# 2601 NE MCBAINE DRIVE LEE'S SUMMIT, MO 64064

# LOT 10 LAKEWOOD BUSINESS PARK LOT 10 I-470 BUSINESS & TECHNOLOGY CENTER



GENERAL NOTES	C
<ol> <li>CONTRACTOR SHALL VISIT THE SITE, FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS AND OWNER REVIEW AND UNDERSTAND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND CONDITIONS PRIOR TO BEGINNING ANY WORK AND SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCY. DO NOT SCALE DRAWINGS, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CORRECTIONS AND REPAIRS REQUIRED DUE TO THEIR FAILURE TO DO SO. GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL SUB-CONTRACTORS RECEIVE ALL ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS.</li> </ol>	1. ALL WORK THE AUTH AGENCIES DISCREPA THE DRAW ARCHITEC WORK, OR
2. SOLELY AS A CONVENIENCE TO THE OWNER AND CONTRACTOR, THE ARCHITECT MAY INCLUDE DOCUMENTS PREPARED BY CERTAIN CONSULTANTS (OR INCORPORATE THE RECOMMENDATIONS OF SAID CONSULTANTS INTO DOCUMENTS PREPARED BY THE 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.	2. THE CONT THE FIELD ANY COND REQUIRING 3. MINOR DE PROPER C
3. ALL WORK AND MATERIALS SHALL CONFORM TO THE APPLICABLE CODES LISTED IN THE PROJECT CODE SUMMARY.	THEY WER 4. REFERENC
<ol> <li>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.</li> <li>CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE</li> </ol>	APPLICATI 5. THE CONT CONDITION CONTRAC
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.	ALL STRUC RESPONSI EXECUTIO 6. NOTES AP SHEETS AF APPLIED T 7. DETAILS N
<ol> <li>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.</li> </ol>	SPECIFIC I CONSULT 8. THE CONT DIMENSIOI
<ol> <li>PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, UTILITIES, OTHER SERVICES AND RELATED TASKS NECESSARY FOR PROPER EXECUTION OF THE CONSTRUCTION REQUIRED BY CONTRACT DOCUMENTS.</li> </ol>	9. THE CONT REQUIRED OTHER WC
<ol> <li>ANY REVISION OR ADDITIONAL WORK REQUIRED BY FIELD CONDITIONS OR LOCAL GOVERNING AUTHORITIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING.</li> </ol>	10. GUTTER A
<ol> <li>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.</li> </ol>	
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.	INST
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 STRUCTURAL ENGINEER.	1. THE INTEN NECESSAF THE CONT
12. NO STRUCTURAL MEMBER SHALL BE CUT FOR PIPES, HVAC DUCTS, ETC., UNLESS SPECIFICALLY DETAILED AND/OR APPROVED BY THE ARCHITECT AND STRUCTURAL ENGINEER.	REQUIRED AND SPEC TO PRODU
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.	2. ORGANIZA ARRANGEI DIVIDING T
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.	OF WORK 3. UNLESS O HAVE WEL
15. NO HAZARDOUS MATERIALS WILL BE STORED AND/OR USED WITHIN THE BUILDING WHICH EXCEED THE QUANTITIES ALLOWED BY CODE.	USED IN TH MEANINGS
<ul> <li>16. INSTALLATION OF ANY BUILDING INSULATION WHICH CONTAINS OR UTILIZES AN OZONE DEPLETING COMPOUND IS PROHIBITED.</li> <li>17. NO BUILDING OR PORTION OF A BUILDING SHALL BE OCCUPIED OR USED FOR STORAGE PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.</li> </ul>	4. GENERAL COORDINA SPECIFICA WITH SPEC
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.	ARCHITEC 5. GENERAL SUBCONTF ARE PLACE FINISH CO

- ERE INDICATED IN THE DRAWINGS.
- TION OF ANY DRAWING.
- ION OF THE WORK.

- IONS REQUIRED FOR OTHER TRADES.
- VORK THAT MAY BE REQUIRED TO COMPLETE THE JOB.
- AND DOWNSPOUT SIZING PER OWNER'S CONTRACTOR.

# **FRUCTION TO CONTRACTOR**

- DUCE THE INDICATED RESULTS.
- K TO BE PERFORMED BY ANY TRADE.
- ECT FOR OWNER REVIEW AND APPROVAL.
- FINISH COLOR.

# **CONSTRUCTION NOTES**

AVING JURISDICTION AND THE RULES AND REGULATIONS OF AL

DITION OR DISCREPANCY BETWEEN DRAWINGS AND FIELD CONDITIONS

ETAILS NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR CONSTRUCTION OF ANY PART OF THE WORK SHALL BE INCLUDED AS IF

NCING OF DRAWINGS IS FOR CONVENIENCE ONLY AND DOES NOT LIMIT

ITRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL IONS AND MATERIALS WITHIN THE PROPOSED CONSTRUCTION AREAS. THE CTOR SHALL DESIGN AND INSTALL ADEQUATE SHORING AND BRACING FOR UCTURAL OR REMOVAL TASKS. THE CONTRACTOR SHALL HAVE SOLE SIBILITY FOR ANY DAMAGE OR INJURIES CAUSED BY OR DURING THE

APPEAR ON VARIOUS SHEETS FOR VARIOUS SYSTEMS AND MATERIALS. ARE TO BE OWNER REVIEWED AND NOTES ON ANY ONE SHEET ARE TO BE ) TO RELATED SYSTEMS AND MATERIALS DEPICTED ON OTHER DRAWINGS.

NOT SHOWN ARE SIMILAR IN CHARACTER TO THOSE THAT ARE. WHERE DIMENSIONS, DETAILS, OR DESIGN INTENT CANNOT BE DETERMINED, THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.

ITRACTOR SHALL LAY OUT HIS OWN WORK, AND SHALL PROVIDE ALL

NTRACTOR SHALL DO ALL CUTTING, PATCHING AND REPAIRING AS ED TO PERFORM ALL OF THE WORK INDICATED ON THE DRAWINGS, AND ALL

ENT OF THE SET OF CONTRACT DOCUMENTS IS TO INCLUDE ALL ITEMS SARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK BY ITRACTOR AS BINDING PERFORMANCE. THE CONTRACTOR SHALL BE ED ONLY TO THE EXTENT CONSISTENT WITH THE CONTRACT DOCUMENTS ECIFICATIONS REASONABLY INFERABLE FROM THEM AS BEING NECESSARY

ZATION OF THE SPECIFICATIONS INTO DIVISIONS, SECTIONS AND ARTICLES, EMENT OF DRAWINGS SHALL NOT CONTROL THE CONTRACTOR, IN G THE WORK AMONG SUBCONTRACTORS OR IN ESTABLISHING THE EXTENT

OTHERWISE STATED IN THE CONTRACT DOCUMENTS, WORDS WHICH ELL-KNOWN TECHNICAL OR CONSTRUCTION INDUSTRY MEANINGS ARE THE CONTRACT DOCUMENTS IN ACCORDANCE WITH SUCH RECOGNIZED

. CONTRACTOR AND ELECTRICAL SUBCONTRACTOR TO FULLY NATE ALL ELECTRICAL DEVICE BODIES AND COVER PLATES PER THE CATIONS. DEVICE BODIES AND COVER PLATES ARE COLOR COORDINATED PECIALTY FINISHES. PROVIDE DEVICE BODY AND COVER PLATES TO THE

CONTRACTOR TO FULLY COORDINATE WITH MECHANICAL/PLUMBING ITRACTORS. ALL FIXTURE/DEVICE COLORS WHERE FIXTURE/DEVICE UNITS ACED WITHIN WALLS AND CEILING ASSEMBLIES VS ADJACENT MATERIAL

E-201

E-202

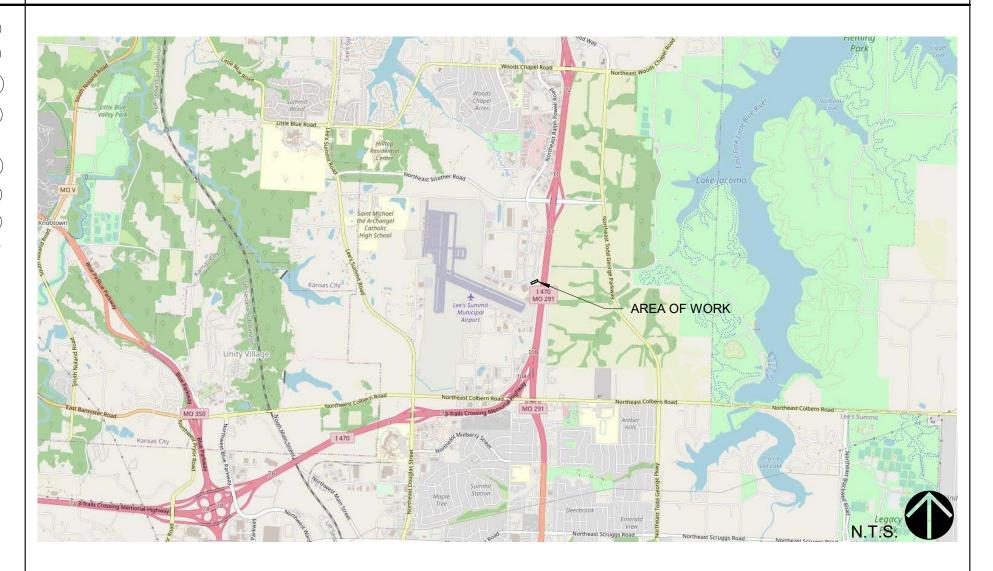
E-301

### SHEET NAME # <u>1</u><u>2</u>. GENERAL G-100-FDP COVER SHEET - FINAL DEV. PLAN G-100-BP COVER SHEET - BUILDING PERMIT | X | X | X CIVIL C-001 COVER SHEET | X | X | X C-101 DEMOLITION PLAN | X | X | X C-121 **EROSION CONTROL PLAN PHASE 1** XXX **EROSION CONTROL PLAN PHASE 2** C-122 | X | X | X C-123 **EROSION CONTROL PLAN PHASE 3** | X | X | X C-131 EROSION CONTROL DETAILS XXXX C-132 EROSION CONTROL DETAILS XXXX C-201 DIMENSION PLAN C-202 ADA RAMP DETAILS C-301 GRADING PLAN XXXX C-302 ADA RAMP GRADING DETAILS C-401 UTILITY PLAN C-411 STORM PROFILES XXXX C-421 DRAINAGE AREA MAP XXXX C-501 DETAILS LANDSCAF L-100 X X X LANDSCAPE PLAN ARCHITECTURAL A-001 LIFE SAFETY AND CODE SHEET XXXX A-002 ROOF DRAINAGE PLAN OVERALL MAIN LEVEL FLOOR PLAN A-100 MAIN LEVEL FLOOR PLAN - AREA A A-110 A-111 MAIN LEVEL FLOOR PLAN - AREA B A-130 ENLARGED PLANS A-200 ROOF PLAN A-301 EXTERIOR ELEVATIONS A-400 WALL SECTIONS & DETAILS A-401 PERSPECTIVES STRUCTURAL S001 STRUCTURAL GENERAL NOTES S100 FOUNDATION PLAN S101 FOUNDATION PLAN MECHANICAL/PLUMBING MP001 MECHANICAL AND PLUMBING SPECIFICATIONS AND SYMBOLS X X X MP002 MECHANICAL AND PLUMBING SCHEDULES AND DETAILS XXXX MECHANICAL M-101 MECHANICAL PLAN WEST M-102 MECHANICAL PLAN EAST PLUMBING P-101 X X X PLUMBING PLAN WEST P-102 PLUMBING PLAN EAST ELECTRICAL E-001 ELECTRICAL SPECIFICATIONS AND SYMBOLS XXXX E-002 PHOTOMETRIC PLAN E-003 PHOTOMETRIC PLAN **ELECTRICAL PLAN - WEST** E-101 E-102 ELECTRICAL PLAN - EAST

ELECTRICAL EQUIPMENT POWER PLAN - WEST

ELECTRICAL EQUIPMENT POWER PLAN - EAST

ELECTRICAL SCHEDULES AND DIAGRAMS



## <u>OWNER</u>

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

## STRUCTURAL ENGINEER



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

## MECHANICAL / ELECTRICAL / PLUMBING ENGINEER

JSC	
ENGINEERS	

XXXX

XXXX

JSC ENGINEERS 1901 NW BLUE PKWY, 3RD FLOOR UNITY VILLAGE, MO 64065 NAME: JUSTIN SMOTHERS, MEP ENGINEER PHONE: (816) 272-5289 EMAIL: JSMOTHERS@JSCENGINEERS.COM

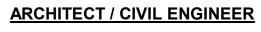
# SHEET INDEX





# VICINITY MAP

# **PROJECT DIRECTORY**





ARCHITECTURE/ENGINEERING/SURVEYING

3200 S. State Route 291, Bldg. 1, Independence, MO 64057 816.373.4800 | powellcwm.com NAME: NICK CURTIS, ARCHITECT PHONE: 816.373.4800 EMAIL:

NAME: PHONE: EMAIL:

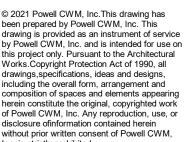
NCURTIS@POWELLCWM.COM

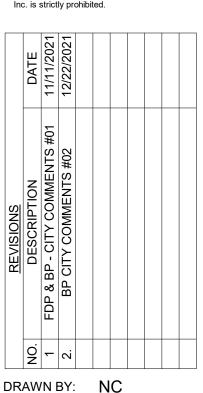
TOBY WILLIAMS, CIVIL ENGINEER 816.373.4800 TWILLIAMS@POWELLCWM.COM



 $\bigcirc$ 







**BUILDING PERMIT** COVER SHEET -**BUILDING PERMIT** G-100-BP

CHECKED BY: NC

ISSUED FOR:

PROJECT #: 21-1902

ISSUE DATE: 2021.09.24

# Lot 10 I-470 BUSINESS AND TECHNOLOGY CENTER FINAL DEVELOPMENT PLAN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI 4. NO GEOLOGICAL INVESTIGATION WAS PERFORMED ON THIS SITE. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS, BONDS, AND INSURANCE REQUIRED BY THE CITY

## GENERAL NOTES

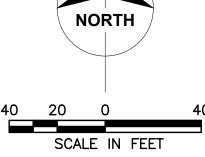
- THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO ALL APPLICABLE STANDARDS AND SPECIFICATIONS OF THE PUBLIC WORKS DEPARTMENT OF THE CITY OF LEE'S SUMMIT, MISSOURI, IN CURRENT USAGE AND ALL SUPPLEMENTS THERE TO.
- 2. REFER TO THE CURRENT VERSION OF THE KC METRO CHAPTER AMERICAN PUBLIC WORKS ASSOCIATION, STANDARD SPECIFICATIONS & INSTALLATION FOR THE GUIDING REFERENCE AS WELL MDNR
- 3. DO NOT SCALE THESE DRAWINGS.
- 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 SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- 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 THE PUBLIC WORKS DEPARTMENT.
- 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 CONSTRUCTION.
- 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
- EXCAVATION OR TRENCHING, AND PROTECT THE SAME AS REQUIRED TO MAINTAIN GOOD OPERATING CONDITION. 16. THE CONTRACTOR SHALL USE HIS OWN INFORMATION AND NOT RELY UPON ANY INFORMATION
- SHOWN ON THE DRAWINGS CONCERNING EXISTING UNDERGROUND INSTALLATIONS 17. 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.
- 18. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES AND OBTAIN ALL NECESSARY INSPECTIONS THROUGHOUT THE CONSTRUCTION ACTIVITIES. 19. ALL EXCAVATION SHALL BE UNCLASSIFIED. NO SEPARATE PAYMENT WILL BE MADE FOR ROCK
- FXCAVATION 20. 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. ADDITIONALLY, ALL EXISTING UTILITY TOPS SHALL BE ADJUSTED TO FINISHED GRADE.
- 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 EXPENSE AS WELL AS REPLACEMENT/REPAIR OF ALL DISTURBED MATERIALS IN ACCORDANCE WITH LOCAL SPECIFICATIONS AND CODES
- 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 CONTRACTOR SHALL MAINTAIN EXISTING UTILITY SERVICE TO ALL ADJOINING PROPERTIES UNTIL
- 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
- MEASURES. 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 COMPLETION OF THE PROJECT.
- 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 DRIP LINES.
- 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

## CONSTRUCTION NOTES

REQUIRED TO COMPLETE THE JOB.

- 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
- REFERENCING OF DRAWINGS IS FOR CONVENIENCE ONLY AND DOES NOT LIMIT APPLICATION OF ANY DRAWING.
- 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.
- 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 DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO THOSE THAT ARE. WHERE SPECIFIC
- DIMENSIONS, DETAILS, OR DESIGN INTENT CANNOT BE DETERMINED, CONSULT THE CENGINEER BEFORE PROCEEDING WITH THE WORK
- THE CONTRACTOR SHALL LAY OUT HIS OWN WORK, AND SHALL PROVIDE ALL DIMENSIONS REQUIRED FOR OTHER TRADES.
- 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.





LOT 10, I-470 BUSINESS AND TECHNOLOGY CENTER, A SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

## **DEVELOPER:**

**David Ward** Ward Development 1120 NW Eagle Ridge Blvd. Grain Valley, MO 816-229-8115

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

A AA W

LEGAL DESCRIPTION

# **NOTES:**

- 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.**

NE LEINWEBER RD

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C-132	Erosion Control Details
C-201	Dimension Plan
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C-301	Grading Plan
C-302	ADA Ramp Grading Details
C-401	Utility Plan
C-411	Storm Profiles
C-421	Drainage Area Map
<u>C-501</u>	Details
C-502	Details
C-503	Details }
L-100	Landscape Plan

# UTILITIES

**EVERGY** 1200 Main St. PO Box 418679 Kansas City, MO 64141 888.471.5275

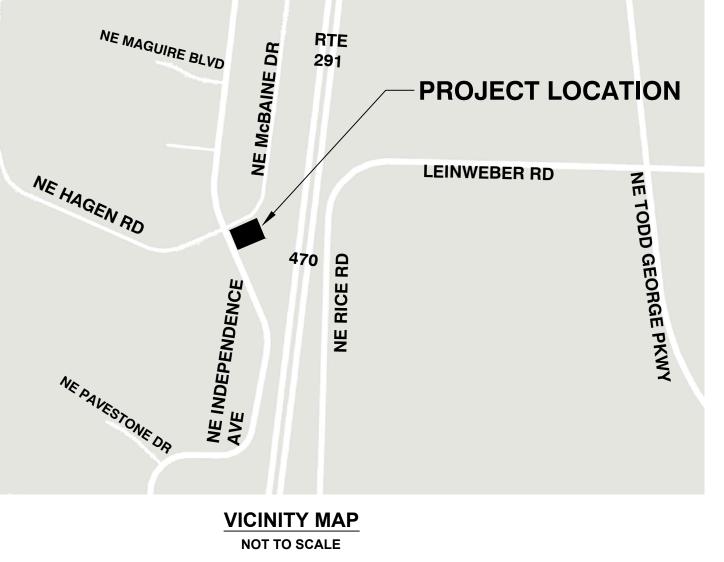
SPIRE 3025 SE Clover Dr. Lee's Summit. MO 64082 800.582.1234

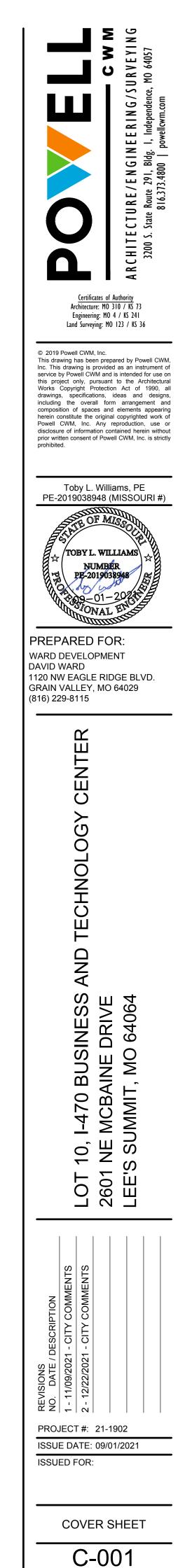
**CITY OF LEE'S SUMMIT** 220 SE Green St Lee's Summit, MO 64063 816.969.1800

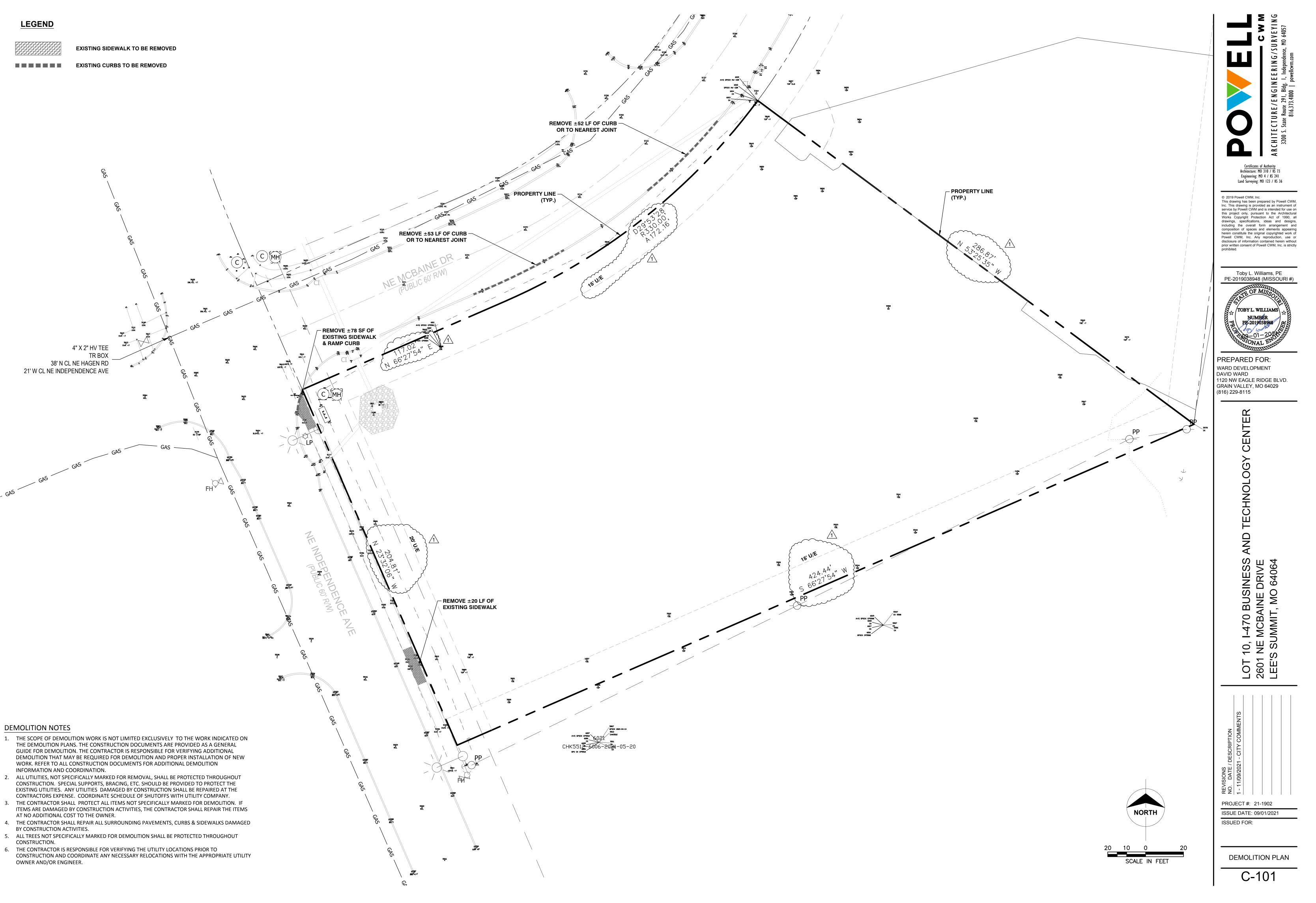
AT&T 215 N Spring St. Independence, MO 64050 816.325.5610

