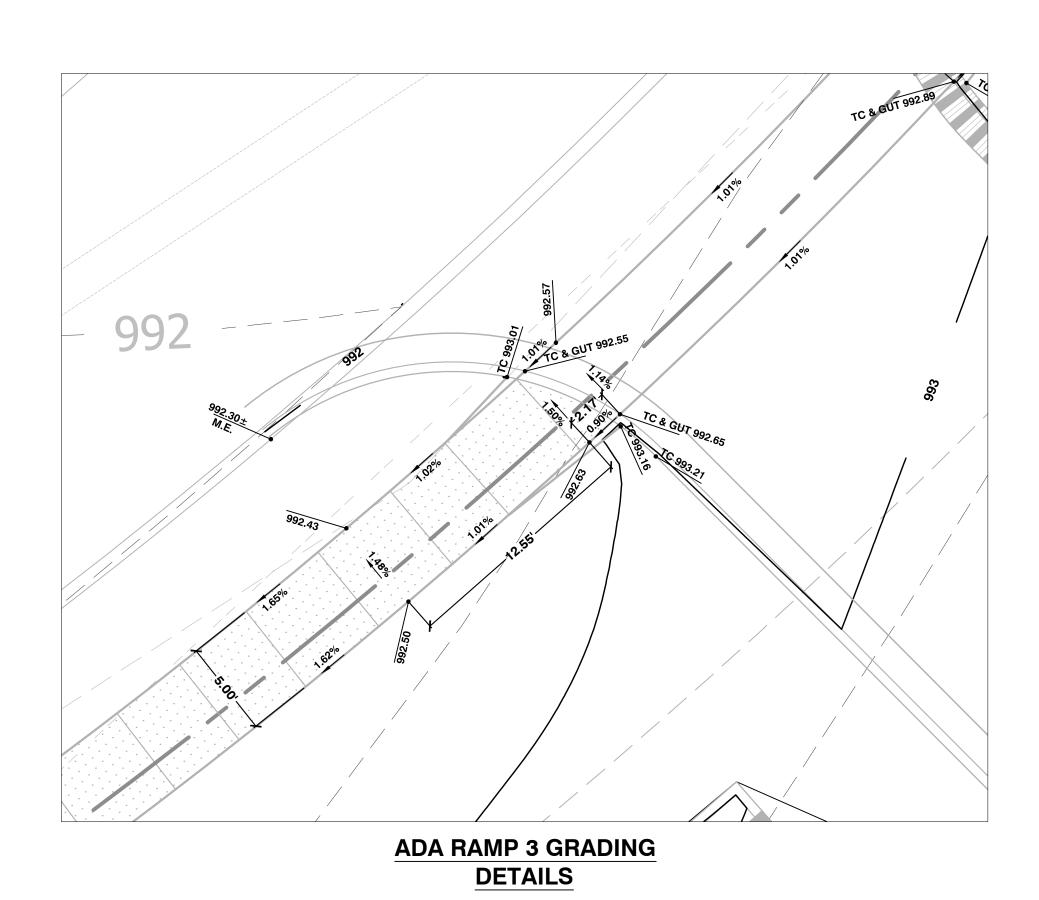
(816) 229-8115

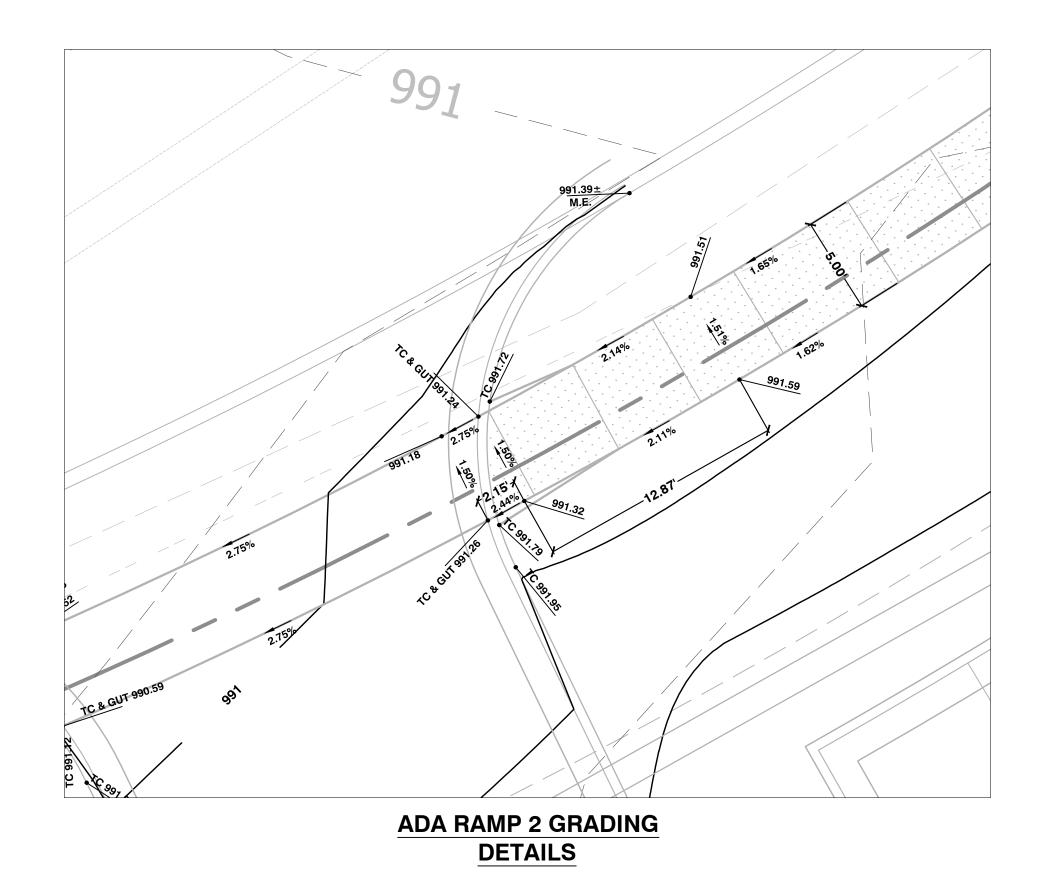
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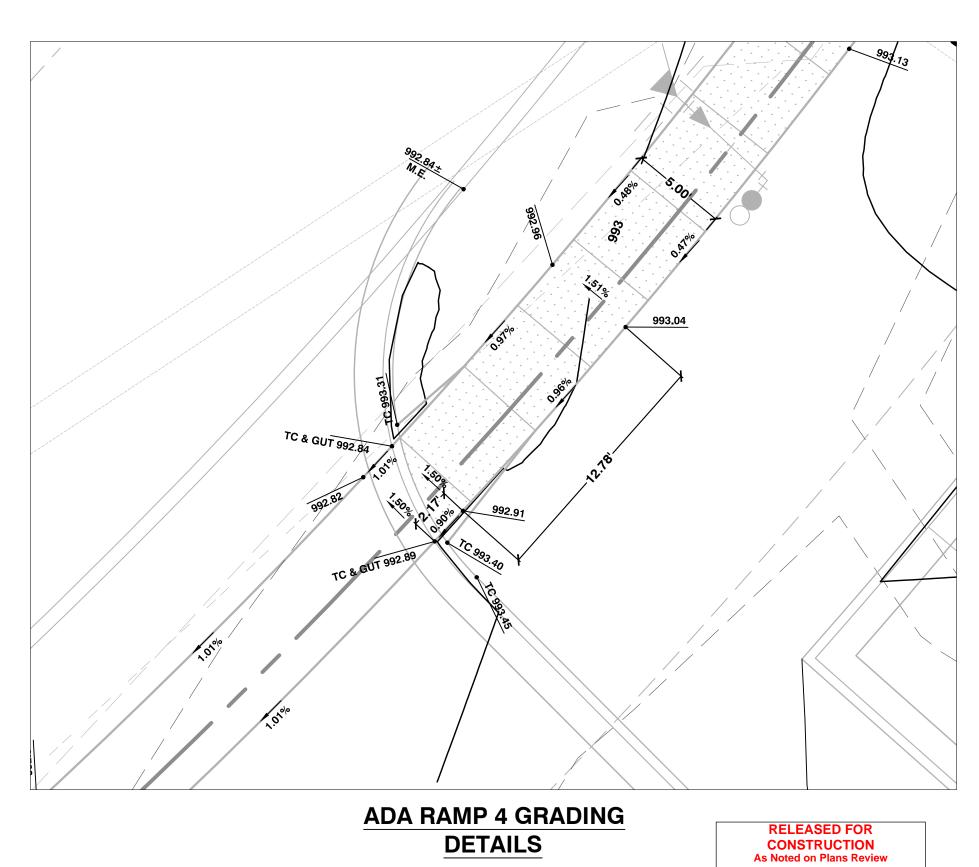
NOTE:
TC = TOP OF CURB
GUT = GUTTER
M.E. = MATCH EXISTING **GRADING NOTES:** 1. ALL ELEVATIONS SHOWN ARE TO FINISHED GRADE SURFACE. 2. ALL EXISTING UTILITY PULL BOXES, HAND HOLES, MANHOLES, VALVE BOXES, METERS, AND OTHER APPURTENANCES TO REMAIN, SHALL BE ADJUSTED TO NEW GRADES. PROPERTY LINE (TYP.) Certificates of Authority
Architecture: MO 310 / KS 73
Engineering: MO 4 / KS 241
Land Surveying: MO 123 / KS 36 Total Disturbed Area: 1.65 acres © 2019 Powell CWM, Inc.
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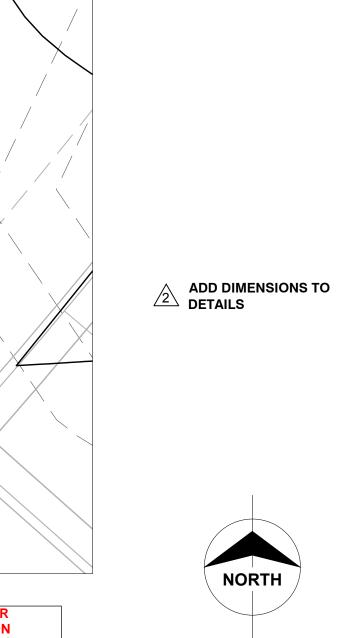
SCALE IN FEET C-301 RAMP 5 GRADING DETAILS











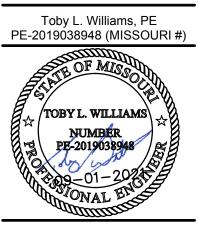
5 2.5 0

SCALE IN FEET

Development Services Department Lee's Summit, Missouri 01/14/2022



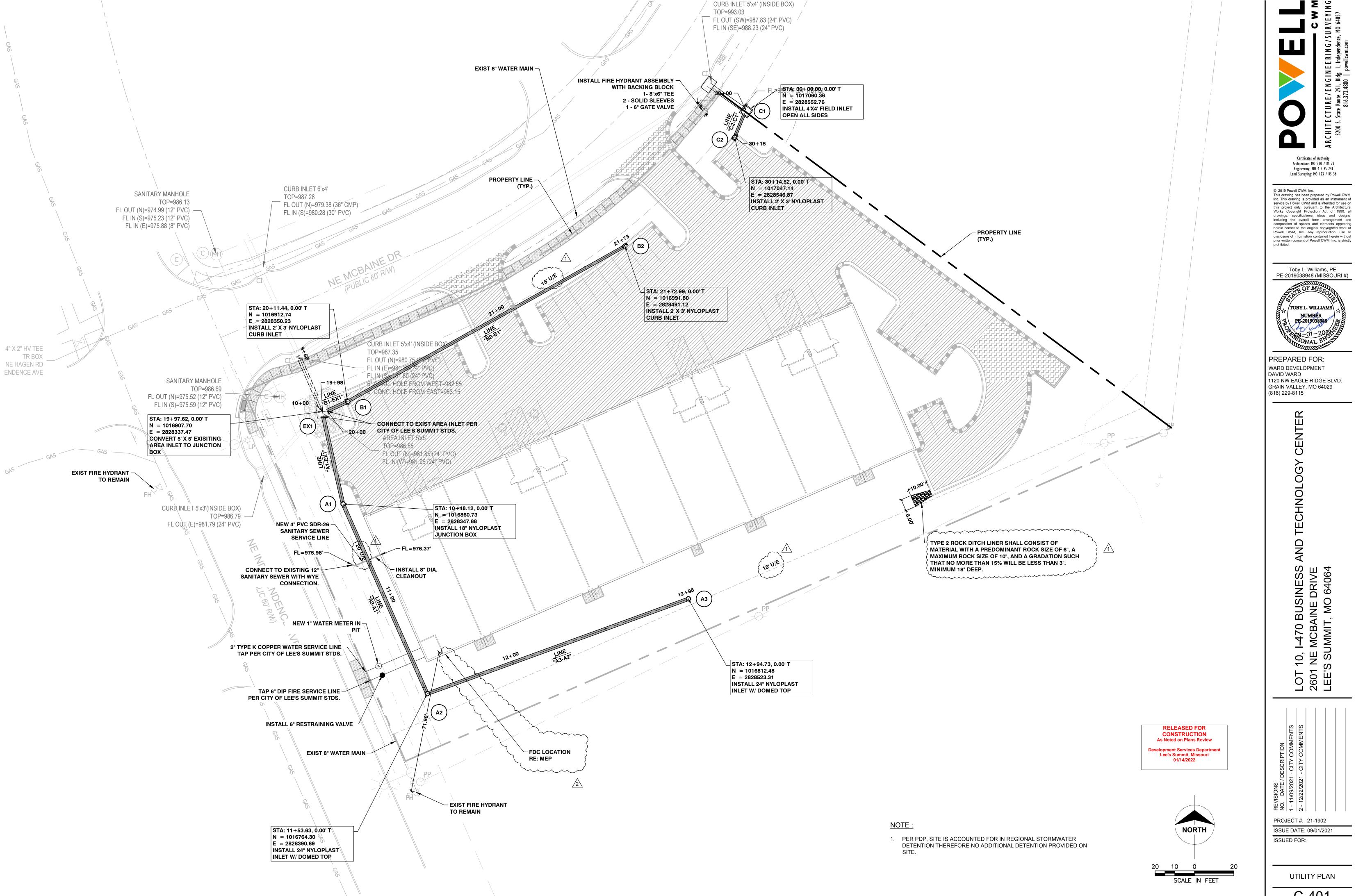
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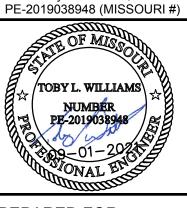
PROJECT #: 21-1902 ISSUE DATE: 09/01/2021 ISSUED FOR:

ADA RAMP GRADING DETAILS



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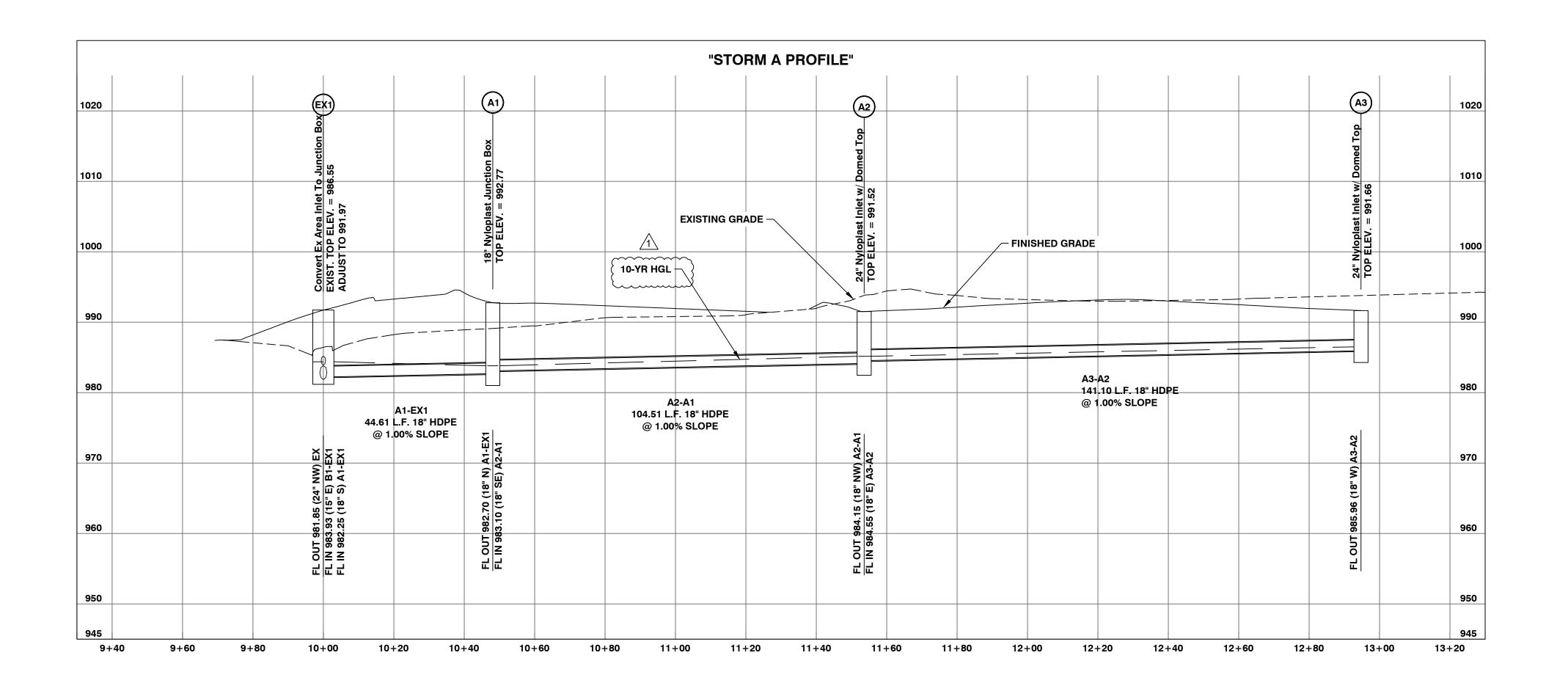
Toby L. Williams, PE