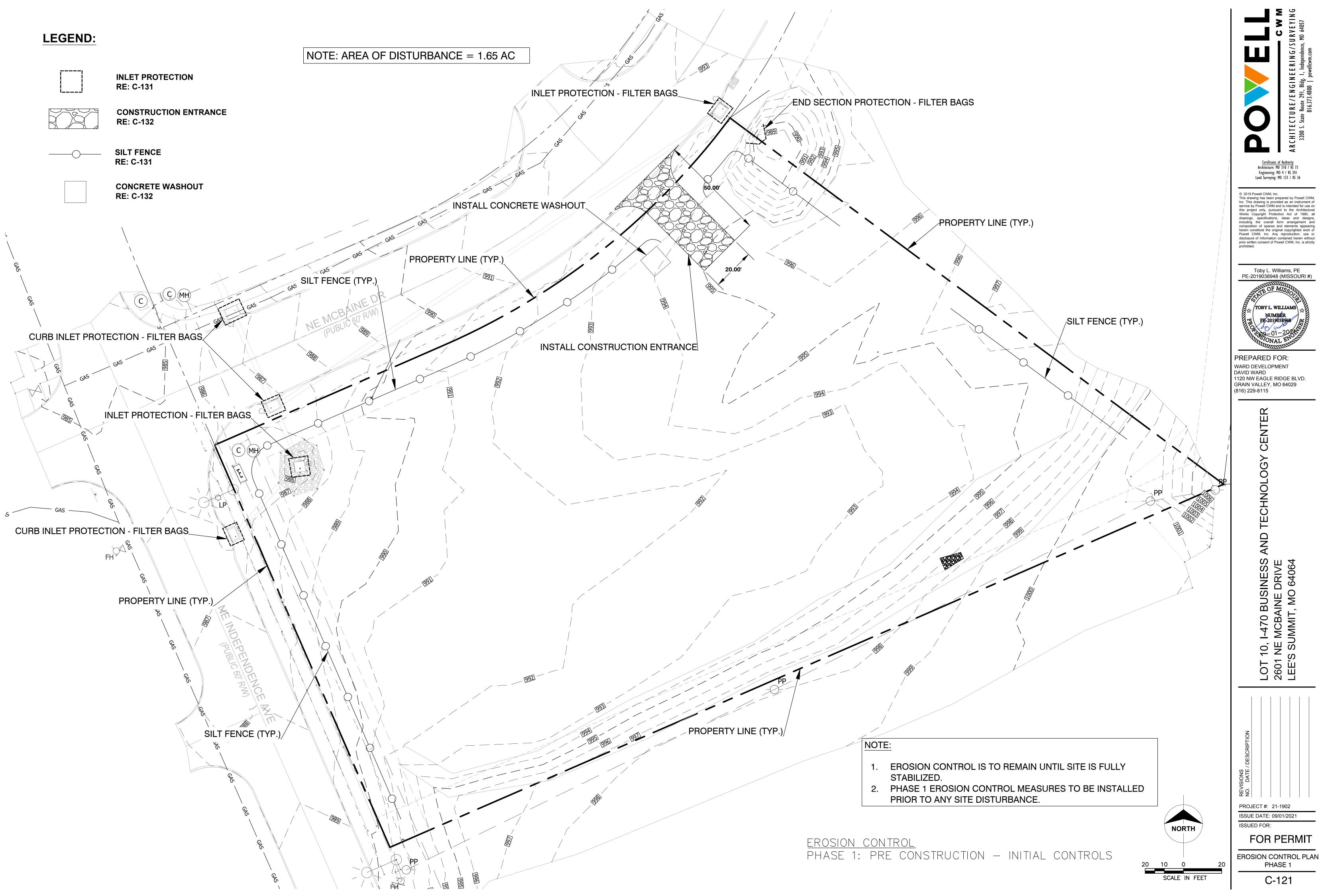
**SPECTRUM** 6550 Winchester Ave Kansas City, MO 64133 816.358.5360

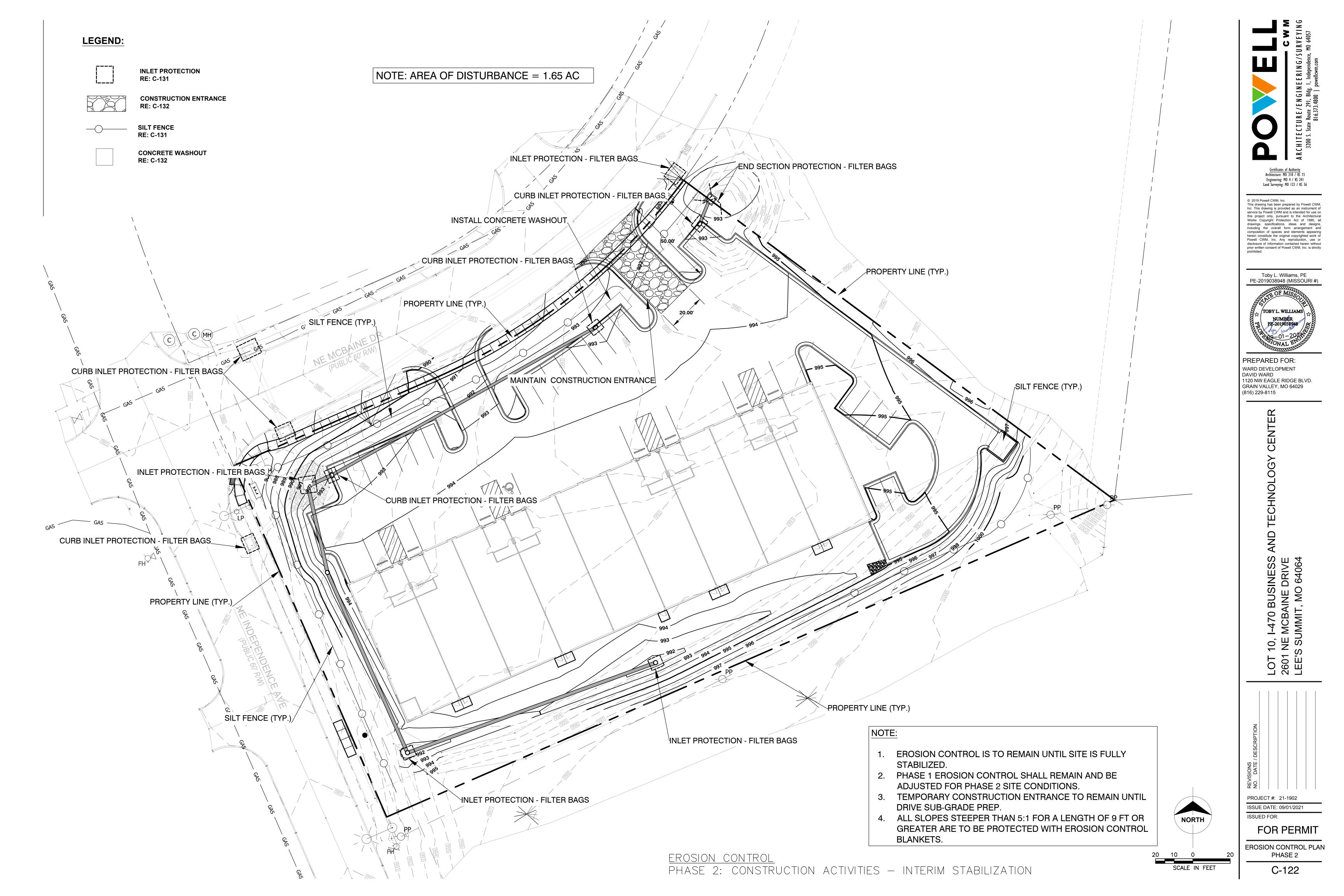
**MISSOURI ONE CALL** 1.800.344.7483



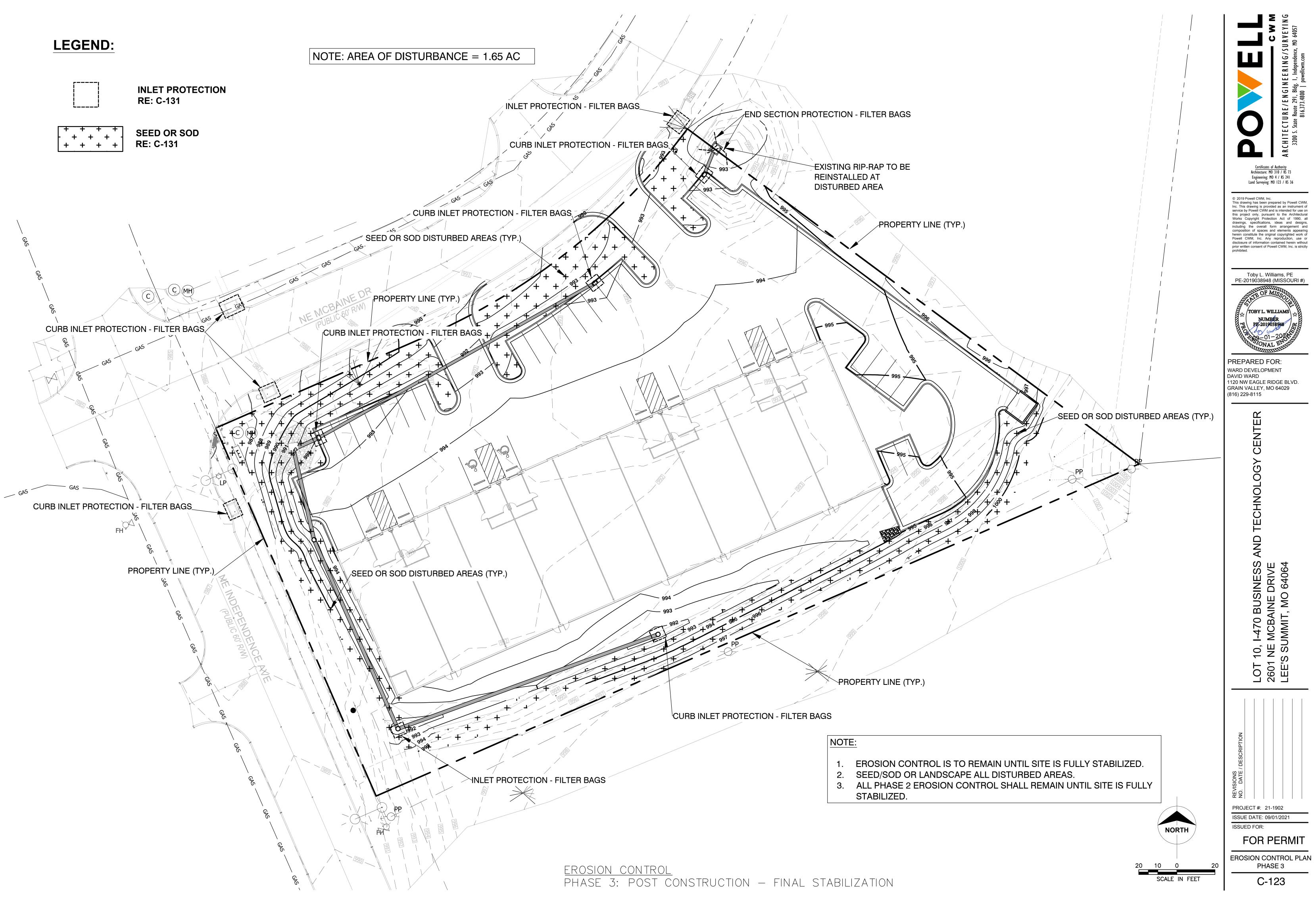


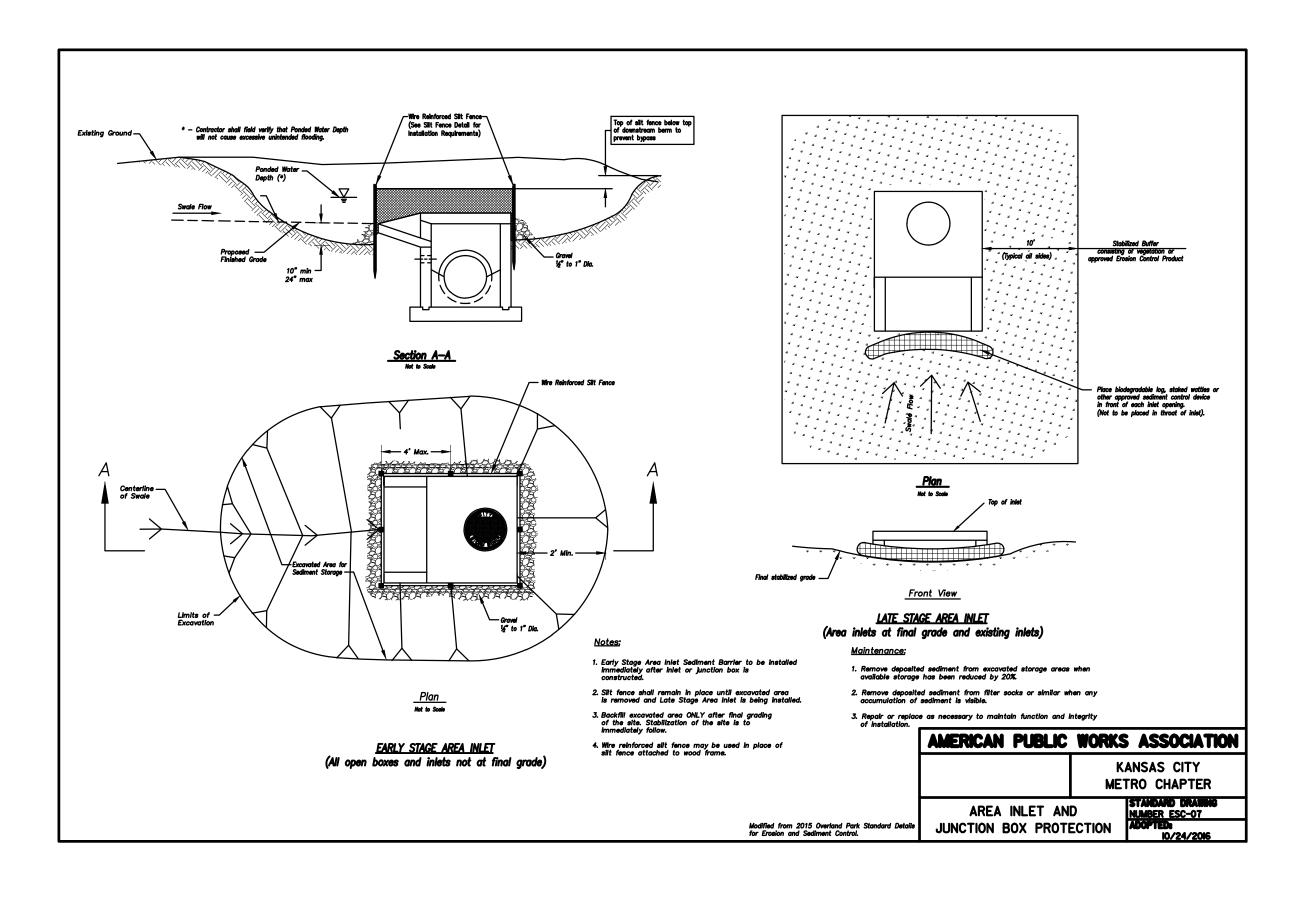


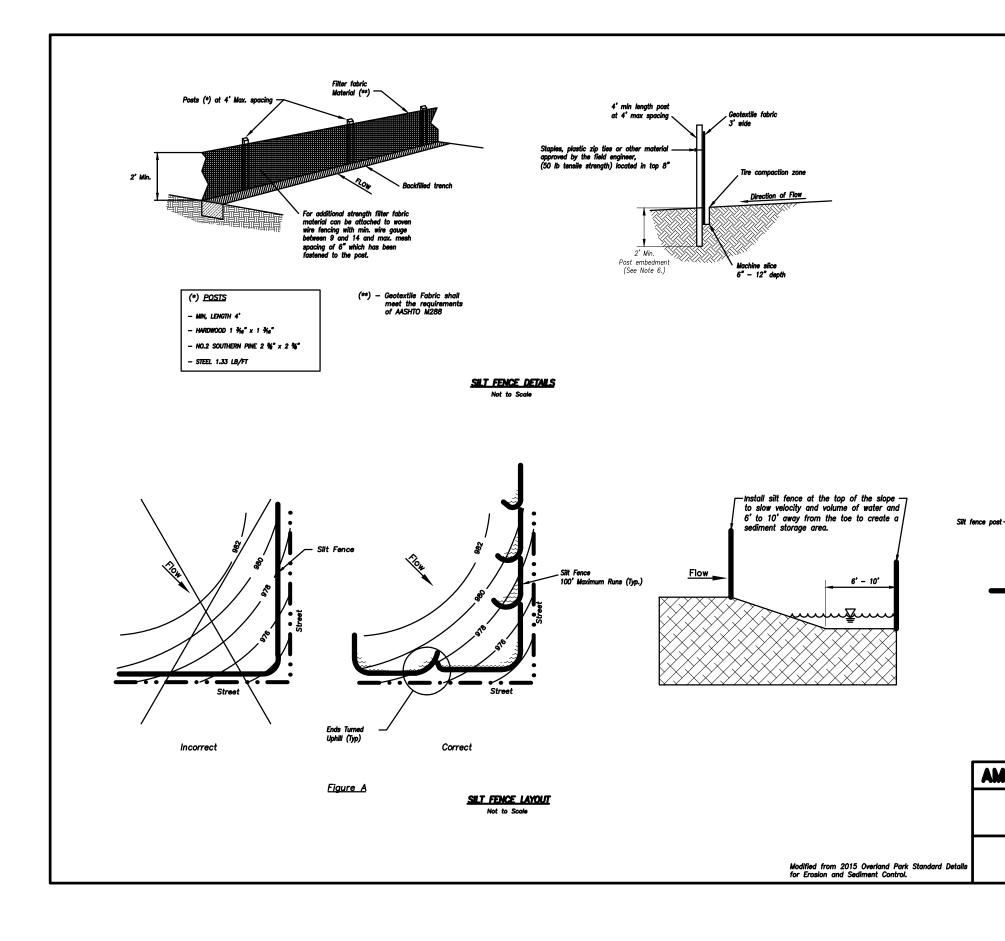


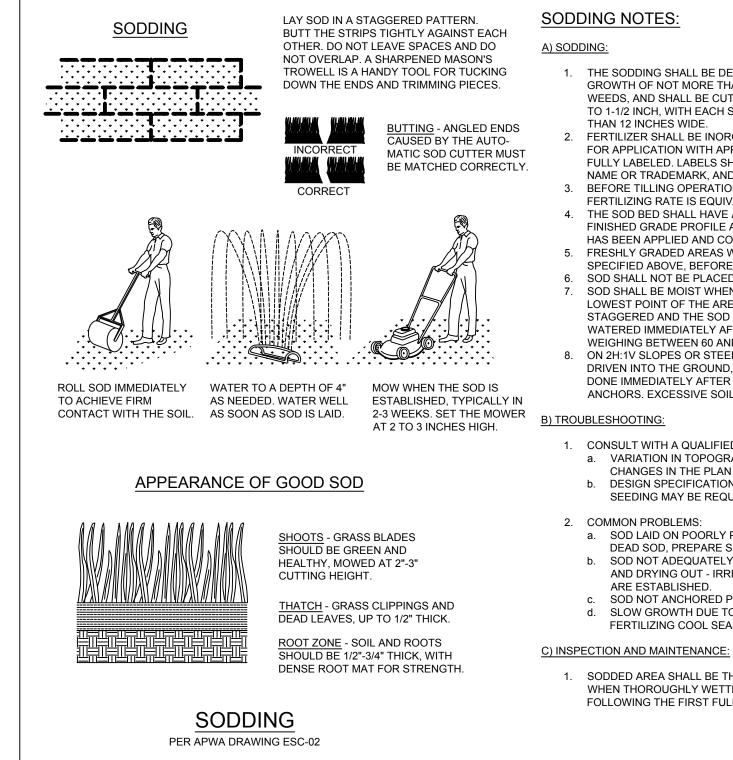


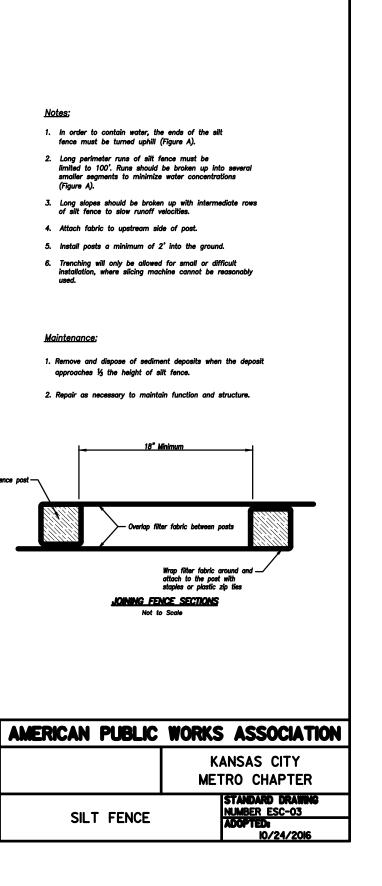


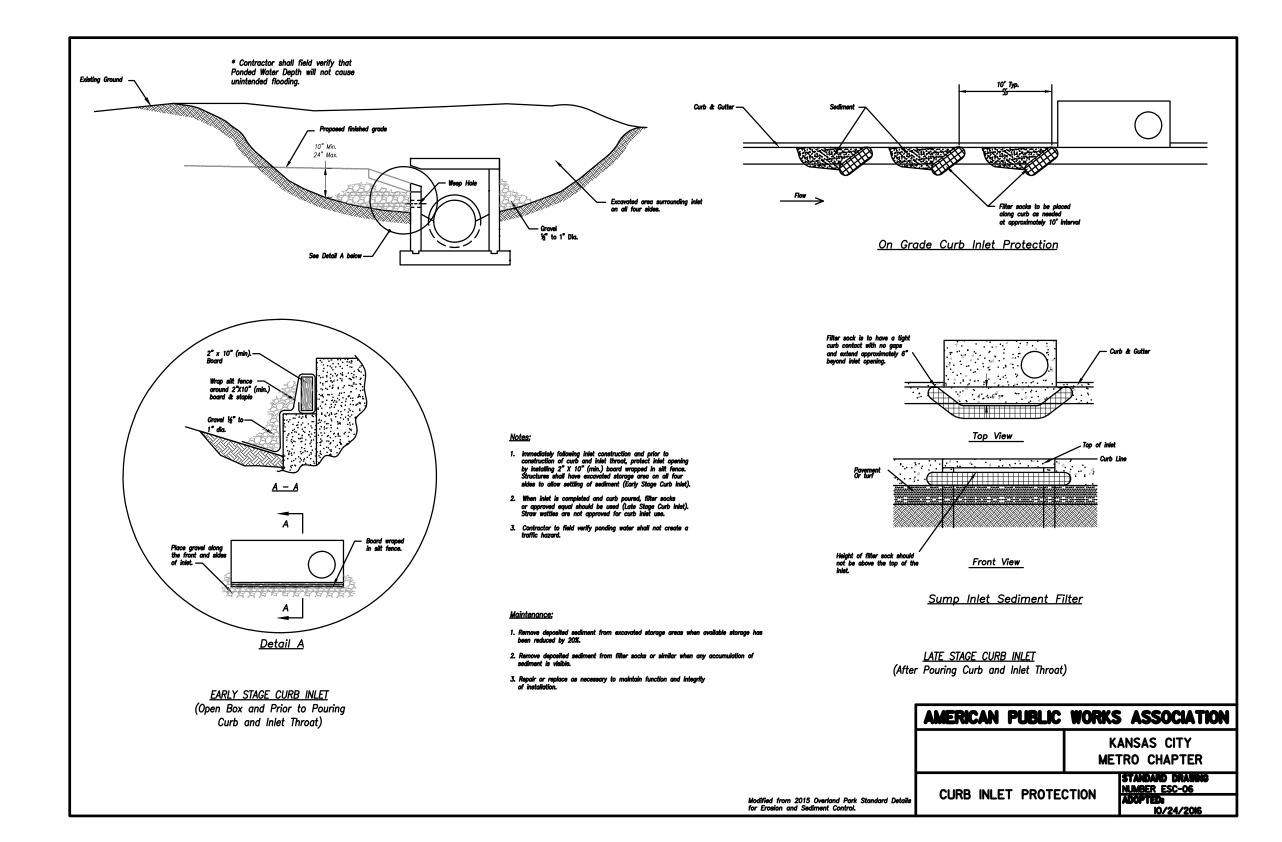












1. THE SODDING SHALL BE DENSELY ROOTED, NURSERY GROWN, AND A PERENNIAL GRASS. THE SOD SHALL CONTAIN A GROWTH OF NOT MORE THAN 10 PERCENT OF OTHER GRASSES, SHALL BE FREE FROM ALL PROHIBITED NOXIOUS WEEDS, AND SHALL BE CUT IN STRIPS OF UNIFORM THICKNESS. THE RANGE OF ACCEPTABLE THICKNESS SHALL BE 1/2 TO 1-1/2 INCH, WITH EACH STRIP CONTAINING AT LEAST ONE (1) SQUARE YARD. SOD SHALL BE CUT IN STRIPS NOT LESS THAN 12 INCHES WIDE. 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.

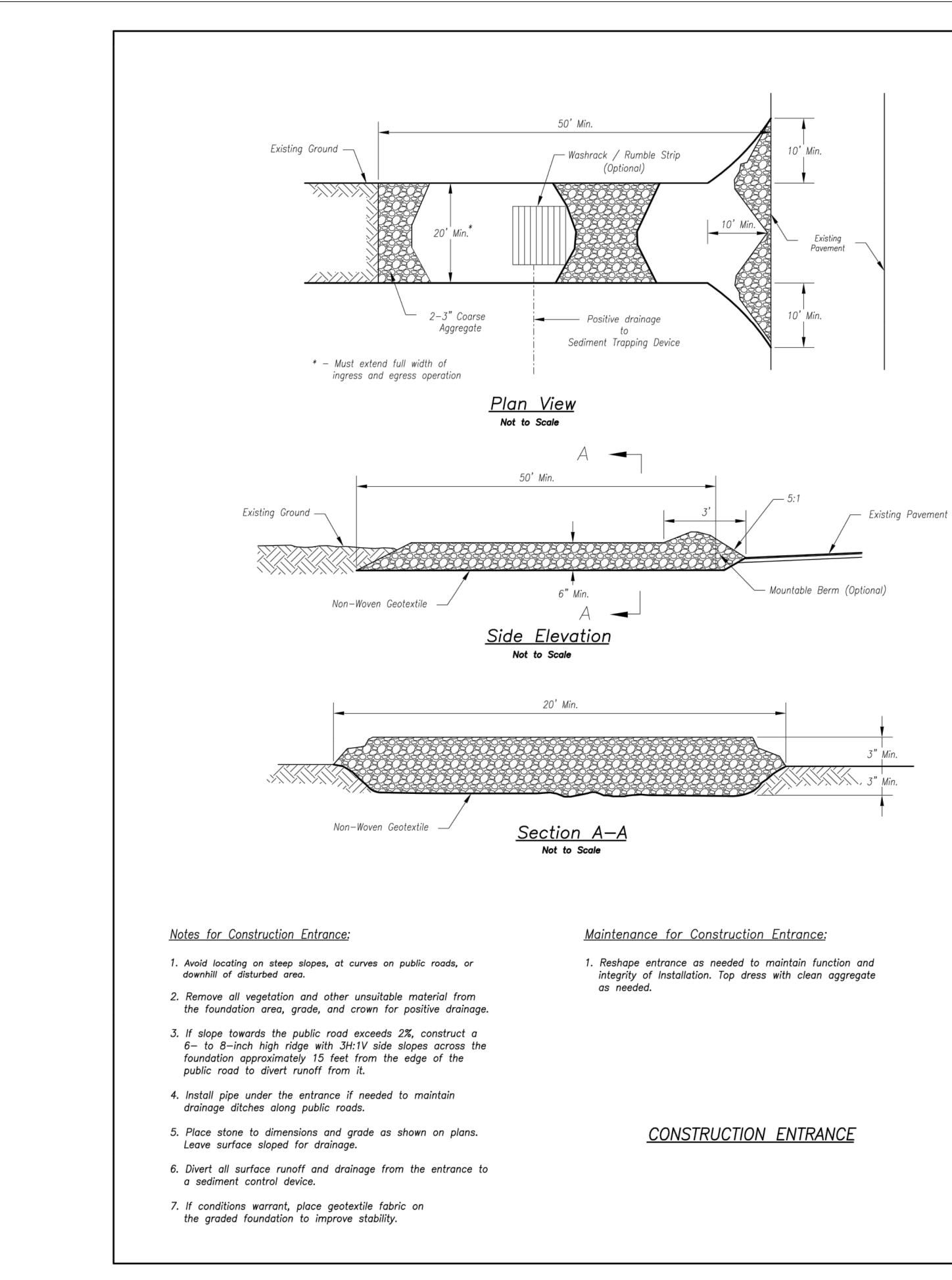
### 2. COMMON PROBLEMS:

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.

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.



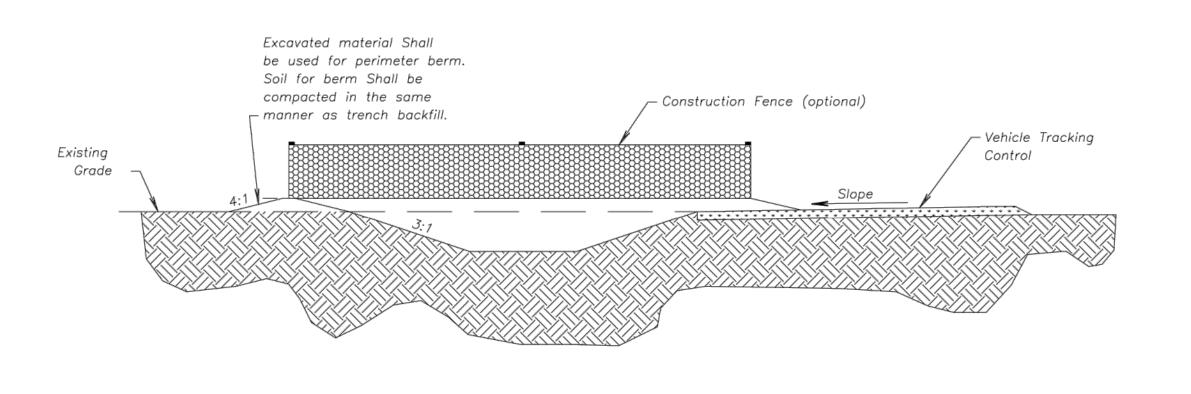


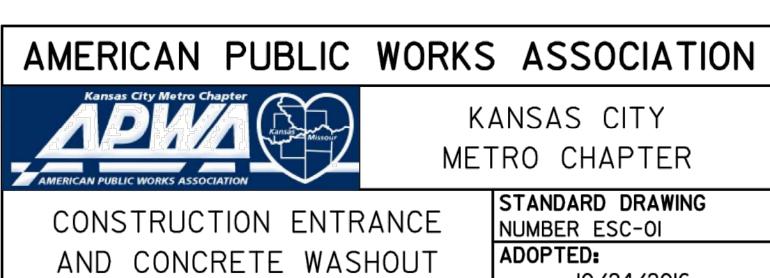
Notes for Concrete Washout:

- placement on site.
- 2. Concrete washout area shall include a flat subsurface pit sized pad shall be sloped towards the concrete washout area.
- 3. 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 of the concrete washout area(s) to operators of concrete truck and pump rigs.
- sides of the subsurface pit in sandy or gravelly soils.

## Maintenance for Concrete Washout:

- 1. Concrete washout materials shall be removed once the materials
- 2. Concrete washout areas shall be enlarged as necessary to maintain capacity for wasted concrete.
- 3. Concrete washout water, wasted pieces of concrete and all other in a water-tight container and disposed of properly.
- the project is placed.
- with suitable compacted backfill and topsoil, any disturbed areas concrete washout areas shall be stabilized.





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.

1. Concrete washout areas shall be installed prior to any concrete

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

area and elsewhere as necessary to clearly indicate the location(s)

5. A one-piece impervious liner may be required along the bottom and

have filled the washout to approximately 75% full.

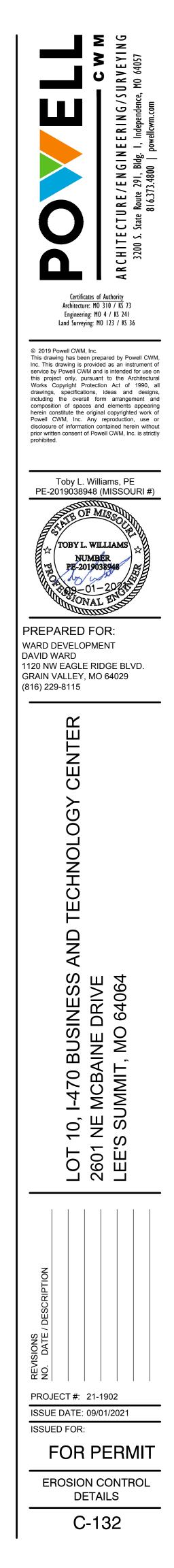
debris in the subsurface pit shall be transported from the job site

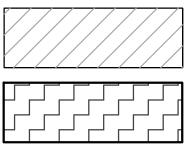
4. Concrete washout areas shall remain in place until all concrete for

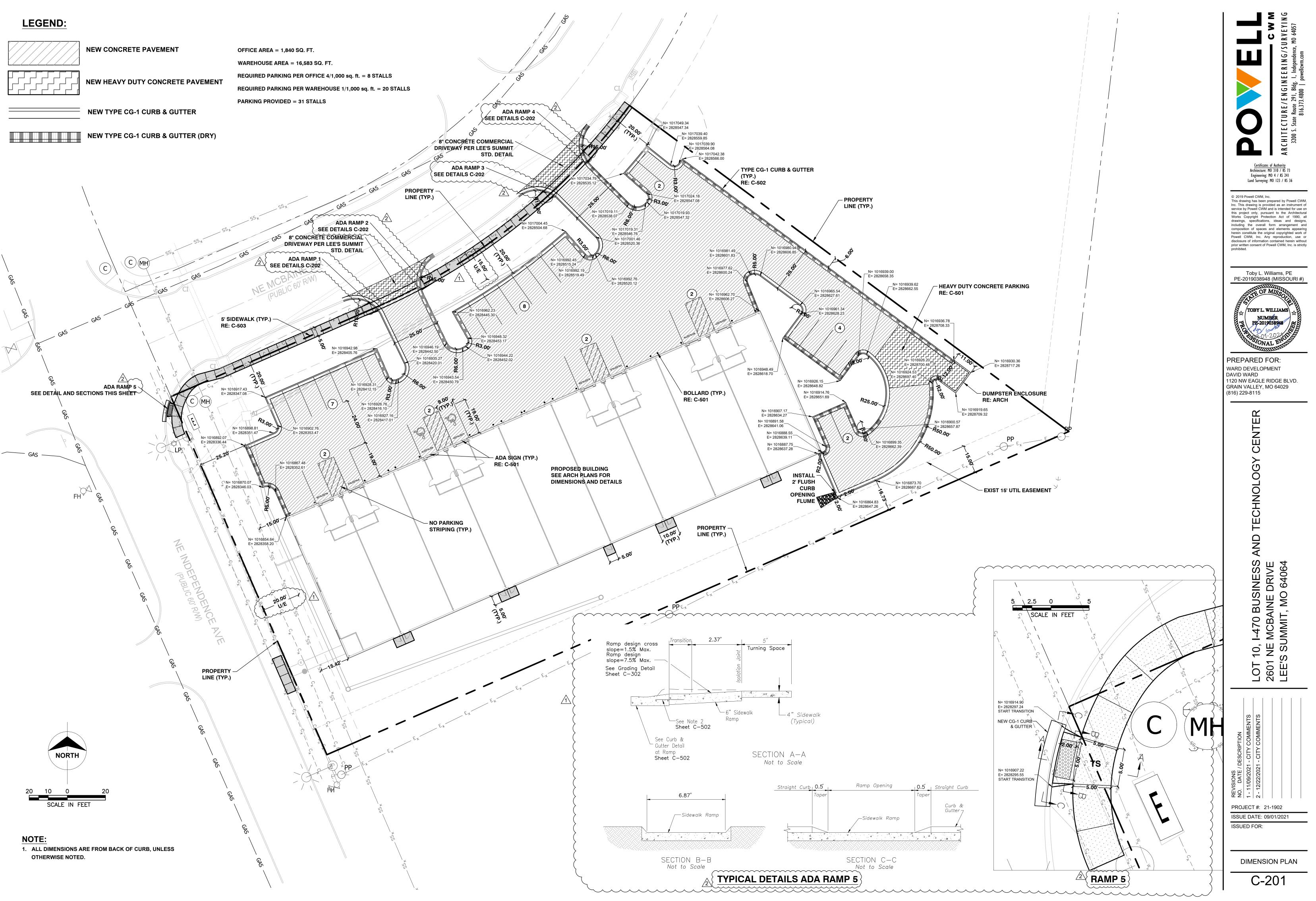
5. When concrete washout areas are removed, excavations shall be filled associated with the installation, maintenance, and/or removal of the