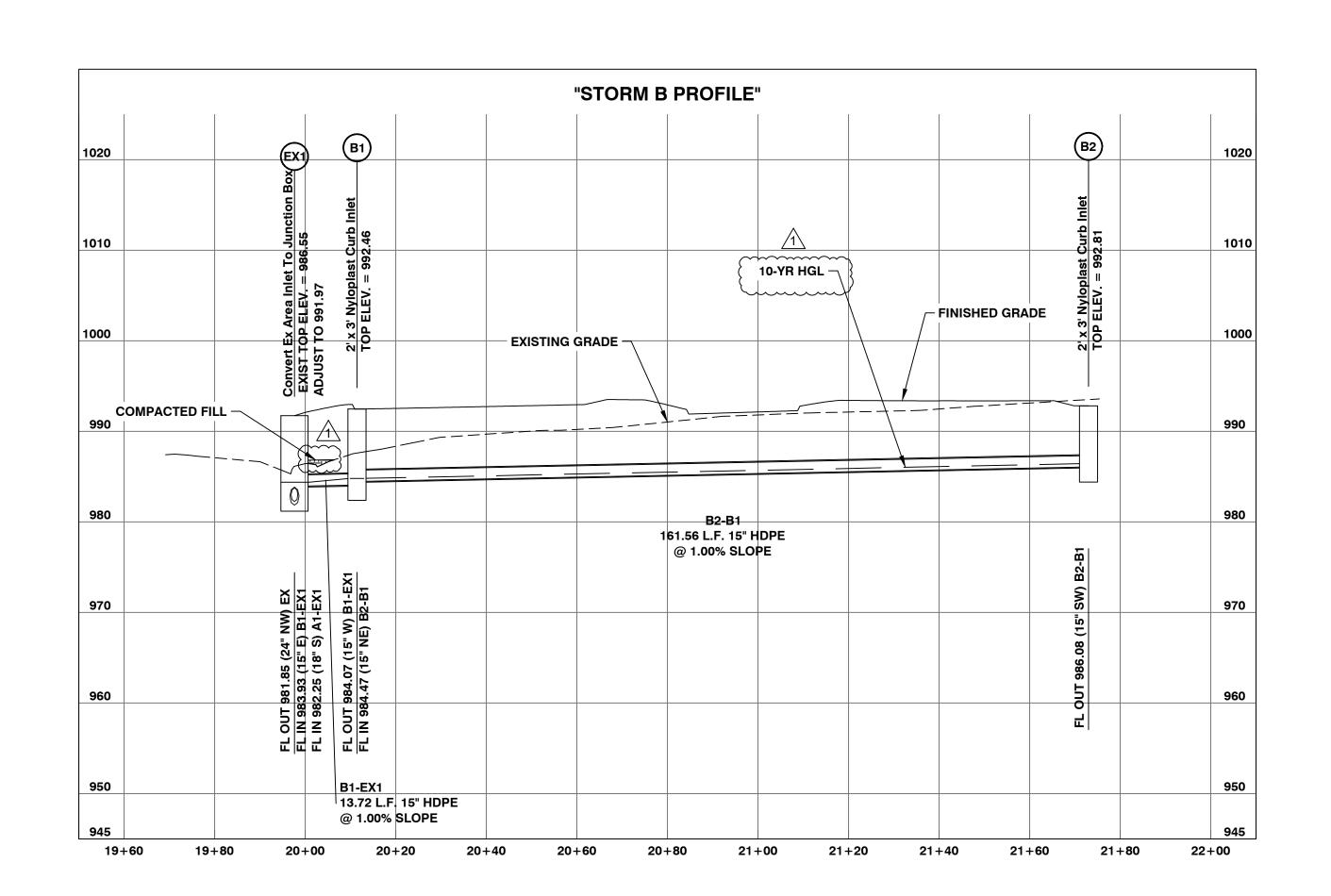


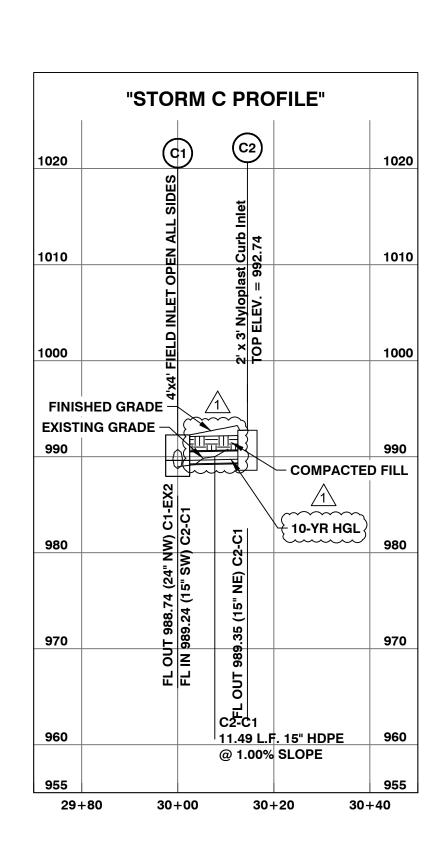
1120 NW EAGLE RIDGE BLVD. GRAIN VALLEY, MO 64029

ISSUE DATE: 09/01/2021

UTILITY PLAN

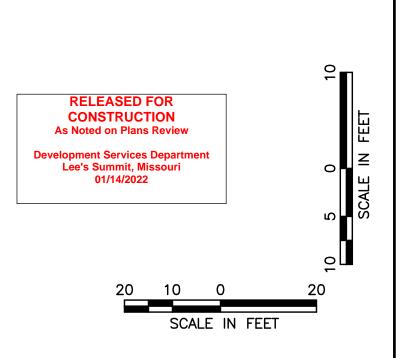






## NOTE:

- **ALL TOPS FOR NYLOPLAST 2'x3' CURB INLET ARE AT GUTTER.**
- 2. COMPACTED FILL SHALL BE PLACED TO A MINIMUM 18" ABOVE THE TOP OF THE PIPE PRIOR TO INSTALLATION.



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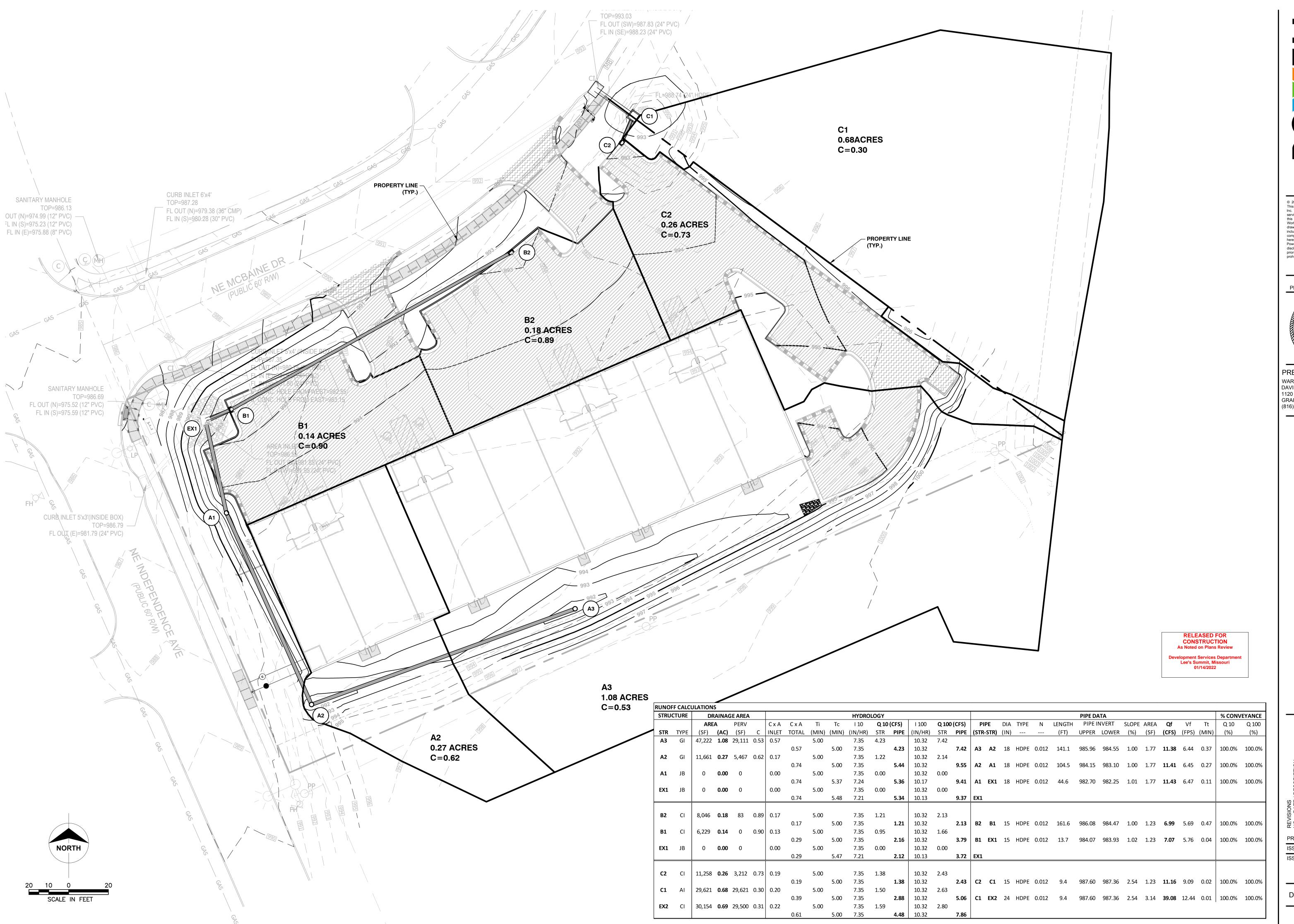
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PROJECT #: 21-1902

ISSUE DATE: 09/01/2021 ISSUED FOR:

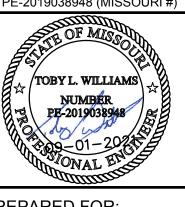
STORM PROFILES



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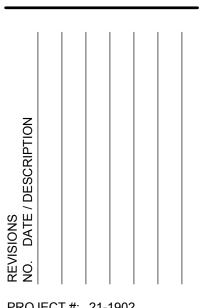
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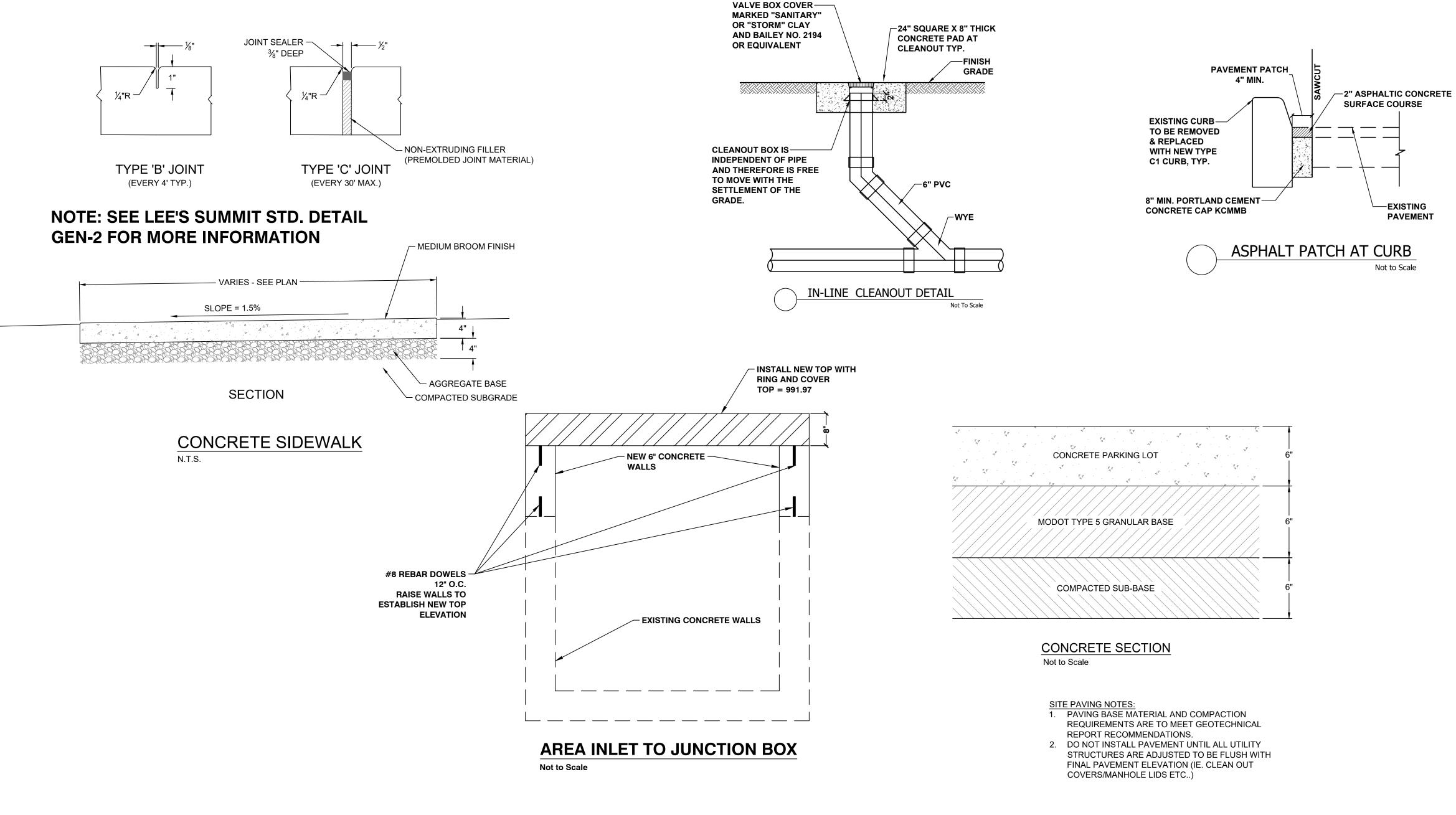
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(816) 229-8115



PROJECT #: 21-1902 ISSUE DATE: 09/01/2021 ISSUED FOR:

DRAINAGE AREA MAP



18" MIN WIDTH GUIDELINE

(1) INTEGRATED DUCTILE IRON

BASE PLATE TO MATCH BASIN O.D.

4" MIN ON 18" & 24"

6" MIN ON 30"

8" MIN THICKNESS GUIDELINE

TRAFFIC LOADS: CONCRETE SLAB DIMENSIONS ARE FOR

GUIDELINE PURPOSES ONLY. ACTUAL CONCRETE SLAB MUST BE DESIGNED TAKING INTO CONSIDERATION LOCAL SOIL CONDITIONS, TRAFFIC LOADING, & OTHER APPLICABLE

(2) VARIABLE SUMP DEPTH

ACCORDING TO PLANS

(6" MIN ON 18" & 24", 10" MIN ON 30"

BASED ON MANUFACTURING REQ.)

THE BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER

GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS I,

BEDDING & BACKFILL FOR SURFACE DRAINAGE INLETS SHALL BE PLACED & COMPACTED UNIFORMLY IN ACCORDANCE WITH ASTM D2321.

CLASS II, OR CLASS III MATERIAL AS DEFINED IN ASTM D2321.