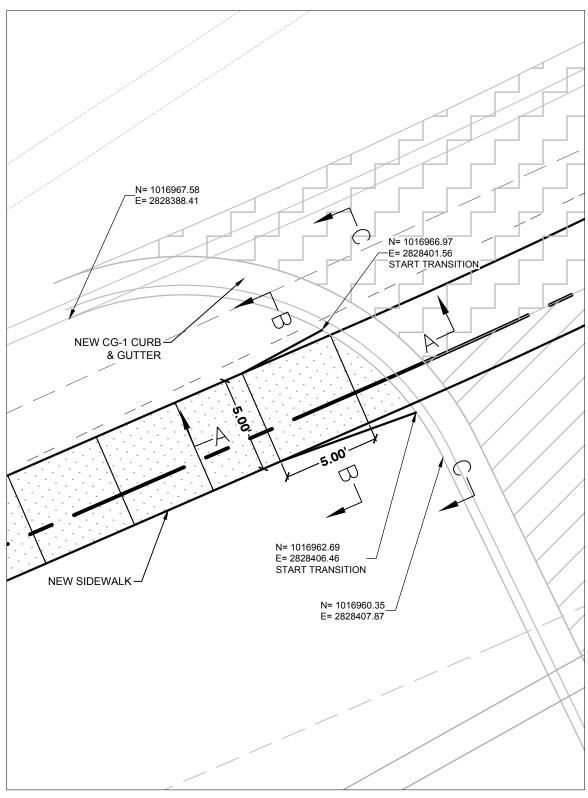
CONCRETE WASHOUT

10/24/2016

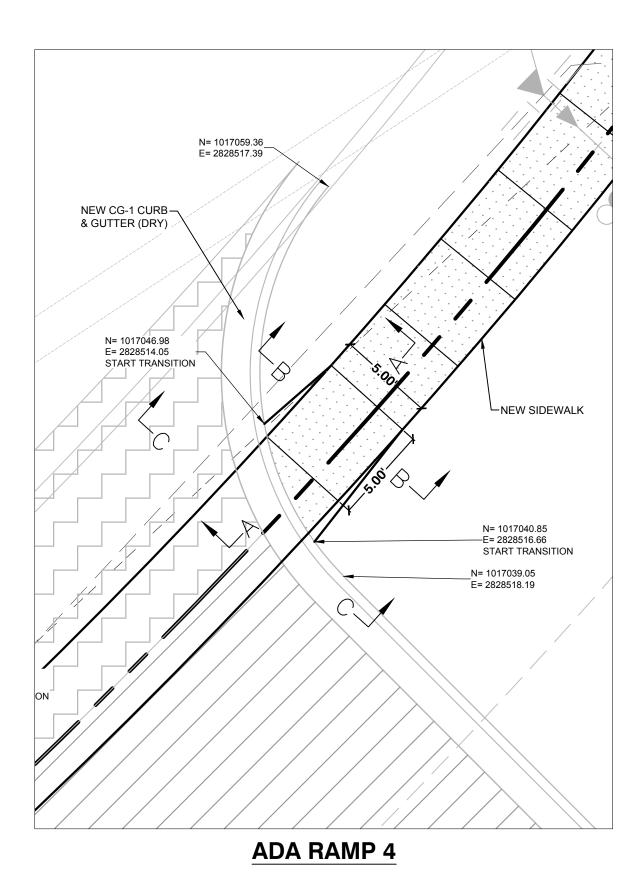


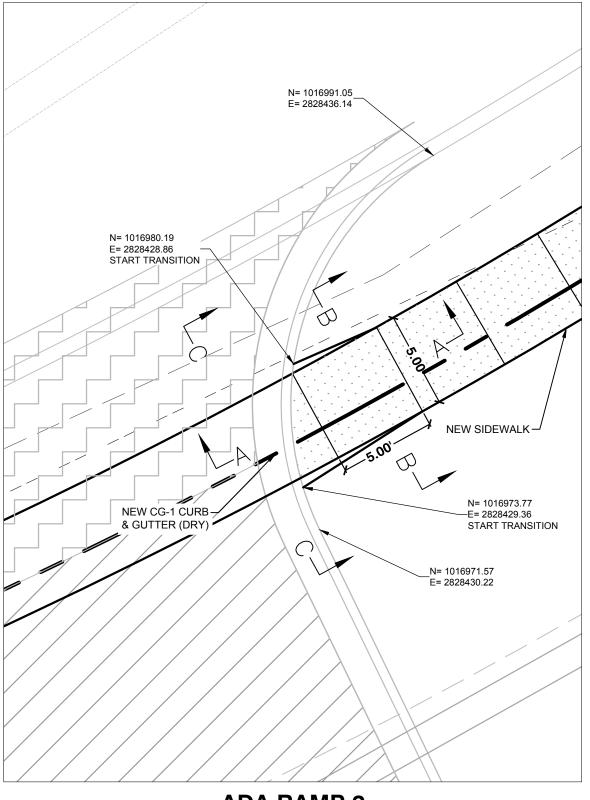




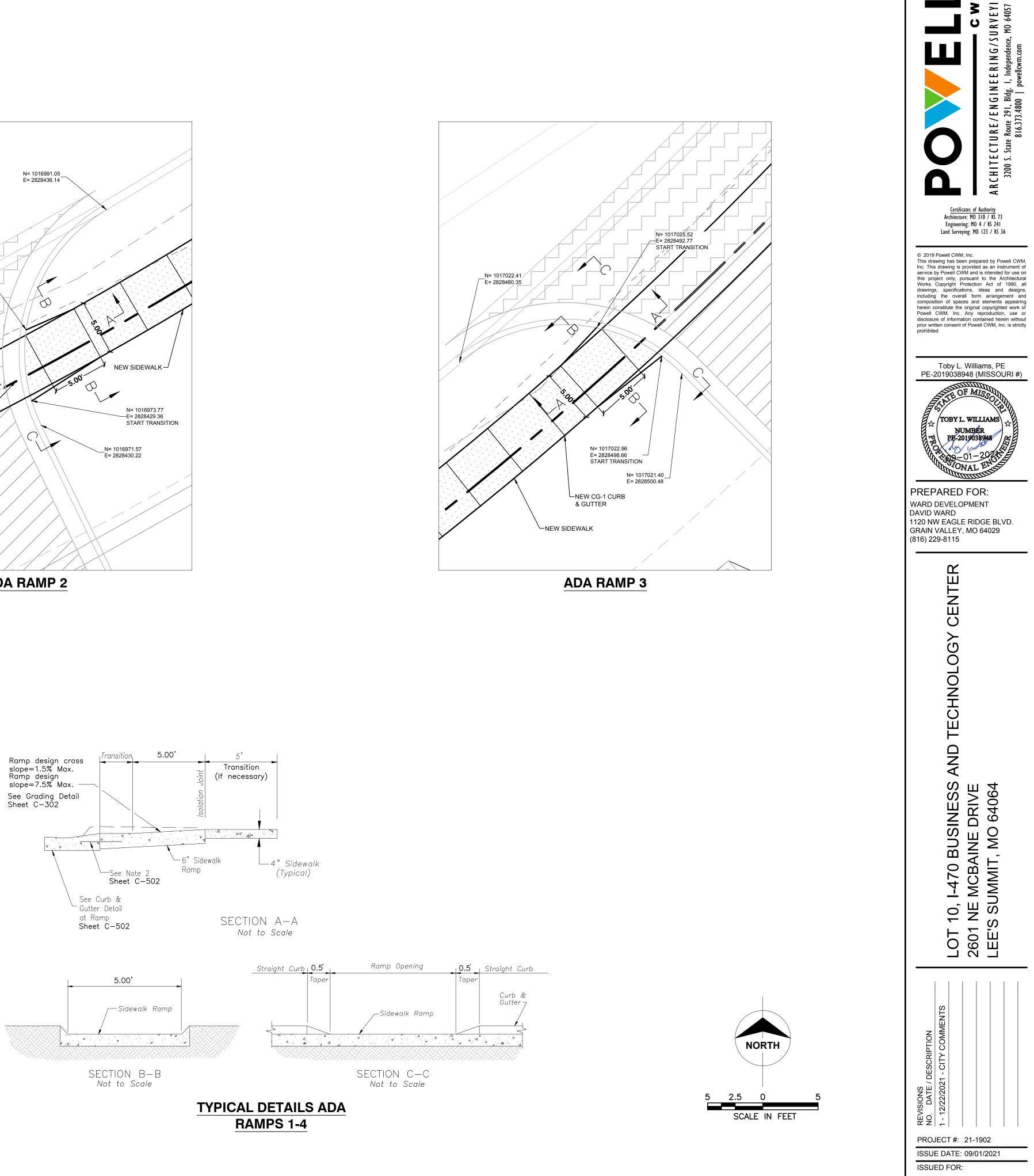


ADA RAMP 1





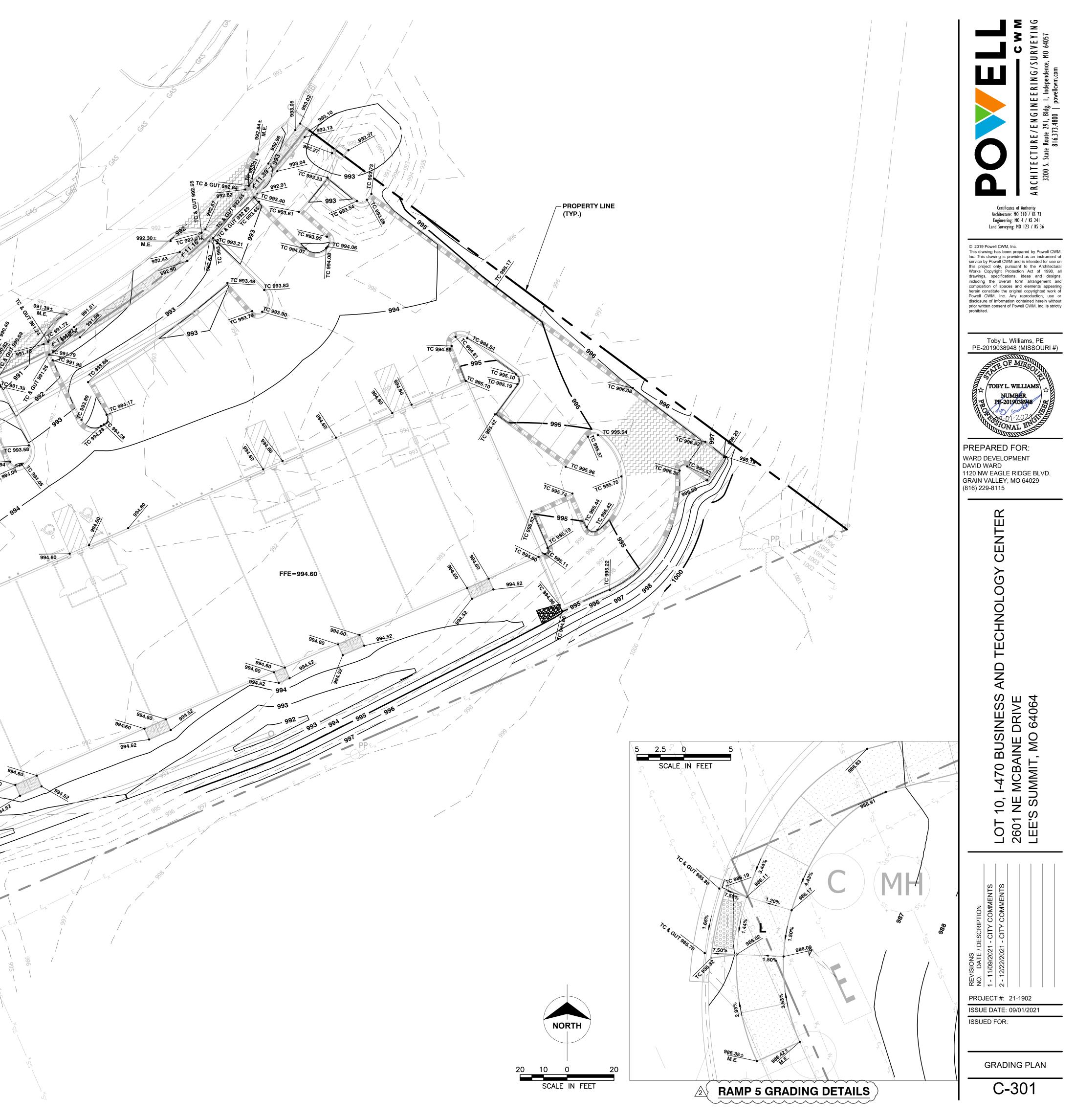


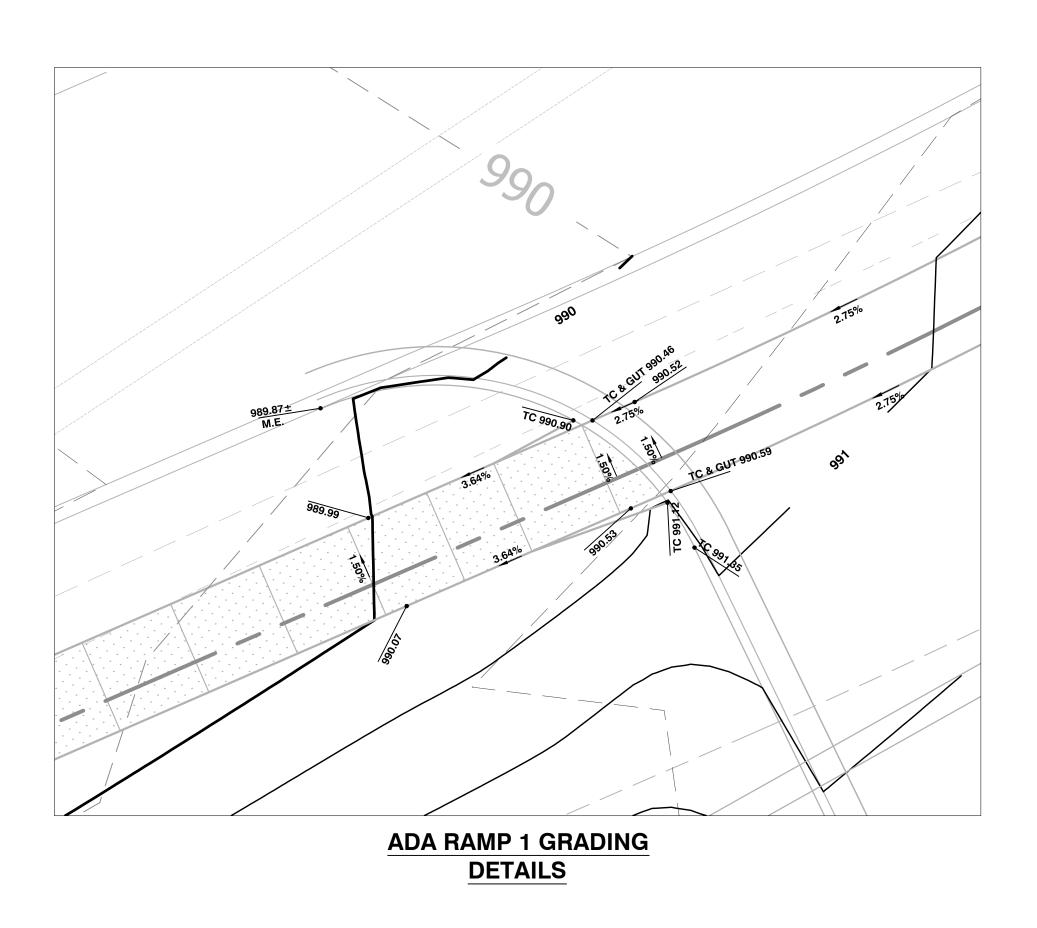


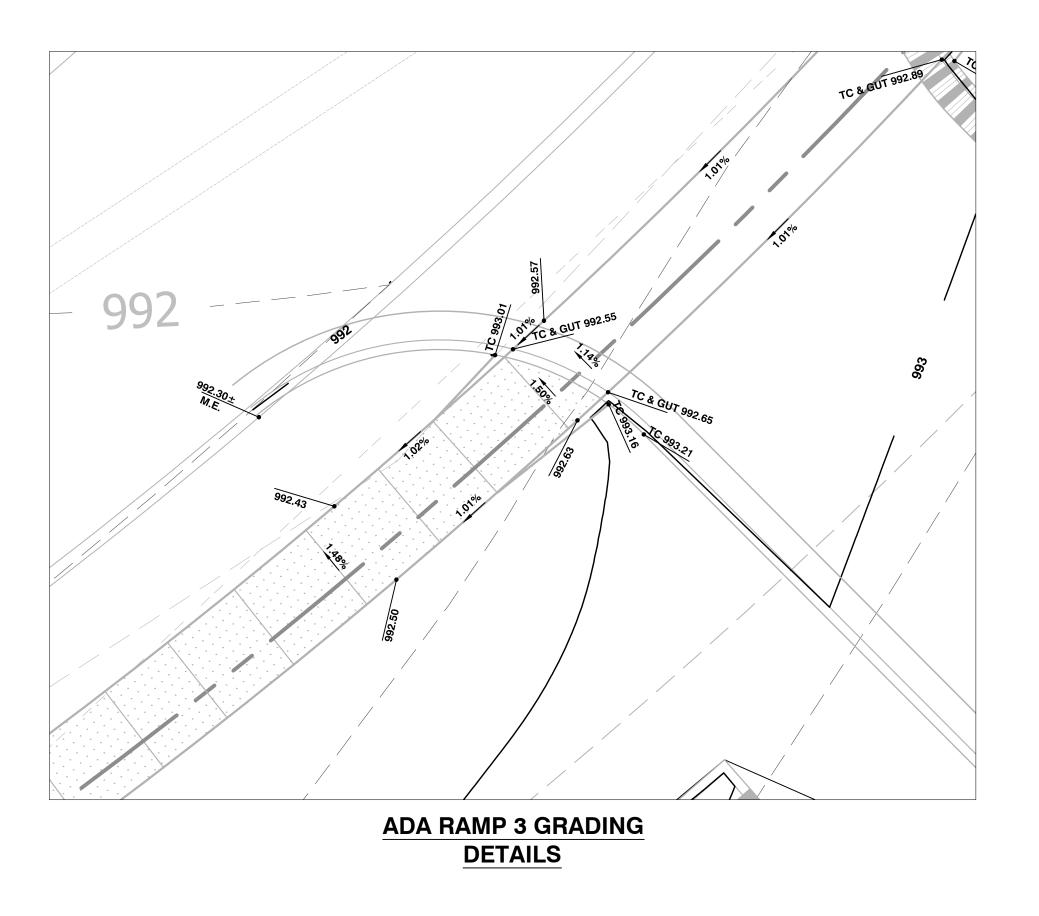
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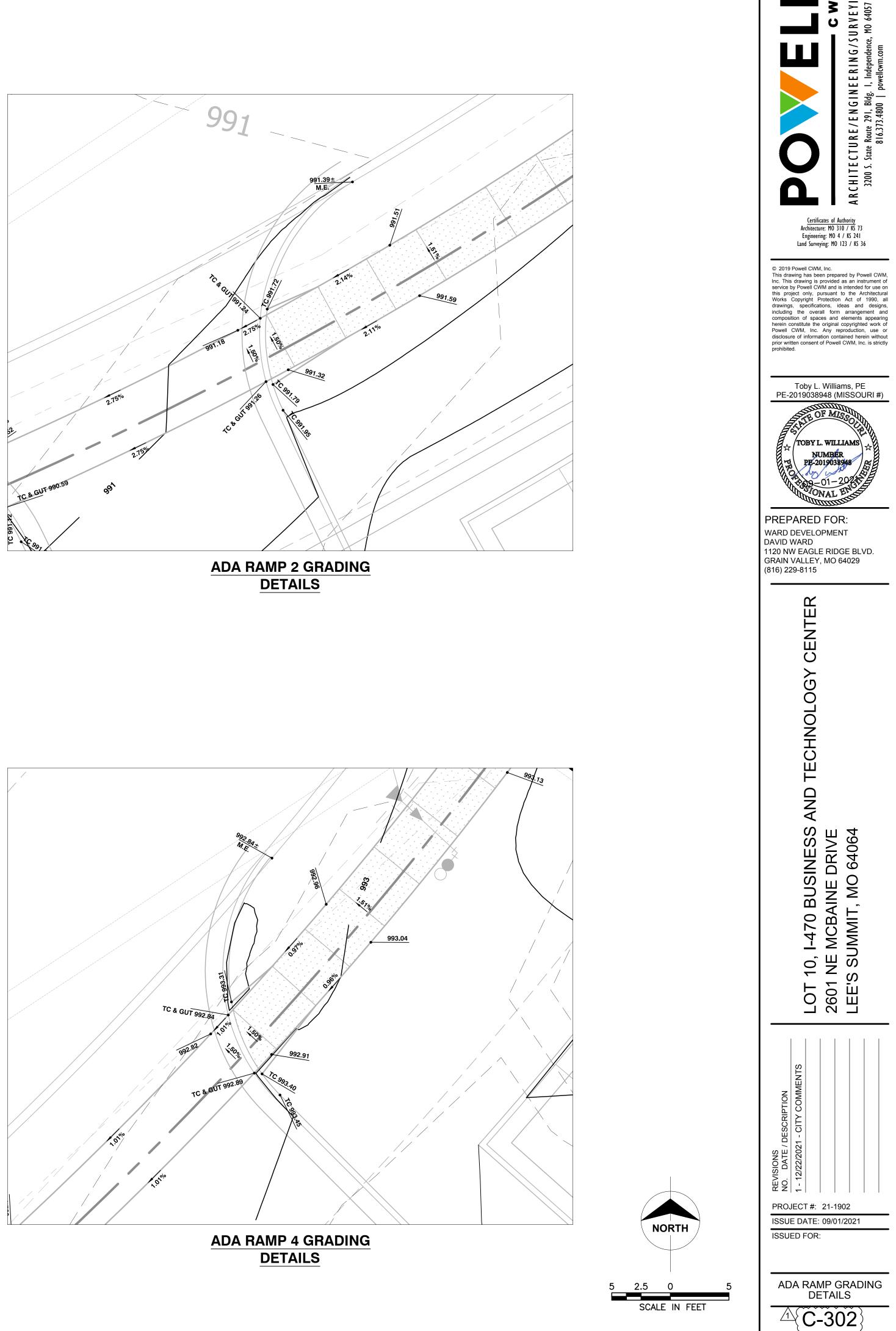
**A**(C-202)

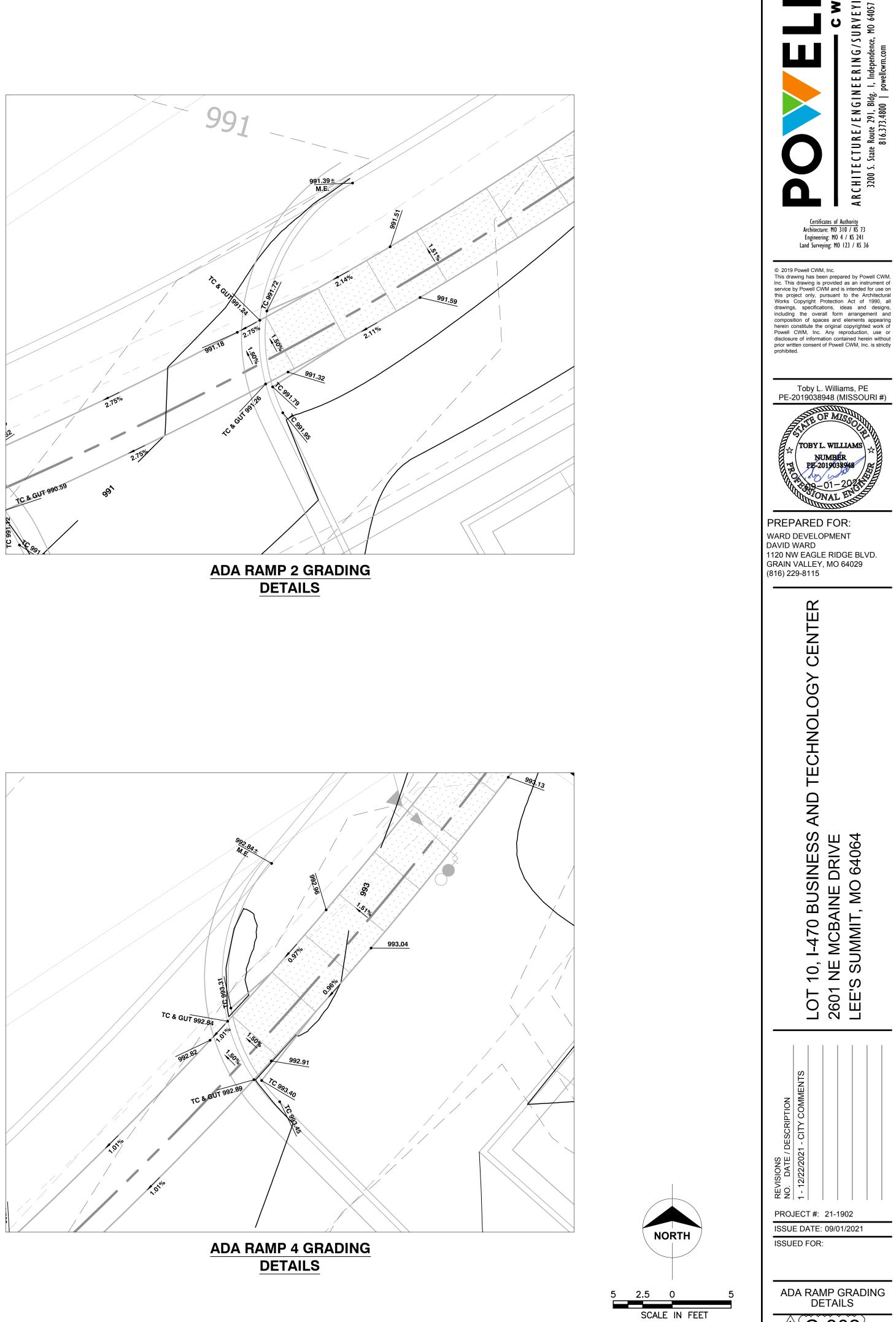
<u>NOTE:</u> TC = TOP OF CURB GUT = GUTTER M.E. = MATCH EXISTING **GRADING NOTES :** 1. ALL ELEVATIONS SHOWN ARE TO FINISHED GRADE SURFACE. 2. ALL EXISTING UTILITY PULL BOXES, HAND HOLES, MANHOLES, VALVE BOXES, METERS, AND OTHER APPURTENANCES TO REMAIN, SHALL BE ADJUSTED TO NEW GRADES. Total Disturbed Area: 1.65 acres TC 993.94 FH NE INDI