NYLOPLAST 2 FT X 3FT CURB INLET STRUCTURE

(4) ADAPTER ANGLES

VARIABLE 0° - 360° ACCORDING TO

PLANS

**→** 18" - 30" **→** 

CONCRETE CURB & GUTTER

(1) DUCTILE IRON

FRAME, GRATE, & HOOD

**ASPHALT** 

MINIMUM PIPE BURIAL DEPTH PER PIPE MANUFACTURER RECOMMENDATION

(MIN. MANUFACTURING

REQ. SAME AS MIN. SUMP)

WATERTIGHT JOINT

(CORRUGATED HDPE SHOWN)

(3) VARIOUS TYPES OF INLET & OUTLET ADAPTERS AVAILABLE:

4" - 30" FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL,

PVC DWV (EX: SCH 40), PVC C900/C905, CORRUGATED & RIBBED PVC

ADS/HANCOR SINGLE WALL), N-12 HP, PVC SEWER (EX: SDR 35),

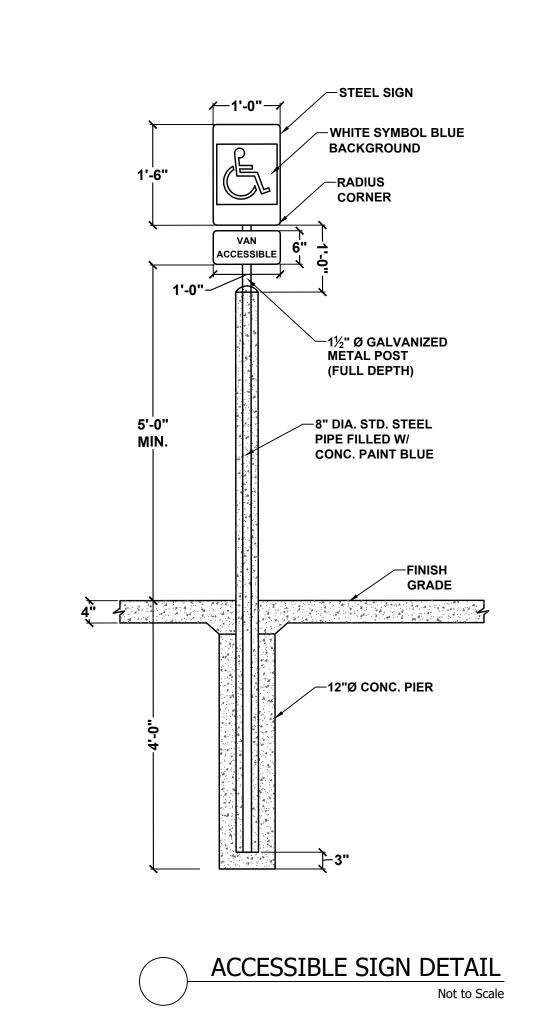
(2) VARIABLE INVERT HEIGHTS

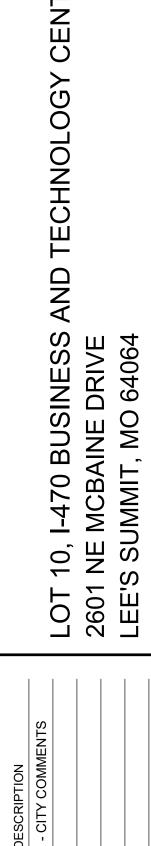
AVAILABLE (ACCORDING TO

PLANS/TAKE OFF)

-EXISTING

**PAVEMENT** 





Certificates of Authority
Architecture: MO 310 / KS 73

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PE-2019038948 (MISSOURI #)

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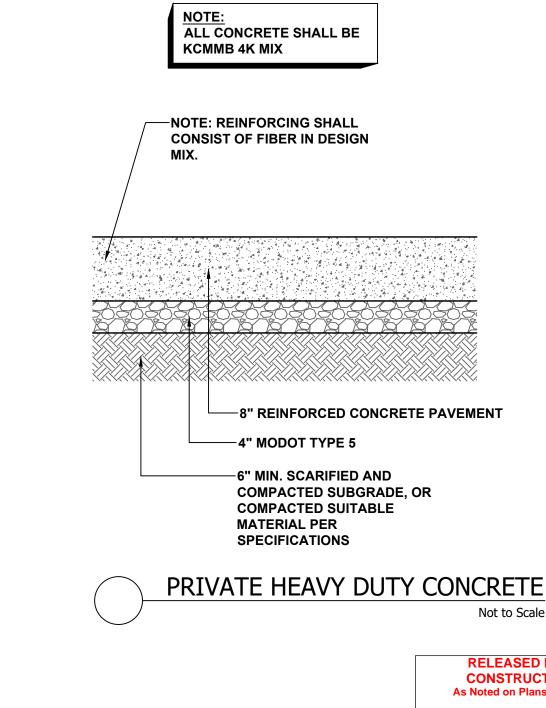
1120 NW EAGLE RIDGE BLVD. GRAIN VALLEY, MO 64029

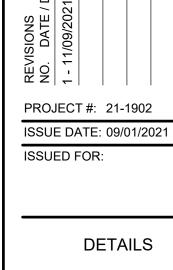
DAVID WARD

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Engineering: MO 4 / KS 241 Land Surveying: MO 123 / KS 36





Not to Scale

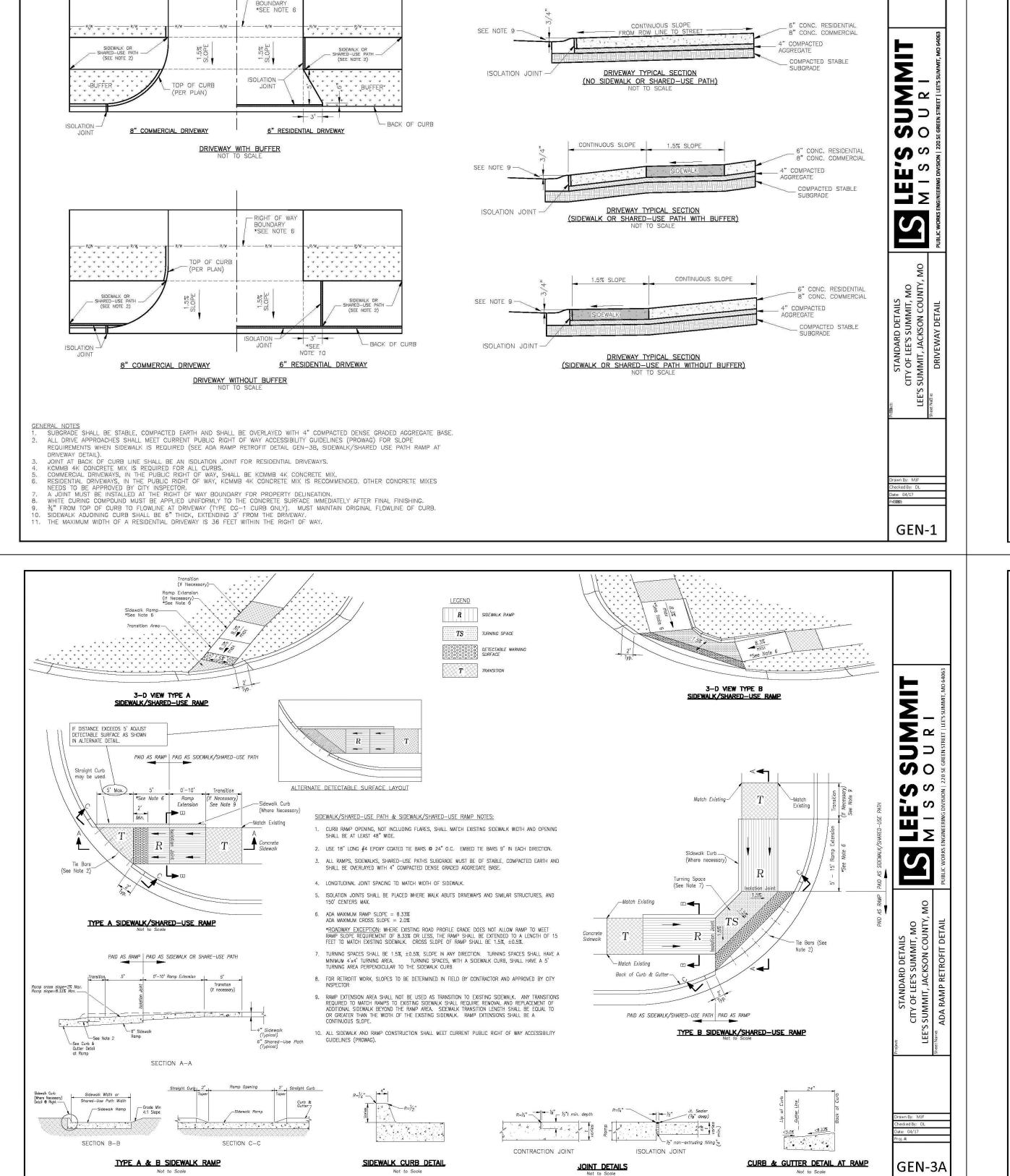
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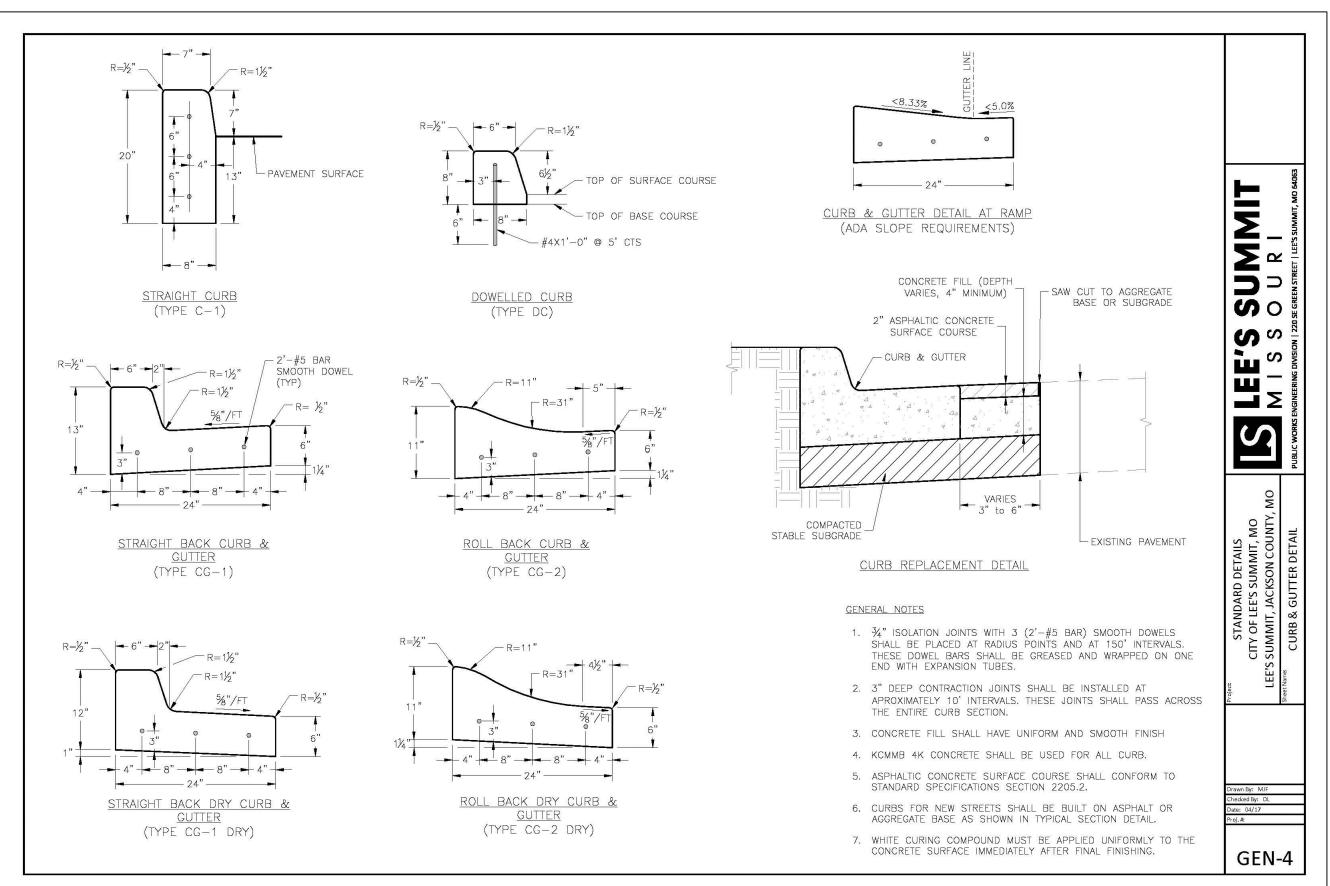
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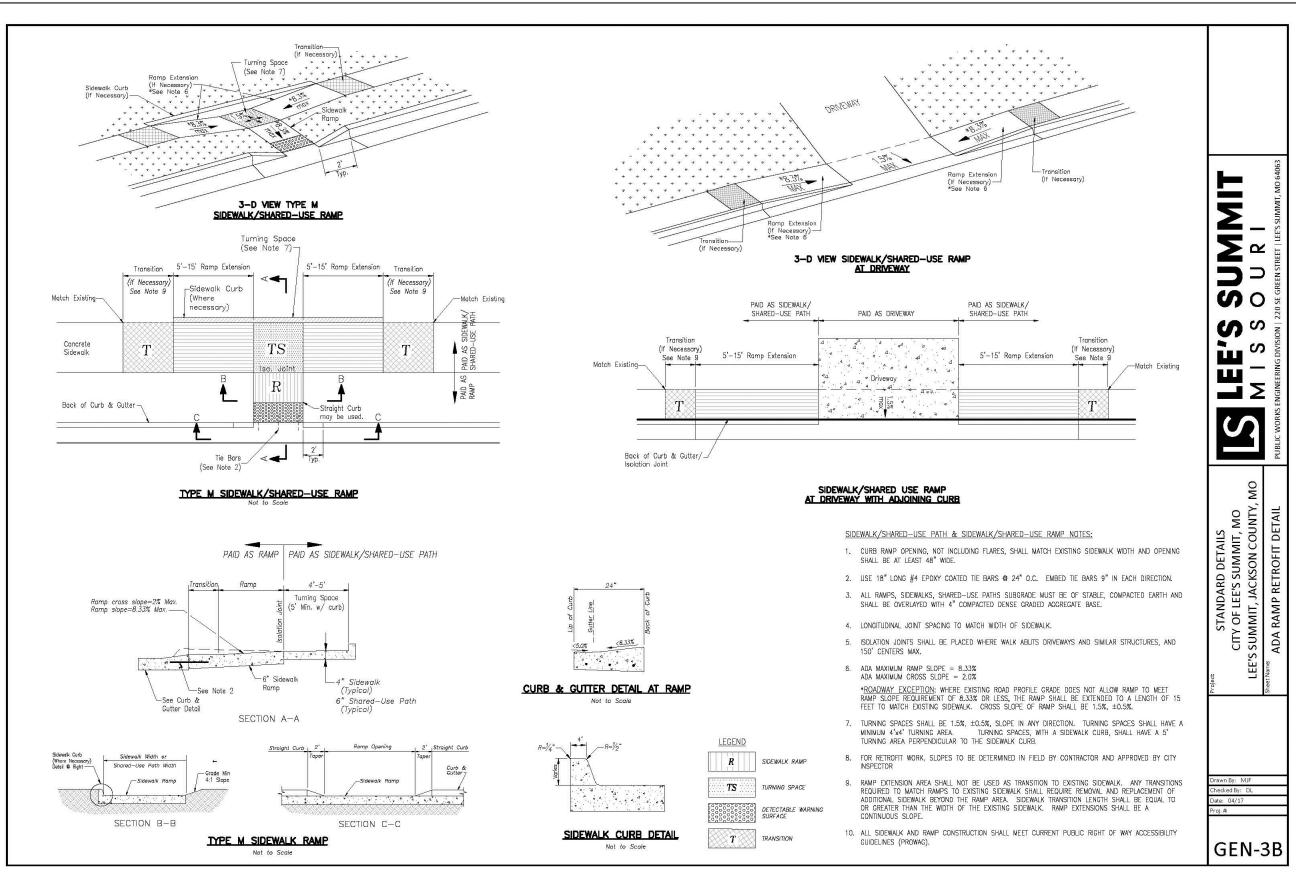
As Noted on Plans Review