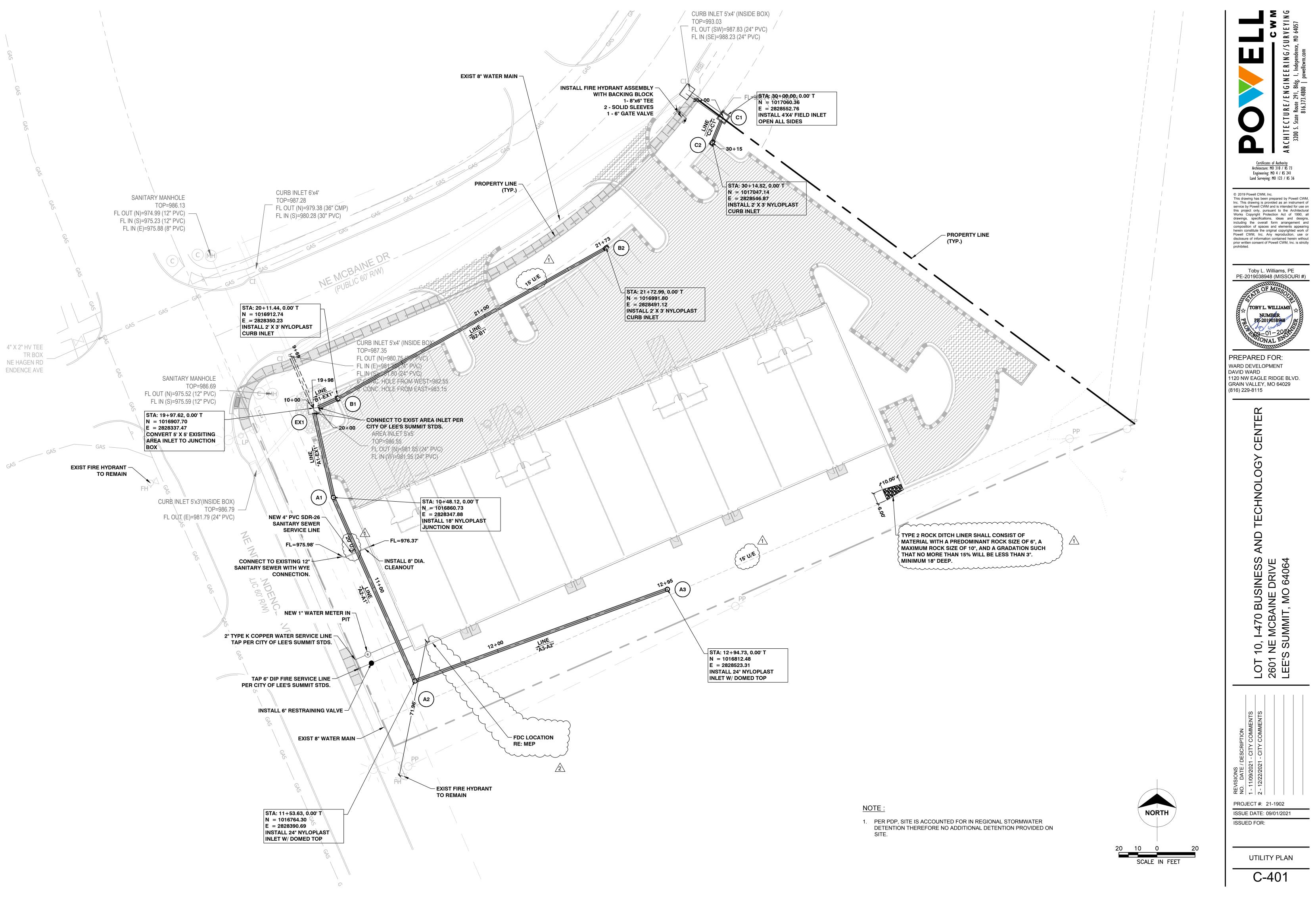


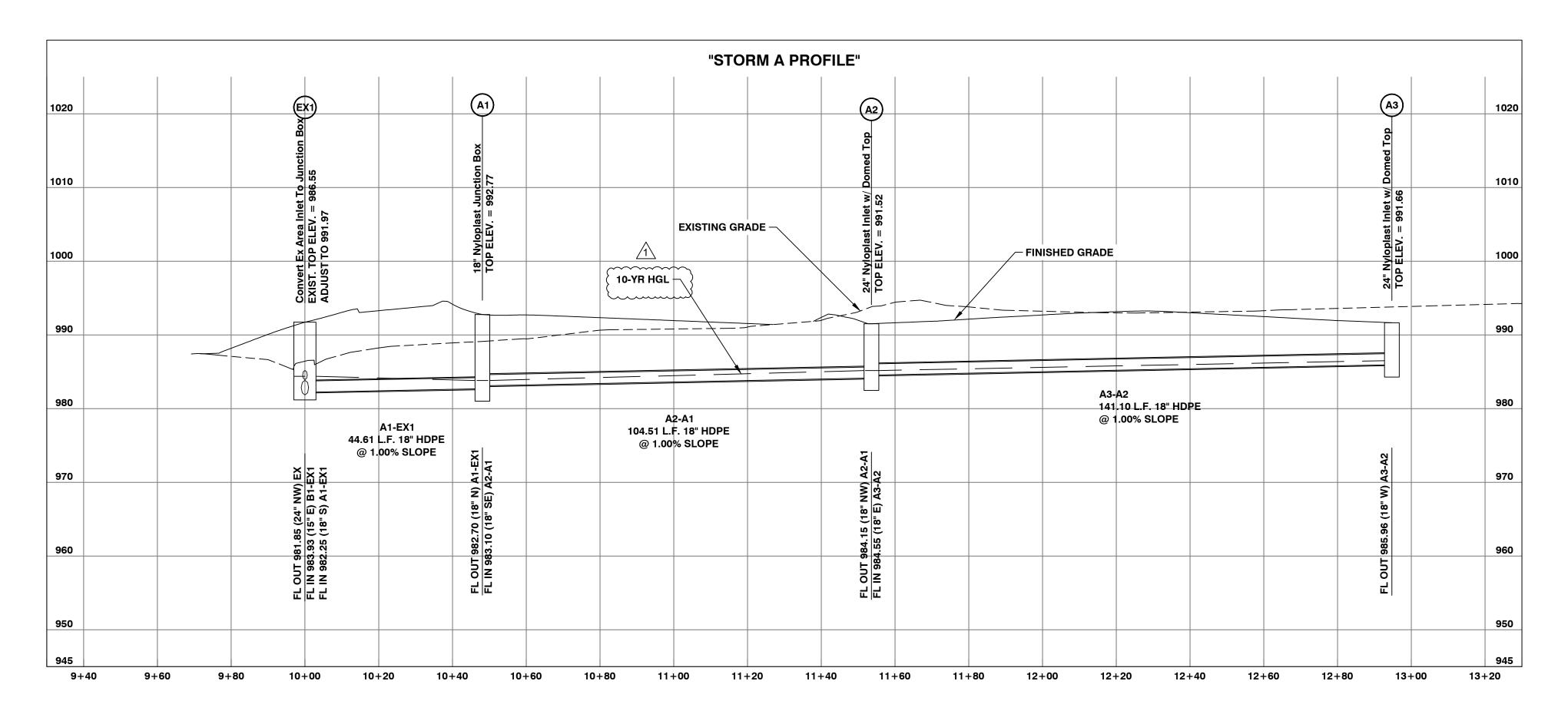


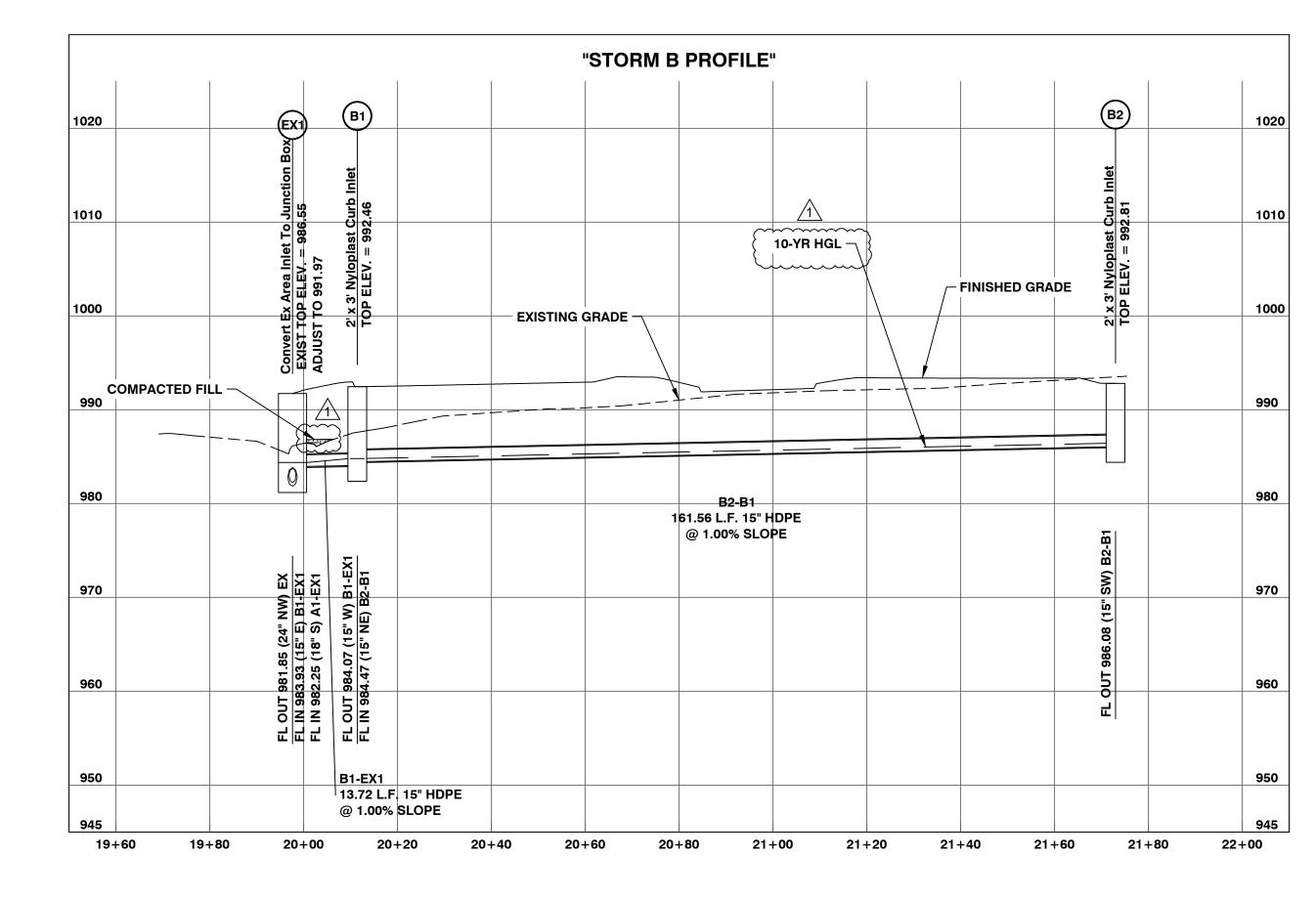


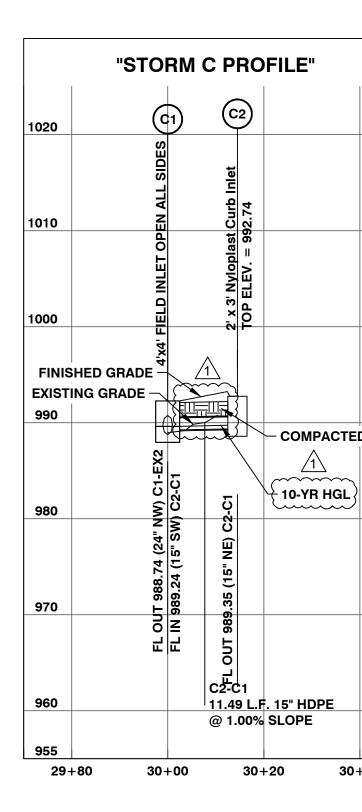


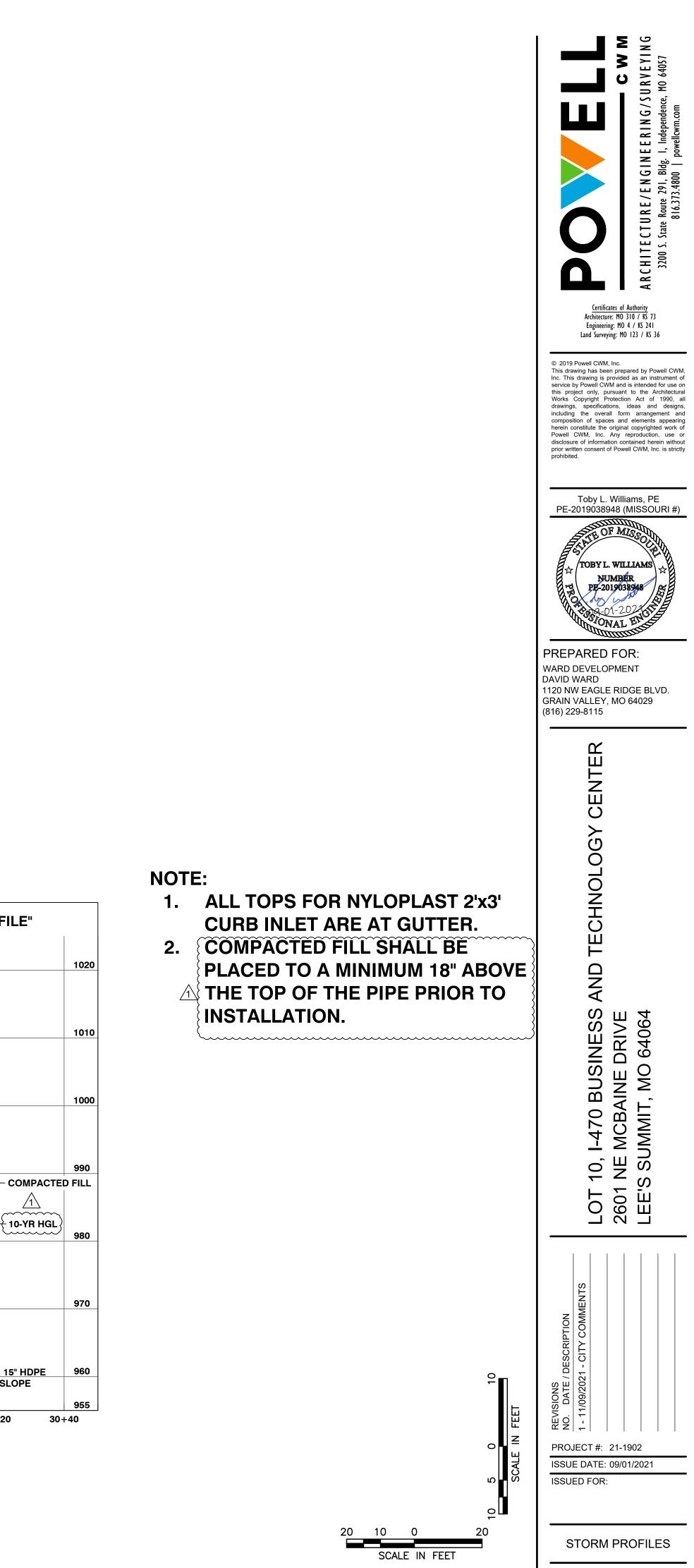




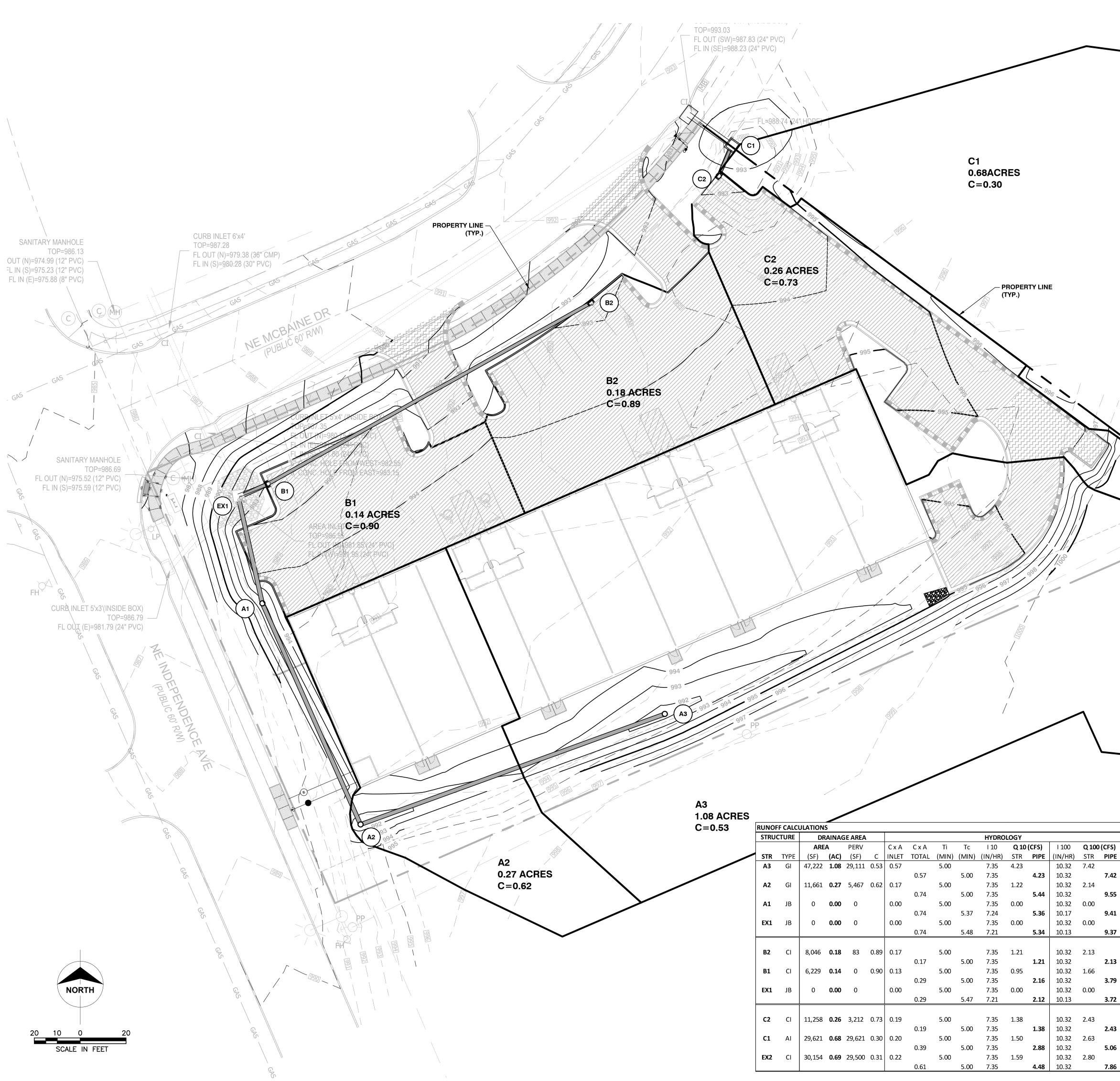








C-411



	A Solution of the second secon
	LOT 10, 1-470 BUSINESS AND TECHNOLOGY CENTER (816) 553-8112 LOT 10, 1-470 BUSINESS AND TECHNOLOGY CENTER 2601 NE MCBAINE DRIVE LEE'S SUMMIT, MO 64064 LEE'S SUMMIT, MO 64064
PIPE DATA         PIPE DATA <t< th=""><th>NS TE / DESCRIPTION</th></t<>	NS TE / DESCRIPTION

.42		72	10	HUPL	0.012	141.1	905.90	504.55	1.00	1.//	11.50	0.44	0.57	100.070	100.070
.55	A2	A1	18	HDPE	0.012	104.5	984.15	983.10	1.00	1.77	11.41	6.45	0.27	100.0%	100.0%
.41	A1	EX1	18	HDPE	0.012	44.6	982.70	982.25	1.01	1.77	11.43	6.47	0.11	100.0%	100.0%
.37	EX1														
.13	B2	B1	15	HDPE	0.012	161.6	986.08	984.47	1.00	1.23	6.99	5.69	0.47	100.0%	100.0%
.79	B1	EX1	15	HDPE	0.012	13.7	984.07	983.93	1.02	1.23	7.07	5.76	0.04	100.0%	100.0%
.72	EX1														
.43	C2	C1	15	HDPE	0.012	9.4	987.60	987.36	2.54	1.23	11.16	9.09	0.02	100.0%	100.0%
.06	C1	EX2	24	HDPE	0.012	9.4	987.60	987.36	2.54	3.14	39.08	12.44	0.01	100.0%	100.0%
.86															

DRAINAGE AREA MAP

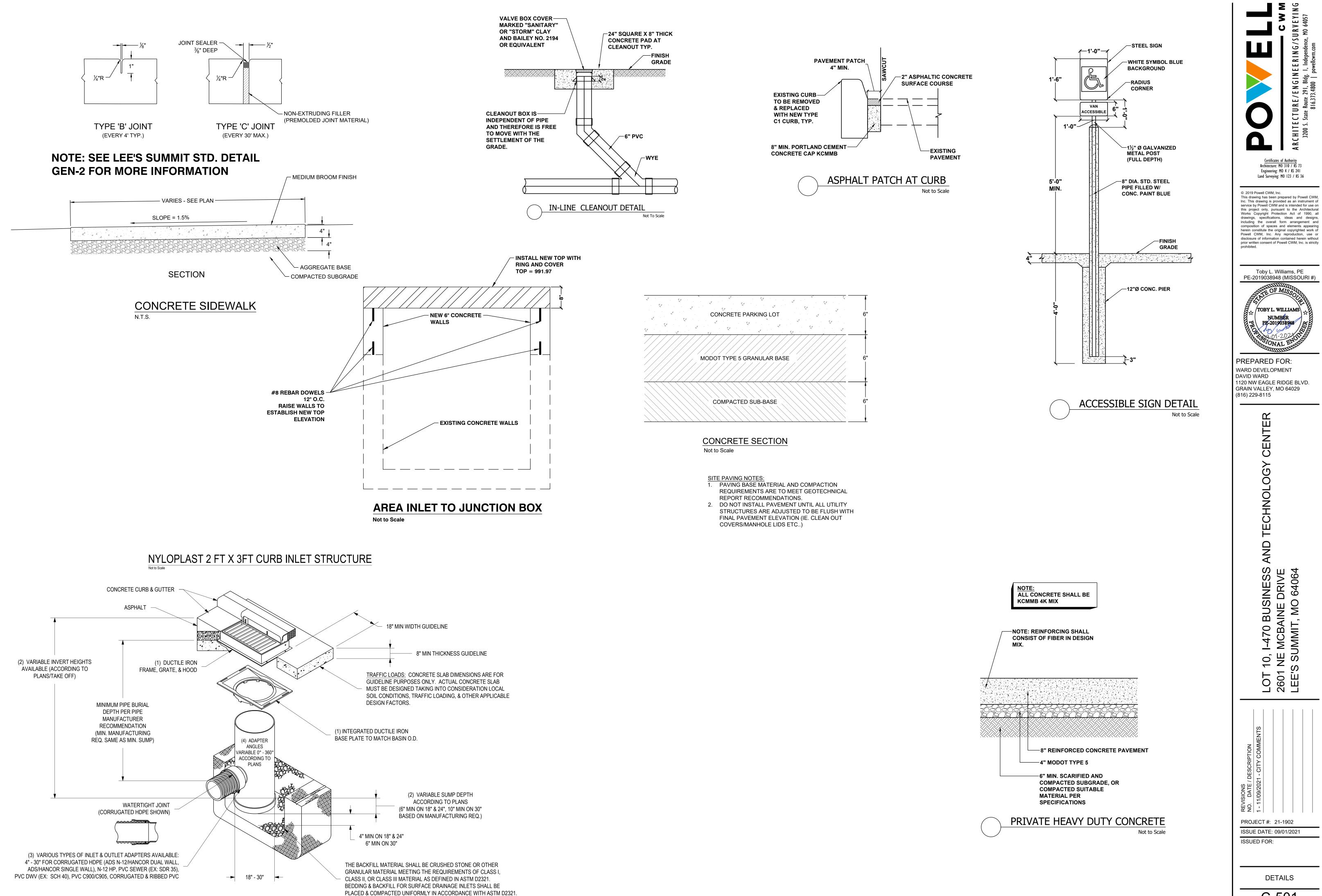
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PROJECT #: 21-1902

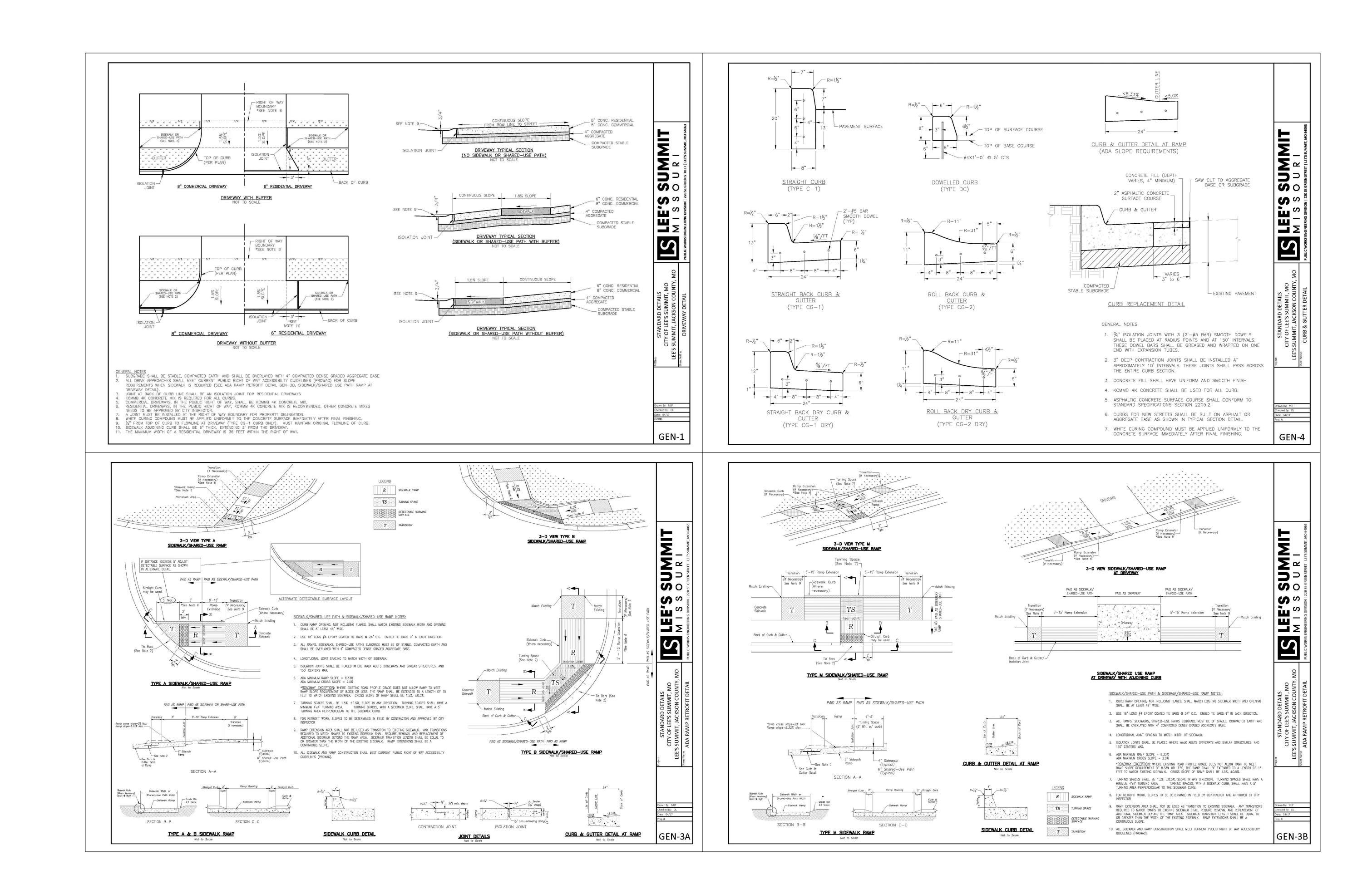
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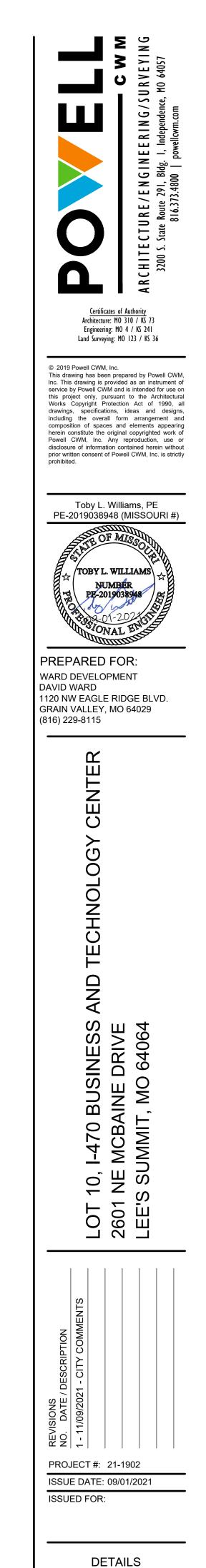
ISSUE DATE: 09/01/2021

C-421

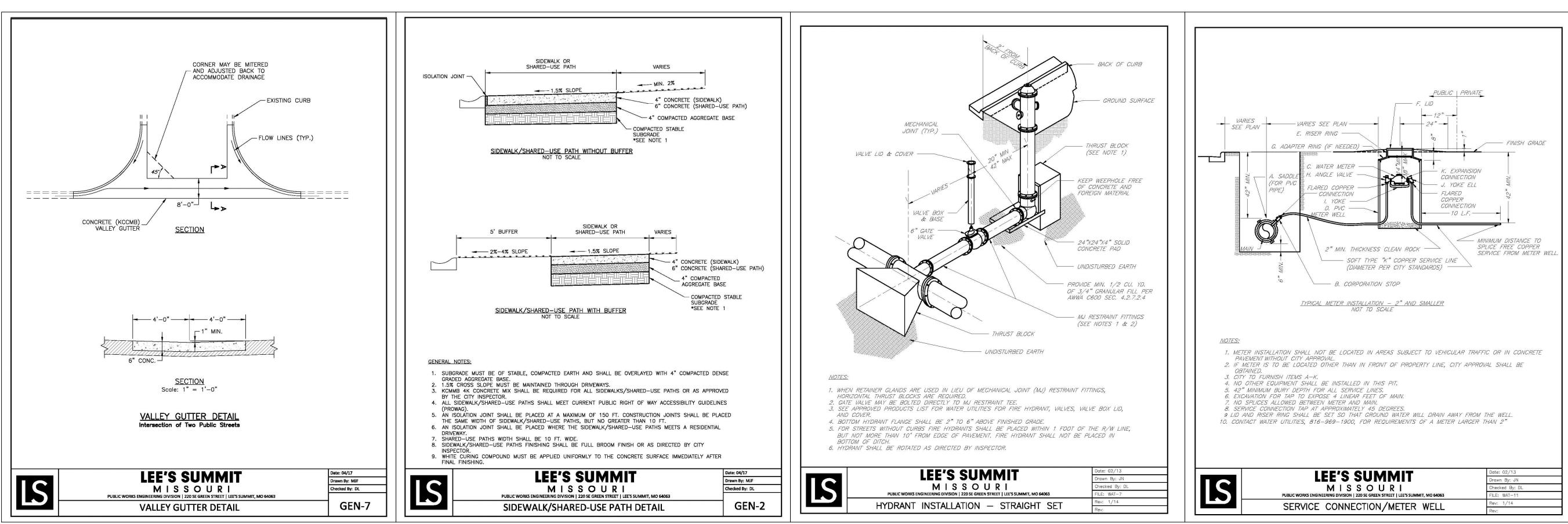


C-501

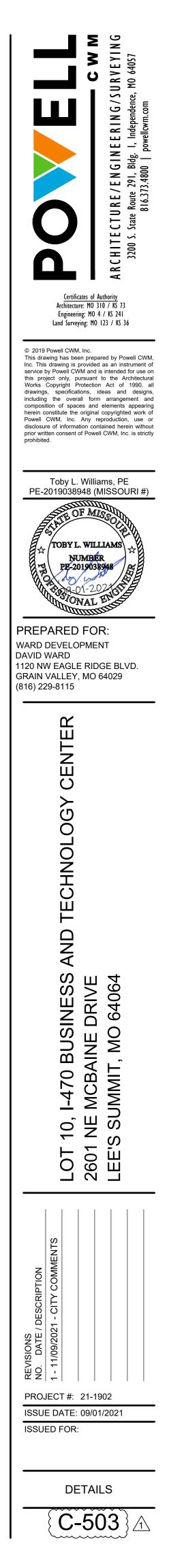


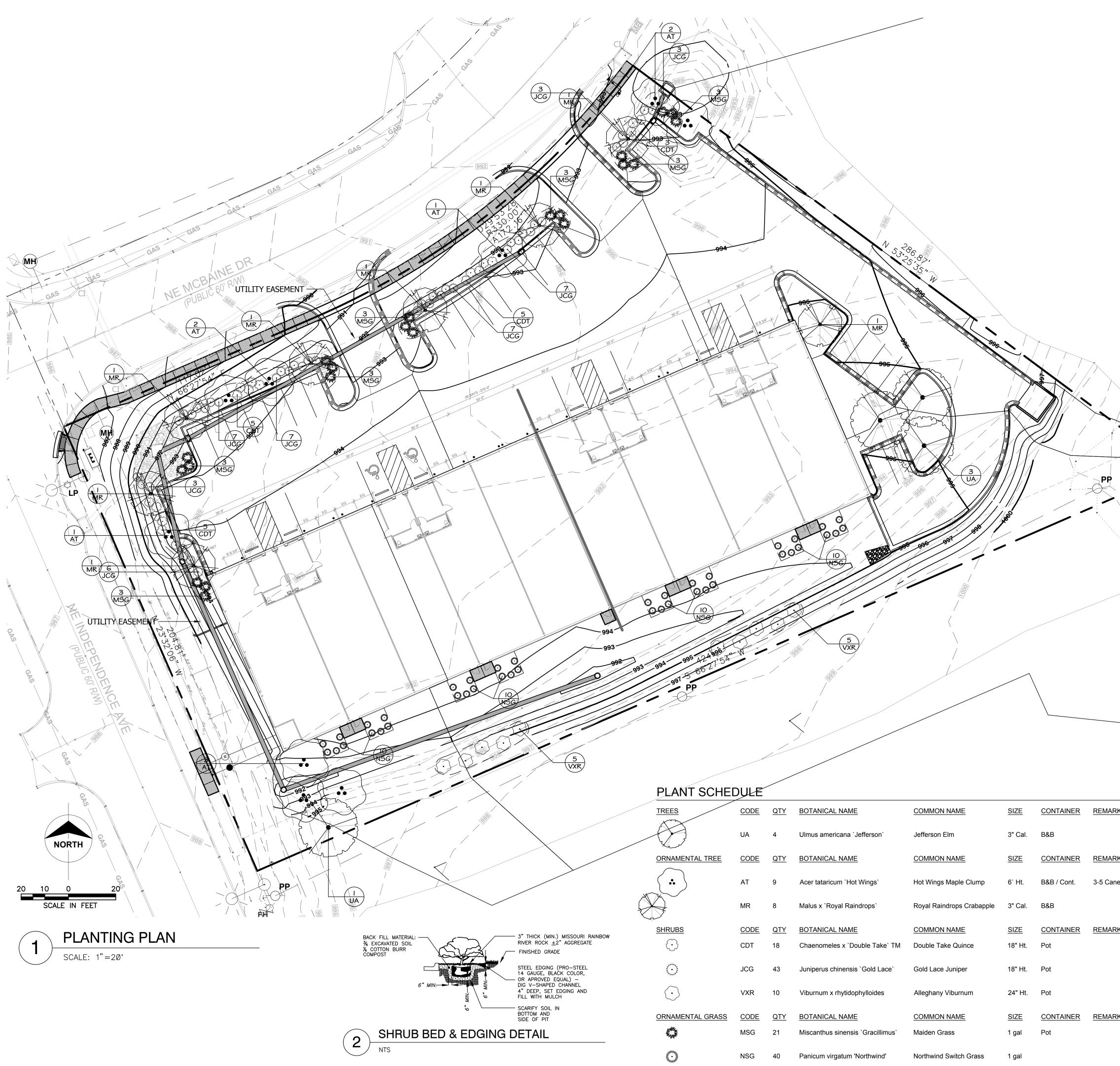


**(C-502**)



	Date: 02/13
LEE'S SUMMIT	Drawn By: JN
MISSOURI	Checked By: DL
PUBLIC WORKS ENGINEERING DIVISION   220 SE GREEN STREET   LEE'S SUMMIT, MO 64063	FILE: WAT-11
SERVICE CONNECTION/METER WELL	Rev: 1/14
SERVICE CONNECTION/WETER WELL	Rev:





	TREES	CODE	<u>QTY</u>	BOTANICAL NAME	COMMON NAME	<u>SIZE</u>	CONTAINER	REMARKS
		UA	4	Ulmus americana `Jefferson`	Jefferson Elm	3" Cal.	B&B	
	ORNAMENTAL TREE	CODE	<u>QTY</u>	BOTANICAL NAME	COMMON NAME	<u>SIZE</u>	CONTAINER	REMARKS
		AT	9	Acer tataricum `Hot Wings`	Hot Wings Maple Clump	6` Ht.	B&B / Cont.	3-5 Cane - 3" Cal. Cumulative
		MR	8	Malus x `Royal Raindrops`	Royal Raindrops Crabapple	3" Cal.	B&B	
IICK (MIN.) MISSOURI RAINBOW	SHRUBS	CODE	<u>QTY</u>	BOTANICAL NAME	COMMON NAME	<u>SIZE</u>	CONTAINER	REMARKS
ROCK $\pm 2$ " AGGREGATE HED GRADE	$\langle \cdot \rangle$	CDT	18	Chaenomeles x `Double Take` TM	Double Take Quince	18" Ht.	Pot	
. EDGING (PRO–STEEL AUGE, BLACK COLOR, PROVED EQUAL) –	zuru Zuru Zuru Zuru Zuru Zuru Zuru Zuru	JCG	43	Juniperus chinensis `Gold Lace`	Gold Lace Juniper	18" Ht.	Pot	
'-SHAPED CHAŃNEL EEP, SET EDGING AND WITH MULCH	$\overline{\mathbf{\cdot}}$	VXR	10	Viburnum x rhytidophylloides	Alleghany Viburnum	24" Ht.	Pot	
FY SOIL IN DM AND OF PIT	ORNAMENTAL GRASS	CODE	<u>QTY</u>	BOTANICAL NAME	COMMON NAME	<u>SIZE</u>	CONTAINER	REMARKS
AIL	ANNE SANNE	MSG	21	Miscanthus sinensis `Gracillimus`	Maiden Grass	1 gal	Pot	
		NSG	40	Panicum virgatum 'Northwind'	Northwind Switch Grass	1 gal		

## LANDSCAPE PLAN NOTES:

1. Existing underground (u/g), overhead (o.h.) utilities and drainage structures have been plotted from available information and therefore, their locations must be considered approximate only. It is the responsibility of the individual contractors to verify existence and location of all utilities before starting any work.

2. Prior to commencement of work, the contractor shall give 48 hours advance notice to all those companies/utilities which have facilities in the near vicinity of the construction to be performed.

3. Contractor shall verify all landscape material quantities and shall report any discrepancies immediately to the Landscape Architect. 4. No substitutions for variety or cultivar shall be accepted without first obtaining written approval from Landscape Architect.

5. All plant material shall be of excellent quality, free of disease and infestation, and true to type, variety, size specified, and form per the American Standard for Nursery Stock (ANSI Z60.1 current version), published by the American Nurserymen's Association. 6. All shrub beds in lawn areas shall be edged as shown in the planting details.

7. All planting areas, as well as a minimum width of 18" from building foundation, shall receive 3" minimum depth of 2" Kansas River Rock as detailed, unless otherwise noted. In landscape beds, rock mulch shall be a consistent 3" depth throughout. Rock mulch shall be placed on top of woven weed fabric (DeWitt Pro-5, or equal), which shall be secured in place with sod pins.

8. Trees planted in turf areas shall have a 3" ring of shredded hardwood mulch formed into a saucer in a minimum ring twice the diameter of the rootball from the trunk.

9. Contractor shall thoroughly water in each plant immediately following installation.

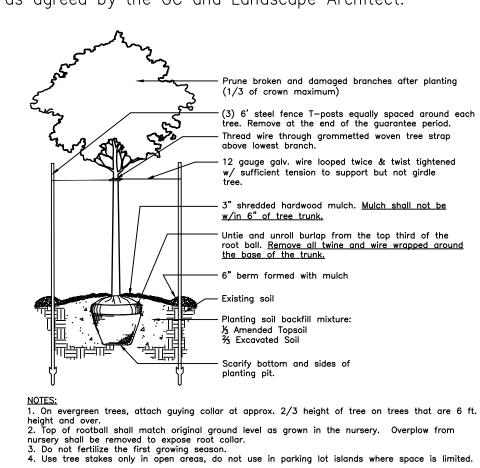
10. No plantings shall be placed closer than 4' from the back of curb to allow for vehicle bumper overhang.

11. Contractor shall be responsible for calculating all areas of sod and seed and the amounts of each needed for optimum coverage.

12. Contractor shall install sod in all turf areas. Sod shall be turf-type tall Fescue consisting of 90% fescue blend and 10% bluegrass in all areas disturbed during construction not otherwise designated as another material. Sod placed in areas greater than 4:1 slope shall fastened to the slope with sod staples.

13. Proposed trees shall not be placed over existing or proposed utility service lines. It is the contractor's responsibility to understand utility locations and have them marked during tree planting operations. If utility is damaged during planting, contractor is responsible for notifying the general contractor and owner of utility and paying for repair of the damaged utility.

14. A fully automated irrigation system will be supplied for this project by the Contractor. Design shall be provided and approved by the landscape architect prior to ordering materials or installing any aspect of the irrigation system. General contractor shall supply tap location and water pressure to irrigation designer. Tap for irrigation shall be after the main building tap and shall be thru a deduct meter configuration. Irrigation system shall consist of tap, blackflow, smart controller, heads, pipe, valves, wire, flow sensing, weather station, and any other feature to give the most efficient and comprehensive system as deemed necessary by the irrigation designer and landscape architect. System shall cover all areas designated as turf or landscape beds. Turf, trees and shrubs shall all be on separate zones so that they can be watered at different rates. Submit all irrigation plans to the landscape architect for approval. Controller shall be mounted inside a stainless steel, lockable cabinet on exterior of building nearest the mechanical room access door or other utility panels, as agreed by the GC and Landscape Architect.



3





## Chad D. Weinand, PLA, ASLA Landscape Architecture

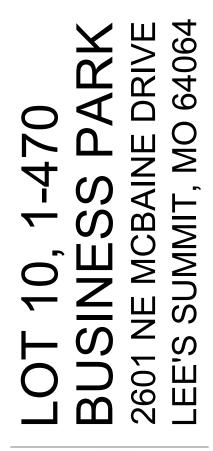
15173 W. 157th Terrace, Olathe, Kansas 66062 913.484.3738 - cweinand74@gmail.com Copyright 2021



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

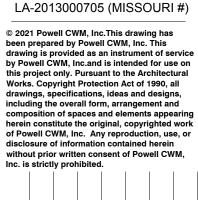
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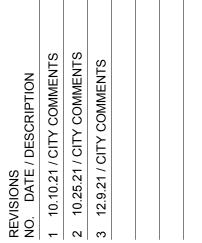
WARD DEVELOPMENT DAVID WARD 1120 NW EAGLE RIDGE BLVD. GRAIN VALLEY, MO 64029 (816) 229-8115





CHAD D. WEINAND, PLA

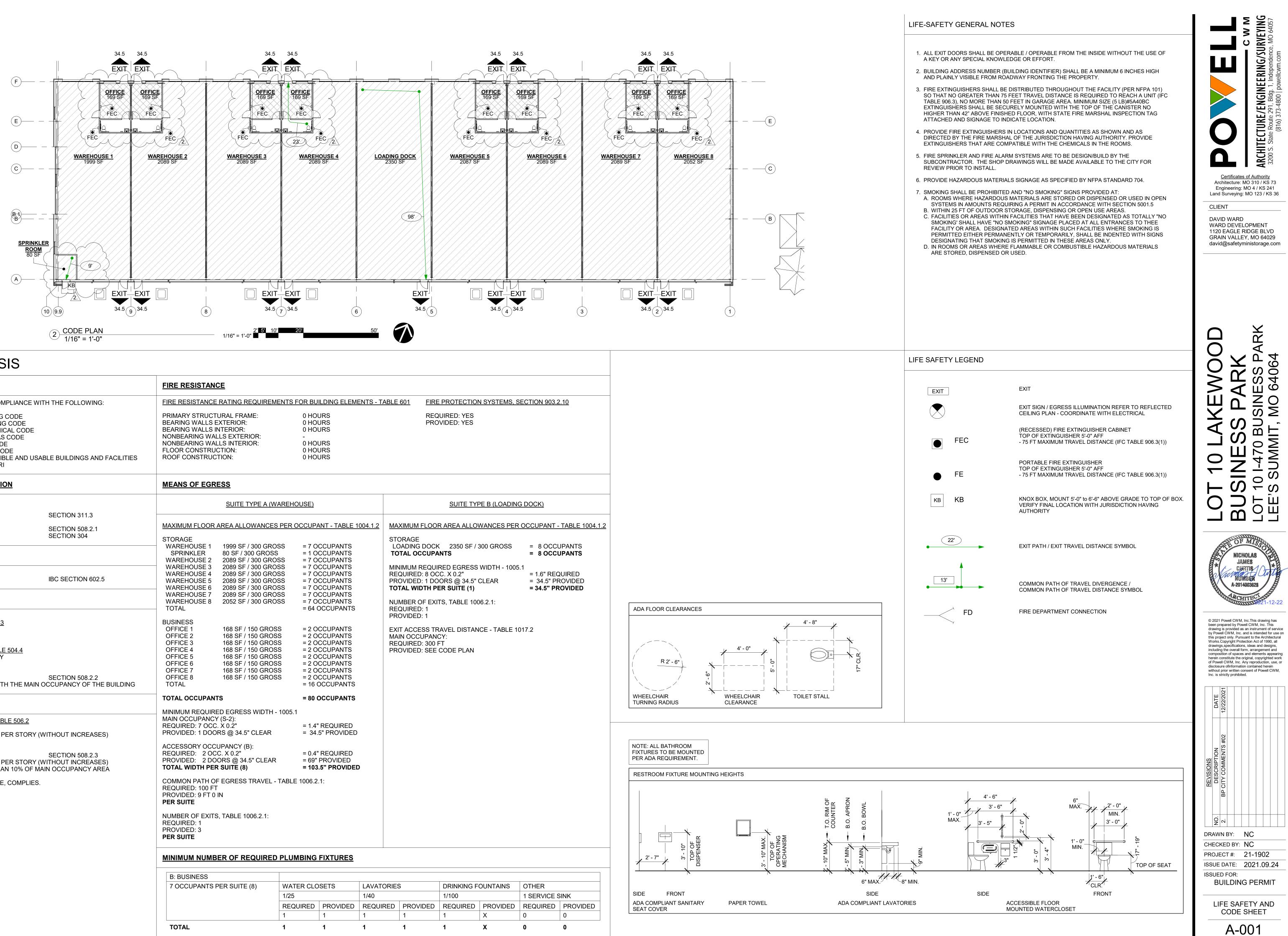




DRAWN BY:	CDW
CHECKED BY:	CDW
PROJECT #:	21-1902
ISSUE DATE:	8/23/2021
ISSUED FOR:	
CONST	RUCTION

LANDSCAPE PLAN

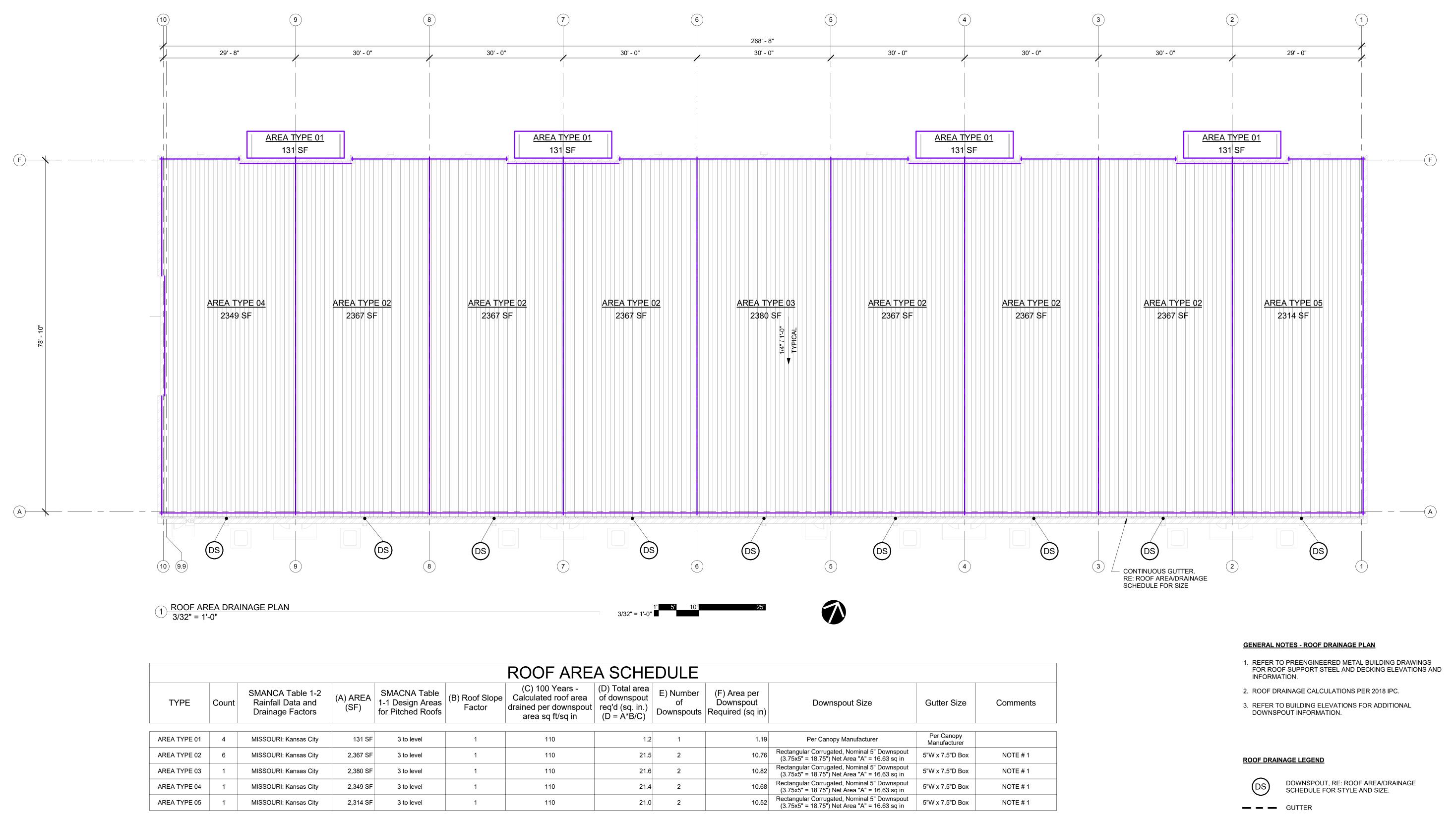
L-100



# CODE ANALYSIS

APPLICABLE CODES	FIRE RESISTANCE	
THE BUILDING SHALL BE IN COMPLIANCE WITH THE FOLLOWING:	FIRE RESISTANCE RATING REQUIREMENTS	FOR BUILDING ELEMEN
2018 INTERNATIONAL BUILDING CODE 2018 INTERNATIONAL PLUMBING CODE 2018 INTERNATIONAL MECHANICAL CODE 2018 INTERNATIONAL FUEL GAS CODE 2018 INTERNATIONAL FIRE CODE 2017 NATIONAL ELECTRICAL CODE ICC/ANSI A117.1-2009, ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES LEE'S SUMMIT, MISSOURI	PRIMARY STRUCTURAL FRAME: BEARING WALLS EXTERIOR: BEARING WALLS INTERIOR: NONBEARING WALLS EXTERIOR: NONBEARING WALLS INTERIOR: FLOOR CONSTRUCTION: ROOF CONSTRUCTION:	0 HOURS 0 HOURS 0 HOURS - 0 HOURS 0 HOURS 0 HOURS
OCCUPANCY CLASSIFICATION	MEANS OF EGRESS	
MAIN OCCUPANCY (S-2): S-2: STORAGE (LOW-HAZARD STORAGE)SECTION 311.3ACCESSORY OCCUPANCY (B): B: BUSINESSSECTION 508.2.1 SECTION 304TYPE OF CONSTRUCTION	SUITE TYPE A (WAREH) MAXIMUM FLOOR AREA ALLOWANCES PER ( STORAGE WAREHOUSE 1 1999 SF / 300 GROSS SPRINKLER 80 SF / 300 GROSS	
TYPE OF CONSTRUCTION       V-B       IBC SECTION 602.5	WAREHOUSE 2         2089 SF / 300 GROSS           WAREHOUSE 3         2089 SF / 300 GROSS           WAREHOUSE 4         2089 SF / 300 GROSS           WAREHOUSE 5         2089 SF / 300 GROSS           WAREHOUSE 5         2089 SF / 300 GROSS           WAREHOUSE 6         2089 SF / 300 GROSS	= 7 OCCUPANTS = 7 OCCUPANTS = 7 OCCUPANTS = 7 OCCUPANTS = 7 OCCUPANTS
ALLOWABLE HEIGHTS	WAREHOUSE 7 2089 SF / 300 GROSS WAREHOUSE 8 2052 SF / 300 GROSS TOTAL	= 7 OCCUPANTS = 7 OCCUPANTS = 64 OCCUPANTS
MAIN OCCUPANCY (S-2): <u>BUILDING HEIGHT - TABLE 504.3</u> ALLOWABLE HEIGHT = 60 FT ACTUAL HEIGHT = 22 FT 2 IN <u>BUILDING # OF STORIES - TABLE 504.4</u> ALLOWABLE HEIGHT = 3 STORY ACTUAL HEIGHT = 1 STORY ACCESSORY OCCUPANCY (B): SECTION 508.2.2 SHALL BE IN ACCORDANCE WITH THE MAIN OCCUPANCY OF THE BUILDING	BUSINESS           OFFICE 1         168 SF / 150 GROSS           OFFICE 2         168 SF / 150 GROSS           OFFICE 3         168 SF / 150 GROSS           OFFICE 4         168 SF / 150 GROSS           OFFICE 5         168 SF / 150 GROSS           OFFICE 6         168 SF / 150 GROSS           OFFICE 7         168 SF / 150 GROSS           OFFICE 8         168 SF / 150 GROSS	= 2 OCCUPANTS = 16 OCCUPANTS
ALLOWABLE AREAS	TOTAL OCCUPANTS	= 80 OCCUPANTS
ALLOWABLE FLOOR AREA - TABLE 506.2 MAIN OCCUPANCY (S-2): ALLOWABLE AREA = 54,000 SF PER STORY (WITHOUT INCREASES) ACTUAL AREA = 22,677 SF ACCESSORY OCCUPANCY (B): SECTION 508.2.3 ALLOWABLE AREA = 36,000 SF PER STORY (WITHOUT INCREASES)	<ul> <li>MINIMUM REQUIRED EGRESS WIDTH - 1005." MAIN OCCUPANCY (S-2): REQUIRED: 7 OCC. X 0.2" PROVIDED: 1 DOORS @ 34.5" CLEAR</li> <li>ACCESSORY OCCUPANCY (B): REQUIRED: 2 OCC. X 0.2" PROVIDED: 2 DOORS @ 34.5" CLEAR</li> <li>TOTAL WIDTH PER SUITE (8)</li> </ul>	1 = 1.4" REQUIRED = 34.5" PROVIDED = 0.4" REQUIRED = 69" PROVIDED = 103.5" PROVIDED
SHALL NOT OCCUPY MORE THAN 10% OF MAIN OCCUPANCY AREA ACTUAL AREA = 1,344 SF 22,677 x .10 = 2,677 THEREFORE, COMPLIES.	COMMON PATH OF EGRESS TRAVEL - TABLE REQUIRED: 100 FT PROVIDED: 9 FT 0 IN <b>PER SUITE</b> NUMBER OF EXITS, TABLE 1006.2.1: REQUIRED: 1 PROVIDED: 3 <b>PER SUITE</b>	
	MINIMUM NUMBER OF REQUIRED PLUI	MBING FIXTURES
	B: BUSINESS	
	1/25	
		QUIRED PROVIDED F
		<u> </u>

TOTAL



TYPECountSMANCA Table 1-2 Rainfall Data and Drainage Factors(A) AREA (SF)SMACNA Table 1-1 Design Areas for Pitched Roofs(B) Roof Slope Factor(C) 100 Years - Calculated roof area drained per downspout area sq ff/sq in(D) Total area of downspout req'd (sq. in.)E) Number of Downspout Required (sq in)(F) Area per Downspout Required (sq in)	ize Gutter Size	Comments
area sq ft/sq in $(D = A*B/C)$ Downspouls (Kequired (sq in)		
AREA TYPE 01         4         MISSOURI: Kansas City         131 SF         3 to level         1         110         1.2         1         1.19         Per Canopy Manufa	cturer Per Canopy Manufacturer	
AREA TYPE 02         6         MISSOURI: Kansas City         2,367 SF         3 to level         1         110         21.5         2         10.76         Rectangular Corrugated, Nomin (3.75x5" = 18.75") Net Area	nal 5" Downspout A" = 16.63 sq in 5"W x 7.5"D Box	NOTE # 1
AREA TYPE 03         1         MISSOURI: Kansas City         2,380 SF         3 to level         1         110         21.6         2         Rectangular Corrugated, Nomin (3.75x5" = 18.75") Net Area "//		NOTE # 1
AREA TYPE 04         1         MISSOURI: Kansas City         2,349 SF         3 to level         1         110         21.4         2         Rectangular Corrugated, Nomin (3.75x5" = 18.75") Net Area "//		NOTE # 1
AREA TYPE 05         1         MISSOURI: Kansas City         2,314 SF         3 to level         1         110         21.0         2         Rectangular Corrugated, Nomin (3.75x5" = 18.75") Net Area "//		NOTE # 1

### NOTES - ROOF AREA SCHEDULE <u>/</u>1

1. BOX GUTTER PROFILE INDICATED BUT ALTERNATE PROFILE MAY BE PROVIDED BY PEMB MFR SO LONG AS THE GUTTER PROFILE: A. PROVIDES EQUAL OR GREATER THAN REQUIRED FLOW

RATES B. IS AT LEAST AS WIDE AS DOWNSPOUT PROFILE DEPTH C. IS COORDINATED WITH PARAPET CAVITY DEPTH, SEE

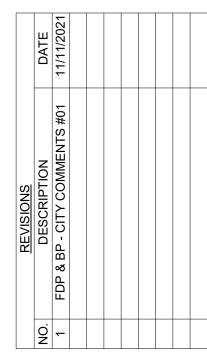
DETAIL: 8 / **A-400** 

1/4" / 1'-0"

SURFACE SLOPE ARROW

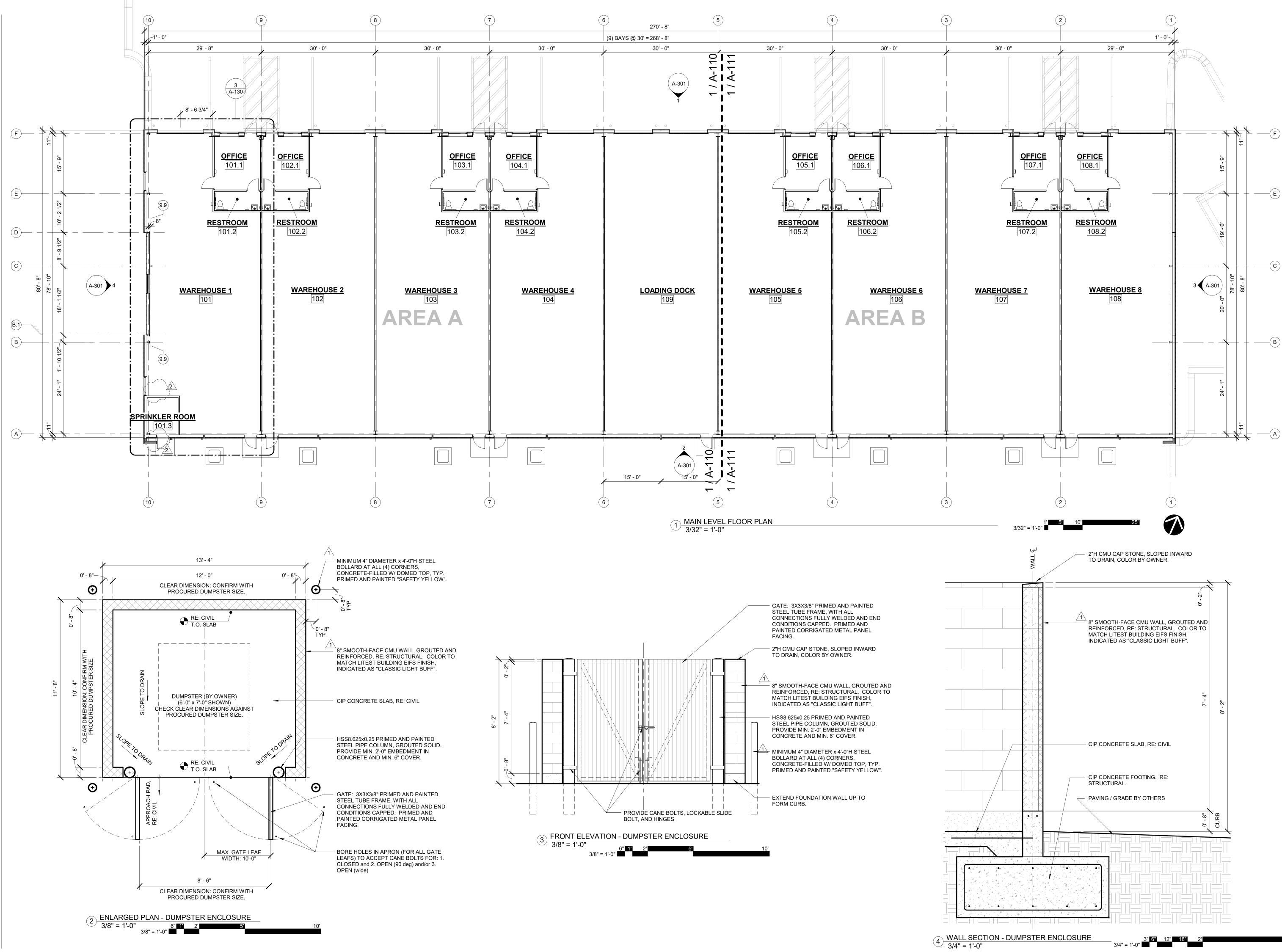
AREA BOUNDARY

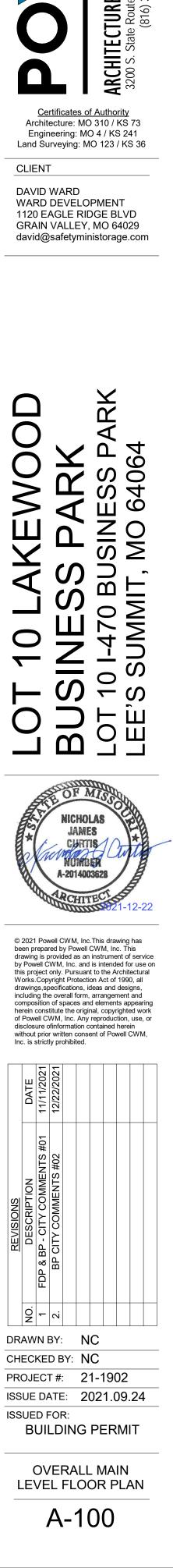




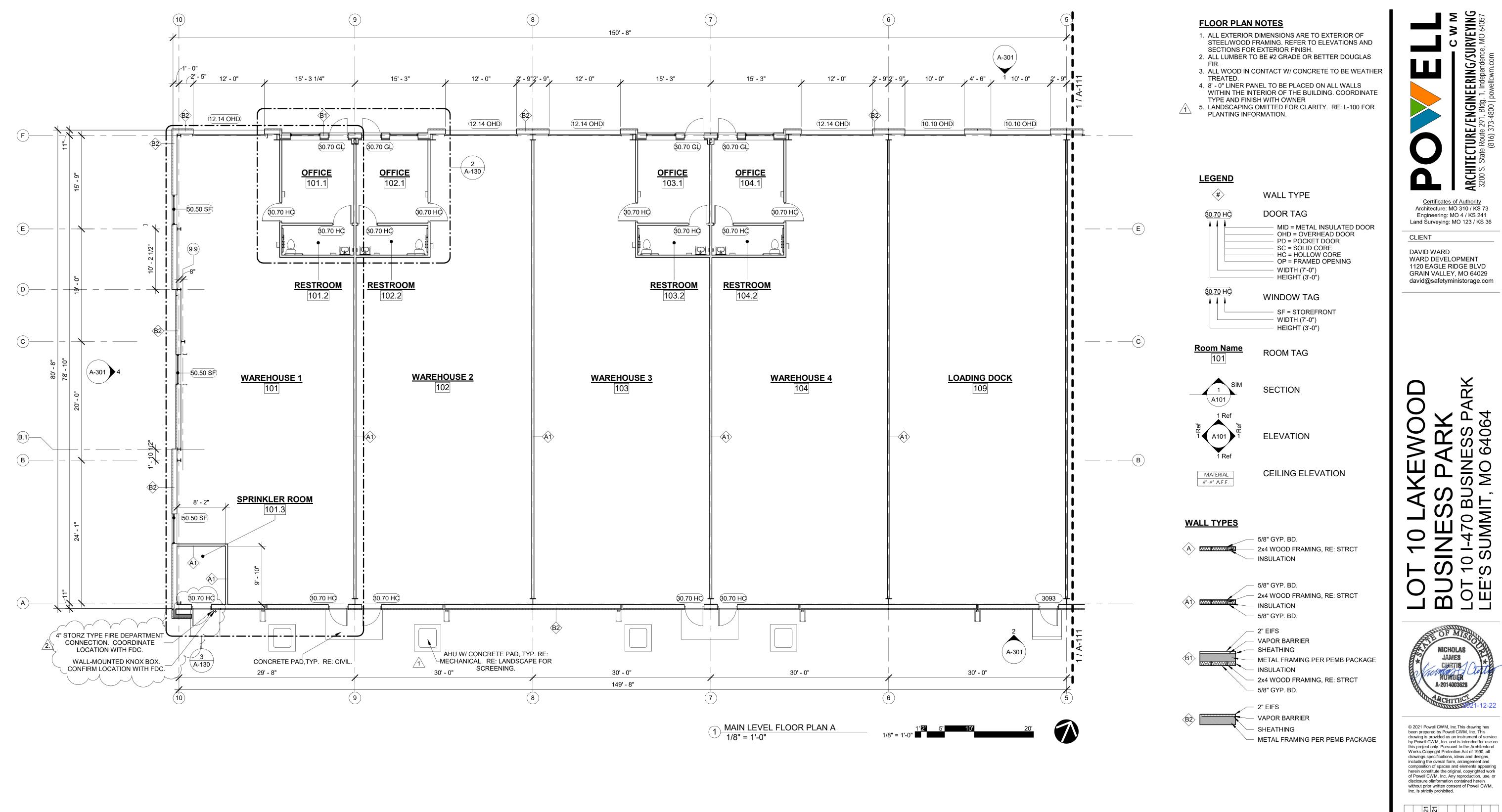
DRAWN BY: NC CHECKED BY: NC PROJECT #: 21-1902 ISSUE DATE: 2021.09.24 ISSUED FOR: BUILDING PERMIT