Lee's Summit, Missouri 01/14/2022

**DETAILS** C-501



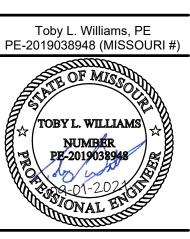








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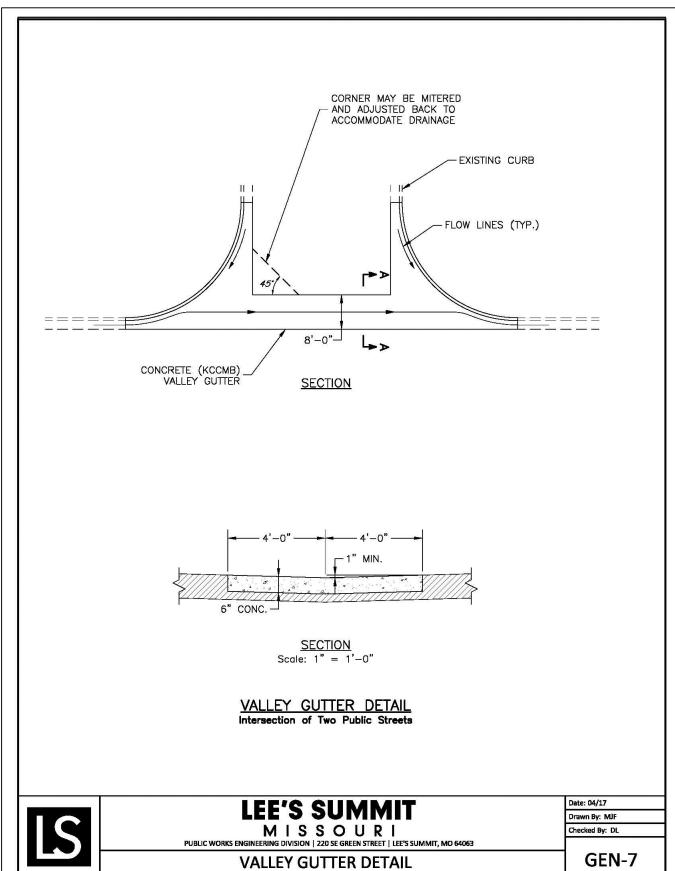
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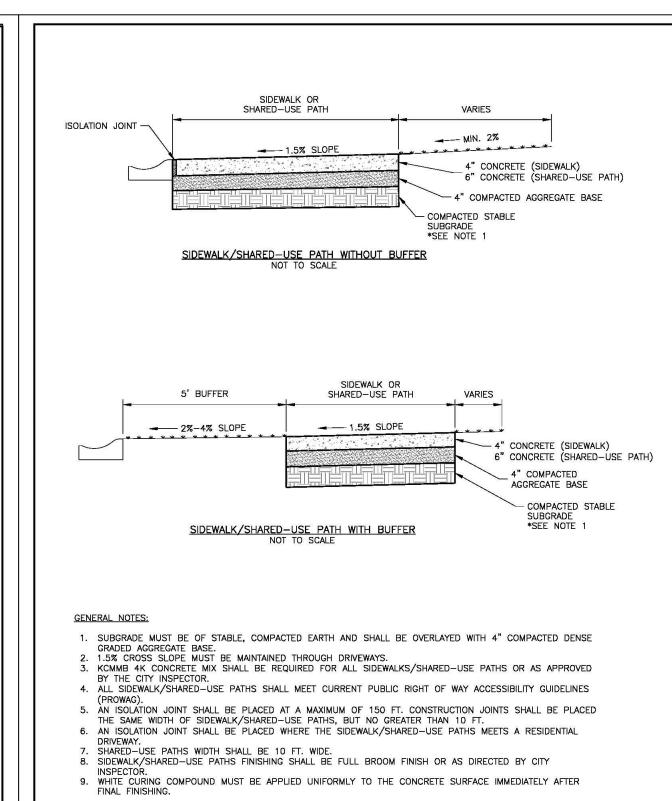
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PROJECT #: 21-1902 ISSUE DATE: 09/01/2021 ISSUED FOR:

**DETAILS** 





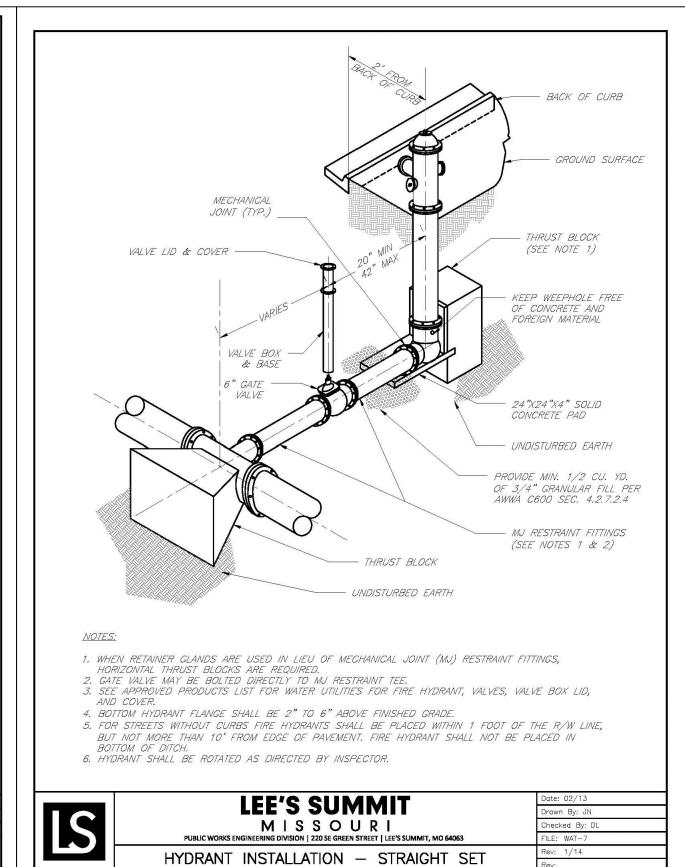
**LEE'S SUMMIT** 

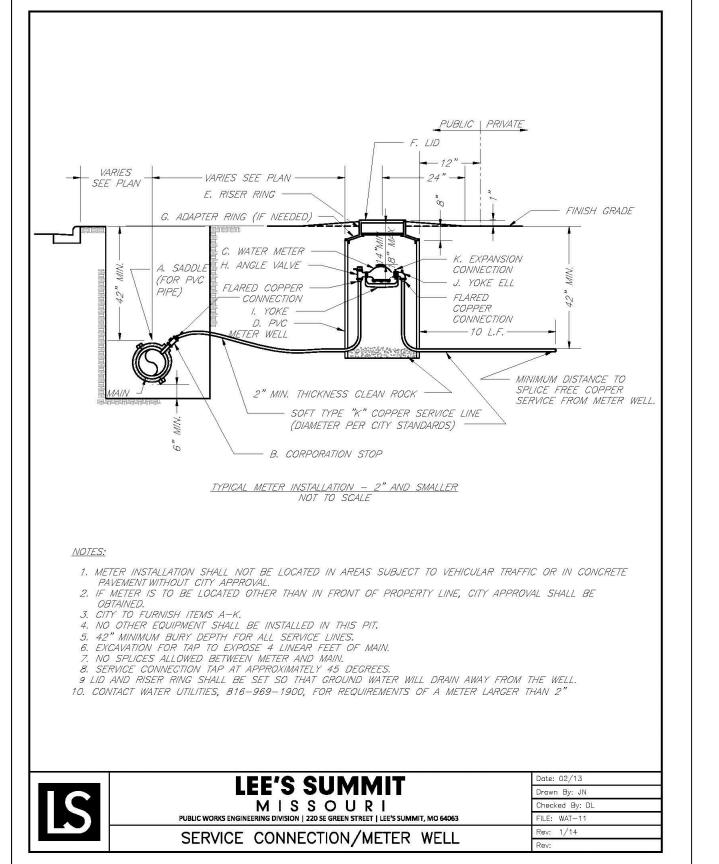
MISSOURI

SIDEWALK/SHARED-USE PATH DETAIL

Drawn By: MJF Checked By: DL

GEN-2









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TOBY L. WILLIAMS

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PREPARED FOR:

WARD DEVELOPMENT

1120 NW EAGLE RIDGE BLVD.

GRAIN VALLEY, MO 64029

DAVID WARD

(816) 229-8115

PROJECT #: 21-1902 ISSUE DATE: 09/01/2021

ISSUED FOR:

**DETAILS** 

## **ELECTRICAL SPECIFICATIONS**

## PART I - GENERAL

### A. CONDITIONS

- FURNISH AND INSTALL A COMPLETELY WIRED AND OPERATIONAL ELECTRICAL SYSTEM AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN, INCLUDING BUT NOT LIMITED TO, THESE MAJOR ITEMS. A. LIGHTING FIXTURES AS INDICATED AND SPECIFIED ON THE PLANS
- B. ELECTRICAL PANELS, SERVICE, CONDUIT, WIRING, ETC., FOR ALL OUTLETS AND EQUIPMENT. C. TELEPHONE, TELEVISION, AND FIRE ALARM. OUTLETS AND CONDUIT AS INDICATED.
- OBTAIN AND REVIEW ALL OTHER DRAWINGS INCLUDING REFLECTED CEILING PLAN. INTERIOR AND EXTERIOR ELEVATIONS, FURNITURE PLANS AND ALL MILL WORK DRAWINGS. COORDINATE INSTALLATION OF ALL ELECTRICAL DEVICES AND EQUIPMENT PRIOR TO ROUGH-IN.
- OBTAIN SUBMITTAL AND SHOP DRAWINGS FROM OTHER TRADES AND EQUIPMENT TO COORDINATE INSTALLATION ACCORDINGLY.
- INSTALLATION SHALL COMPLY WITH ALL CURRENT APPLICABLE CODES AND GOVERNING AGENCIES HAVING JURISDICTION.
- FIRE ALARM SYSTEM, IF REQUIRED PER IBC. SHALL BE DESIGN-BUILD BY OWNER'S/GC'S FIRE ALARM CONTRACTOR. DESIGN SHALL BE IN ACCORDANCE WITH NFPA 72. FIRE ALARM CONTRACTOR SHALL SUBMIT STAMPED DRAWINGS TO AHJ FOR REVIEW AND APPROVAL. FIRE ALARM CONTRACTOR IS RESPONSIBLE FOR TESTING AND VERIFYING THAT THE AUDIBILITY OF THE FIRE ALARM SYSTEM MEETS A MINIMUM OF 15 DBA ABOVE AMBIENT NOISE LEVELS. ADD HORNS WHERE REQUIRED TO MAINTAIN MINIMUM LEVELS.
- PROVIDE FIRE STOP ON ALL PIPING THAT PENETRATES RATED WALLS. METHOD OF FIRE STOP SHALL MEET WALL RATING. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF FIRE RATED WALLS. THIS CONTRACTOR SHALL PROVIDE FIRE RATED ENCLOSURES AROUND ALL ROUGH-IN BOXES, PANELS, ETC. THAT ARE LOCATED IN FIRE RATED WALLS AND SHALL FIRE CAULK ALL OPENINGS IN RATED ASSEMBLIES.

## <u>B. RELATED WORK BY OTHERS</u>

- THE ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT, TRENCH, AND BACKFILL FOR ELECTRICAL SERVICE ENTRANCE FROM THE MAIN SERVICE TO UTILITY POINT OF ELECTRICAL SERVICE. ELECTRICAL CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE ELECTRICAL SERVICE ENTRANCE WITH SERVING UTILITY COMPANY.
- THE ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT, TRENCH, AND BACKFILL FOR PRIMARY PHONE AND CATV SERVICE FROM THE TELEPHONE TERMINAL BOARD OR CABINET TO THE PHONE COMPANY AND CATV COMPANY POINT OF SERVICE COORDINATE WITH LOCAL UTILITY COMPANIES.

## <u>C. CODES, REGULATIONS, AND STANDARDS</u>

- THE INSTALLATION SHALL COMPLY WITH APPLICABLE LOCAL AND STATE CODES AND ORDINANCES, WITH THE REGULATIONS OF THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE AND WITH THE REQUIREMENTS OF THE POWER, TELEPHONE, AND CATV COMPANIES FURNISHING SERVICES TO THIS
- INSTALLATION. THE LATEST EDITIONS OF THE FOLLOWING INDUSTRY STANDARDS, SPECIFICATIONS, AND CODES ARE
- MINIMUM REQUIREMENTS: A. THE NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION STANDARDS.
- B. THE NATIONAL ELECTRICAL CODE, INCLUDING LOCAL AMENDMENTS. C. UNDERWRITER LABORATORIES INCORPORATED STANDARDS.
- D. AMERICAN NATIONAL STANDARDS INSTITUTE. E. INTERNATIONAL BUILDING CODE.

## D. INSPECTION OF SITE

- PRIOR TO SUBMITTING A BID FOR ELECTRICAL WORK, THE CONTRACTOR SHALL VISIT THE SITE OF THE PROPOSED CONSTRUCTION AND SHALL THOROUGHLY ACQUAINT HIMSELF WITH EXISTING UTILITIES, AND WORKING CONDITIONS TO BE ENCOUNTERED, ETC. ALLOWANCE WILL NOT BE MADE FOR NONCOMPLIANCE WITH THIS CONDITION AFTER BIDDING.
- ELECTRICAL INSTALLATION SHALL MEET THE EXISTING CONDITIONS.

WITH THE CONTRACT DOCUMENTS MAY BE REJECTED BY THE ENGINEER.

## . STORAGE AND HANDLING OF MATERIAL

- DELIVER MATERIALS AND EQUIPMENT TO THE PROJECT IN THE MANUFACTURER'S ORIGINAL, UNOPENED, LABELED CONTAINERS. PROTECT AGAINST MOISTURE, TAMPERING, OR DAMAGE FROM IMPROPER HANDLING OR STORAGE. CONTRACTOR SHALL PROTECT AND BE RESPONSIBLE FOR ANY DAMAGE TO WORK OR MATERIALS UNTIL FINAL ACCEPTANCE BY THE OWNER, AND SHALL MAKE GOOD WITHOUT COST TO THE OWNER, ANY DAMAGE OR LOSS THAT MAY OCCUR DURING THIS PERIOD.
- ARRANGE FOR TIMELY DELIVERY OF MATERIALS AND EQUIPMENT TO THE JOB SITE IN ORDER TO MINIMIZE
- THE LENGTH OF TIME BETWEEN DELIVERY AND INSTALLATION. COVER AND PROTECT ANY MATERIAL WHICH MAY BE AFFECTED BY THE WEATHER WHILE IN TRANSIT OR STORED AT THE PROJECT SITE. ANY MATERIAL FOUND DEFECTIVE OR NOT INSTALLED IN ACCORDANCE

KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS, OR RUBBISH CAUSED BY EMPLOYEES OR WORK UNDER THIS DIVISION OF THE SPECIFICATIONS. AT THE COMPLETION OF THE WORK REMOVE ALL SURPLUS MATERIALS, TOOLS, ETC., AND LEAVE THE PREMISES BROOM-CLEAN.

## EXCAVATION, CUTTING, AND FITTING

- PERFORM ALL EXCAVATION AND BACK FILLING REQUIRED FOR WORK PERFORMED UNDER THIS DIVISION OF THE SPECIFICATIONS. USE EXCAVATED MATERIALS FOR BACKFILL UNLESS OFF SITE MATERIALS ARE
- PERFORM THE EXCAVATION, CUTTING, FITTING, REPAIRING, AND FINISHING OF THE WORK NECESSARY FOR THE INSTALLATION OF THE EQUIPMENT OF THIS SECTION. HOWEVER, NO CUTTING OF THE WORK OF OTHER TRADES OR OF ANY STRUCTURAL MEMBERS SHALL BE DONE WITHOUT THE CONSENT OF THE ARCHITECT.

## H. DRAWINGS

THE DRAWINGS INDICATE THE GENERAL ARRANGEMENT AND LOCATIONS OF THE ELECTRICAL WORK DATA PRESENTED ON THESE DRAWINGS ARE AS ACCURATE AS PLANNING CAN DETERMINE. BUT FIELD VERIFICATION OF ALL DIMENSIONS, LOCATIONS, LEVELS, ETC., TO SUIT FIELD CONDITIONS IS REQUIRED. REVIEW ALL ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DRAWINGS AND ADJUST ALL WORK TO MEET THE REQUIREMENTS OF CONDITIONS SHOWN. THE ARCHITECTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER ALL OTHER DRAWINGS. DISCREPANCIES BETWEEN DIFFERENT PLANS, OR BETWEEN DRAWINGS AND SPECIFICATIONS, OR REGULATIONS AND CODES GOVERNING THE INSTALLATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING BEFORE THE DATE OF BID OPENING. IF DISCREPANCIES ARE NOT REPORTED, THE CONTRACTOR SHALL BID THE GREATER QUANTITY OR BETTER QUALITY, AND APPROPRIATE ADJUSTMENTS WILL BE MADE AFTER CONTRACT AWARD. CONTRACTOR SHALL BE RESPONSIBLE TO FIELD MEASURE AND CONFIRM MOUNTING HEIGHTS AND LOCATION OF ELECTRICAL EQUIPMENT WITH RESPECT TO COUNTERS, RADIATION, ETC. DO NOT SCALE DISTANCES OFF THE ELECTRICAL DRAWINGS, USE ACTUAL BUILDING DIMENSIONS.

## COOPERATION WITH OTHER CONTRACTORS

- COOPERATE WITH THE OTHER TRADES SO THAT THE INSTALLATION OF THE ELECTRICAL OUTLETS AND EQUIPMENT WILL BE PROPERLY COORDINATED. CONDUIT, LIGHTING FIXTURES, AND OTHER EQUIPMENT LOCATIONS SHALL BE VERIFIED WITH OTHER TRADES TO AVOID CONFLICT WITH THE PIPING, DUCTWORK, STEEL, BEAMS, OR OTHER OBSTRUCTIONS.
- CAREFULLY VERIFY THE LOCATIONS OF THE OUTLET BOXES AND DETERMINE THAT THEY HAVE NOT
- BEEN DISTURBED DURING THE INSTALLATION OF MATERIALS OF OTHER TRADES.
- SERVICES WITH THE GENERAL CONTRACTOR. COORDINATE HVAC AND PLUMBING EQUIPMENT CONNECTION REQUIREMENTS WITH HVAC AND PLUMBING

### CONTRACTORS. RECORD DRAWINGS

THE ELECTRICAL CONTRACTOR SHALL MAINTAIN A SET OF DRAWINGS AT THE JOB SITE FOR THE EXCLUSIVE PURPOSE OF MAINTAINING A RECORD OF ALL WORK INSTALLED AND TO SHOW ANY DEVIATIONS FROM THE WORK INDICATED ON THE DRAWINGS.

COORDINATE THE LOCATION OF THE TRENCHES AND CONDUITS FOR ELECTRICAL AND TELEPHONE UTILITY

AT THE COMPLETION OF THE PROJECT, ONE SET OF REPRODUCIBLE DRAWINGS, SHOWING ALL RECORD CONDITIONS, SHALL BE DELIVERED TO THE OWNER FOR ACCEPTANCE PRIOR TO FINAL PAYMENT.

## PART II - PRODUCTS AND EXECUTION

## ALL MATERIALS SHALL BE NEW AND OF QUALITY AS SPECIFIED ON THE PLANS OR SPECIFICATIONS AND MUST CARRY THE UNDERWRITER'S LABORATORIES APPROVAL COVERING THE PURPOSE FOR WHICH THEY ARE USED, IN ADDITION TO MEETING ALL REQUIREMENTS OF THE CURRENT APPLICABLE CODES AND REGULATIONS.

## B. SHOP DRAWINGS AND APPROVALS

THE ITEMS SPECIFIED HEREIN AND ON DRAWINGS ARE USED AS A STANDARD OF QUALITY. ANY MATERIALS OF EQUAL QUALITY AND AESTHETIC VALUE WILL BE GIVEN CONSIDERATION AS A SUBSTITUTE FOR THE MATERIALS SPECIFIED. NO APPROVAL WILL BE GIVEN TO A SPECIFIC CATALOG NUMBER, MODEL OR TYPE OF EQUIPMENT, PRIOR TO BIDDING. AFTER BIDDING, THE DECISION OF THE ARCHITECT AND/OR ENGINEER DETERMINING EQUAL MATERIALS WILL BE FINAL.

- 2. THE CONTRACTOR SHALL SUBMIT SEVEN (7) IDENTICAL BOUND SETS OF SHOP DRAWINGS ON THE FOLLOWING ITEMS:
- A. LIGHTING FIXTURE CUTS AND PERFORMANCE DATA. B. OUTLINE DRAWINGS AND DATA SHEETS OF EACH PANELBOARD, LOAD CENTERS, AND DISTRIBUTION
- C. OUTLINE DRAWINGS OF ALL SWITCH GEAR COMPONENTS. ). WIRING DEVICES AND COVERPLATES.

AS SPECIFIED ABOVE FOR THE SERVICE ENTRANCE

E. ALL CIRCUIT BREAKERS INSTALLED IN PANELBOARDS, LOAD CENTERS, AND DISTRIBUTION PANELS. SUBMIT ITEMS AT ONE TIME IN A NEAT AND ORDERLY MANNER WITHIN 15 DAYS OF AWARD OF CONTRACT. PARTIAL SUBMITTALS WILL NOT BE ACCEPTABLE.

- 1. GROUNDING SHALL COMPLY WITH REQUIREMENTS OF ARTICLE 250. ALL EXPOSED NONCURRENT CARRYING METALLIC PARTS OF ELECTRICAL EQUIPMENT, METALLIC RACEWAY SYSTEMS, METALLIC CABLE ARMOR, GROUNDING CONDUCTOR OF NONMETALLIC SHEATHED CABLES, GROUNDING CONDUCTOR IN NONMETALLIC RACEWAYS, AND GROUNDED CONDUCTORS OF THE WIRING SYSTEM SHALL BE GROUNDED.
- GROUNDING CONDUCTOR (NEUTRAL) OF THE WIRING SYSTEM SHALL BE CONNECTED TO THE SYSTEM GROUNDING CONDUCTOR AT A SINGLE PLACE IN EACH SYSTEM BY REMOVABLE BONDING JUMPERS, SIZED ACCORDING TO THE APPLICABLE PROVISIONS OF THE NATIONAL ELECTRICAL CODE. THE GROUNDED CONDUCTOR (NEUTRAL) TO THE GROUNDING CONDUCTOR CONNECTION SHALL BE LOCATED IN THE ENCLOSURE FOR THE SYSTEM'S OVERCURRENT PROTECTION OR WHERE OTHERWISE INDICATED ON THE PLANS OR SPECIFICATIONS.
- 3. A GROUND BUS SEPARATE FROM THE NEUTRAL BUS SHALL BE PROVIDED IN ALL DISTRIBUTION PANELS AND PANELBOARDS. PROPER TORQUE ON GROUND BUS SHALL BE VERIFIED, PER MANUFACTURER'S RECOMMENDATIONS, PRIOR TO ENERGIZING EQUIPMENT.
- 4. GROUND BUSES AND NEUTRAL BUSES IN ALL DISTRIBUTION PANELS, LOAD CENTERS, PANELBOARDS, AND THOSE PROVIDED IN ANY EQUIPMENT SHALL BE ISOLATED EXCEPT WHERE REQUIRED TO BE CONNECTED
- WHEN INDICATED ON THE DRAWINGS, EQUIPMENT GROUNDING CONDUCTORS SHALL BE EXTENDED FROM THE GROUND BUS IN THE DISTRIBUTION EQUIPMENT TO THE RECEPTACLE, FIXTURE OR DEVICE LUGS WHERE THEY ARE PROVIDED. WHERE LUGS ARE NOT PROVIDED, EQUIPMENT GROUNDING CONDUCTORS SHALL BE CONNECTED TO EQUIPMENT ENCLOSURES. THE CONNECTIONS SHALL BE ARRANGED SUCH THAT REMOVAL OF THE RECEPTACLE, EQUIPMENT GROUND CONDUCTORS, OR GROUND JUMPERS FROM GROUND BUSING SHALL NOT AFFECT THE GROUND SYSTEM.
- 6. RACEWAYS MAY NOT BE USED AS A GROUNDING CONDUCTOR FOR POWER AND LIGHTING CIRCUITS. ALL CONDUIT SHALL HAVE SEPARATE CODE SIZED GREEN GROUND WIRE INSTALLED IN THE CONDUIT TO INSURE A CONTINUOUS GROUNDING PATH.
- IN INACCESSIBLE LOCATIONS, MAKE CONNECTIONS BY EXOTHERMIC WELD PROCESS.
- IN ACCESSIBLE LOCATIONS, CONNECTIONS SHALL BE MADE WITH BOLTED THROUGH, APPROVED SOLDERLESS BRONZE GROUNDING DEVICES.

## CONDUCTOR SIZES SHOWN ON THE DRAWINGS ARE BASED ON COPPER WIRE. UNLESS OTHERWISE SPECIFIED, ALL WIRE SHALL BE TYPE XHHW OR SE FOR FEEDERS OR BRANCH CIRCUITS LARGER THAN 4

- AWG, TYPE THHN/THWN INSULATION FOR FEEDERS AND BRANCH CIRCUITS 4 AWG AND SMALLER. ALL BRANCH CIRCUIT WIRING SHALL BE COPPER. 2. ALUMINUM CONDUCTORS MAY BE UTILIZED FOR SERVICE ENTRANCE AND PANEL FEEDERS. CONDUCTORS
- SHALL BE ALUMINUM ALLOW AA-8000 SERIES. THE WIRES SHALL BE MARKED WITH COLOR TO SIMPLIFY CIRCUIT IDENTIFICATION. UNLESS OTHERWISE REQUIRED BY LOCAL ORDINANCES GROUND WIRES SHALL BE GREEN, NEUTRAL WIRES SHALL BE 120V-WHITE, AND LIVE WIRES 208Y/120V AND 120/240 SHALL BE BLACK (PHASE A), RED (PHASE B), AND BLUE (PHASE C). CIRCUIT SHALL BE LABELED IN EACH J-BOX.
- ALL CONDUCTORS SHALL BE RATED 600 VOLT. SPLICES IN EXTERIOR PULL BOXES AND MANHOLES SHALL BE WEATHERPROOF USING "SCOTCHCAST" SPLICE KIT OR APPROVED EQUAL. SEAL ENDS OF CONDUITS AND DUCTS WITH "DUCTSEAL" OR
- APPROVED EQUAL. PROVIDE SOLID CONDUCTOR FOR 12 AWG AND SMALLER.
- NO WIRE SHALL BE INSTALLED IN THE CONDUIT SYSTEM UNTIL THE CONDUIT SYSTEM IS COMPLETE. USE MINERALAC NO. 100 OR EQUIVALENT AS A LUBRICANT TO FACILITATE THE INSTALLATION OF THE CONDUCTORS IN THE CONDUIT SYSTEM.
- 8. MC CABLE WITH COPPER CONDUCTORS AND GROUND WIRE MAY BE USED WHERE PERMITTED.

- ALL WIRING SHALL BE INSTALLED IN LISTED METALLIC CONDUIT EXCEPT AS PERMITTED IN OTHER SECTIONS. RGS, WITH A 20 MIL PVC COATING WILL BE USED WHEN IN CONTACT WITH EARTH. IMC MAY BE USED IN INDOOR LOCATIONS NOT IN CONTACT WITH THE EARTH. EMT MAY BE USED IN INDOOR LOCATIONS NOT IN CONTACT WITH EARTH. NOT IN CONCRETE SLABS OR WALLS AND NOT SUBJECT TO DAMAGE. PVC MAY BE USED IN OR BELOW CONCRETE AND DIRECT BURIED IN EARTH. FLEXIBLE STEEL CONDUIT SHALL BE USED FOR INDOOR FINAL CONNECTIONS TO EQUIPMENT IN LENGTHS NOT TO EXCEED 72". LIQUID-TIGHT FLEXIBLE STEEL CONDUIT SHALL BE FOR OUTDOOR FINAL CONNECTIONS TO EQUIPMENT NOT TO EXCEED 48".
- WHERE CONDUIT ENTERS OUTLET BOXES, FIXTURES OR CABINETS, FIRMLY FASTEN WITH STEEL SET SCREW, COMPRESSION CONNECTORS, OR DOUBLE LOCKNUTS FOR GRC. ALL CONNECTIONS SHALL HAVE BUSHINGS OR INSULATED THROAT CONNECTORS. FIRMLY FASTEN CONDUIT TO THE BUILDING CONSTRUCTION. RUN EXPOSED CONDUIT PARALLEL TO THE BUILDING LINES, SUPPORTED BY APPROPRIATE HANGERS (UNISTRUT, T & B OR APPLETON, OR EQUAL).
- 3. COVER METALLIC CONDUIT IN CONTACT WITH EARTH WITH POLYETHYLENE TAPED SPIRAL WRAPPED, 1/2 LAPPED TO PROVIDE 20 MIL. THICKNESS. TAPE SHALL BE SCOTCH NO. 50 TAPE. CONDUIT AND DUCTS NOT UNDER BUILDINGS AND FEEDER DUCTS SHALL BE INSTALLED PER N.E.C. 300-5. MAKE JOINTS WITH COMPOUND TO BE WATERTIGHT.
- 4. SCHEDULE 40 PVC CONDUIT SHALL BE PERMITTED UNDERGROUND WITH PROPER FITTINGS, ALL UL APPROVED AND CEMENTED JOINTS. PENETRATIONS THROUGH FLOOR SLABS AND BENDS GREATER THAN 22° SHALL BE WRAPPED RIGID GALVANIZED STEEL ELBOWS.
- FITTINGS AND CONDUIT BODIES SHALL BE STEEL. DIECAST FITTINGS ARE NOT ACCEPTABLE. CONDUIT SIZES SHALL BE AS REQUIRED BY CODE AND AS INDICATED OR SPECIFIED.
- 7. ALL EMPTY CONDUIT SYSTEMS SHALL HAVE A 200 LB. TEST NYLON PULL STRING TO FACILITATE INSTALLATION OF FUTURE WIRE.
- WIRING, CONDUITS, AND OUTLETS SHALL BE CONCEALED WITH THE BUILDING STRUCTURE, EXCEPT THAT CERTAIN MOTOR AND LIGHTING FEEDER CONDUITS MAY BE RUN EXPOSED IN CERTAIN AREAS AS INDICATED ON THE DRAWINGS. 9. CONDUIT PENETRATION THROUGH ROOF SHALL HAVE ROOF FLASHING WITH CAULK TYPE COUNTER
- FLASHING SLEEVE. INSTALLATION SHALL BE WATERTIGHT.
- 10. CONDUITS SHALL BE ROUTED PARALLEL AND PERPENDICULAR TO THE STRUCTURE.

## F. OUTLET, PULL, AND JUNCTION BOXES

- ALL JUNCTION AND OUTLET BOXES CONCEALED IN WALLS SHALL BE STEEL BOXES INSTALLED IN POURED CEMENT FLOORS SHALL BE FLUSH TYPE CAST IRON OR STEEL WITH WATERTIGHT GASKETED COVERS. WHERE BOXES ARE INSTALLED IN FLOORS WITH TILE OR CARPET FLOOR
- BOXES INSTALLED FOR THE ALARM, COMPUTER, AND SECURITY SYSTEM SHALL BE PROVIDED WITH APPROPRIATE COVER PLATES.

COVERING, COVERS SHALL BE OF THE RECESSED TYPE TO ACCOMMODATE THE FLOOR COVERING.

4. BOXES FOR TELEPHONE, COMPUTER, T.V., FIRE ALARM, SECURITY, AND SIMILAR SYSTEMS SHALL BE MINIMUM 2-1/8" DEEP.

## **G WIRING DEVICES (COMMERCIAL)**

- WALL SWITCHES SHALL BE SPECIFICATION GRADE AC SILENT TYPE SWITCHES, 20A 120/277 VOLT. RECEPTACLES SHALL BE SPECIFICATION GRADE, DUPLEX TYPE. NEMA5-20R, 20 AMPERE, 120VOLT GROUNDED TYPE. SPECIAL APPLICATION RECEPTACLES SHALL BE INDICATED ON PLANS. MOUNT WITH THE
- GROUND DOWN. 3. DEVICE PLATES SHALL BE EQUAL TO SIERRA SMOOTH-LINE PLASTIC WALL PLATES. COLOR SHALL BE
- WHITE, UNLESS OTHERWISE NOTED. 4. RECEPTACLES IN OUTDOOR AND WET LOCATIONS SHALL BE INSTALLED WITH A HINGED OUTLET COVER/ENCLOSURE CLEARLY MARKED AND U.L. LISTED SUITABLE FOR WET LOCATIONS WHILE IN USE, EQUAL TO TAYMAC SPECIFICATION GRADE.

## H. SERVICE ENTRANCE SECTION

- THE SERVICE ENTRANCE EQUIPMENT SHALL BE AS INDICATED ON THE DRAWINGS. EQUIPMENT SHALL
- CARRY THE U.L. LABEL AND SHALL CONFORM TO THE POWER COMPANY REGULATIONS. SERVICE ENTRANCE EQUIPMENT SHALL BE PROVIDED WITH A FULLY RATED COPPER OR ALUMINUM BUS. HORIZONTALLY TAPERED BUSSING SHALL NOT BE ALLOWED.

1. DISTRIBUTION PANELS SHALL BE PROVIDED WITH FULLY RATED COPPER OR ALUMINUM BUS. HORIZONTAL TAPERED BUSSING SHALL NOT BE ALLOWED

- ACCEPTABLE MANUFACTURERS CUTLER HAMMER, SEIMENS, SQUARE D OR GENERAL ELECTRIC FACTORY ASSEMBLED DEAD FRONT. METAL ENCLOSED. AND SELF-SUPPORTING SWITCH BOARD ASSEMBLY CONFORMING T NEMA PB 2 AND UL 891. AND COMPLETE FROM INCOMING LINE TERMINALS TO LOAD SIDE
- TERMINATIONS. LINE AND LOAD TERMINATIONS: ACCESSIBLE FROM FRONT ONLY OF THE SWITCH BOARD. SUITABLE FOR
- CONDUCTOR MATERIALS AND NUMBER OF CONDUCTORS USED. BUS CONNECTIONS: BOLTED. ACCESSIBLE FROM FRONT FOR MAINTENANCE. PROVIDE BELLEVILLE WASHERS
- FOR PROPERLY TORQUE ALL CONNECTIONS PROVIDE FULLY-RATED NEUTRAL BUS AND FULLY RATED GROUND BUS MATCHING MATERIAL USED FOR MAIN BUS.
- FUTURE PROVISIONS: FULLY EQUIP SPACES FOR FUTURE DEVICES WITH BUSSING AND BUS CONNECTIONS SUITABLY INSULATED AND BRACED FOR SHORT CIRCUIT CURRENTS. CONTINUOUS CURRENT RATING AS
- INDICATED ON DRAWINGS. ALL CIRCUIT BREAKERS SHALL BE BOLT-ON TYPE.

- CIRCUIT BREAKER TYPE AS INDICATED ON DRAWINGS. UNLESS INDICATED OTHERWISE, ALL PANELS SHALL HAVE PANEL HAVE PANEL BOARD TYPE CONSTRUCTION WITH BOLT-ON CIRCUIT BREAKERS FOR 30
- MANUFACTURERS SHALL BE GENERAL ELECTRIC, SQUARE D, SEIMENS, CUTLER-HAMMER WITH VOLTAGE. SIZES, AND RATINGS AS INDICATED ON DRAWINGS.
- THE CIRCUIT BREAKERS SHALL BE OPERABLE IN ANY POSITION AND BE REMOVABLE FROM THE FRONT O THE PANEL BOARD WITHOUT DISTURBING THE ADJACENT UNITS. BRANCH BREAKERS SHALL BE OF SUCH DESIGN THAT COMBINATION OF SINGLE-POLE, DOUBLE-POLE, AND THREE-POLE BREAKERS CAN BE ASSEMBLED ON THE SAME PANEL. EACH BRANCH CIRCUIT SHALL BE CLEARLY NUMBERED. BRANCH AND MAN TERMINALS SHALL BE SOLDERLESS TYPE. HANDLE TIES TO FORM MULTI-POLE BREAKERS NOT ACCEPTABLE.