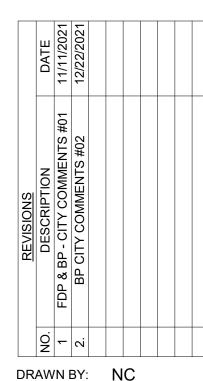
> ROOF DRAINAGE PLAN A-002





ARCHITECTURE/ENGINEERING/SURVEYING 3200 S. State Route 291, Bldg. 1, Independence, MO 64057 ≥ C



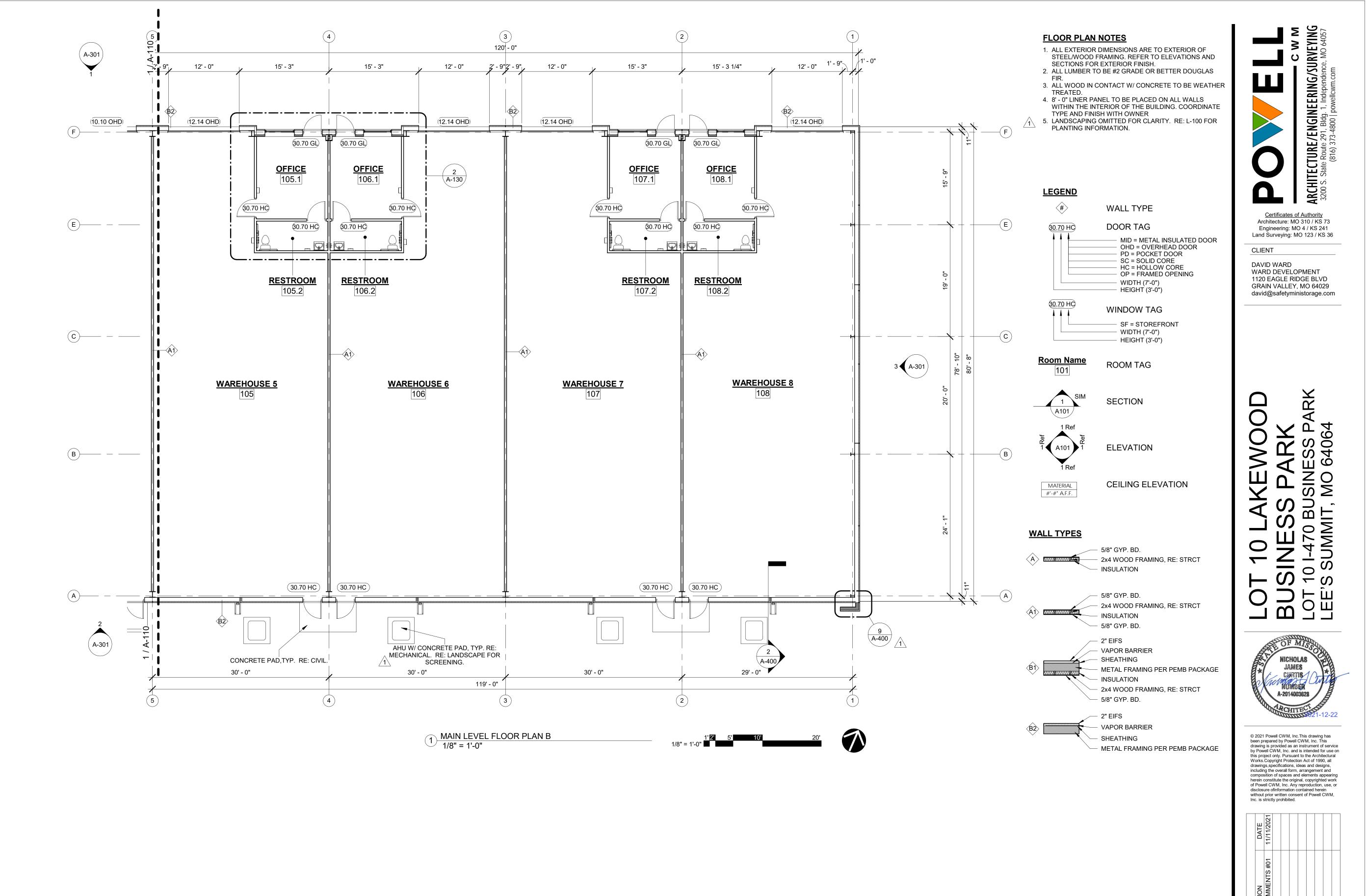


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BUILDING PERMIT

MAIN LEVEL FLOOR PLAN - AREA A

A-110



BUILDING PERMIT MAIN LEVEL FLOOR

PLAN - AREA B A-111

REVISIONS DESCRIPT

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ISSUED FOR:

DRAWN BY: NC CHECKED BY: NC

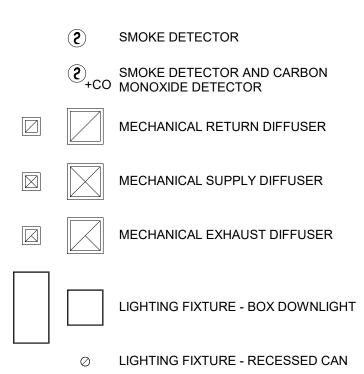
PROJECT #: 21-1902

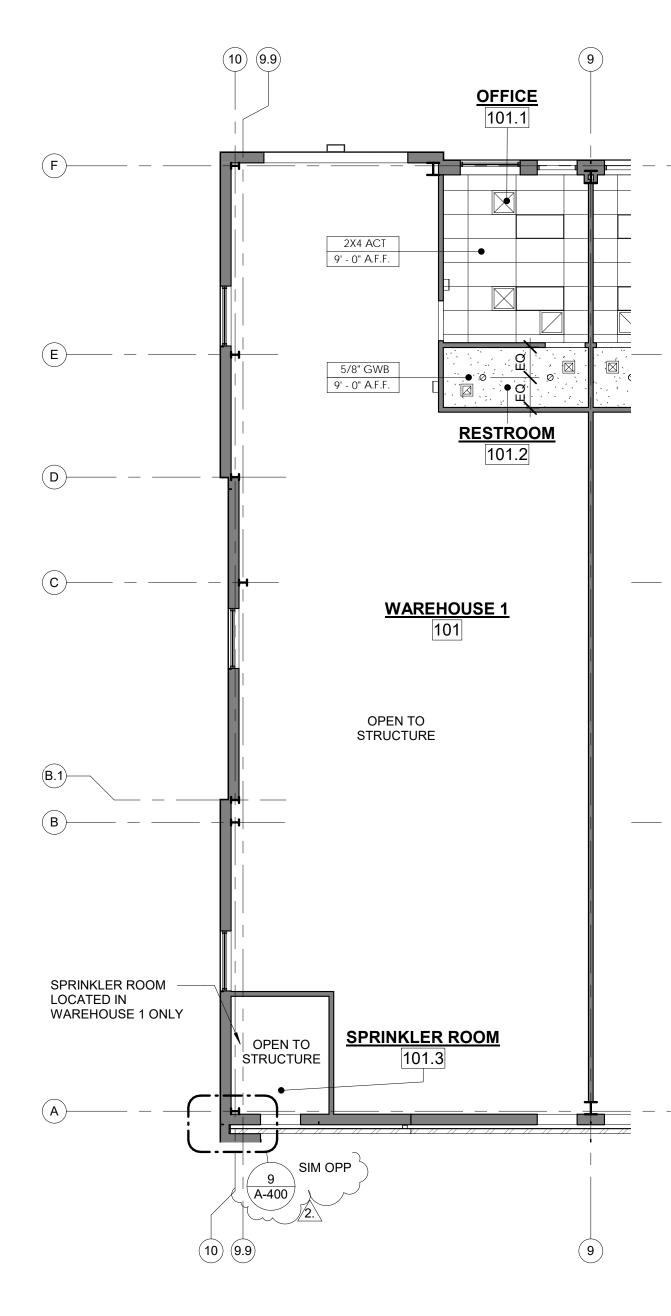
ISSUE DATE: 2021.09.24

## **GENERAL NOTES - CEILING PLAN**

- 1. REFER TO MEP DRAWINGS FOR ALL ADDITIONAL CEILING MOUNTED DEVICES NOT SHOWN ON THIS DRAWING INCLUDING, BUT NOT LIMITED TO, LIGHTING, MECHANICAL REGISTERS, SMOKE DETECTORS, MOTION DETECTORS, EXIT SIGNAGE, HEAT DETECTORS, CAMERAS, COMMUNICATION EQUIPMENT,
- FIRE SPRINKLER HEADS, ETC. 2. ALL EXPOSED STRUCTURAL STEEL SHALL BE PAINTED TO MATCH THE ADJACENT WALL COLOR. THIS INCLUDES, BUT IS NOT LIMITED TO STEEL BEAMS, LADDERS, GUARD RAILS, MISC. BRACING, ETC. SEE PEMB PACKAGE.
- 3. CEILING R-VALUES SHALL MAINTAIN R-38. EXTERIOR WALL INSULATION SHALL MAINTAIN R-13 OR BETTER. WALL R-VALUES SHALL BE OF CONSTRUCTION TO EQUAL R-19 TOTAL.

## LEGEND - CEILING PLAN

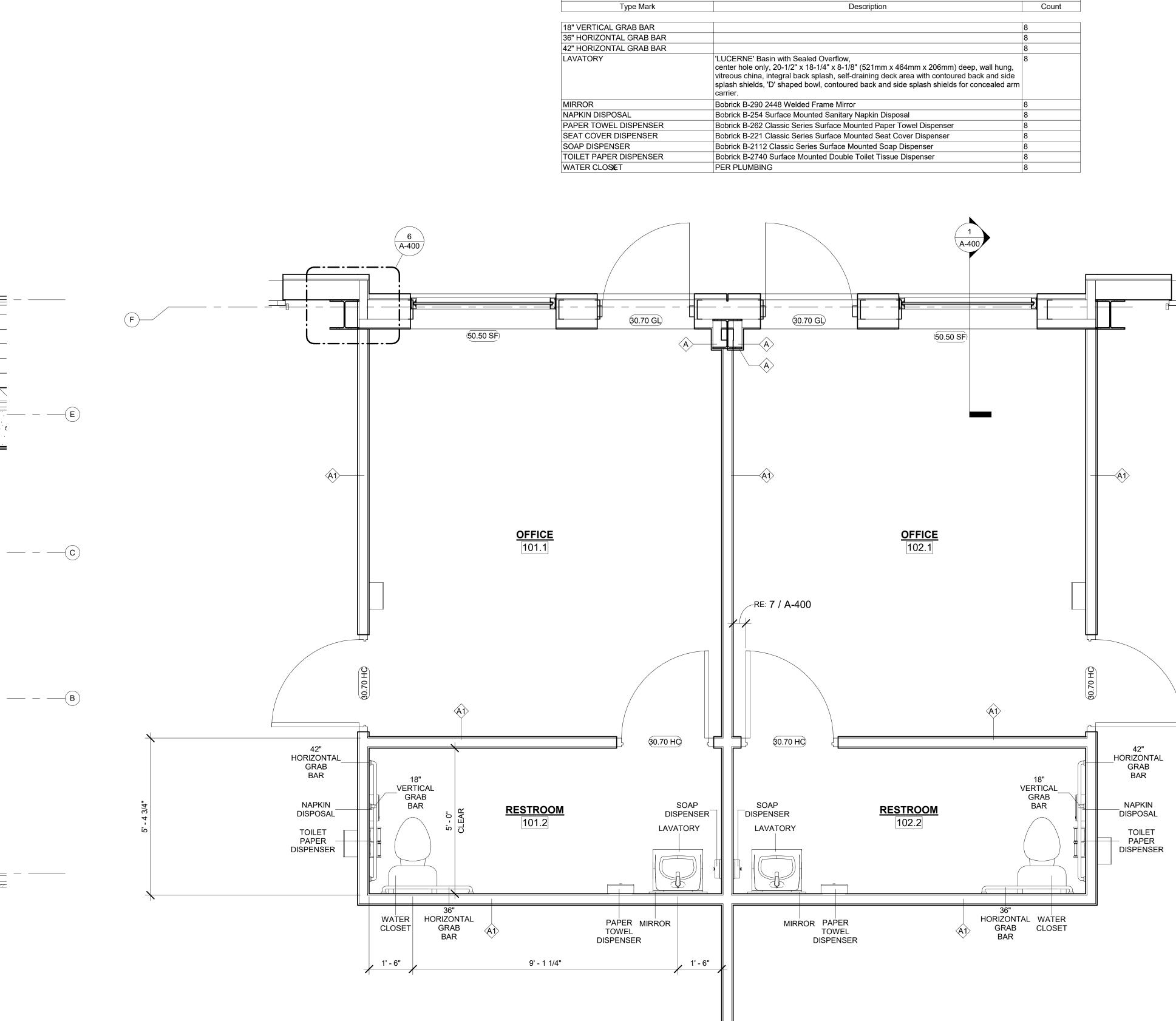




3 ENTRY LEVEL RCP 1/8" = 1'-0"

Type Mark	
18" VERTICAL GRAB BAR	
36" HORIZONTAL GRAB BAR	
42" HORIZONTAL GRAB BAR	
LAVATORY	'LUCERI center ho vitreous splash sl carrier.
MIRROR	Bobrick I
NAPKIN DISPOSAL	Bobrick I
PAPER TOWEL DISPENSER	Bobrick I
SEAT COVER DISPENSER	Bobrick I
SOAP DISPENSER	Bobrick I
TOILET PAPER DISPENSER	Bobrick I
WATER CLOSET	PER PLI

RESTROOM ACCESSORY SCHEDULE

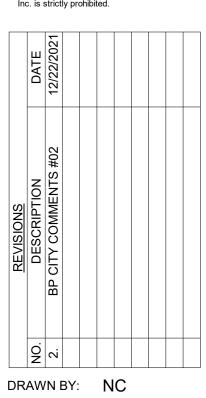


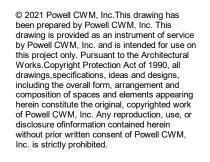
1/2" = 1'-0"





CHECKED BY:	NC
PROJECT #:	21-1902
ISSUE DATE:	2021.09.24
ISSUED FOR:	
BUILDIN	G PERMIT







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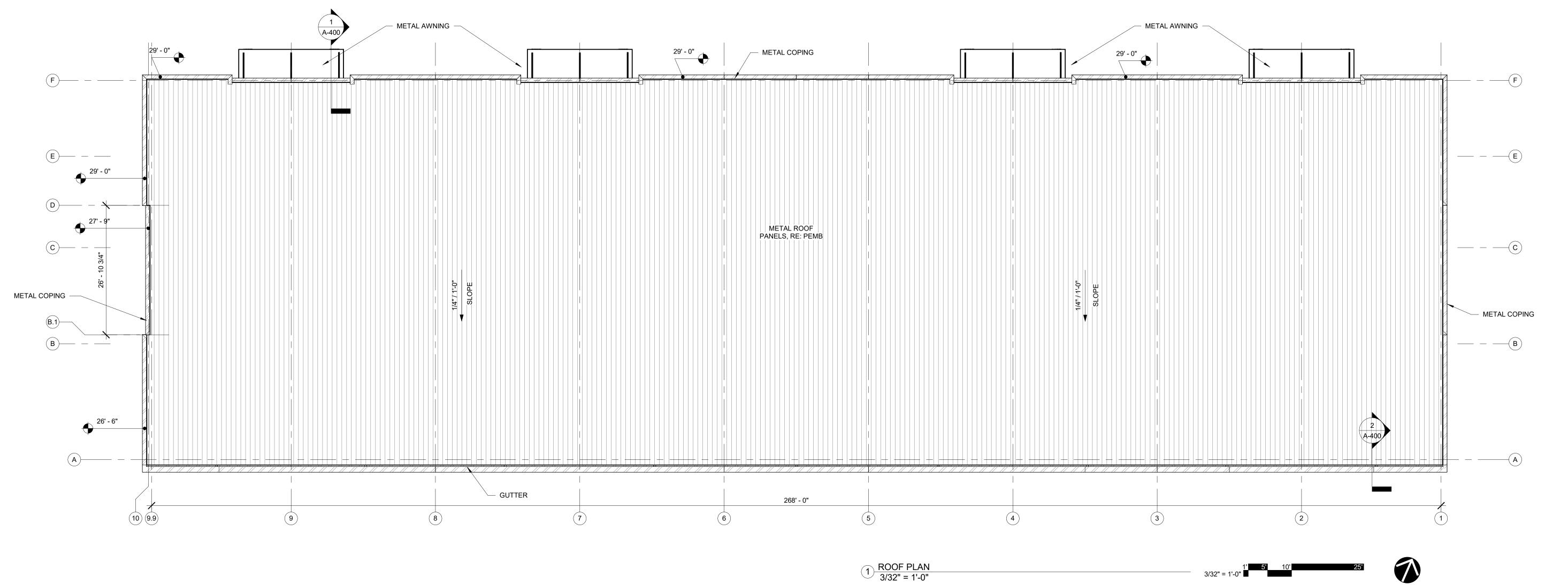
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CLIENT

DAVID WARD

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



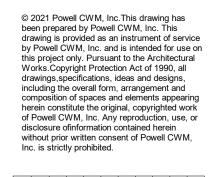
1 ROOF PLAN 3/32" = 1'-0"

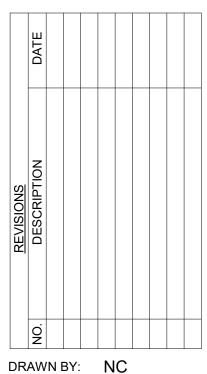
ROOF GENERAL NOTES

3/32" = 1'-0"

1. DIMENSIONS ARE FROM PEMB PACKAGE AND ARE SHOWN FOR REFERENCE ONLY. PEMB DRAWINGS WILL OVER-RIDE INFO SHOWN IN ARCH PLANS.

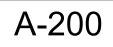


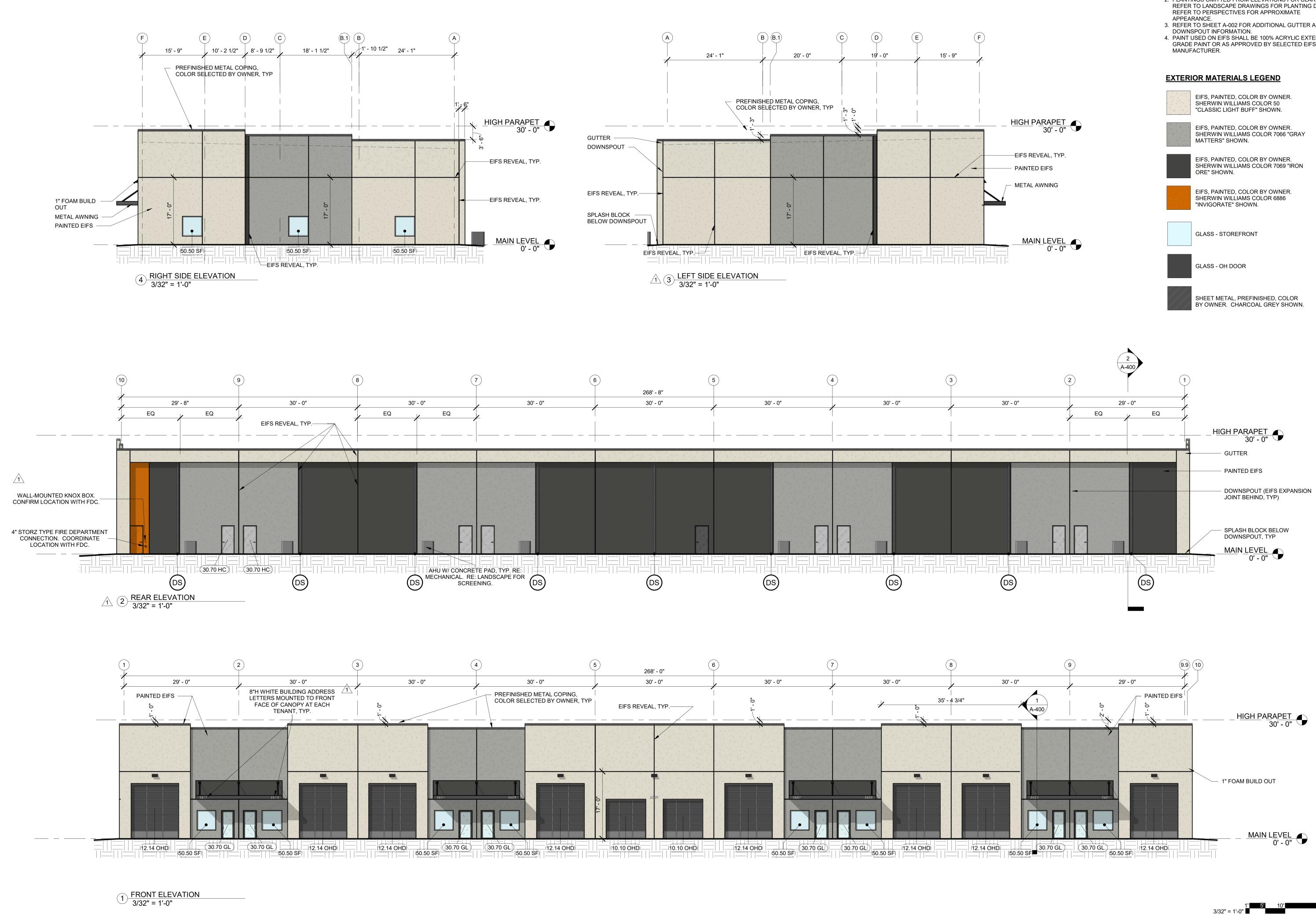




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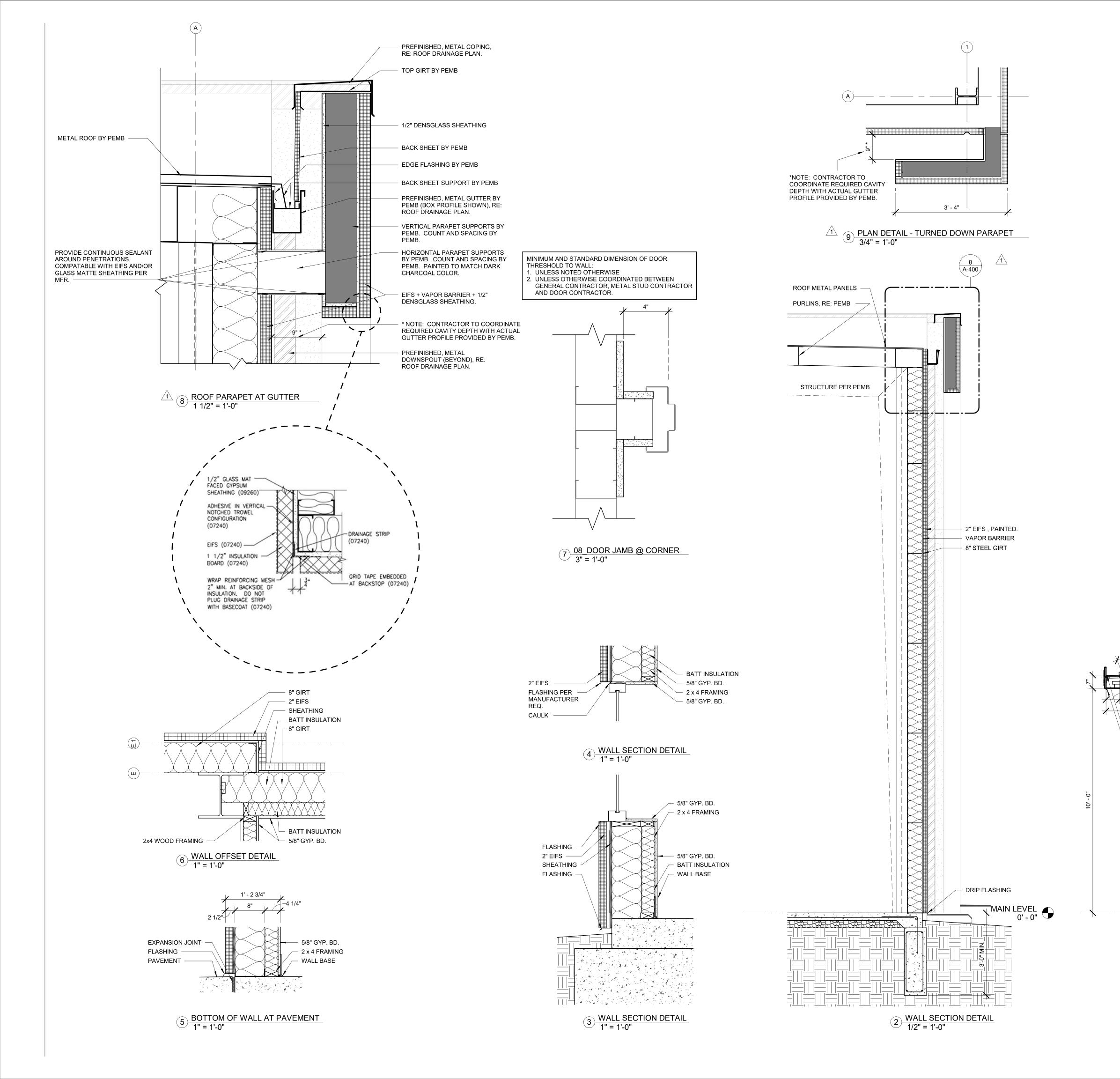
ROOF PLAN