- CIRCUIT BREAKER TYPE AS INDICATED ON DRAWINGS. MANUFACTURERS SHALL BE GENERAL ELECTRIC, SQUARE D, SIEMENS, CUTLER-HAMMER/EATON WITH VOLTAGE, SIZES, AND RATINGS AS INDICATED ON
- THE CIRCUIT BREAKERS SHALL BE OPERABLE IN ANY POSITION AND BE REMOVABLE FROM THE FRONT OF THE PANEL BOARD WITHOUT DISTURBING THE ADJACENT UNITS. BRANCH BREAKERS SHALL BE OF SUCH DESIGN THAT COMBINATION OF SINGLE-POLE AND DOUBLE-POLE BREAKERS CAN BE ASSEMBLED ON THE SAME PANEL. EACH BRANCH CIRCUIT SHALL BE CLEARLY NUMBERED. BRANCH AND MAIN TERMINALS SHALL BE OF THE SOLDERLESS TYPE. HANDLE TIES TO FORM MULTI-POLE BREAKERS NOT ACCEPTABLE
- A. CIRCUIT BREAKERS SHALL BE PLUG-IN TYPE WIRE TERMINATION FOR PANEL BOARDS AND CIRCUIT BREAKERS SHALL BE LISTED AS SUITABLE FOR 75
- PROVIDE A TYPEWRITTEN CIRCUIT INDEX BEHIND CLEAR PLASTIC COVER ON INSIDE OF DOOR. INFORMATION SHALL INCLUDE ROOM AND TYPE LOAD SERVED. ALL CIRCUIT BREAKERS SHALL BE IDENTIFIED, INCLUDING SPARES. INDEX CARD FRAME SHALL BE METAL, SECURED TO DOOR. PANEL BOARDS/LOAD CENTERS TO BE PROVIDED WITH COPPER BUSSIING ONLY.

PROVIDE ALL LIGHTING FIXTURES, WIRED AND CONNECTED. THE DRAWINGS INDICATE THE FIXTURES FOR EACH LOCATION. PROVIDE LAMPS FOR ALL FIXTURES. THE LAMPS SHALL BE BY THE SAME MANUFACTURER. VERIFY CEILING CONSTRUCTION BEFORE ORDERING RECESSED UNITS. PROVIDE PLASTEF FRAMES AND HANGERS AS REQUIRED. CEILING CONSTRUCTION, ARCHITECTURAL ACCESSORIES, VOLTAGE,

- AND BALLASTS TO MEET THE EXISTING CEILING CONDITION.
- FURNISH AND INSTALL TIME SWITCHES, PHOTOCELLS, CONTRACTORS AND FULL LIGHTING CONTROL SYSTEMS AS REQUIRED FOR LIGHTING CONTROLS INDICATED ON THE DRAWINGS.
- TIME SWITCHES SHALL BE EQUAL TO PARAGON, GENERAL ELECTRIC, TORK, OR INTERMATIC AND SHALL HAVE SIZE AND NUMBER OF POLES AS REQUIRED.
- PHOTOCELLS SHALL BE EQUAL TO TORK OR INTERMATIC WITH VOLTAGE AS INDICATED
- N. TELEPHONE AND CABLE TELEVISION SYSTEMS TELEPHONE WALL OUTLETS SHALL CONSIST OF STANDARD BOXES MOUNTED 18" ABOVE THE FLOOR UNLESS OTHERWISE INDICATED. PROVIDE A TERMINAL MOUNTING BOARD FOR THE INCOMING SERVICE
- CABLE TELEVISION OUTLETS SHALL CONSIST OF STANDARD BOXES MOUNTED 18" ABOVE THE FLOOR UNLESS OTHERWISE INDICATED. PROVIDE A TERMINAL MOUNTING BOARD FOR THE INCOMING SERVICE CABLE.

TRACEABLE TO MATERIAL FURNISHED AS A PART OF THIS SECTION OR WORKMANSHIP PERFORMED

GUARANTEE ALL MATERIAL FURNISHED AND ALL WORKMANSHIP PERFORMED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE OF WORK. ANY DEFECTS DEVELOPING WITHIN THIS PERIOD,

HEREUNDER, SHALL BE MADE GOOD AT NO EXPENSE TO THE OWNER.

## SYMBOLS LEGEND

NOTE: THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS, ETC, ARE NECESSARILY USED ON THE DRAWINGS.

FLUORESCENT OR LED FIXTURE (SEE SCHEDULE)

FIXTURE WITH EMERGENCY BATTERY BALLAST UNIT

SITE POLE MOUNT LIGHT FIXTURE WALL MOUNTED FIXTURE WITH EMERGENCY BATTERY BALLAST UNIT

- 0 DOWNLIGHT FIXTURE
- OH WALL MOUNTED FIXTURE PENDANT MOUNTED FIXTURE

 $\vdash$ 

- SINGLE FACE EXIT SIGN UNIVERSAL MOUNTED
- SINGLE FACE EXIT SIGN W/ DIRECTIONAL ARROWS -
- DOUBLE FACE EXIT SIGN W/ DIRECTIONAL ARROWS -
- DUAL HEADED EMERGENCY UNIT
- COMBO DUAL HEADED EMERGENCY AND EXIT SIGN UNIT LETTER INDICATES LIGHT FIXTURE AS INDICATED ON FIXTURE SCHED
- SINGLE POLE SWITCH @ +48" UNLESS NOTED SWITCH BANK @ +48" UNLESS NOTED. LOWER CASE
- LETTER INDICATES FIXTURE CONTROLLED. 2 POLE SWITCH @ +48" UNLESS NOTED
- 3-WAY SWITCH @ +48" UNLESS NOTED 4-WAY SWITCH @ +48" UNLESS NOTED
- DIMMER SWITCH SIZE AS REQUIRED @ +48" UNLESS NOTED
- 3-WAY DIMMER SWITCH SIZE AS REQUIRED @ +48" UNLESS NOTED 3-WAY DIMMER SWITCH BANK @ +48" UNLESS NOTED. LOWER CASE LETTER INDICATES FIXTURE
- CONTROLLED. SWITCH SENSOR @ +48" UNLESS NOTED
- MANUAL MOTOR STARTER
- OCCUPANCY SENSOR
- SOS WALL SWITCH WITH OCCUPANCY SENSOR. TWO BUTTON DIGITAL LOW VOLTAGE WALL SWITCH. PROVIDES ON/OFF/0-10V DIMMING. SWITCH @ +48" UNLESS NOTED.
- TWO BUTTON DIGITAL LOW VOLTAGE WALL SWITCH. PROVIDES ON/OFF/0-10V DIMMING. SWITCH @ +48" UNLESS NOTED.
- DUCT DETECTOR REMOTE TEST STATION MOUNT AT 60" AFF
- LIGHTING CONTROLS POWER PACK
- LIGHTING CONTROLS PHOTOCELL
- FIRE SUPPRESSION TAMPER SWITCH
  - CAMERA
  - SPEAKER

FIRE SUPPRESSION FLOW SWITCH

TELEPHONE OUTLET@ +18" UNLESS NOTED

SPRINKLER ALARM NOTIFICATION HORN

- DATA OUTLET @ +18" UNLESS NOTED COMBINATION TELEPHONE/DATA OUTLET @ +18" UNLESS NOTED
- τvΗ TELEVISION OUTLET @ +18" UNLESS NOTED DUCT DETECTOR
- (HD) HEAT DETECTOR
- 120 VOLT SMOKE DETECTOR WITH SOUNDER BASE AND BATTERY BACKUP
- AUXILIARY SYSTEM TERMINAL CABINET SWITCHBOARD, MOTOR CONTROL CENTER OR DISTRIBUTION BOARD
- 120/208V., 3 PHASE, 4 WIRE PANELBOARD, UNO CARD READER. PROVIDE 2-GANG OUTLET BOX WITH SINGLE GANG RING AND 3/4" CONDUIT
  - STUBBED UP IN WALL TO ABOVE ACCESSIBLE CEILING WITH BUSHING ON END OF CONDUIT @ 48" UNLESS NOTED OTHERWISE.
  - GENERATOR

(G)

Т

RELEASED FOR

CONSTRUCTION

evelopment Services Department

As Noted on Plans Review

Lee's Summit, Missouri 01/14/2022

TRANSFORMER

JUNCTION BOX

- **/** MOTOR OUTLET DISCONNECT SWITCH - SIZE AND TYPE NOTED
- COMBINATION FUSED STARTER DISCONNECT SWITCH FUSE SIZE AS INDICATED, STARTER SIZE '1' MECHANICAL EQUIP. CONNECTION, SEE SCHED. ON MECH. PLAN
- ———— CONDUIT RUN CONCEALED IN WALL OR ABOVE CEILING ———— CONDUIT RUN BELOW FLOOR OR GRADE
- SPECIAL HEAVY DUTY RECEPTACLE SIZE AS NOTED. @ +18" UNLESS NOTED

FIRE RATED POKE THRU WITH TYPE INDICATED

- 1/2 SWITCHED RECEPTACLE @ +18" UNLESS NOTED
- FLUSH FLOOR BOX WITH TYPE INDICATED
- → SINGLE RECEPTACLE @ +18" UNLESS NOTED DUPLEX RECEPTACLE @ +18" UNLESS NOTED
- DOUBLE DUPLEX RECEPTACLE @ +18" UNLESS NOTED GFI DUPLEX RECEPTACLE
- FULL SWITCHED RECEPTACLE DUPLEX RECEPTACLE INSTALLED ABOVE COUNTERTOP

DUPLEX RECEPTACLE WITH WEATHERPROOF COVERPLATE

- @ 18" UNLESS NOTED HOMERUN TO PANELBOARD, INFORMATION AT ARROWS ARE CIRCUIT NUMBERS AND PANELBOARD FOR TERMINATION. REFER TO ASSOCIATED NOTE FOR BRANCH CIRCUIT CONDUCTOR SIZES.
  - S INDICATES 1/2" CONDUIT CONCEALED IN CEILING OR WALL WITH (3) CONDUCTORS. (1) PHASE, (1) NEUTRAL AND (1) GROUND WIRE. ALL ARE #12 AWG UNLESS NOTED OTHERWISE.
  - ——/// WHIP COUNT INDICATES NUMBER OF HOT CONDUCTORS

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

CLIENT

WARD DEVELOPMENT 1120 EAGLE RIDGE BLVD GRAIN VALLEY, MO 64029 david@safetyministorage.com

MEP ENGINEER

DAVID WARD

**ENGINEERS** MO COA NO. 2012006786 / KS COA NO. E-28



PROJECT #: 21-049 ISSUE DATE: 06/11/2021 ISSUED FOR:

**PERMIT** 

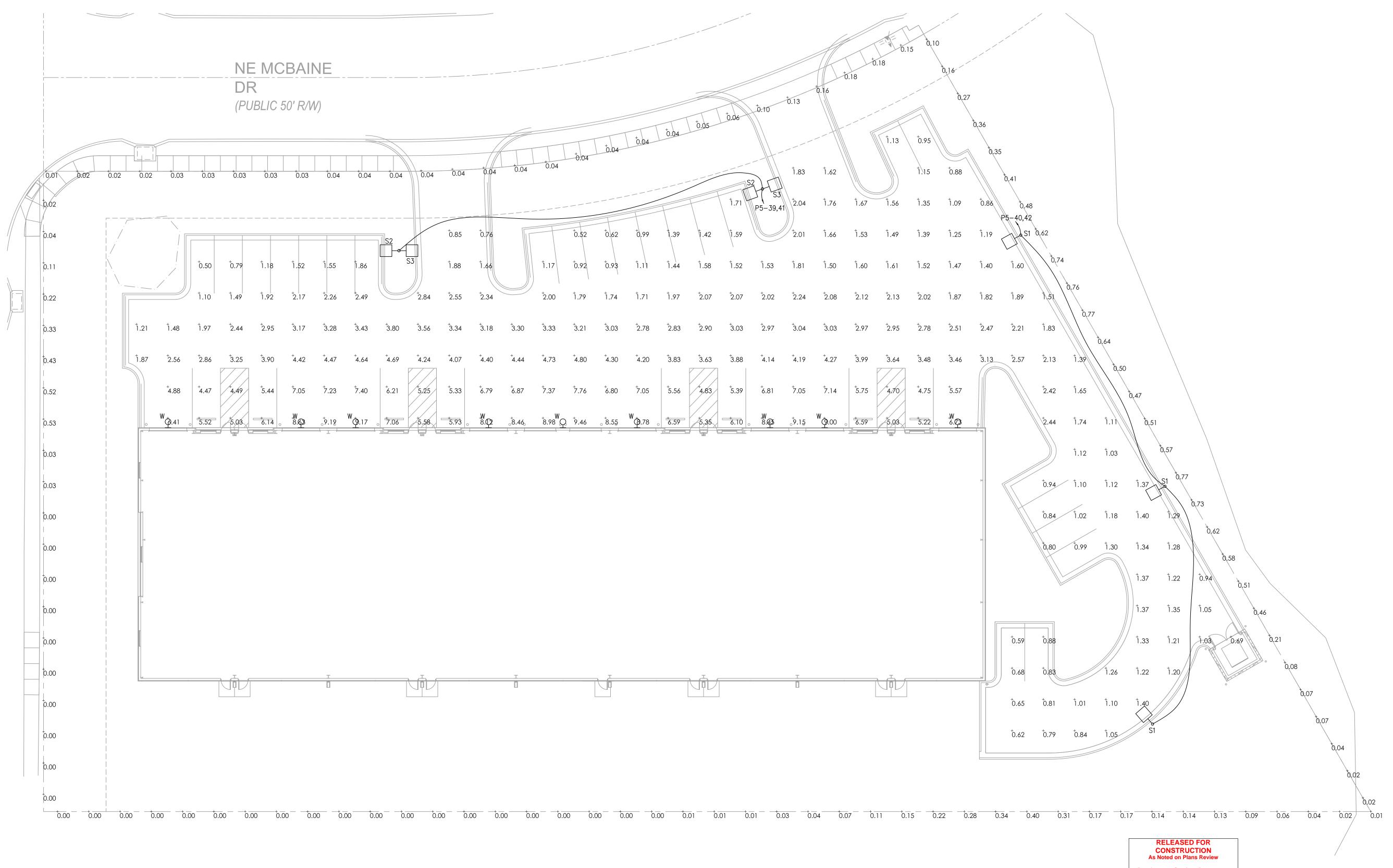
ELECTRICAL SPECIFICATIONS AND SYMBOLS

# **GENERAL NOTES**

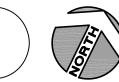
- ASSOCIATION, CONSTRUCTION & MATERIAL SPECIFICATION, THE SECTION 5800 -STREET LIGHTING OF THE CITY OF LEE'S SUMMIT, MO DESIGN CRITERIA, AND ALL APPLICABLE LEE'S SUMMIT, MO SUPPLEMENTS.
- 2. ALL ELECTRICAL/CONDUIT STREET CROSSINGS NEED TO BE BACKFILLED WITH AB-3 OR FLOWABLE FILL IN ACCORDANCE WITH MUNICIPAL REQUIREMENTS.

Luminaire Sc	Luminaire Schedule								
Tag	Description	LLF	Luminaire	Luminaire					
			Lumens	Watts					
S1	DSX1 LED P2 40K T3M MVOLT HS (MH: 30'-0") - PROVIDE WITH PHOTOCELL	0.800	7002	70					
S2	DSX1 LED P2 40K RCCO MVOLT (MH: 30'-0") - PROVIDE WITH PHOTOCELL	0.800	5429	70					
\$3	DSX1 LED P2 40K LCCO MVOLT (MH: 30'-0") - PROVIDE WITH PHOTOCELL	0.800	5429	70					
W	WDGE3 LED P2 70CRI R4 40K (MH: 16'-0")	0.800	8779	59.2761					

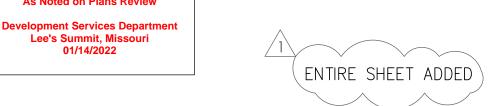
Calculation Summary									
Label	Units	Avg	Max	Min	Max/Min				
Parking_Lot	Fc	3.04	9.46	0.50	18.92				
Property_Line	Fc	0.16	0.77	0.00	N.A.				



PHOTOMETRIC PLAN SCALE : 1/16" = 1'-0"





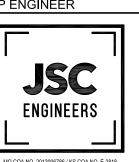


Certificates of Authority
Architecture: MO 310 / KS 73
Engineering: MO 4 / KS 241
Land Surveying: MO 123 / KS 36

CLIENT

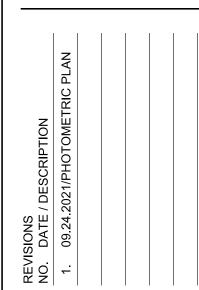
DAVID WARD WARD DEVELOPMENT 1120 EAGLE RIDGE BLVD GRAIN VALLEY, MO 64029 david@safetyministorage.com

MEP ENGINEER





LOT 10 LAKEWOOD BUSINESS PALOT 10 I-470 BUSINESS PALEE'S SUMMIT, MO 64064

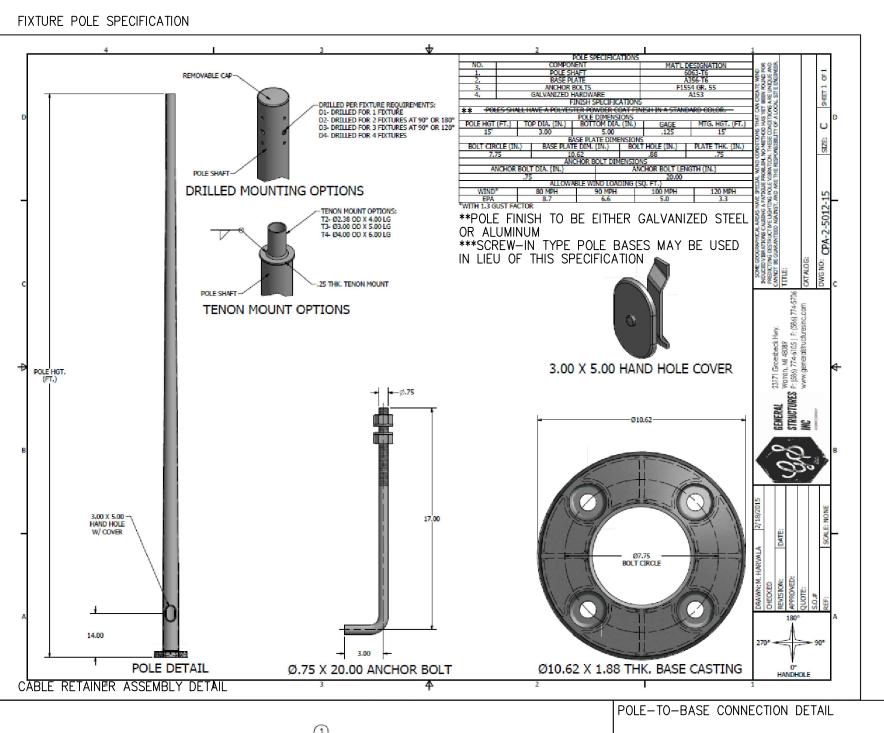


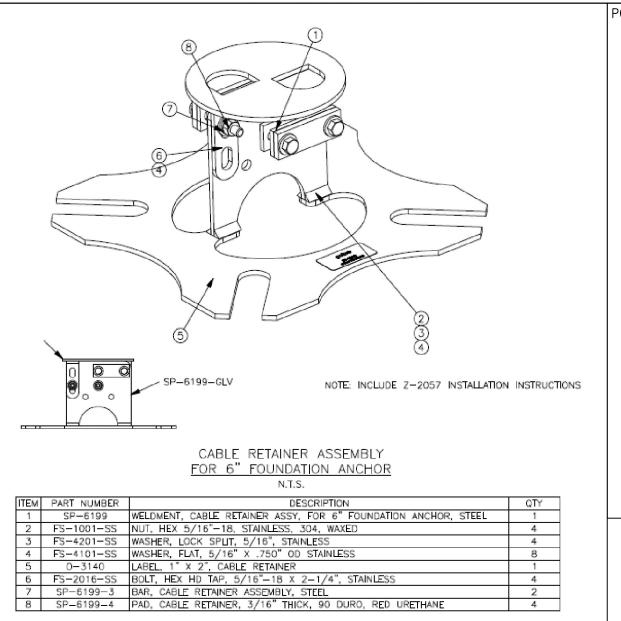
PROJECT #: 21-049 ISSUE DATE: 06/11/2021
ISSUED FOR:

PERMIT

PHOTOMETRIC PLAN

E-002





PEDESTAL WIRING DIAGRAM

UTILITY SECTION

CONSULATED LINE SIDE LUGS: 3504(MIL-6

PACIFIC UTILITY PRODUCTS 2430 RAILROAD ST. CORONA, CA. 92880

RAINPROOF TYPE 3R ENCLOSURE

Customer Section

A-A-A-A A-A-A-A #6 +2 - 1/

WIRING DIAGRAM N.T.S.

INDUSTRIAL CONTROL SUITABLE ONLY FOR USE AS SERVICE EQUIPMENT BONDED NEUTRAL REMOVE BONDING MEANS FOR TEST PURPOSES ONLY

"SHORT CIRCUIT RATING: 10,000 RMS SYM. AMPS © 240 VAC MAXIMUM.

"AL/TOMATIC TRIP IS INDICATED BY HANDLE POSITION MIDWAY BETWEEN (ON) AND (OFF). TO RESTORE POWER MOVE HANDLE TO (OFF), THEN ON.

"METER SOCKET : MS24; 200 AMPS WATT—HOUR METER NOT INCLUDED IN SHORT CIRCUIT RATING.

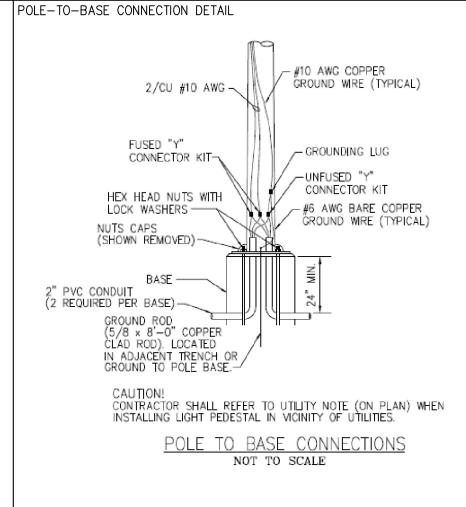
"THE MAXIMUM SIZE CIRCUIT BREAKER TO BE INSTALLED ON THE LOAD CENTER IS SO AMPS WHEN COPPER WIRE IS USED AND 40 AMPS WHEN ALUMINUM WIRE IS USED.

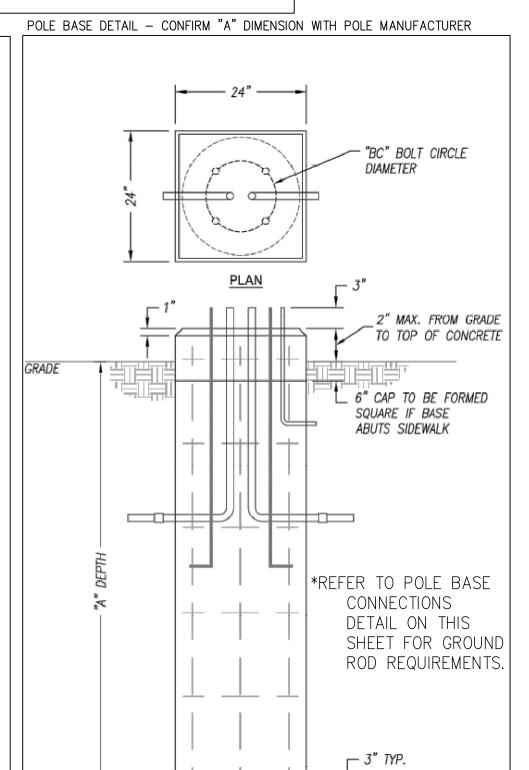
\*CIRCUIT BREAKERS 100-15 AMPS: CUTLER HAMMER BR, BQ, GFCB

REPLACEMENT BREAKER MUST BE SAME TYPE AND RATING

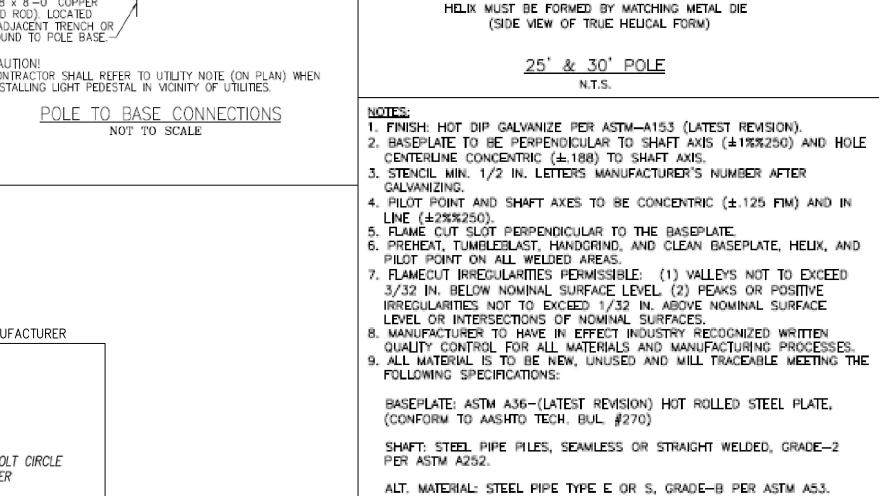
\*MOISTURE KIT AVAILABLE—CONTACT FACTORY, CAT.NO. WSK-1 \*SHIPPING TENDS TO LOOSEN ELECTRICAL CONNECTIONS—TIGHTEN ALL CONNECTIONS BEFORE ENERGIZING UNIT.

CAT, NO, MHPDR-KCMO-33 120/240VAC 1PH 3W 100 AMPS INSTALL NO MORE THAN 5 (ONE OR TWO POLE) DISCONNECTING MEANS





AT-GRADE POLE BASE ELEVATION



BREAK AWAY FUSE DETAILS

"Y" TERMINATION

"J" TERMINATION

BREAK AWAY FUSE KITS N.T.S.

- 1" X 4" CARRIAGE BOLTS W/NUTS

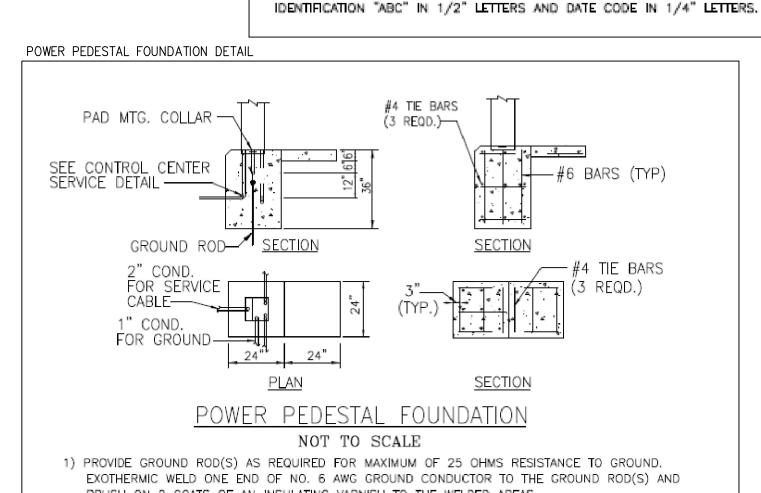
DIA. BOLT CIRCLE

6.63" DIA.

ALL RADIAL SECTIONS

NORMAL TO AXIS ±36

ALL RADIAL SECTIONS NORMAL TO AXIS ±36



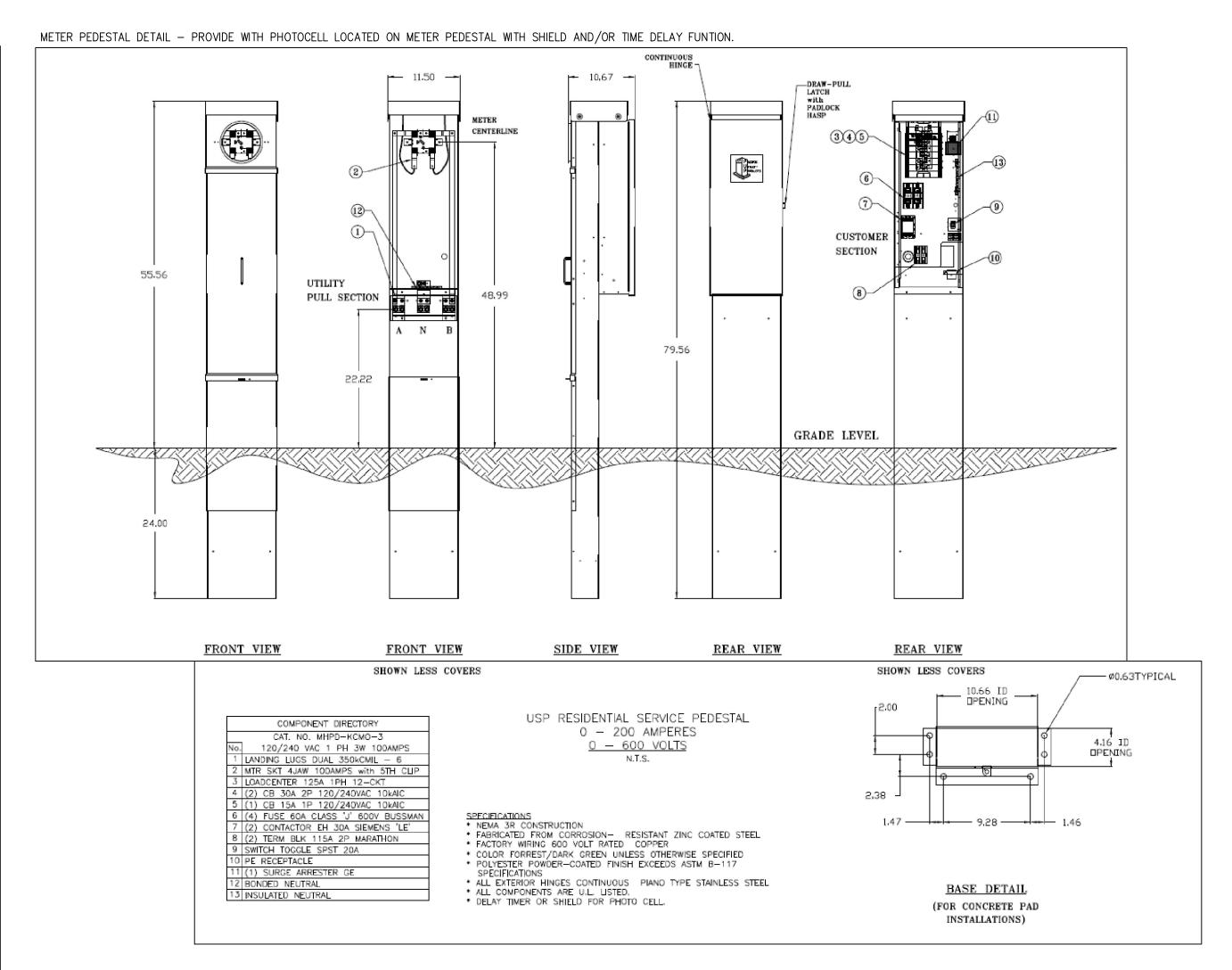
HELIX: ASTM A635 (LATEST REVISION) HOT ROLLED STEEL.

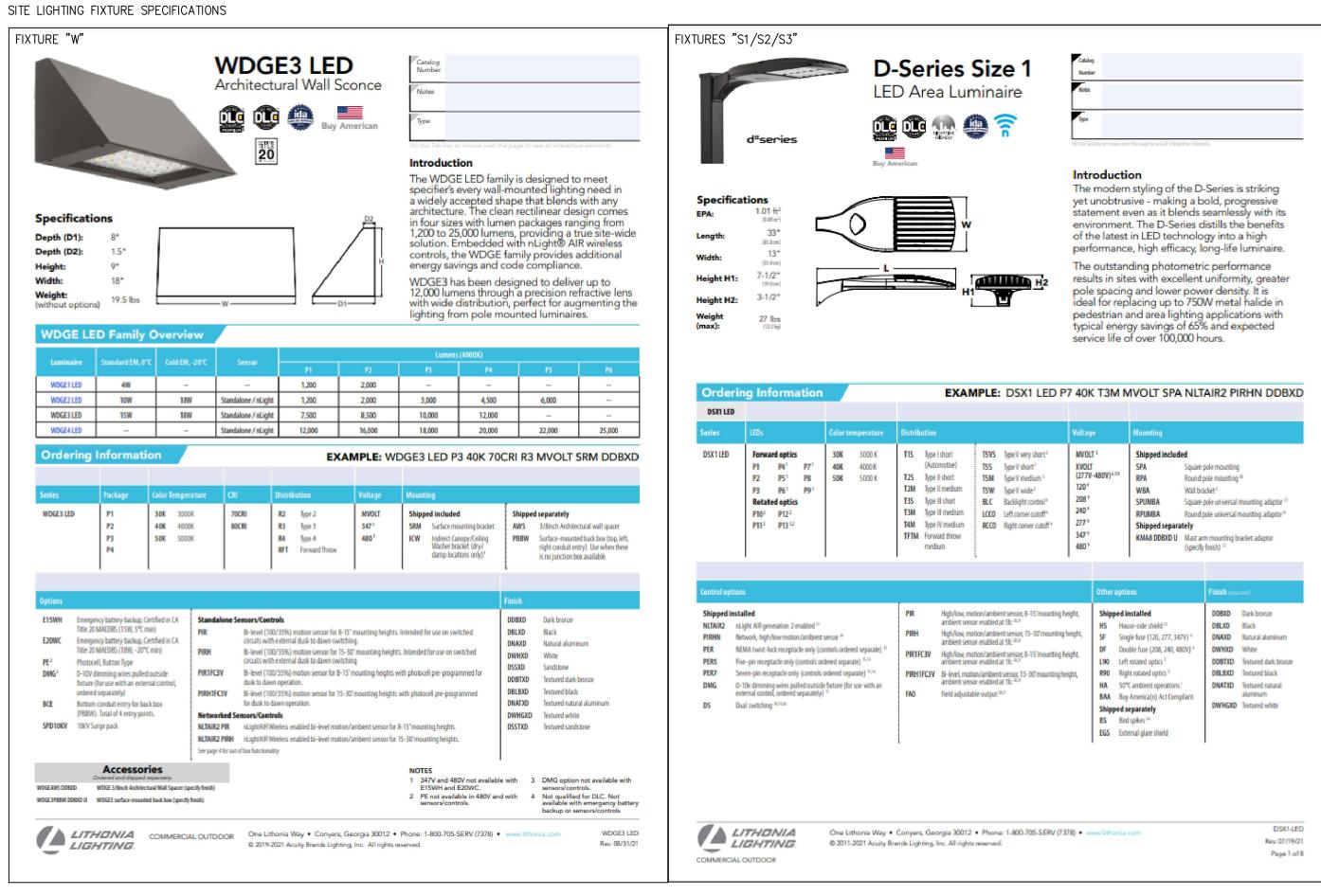
PILOT POINT: ASTM A575 (LATEST REVISION) STEEL BAR.

BOLTS: CARR BOLT PER ANSI B-18.2.1, SAE J429 GRADE-5.3

BASEPLATE IS PERMANENTLY STAMPED WITH MANUFACTURER'S.

BRUSH ON 2 COATS OF AN INSULATING VARNISH TO THE WELDED AREAS. CONCRETE SLAB TO PROVIDE SEMI-DRY WORKING AREA IN FRONT OF CONTROLLER CABINET. SECONDARY POWER SERVICE (DIRECT BURY) THRU CONTRACTOR INSTALLED 2" CONDUIT AND ELBOW.





RELEASED FOR

CONSTRUCTION

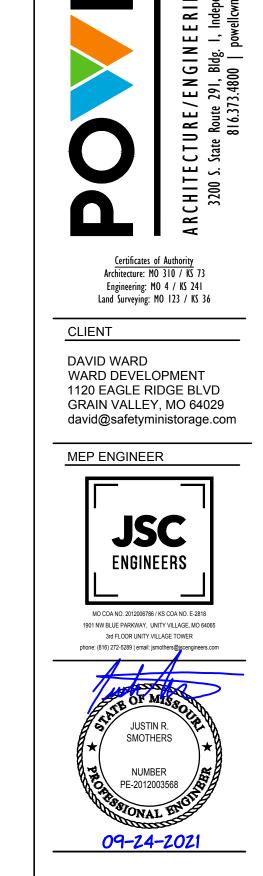
As Noted on Plans Review

Development Services Departmen

Lee's Summit, Missouri

01/14/2022





PROJECT #: 21-049

ISSUE DATE: 06/11/2021 ISSUED FOR:

PHOTOMETRIC PLAN

PERMIT

ENTIRE SHEET ADDED

PANELBOARD: P5 (NEW) BUS AMPS: 225A MAIN SIZE/TYPE: 200A MCB VOLTS/PHASE: 208Y/120V, 3PH, 4W SECTION: 1							FED FROM: SERVICE ENTRANCE AIC RATING: 42000 FULLY RATED SERVES: TENANT SPACE MOUNTING: SURFACE LOCATION: WAREHOUSE								LINE-SIDE LUGS: MECHANICAL EQUIPMENT GROUND BUS	
CKT	DESCRIPTIO	N	VOL	TAMPS/P	HASE	WRE	BKR	Р	Р	BKR	WRE	VOL	TAMPS/PH	IASE	DESCRIPTION	(
NO.			Α	В	С	NO.	<b>AMP</b>			<b>AMP</b>	NO.	Α	В	С		١
1	LTG - WAREHOUSE		880			12	20	1	1	20	12	1,000			PWR - GARAGE DOOR 1	
3	RCPT - WAREHOUSE	GEN		720		12	20	1	1	20	12		1,000		PWR - GARAGE DOOR 2	
5	SPARE						20	1	1	20	12			600	PWR - UH-1	
7	SPARE						20	1	1	20					SPARE	1
-	SPARE						20	1	1	20					SPARE	1
444	SPARE						20	1	1	20					SPARE	1
	SPARE						20	1	1	20					SPARE	1
	SPARE						20	1	1	20					SPARE	1
100000	SPARE						20	1	1	20					SPARE	1
	SPARE						20	1	1	20					SPARE	2
	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	2
		PROVISIONAL SPACE PROVISIONAL SPACE						1	1						PROVISIONAL SPACE	2
	the same at the same of the sa							1	1						PROVISIONAL SPACE	2
	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	2
	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	3
	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	3
	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	3
	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	3
37	PROVISIONAL SPACE							1	1						PROUSIONAL SPACE	3
39 41	LTG - SITE 1			140	140	10	20	1	1	20	10		105	105	LTG - SITE 2	4
	SUBTOTAL		880	860	140						$/ \setminus$	_1,000	1,105	705	SUBTOTAL	
	TOTAL PHASE A - VA	1,880	LOAD		CONN. V	/A	DF		LO			C	CONN. VA	DF		
	AMPS	16	COOLIN	G			0		RE	FRIG				1.00	1	
	TOTAL PHASE B - VA 1,965		HEATING	G	600		1.00	1	SIC	SN/DIS	SP			1.25		
	AMPS	16	LIGHTIN	G	1,370		1.25		KIT	CHE	٧			1.00		
	TOTAL PHASE C - VA 845  AMPS 7  TOTAL PNLBD - VA 4,690		RECEPT	TACLES	720		1.0/.5		EX	ISTIN	G			1.00		
			MOTORS	RS 2,0			1.00			G MO				1.25	TOTAL DEMAND	
							1.00	SHOW WNDW				1.25	5,033 V			
	AMPS	13	MISC EC	QUIP			1.00		LTG TRACK				1.00	147	A	

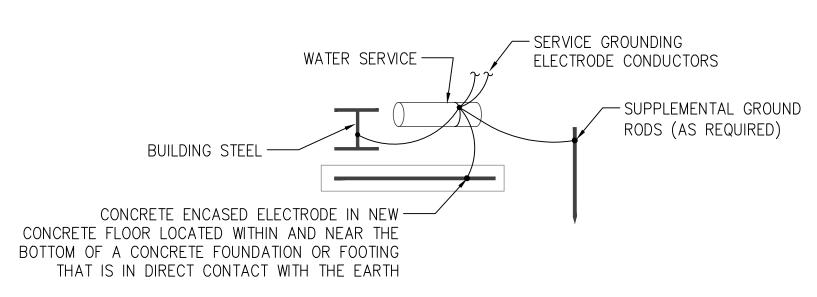
BUS AMPS: 225A MAIN SIZE/TYPE: 200A MCB VOLTS/PHASE: 208Y/120V, 3PH, 4W SECTION: 1						AIC RATING: 42000 FULLY RATED SERVES: TENANT SPACE MOUNTING: SURFACE LOCATION: WAREHOUSE								EQUIPMENT GROUND	BU	
KT	DESCRIPTIO	N		TAMPS/PI			BKR	Р	Р				AMPS/PH		DESCRIPTION	CK
10.			Α	В	С	NO.	AMP			AMP		Α	В	С		N
•	LTG - WAREHOUSE		851			12	20	1	1	20	12	1,000			PWR - GARAGE DOOR	2
_	LTG - OFFICE/RR			76		12	20	1	1	30	10		1,987		PWR - CU-1	4
_	RCPT - OFFICE QUAD				360	12	20	1	1		100 100			1,987		6
-	RCPT - OFFICE GEN		540			12	20	-	-	20	12	600			PWR - UH-1	8
_	RCPT - RR GFI			180		12	20	1	1	20	12		1,650		PWR - WH	10
	RCPT - WAREHOUSE	GEN			720	12	20	1	1	15	12			924	PWR - F-1	1:
	SPARE						20	1	1	30	10	1,500			PWR - EWH-1 (PNLBD 1 ONLY)	1
	SPARE						20	1	1				1,500			1
	SPARE						20	1	1	20					SPARE	18
	SPARE						20	1	1	20					SPARE	2
	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	2
23	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	2
25	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	20
1	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	28
	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	3(
1	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	32
33	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	34
	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	36
37	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	38
	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	4(
41	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	42
	SUBTOTAL		1,391	256	1,080							3,100	5,137	2,911	SUBTOTAL	
	TOTAL PHASE A - VA	4,491	LOAD		CONN. V	/A	DF		LO	AD		С	ONN. VA	DF		
	AMPS	37	COOLING	G	2,772		0		RE	FRIG				1.00		
TOTAL PHASE B - VA 5,393		HEATING	3	5,250		1.00		SIC	SN/DIS	SP SP			1.25			
	AMPS	45	LIGHTIN	G	927		1.25		KIT	CHEN	١			1.00		
			1,800		1.0/.5		EX	ISTING	3			1.00	1			
	AMPS	33	MOTORS	3	1,924		1.00		LRG MOTOR				1.25	TOTAL DEMAND	1	
	TOTAL PNLBD - VA 13.875 SUPP HEAT				1.00		SH	OW W	MDW			1.25	11,335 VA			
	AMPS	39	MISC EQ	UIP	1,202		1.00		LT	G TRA	CK			1.00	31 A	
ΔΝΕ	LBOARD NOTES		•													

SCALE : NO SCALE

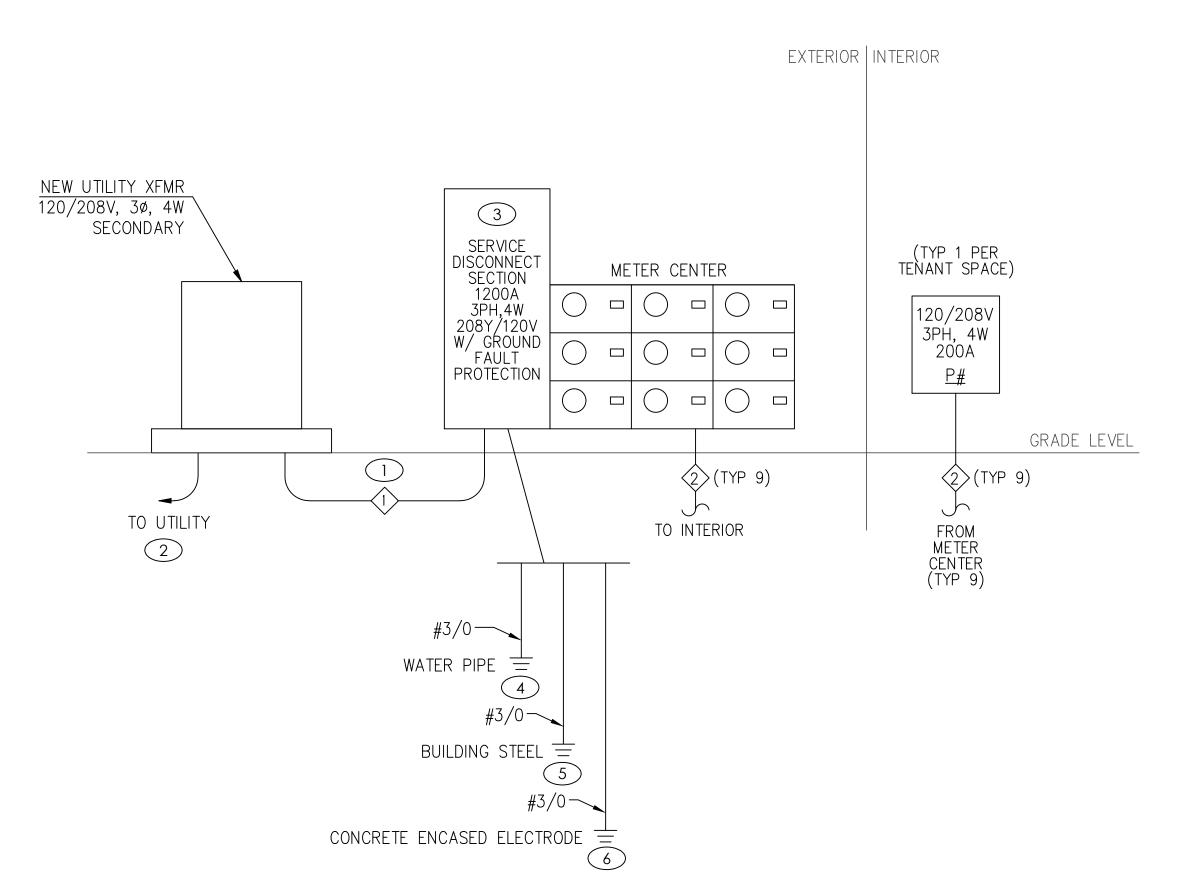
ELECTRICAL	PANEL	SCHEDULES	

**≪ 3** 

							<del></del> 1
		ELECTRI	CAL LIC	SHTING SC	CHEDULE (OR EQUAL, VERIFY	Y ALL SELECTIONS AND FINISHES WITH OWNER AND ARCHITECT PRIOR TO ORDERING).	
FIXTURE		MANUFACTURER	VOLT				VOLT
TYPE	NAME	SERIES	AMPS	MOUNTING	LAMP TYPE	REMARKS	VOLT
Α	LITHONIA	EPANL	31	RECESSED/GRID	INCLUDED 4000K LED	LED 2'X4' FLAT PANEL - 4000LM OUTPUT HIGH EFFICIENCY	MVOLT
В	LITHONIA	WF6	14	RECESSED	INCLUDED 2700K LED	WAFER-STYLE 6" LED DOWNLIGHT	MVOLT
С	LITHONIA	CPHB 12LM MVOLT 40K	88	SUSPENDED	INCLUDED 4000K LED	COMPACT HIGH-BAY LED WAREHOUSE FIXTURE - 12000 LUMEN OUTPUT	MVOLT
W	LITHONIA	WDGE3	59	WALL	INCLUDED 4000K LED	EXTERIOR WALL PACK - P2 PACKAGE - PROVIDE WITH 'PE' PHOTOCELL OPTION	MVOLT
<b>Q_P</b>	LITHONIA	ELM2L-SDRT	5	SURFACE	INCLUDED LED	EMERGENCY EGRESS LIGHTING UNIT WITH 90 MIN. BATTERY PACK	120
	LITHONIA	LHQM-LED-R-SD	5	SURFACE	INCLUDED LED	EMERGENCY EXIT EGRESS COMBO LIGHTING UNIT WITH RED FACE EXIT SIGN AND 90 MIN. BATTERY PACK	120
ØH	LITHONIA	ELA-B-T-QWP-L0309-SD	5	SURFACE	INCLUDED LED	OUTDOOR EMERGENCY REMOTE EGRESS LIGHTING UNIT	120



# GROUNDING ELECTRODE SYSTEM DIAGRAM SCALE: NO SCALE



1	PROVIDE NEW CONDUCTORS TO UTI LOCATION AND REQUIREMENTS WITH
2	 CONTRACTOR TO PROVIDE AND INST FOR SERVICE PRIMARY TO LOCATION

3. NEW DISCONNECT WITH GROUND FAULT PROTECTION PER UTILITY REQUIREMENTS.

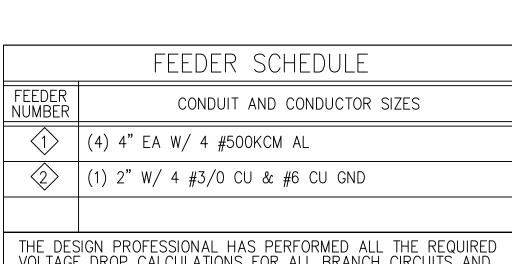
4. PROVIDE NEW GROUND PER NEC 250.52(A)(1).

5. PROVIDE NEW GROUND PER NEC 250.52(A)(2).

6. PROVIDE NEW GROUND PER NEC 250.52(A)(3).

CONSTRUCTION As Noted on Plans Review Development Services Department Lee's Summit, Missouri 01/14/2022

ELECTRICAL SINGLE LINE DIAGRAM SCALE : NO SCALE



THE DESIGN PROFESSIONAL HAS PERFORMED ALL THE REQUIRED VOLTAGE DROP CALCULATIONS FOR ALL BRANCH CIRCUITS AND FEEDERS PER THE NATIONAL ELECTRICAL CODE, ARTICLE 210.19(A)(1) FPN NO. 4.

THE DESIGN PROFESSIONAL HAS PERFORMED ALL THE REQUIRED SHORT CIRCUIT CALCULATIONS AND THE AIC RATING INDICATED FOR EACH DEVICE IS ADEQUATE TO PROTECT THE EQUIPMENT AND THE ELECTRICAL SYSTEM.

## **# KEYED SLD NOTES**

JTILITY SOURCE. VERIFY EXACT TH UTILITY PRIOR TO ROUGH-IN.

NSTALL TWO 4" PVC CONDUITS ION DETERMINED BY UTILITY.

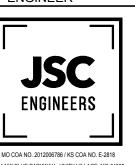
**RELEASED FOR** 

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

CLIENT

DAVID WARD WARD DEVELOPMENT 1120 EAGLE RIDGE BLVD GRAIN VALLEY, MO 64029 david@safetyministorage.com

MEP ENGINEER





LOT 10 LASS
LOT 10 L470 BUS
LEE'S SUMMIT, N

NO --PROJECT #: 21-049 ISSUE DATE: 06/11/2021 ISSUED FOR:

**ELECTRICAL SCHEDULES** AND DIAGRAMS

**PERMIT** 

E-301