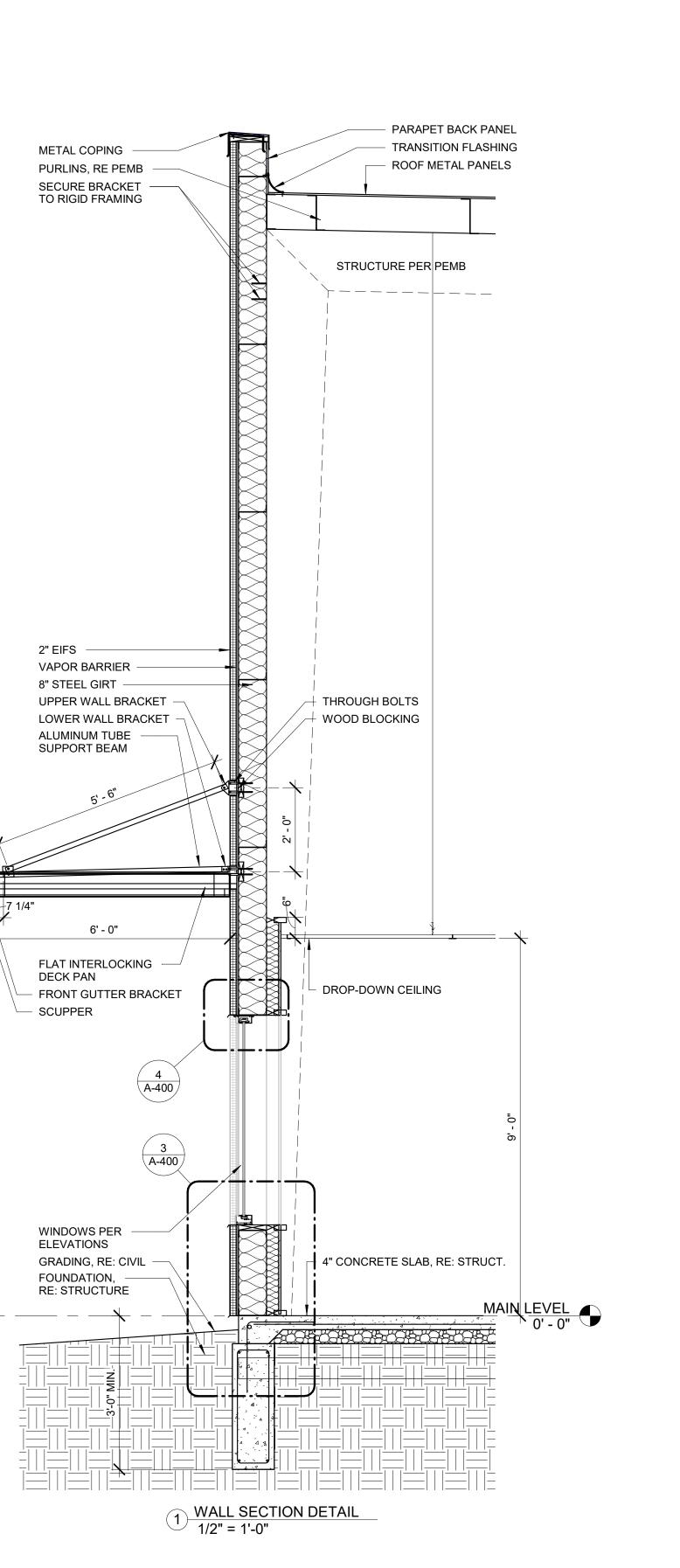


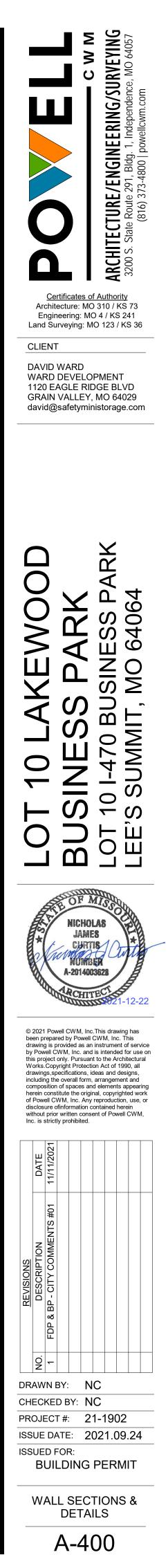














<u>SOUTHWEST</u>

20



<u>NORTHEAST DUSK</u>



<u>SOUTHEAST</u>

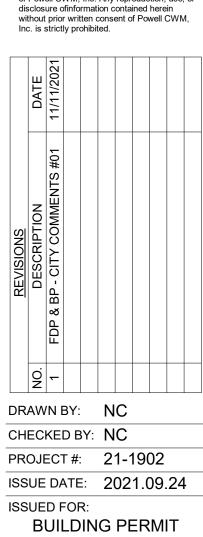




<u>NORTHWEST</u>

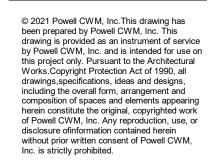


<u>NORTHEAST</u>



PERSPECTIVES

⚠ **A-401** 





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ARCHITECTURE/ENGINEERING/SURVEYING 3200 S. State Route 291, Bldg. 1, Independence, MO 64057 <u>Certificates of Authority</u> 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

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Abbreviation	Abbreviation Name
+/- ADDNL	PLUS OR MINUS ADDITIONAL
ADJ	ADJACENT
AESS	ARCHITECTURALLY EXPOSED STRUCTURAL STEEL
AFF ALT	ABOVE FINISHED FLOOR ALTERNATE
AR	ANCHOR ROD
ARCH B/	ARCHITECT OR ARCHITECTURAL BOTTOM OF
B/W	BETWEEN
BLDG BLKG	BUILDING BLOCKING
BM	BEAM
BOT BRG	BOTTOM BEARING
BWP	BRACED WALL PANEL
CFS CHKD	COLD FORMED STEEL CHECKED
CIP	CAST IN PLACE
CJ CJP	CONTROL JOINT COMPLETE JOINT PENETRATION
CL	CENTERLINE
CLR COL	CLEAR COLUMN
CONC	CONCRETE
CONN CONT	CONNECTION CONTINUOUS
CTR	
db DBA	DIA OF REINF BAR, DIA OF BOLT DEFORMED BAR ANCHOR
DIAG DIR	DIAGONAL DIRECTION
DWL	DOWEL
EA EE	EACH EXTENDED END
EJ ELEV	EXPANSION JOINT
ELEV ENGR	ELEVATION ENGINEER
EOD EOS	EDGE OF DECK EDGE OF SLAB
EQ	EQUAL
EW EXIST	EACH WAY EXISTING
EXT	EXTERIOR
FDN FLG	FOUNDATION FLANGE
FLG	FLOOR
FS FTG	FAR SIDE FOOTING
FV	FIELD VERIFY
GA GALV	GAUGE GALVANIZED
GB	GRADE BEAM
GC HORIZ	GENERAL CONTRACTOR HORIZONTAL
HSA	HEADED STUD ANCHOR
HSS IF	HOLLOW STRUCTURAL SECTION
INT	INTERIOR
JST K	JOIST KIPS (1000 LBS)
LCE	COMPRESSION EMBEDMENT LENGTH
LCS LLH	COMPRESSION LAP SPLICE LENGTH LONG LEG HORIZONTAL
LLV LTE	LONG LEG VERTICAL TENSION EMBEDMENT LENGTH
LTS	TENSION LAP SLICE LENGTH
LW	
MFCR MTL	MANUFACTURER METAL
NIC	
NS NTS	NEAR SIDE NOT TO SCALE
OC OF	ON CENTER
OF OPP	OUTSIDE FACE OPPOSITE
OVS P/C	OVERSIZED
P/C PAF	PRECAST POWDER ACTUATED FASTENER
PAR PEMB	PARALLEL PRE-ENGINEERED METAL BUILDING
PEN	PENETRATION
PERP PL	PERPENDICULAR PLATE
PLF	POUNDS PER LINEAR FOOT
PREFAB PRELIM	PREFABRICATED PRELIMINARY
PSF	POUNDS PER SQUARE FOOT
PSI RC	POUNDS PER SQUARE INCH REINFORCED CONCRETE
RE:	REFER TO
REINF REQD	REINFORCING REQUIRED
RF	RIGID FRAME
SC SDS	SLIP CRITICAL SELF DRILLING SCREW
SIM	SIMILAR
SLV SOG	SHORT LEG VERTICAL SLAB ON GRADE
SQ	SQUARE
SS STD	STAINLESS STEEL STANDARD
STIR	STIRRUPS
STL SW	STEEL SHEAR WALL
SYM	SYMMETRIC
T&B T/	TOP AND BOTTOM TOP OF
TRANS	TRANSVERSE
TYP UNO	TYPICAL UNLESS NOTED OTHERWISE
VERT	VERTICAL
W/ W/O	WITH WITHOUT
WF	WIDE FLANGE
VVF	

### STRUCTURAL DESIGN CRITERIA (2018 IBC AND ASCE 7-16):

- 1. BUILDING OCCUPANCY RISK CATEGORY I
- 2. LIVE LOADS [UNIFORM (PSF) / POINT LOADS (KIPS)]: -- ROOF:..... ...20 PSF / 300#

## 3. ROOF SNOW LOAD:

...20 PSF ..16.9 PSF W/ DRIFT -- SNOW EXPOSURE FACTOR (Ce):.....1.0, EXPOSURE C -- SNOW LOAD IMPORTANCE FACTOR (Is):.....1.0

4. WIND DESIGN DATA:

-- THERMAL FACTOR (Ct):...

-- GROUND SNOW LOAD (Pg):.

-- FLAT ROOF SNOW LOAD (Pf):

- -- BASIC WIND SPEED (3 SEC GUST):. ..115 MPH -- WIND EXPOSURE ...
- -- DIRECTIONALITY FACTOR (Kd) . ..0.85 -- INTERNAL PRESSURE COEFF:. ...0.18

STRUCTURAL GENERAL NOTES:

1. DESIGN AND CONSTRUCTION SHALL CONFORM TO THE "INTERNATIONAL BUILDING CODE, 2018 EDITION". REFER TO THE SPECIAL STRUCTURAL INSPECTION NOTES FOR ADDITIONAL REQUIREMENTS.

2. CONTRACTOR TO VERIFY ALL DIMENSIONS, ELEVATIONS AND EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE ARCHITECT IMMEDIATELY.

3. IF DISCREPANCIES EXIST BETWEEN STRUCTURAL PLANS, ARCHITECTURAL PLANS, OTHER PLANS, OR SPECIFICATIONS, THE CONTRACTOR OR SUBCONTRACTOR SHALL PROVIDE A WRITTEN REQUEST FOR CLARIFICATION FROM THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK

4. THE STRUCTURE AND FOUNDATIONS ARE NOT DESIGNED FOR FUTURE EXPANSION.

5. FOR DEFERRED SUBMITTALS (EXAMPLES: PRE-ENGINEERED CANOPIES, WOOD TRUSSES, PRECAST CONCRETE ELEMENTS, COLD FORMED FRAMING), SHOP DRAWINGS AND CALCULATIONS SEALED BY A STRUCTURAL ENGINEER LICENSED TO PRACTICE IN THE JURISDICTION OF THE PROJECT SHALL BE FURNISHED TO THE ENGINEER OF RECORD FOR REIVEW.

6. TYPICAL DETAILS ARE SHOWN ON SHEETS DESIGNATED "S0XX". THE INCLUDED TYPICAL DETAILS MAY OR MAY NOT BE CUT / REFERENCED ON PLANS OR SECTIONS. BUT ARE TO BE USED AS APPLICABLE

### EARTHWORK AND FOUNDATIONS:

1. ALLOWABLE BEARING PRESSURE = 2500 PSF (MUST BE CONFIRMED BY SPECIAL INSPECTION)

2. ALL FOOTINGS SHALL BEAR A MINIMUM DEPTH BELOW GRADE OF 3'-0" ON FIRM NATIVE MATERIALS, COMPACTED OR ENGINEERED FILL CAPABLE OF SUPPORTING AN ALLOWABLE BEARING PRESSURE OF 2,500 PSF. DEEPEN FOOTINGS, AND REMOVE AND REPLACE SOFT SOILS WITH A 3'-0" GRAVEL TRENCH TO PROVIDE THIS MINIMUM DEPTH AND SUITABLE BEARING.

3. UNDERCUT THE PAD TO A DEPTH OF 18-INCHES BELOW BOTTOM OF FLOOR SLAB ELEVATION AND REPLACE WITH LOW-VOLUME-CHANGE MATERIALS PER THE GEOTECHNICAL REPORT.

4. FILL PLACEMENT, COMPACTION, AND SOIL BEARING TESTS SHALL BE PERFORMED BY A GEOTECHNICAL ENGINEER PRIOR TO INSTALLING FOOTINGS TO ENSURE DESIGN ALLOWABLE BEARING VALUES AND SLAB SUBGRADE REQUIREMENTS ARE SATISFIED. IF ACTUAL SITE CONDITIONS DO NOT SATISFY THESE REQUIREMENTS, COORDINATE ADJUSTMENTS WITH ARCHITECT/ENGINEER/ GEOTECHNICAL ENGINEER

5. SURFACE WATER SHALL NOT BE ALLOWED TO STAND ADJACENT TO OR DRAIN TOWARDS THE FOUNDATION AND SLAB SUBGRADES UNDER ANY CIRCUMSTANCES. PAVEMENTS OR GRADED SOILS AT THE PERIMETER OF THE BUILDING, EXCEPT AS REQUIRED AT EXITS OR AS NOTED, SHALL BE SLOPED AWAY AT 5% OR 6" MIN FOR THE FIRST TEN FEET AND AS REQUIRED TO PROVIDE POSITIVE DRAINAGE.

6. FOOTINGS MAY BE POURED TO NEAT LINES OF EXCAVATIONS PROVIDING VERTICAL LINES OF EXCAVATIONS CAN BE MAINTAINED DURING CONCRETE PLACEMENT.

7. FOUNDATION WALL BACKFILL SHALL NOT BE UNBALANCED BY MORE THAN TWO FEET ON EITHER SIDE AT ANY TIME. BASEMENT WALL AND RESTRAINED RETAINING WALL BACKFILL SHALL NOT BE PLACED, UNLESS THE WALL IS ADEQUATELY BRACED. RETAINING WALL AND BASEMENT WALL BACKFILL SHALL BE FREE DRAINING GRANULAR BACKFILL ACCEPTABLE TO THE GEOTECHNICAL ENGINEER.

### CONCRETE REINFORCING STEEL:

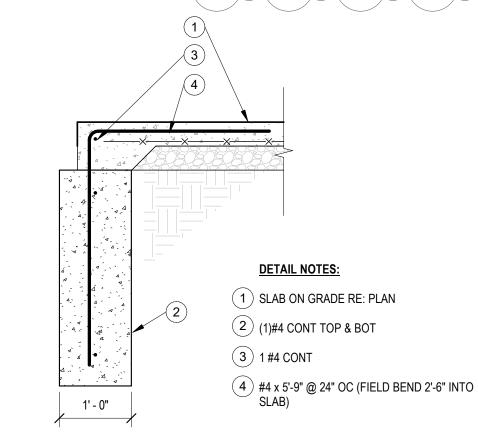
1. SUBMIT SHOP DRAWINGS FOR REBAR. ALL REINFORCING BARS SHALL MEET ASTM A615 GRADE 60.

2. ALL MESH SHALL MEET ASTM A-185: LAP A MINIMUM OF 8" OR ONE FULL MESH, WHICHEVER IS GREATER.

3. CONCRETE PROTECTION FOR REINFORCEMENT SHALL BE <sup>3</sup>/<sub>4</sub>" CLEAR FOR SLABS, 2" CLEAR FOR FORMED SURFACES AND 3" CLEAR FOR FOOTINGS (TYPICAL UNLESS NOTED).

4. CONTRACTOR SHALL VERIFY THAT ALL REINFORCEMENT, SLAB DOWELS, INSERTS, SLEEVES AND EMBEDDED ITEMS ARE PROPERLY LOCATED AND RIGIDLY SECURED PRIOR TO CONCRETE PLACEMENT, "WET STICKING" DOWELS WILL NOT BE ALLOWED.

5. REINFORCEMENT SHALL BE DETAILED IN ACCORDANCE WITH THE LATEST A.C.I. DETAILING MANUAL BY A QUALIFIED AND EXPERIENCED FIRM AND PERSON. PLACE AND SUPPORT REINFORCEMENT WITH ACCESSORIES: MAXIMUM SPACING - 48" CENTERS (PLASTIC-TIPPED LEGS FOR EXPOSED SURFACES). USE 3" SBP SUPPORTS AT ALL FOOTINGS.





### CAST IN PLACE CONCRETE:

REQUIRED MINIMUM CONCRETE COMPRESSIVE STRENGTHS AT 28 DAYS:

a. FOOTING AND GRADEBEAM CONCRETE ... b. SLAB ON GRADE .

2. ALL CONCRETE MIX DESIGNS SHALL HAVE WATER TO CEMENT RATIOS LESS THAN 0.52, WITH A MAXIMUM 60/40 FINE TO COARSE AGGREGATE RATIO. CONCRETE MIX DESIGNS THAT DO NOT CONFORM TO THE ABOVE STANDARD AND/OR CONTAIN WATER REDUCING ADMIXTURES SHALL BE SUBMITTED WITH APPROPRIATE TEST DATA PER A.C.I.. ALL CONCRETE SHALL BE IN CONFORMANCE WITH THE LATEST A.C.I. 301 STANDARDS PUBLICATION.

3. EXTERIOR CONCRETE (FLOOR SLABS, WALLS, ETC) SHALL HAVE 6% (PLUS/MINUS 1%) ENTRAINED AIR.

4. NO ALUMINUM SHALL BE EMBEDDED IN ANY CONCRETE.

5. NO CALCIUM CHLORIDE SHALL BE USED IN CONCRETE

6. THE DESIGN, CONSTRUCTION, AND SAFETY OF ALL FORMWORK IS THE

RESPONSIBILITY OF THE CONTRACTOR 7. ALL CONCRETE IS REINFORCED UNLESS SPECIFICALLY NOTED AS UNREINFORCED. REINFORCE ALL CONCRETE NOT OTHERWISE SHOWN WITH THE SAME REINFORCING AS SIMILAR SECTIONS OR AREAS.

9. WHERE FRESH CONCRETE IS DEPOSITED AGAINST HARDENED CONCRETE (GREATER THAN 8 HRS OLD). CLEAN EXISTING SURFACE OF LAITANCE AND FOREIGN MATERIAL AND DAMPEN THE EXISTING SURFACE. IF REQUIRED, ROUGHEN EXISTING CONCRETE TO 1/4" AMPLITUDE.

10. SLABS ON GRADE SHALL BE 4" THICK MINIMUM ON 4" OF GRANULAR FILL REINFORCED WITH 6x6-W2.1xW2.1. PLACE REINF IN UPPER 1/3 OF SLAB THICKNESS. AT INTERIOR SLABS, A 10 MIL VAPOR BARRIER SHALL BE PLACED BETWEEN THE CONCRETE AND GRANULAR BASE AND CARE SHOULD BE TAKEN DURING CURING TO PREVENT SLAB CURLING. THIS NOTE SHALL BE TYPICAL UNLESS NOTED OTHERWISE

11. SAW CUT JOINTS OR KEYED CONSTRUCTION JOINTS IN SLABS ON GRADE SHALL BE SPACED TO DIVIDE THE SLAB INTO PANELS NOT TO EXCEED 225 SQUARE FEET. THE LONGER DIMENSION OF EACH PANEL SHALL NOT EXCEED THE SHORTER DIMENSIONS BY MORE THAN 40%. JOINTS SHALL BE LOCATED AT COLUMN CENTERLINES WHERE POSSIBLE. SPACING BETWEEN JOINTS SHALL NOT EXCEED 15 FEET. CONTRACTOR SHALL SUBMIT JOINT LAYOUT TO ARCHITECT FOR APPROVAL. REFER TO TYP DETAIL RC-001A.

12. REINFORCEMENT SHALL BE CONTINUOUS AND LAPPED 53 BAR DIAMETERS (2' -6" MIN.) EXCEPT AS NOTED AND PROVIDE CORNER BARS OF SAME SIZE AND SPACING.

13. CONTRACTOR SHALL COORDINATE ALL CURING COMPOUNDS WITH FLOOR FINISH REQUIREMENTS TO ENSURE COMPATIBILITY.

14. FOUNDATION CONTRACTOR TO ENSURE PROPER ANCHOR ROD PROJECTION AND THAT ANCHOR RODS ARE HELD SECURELY IN POSITION PRIOR TO CONCRETE PLACEMENT. INSTALL ANCHOR RODS TO THE STRICT DIMENSIONAL TOLERANCES PER AISC REQUIREMENTS. STRUCTURAL STEEL COLUMN ANCHOR RODS SHALL BE SET WITH A RIGID TEMPLATE.

AGGREGATE REACTIONS WHEN EXPOSED TO SOILS AND/OR AN EXTERIOR ENVIRONMENT.

### CONCRETE MASONRY UNITS:

1. ALL MASONRY SHALL BE IN ACCORDNACE WITH ACI 530/TMS 402. INDIVIDUAL CMU'S SHALL BE PER ASTM C90 (4950 PSI). GROUT SHALL BE PER ASTM C476, MORTAR SHALL BE PER ASTM C270.

2. MASONRY MATERIALS SHALL BE AS FOLLOWS: A. fm = 2,000 PSI MINIMUM. ALL UNITS SHALL BE NORMAL-WEIGHT BLOCK. B. GROUT STRENGTH NOT LESS THAN 2,000 PSI. C. MORTAR TYPE S.

3. PROVIDE NOT LESS THAN 9-GAUGE HORIZONTAL LADDER-TYPE REINFORCEENT AT NOT MORE THAN 16" OC VERTICALLY, LAPPED 8" MINIMUM. REBAR POSITIOERS SHALL BE USED FOR ALL VERTICAL BARS SUCH THAT A MINIMUM 3" OF SPACE IS MAINTAINED CLEAR FOR PLACMENT OF GROUT.

4. PLACEMENT OF REINFORCEMENT SHALL OCCUR PRIOR TO PLACEMENT OF GROUT.

### SPECIAL INSPECTIONS

OFFICAL.

2. SPECIAL INSPECTORS SHALL BE QUALIFIED AND FURNISH THEIR REPORTS IN A TIMELY MANNER TO THE CONTRACTOR, BUILDING OFFICALS, ARCHITECT, AND/OR ENGINEER

IS NEEDED

## 4. SPECIAL INSPECTIONS AS REQUIRED BY CODE: BUT NOT LESS THAN ONE SET OF SAMPLES PER DAY'S WORK AND PER MIX. B. EARTHWORK: FOUNDATION BEARING, EXCAVATION, FILL PLACEMENT.

C. STEEL: SECTION 1705.2 AND AISC 360. PERIODIC OBSERVATIONS OF CONNECTIONS, ALL BRACED FRAME CONNECTIONS, WELDERS AND FIELD WELDING.

## 1. SUBMIT PROPOSED MIXED DEIGNS OF EACH TYPE FOR REVIEW.

4000 PSI ..4000 PSI

8. CONSTRUCTION JOINTS IN GRADE BEAMS, CONTINUOUS FOOTINGS, AND WALLS THAT DO NOT CHANGE DIRECTION SHALL BE SPACED NO GREATER THAN 100'-0".

15. AGGREGATES AND/OR CONCRETE MIXES SHALL BE CERTIFIED TO BE FREE OF AND ELIMINATE DAMAGE OF CONCRETE DUE TO ALKALI-SILICA REACTION OR ALKALI-

1. PROVIDE SPECIAL STRUCTURAL INSPECTIONS AND VERIFICATIONS BY A THIRD PARTY MEETING THE REQUIRMENTS OF CHAPTER 17 OF THE BUILDING CODE AND THE BUILDING

3. SHOULD INSPECTOR IDENTIFY ANY DISCREPANCY, THEY SHAL NOTIFY CONTRACTOR FIRST, AND THEN ARCH/ ENGINEER IMMEDIATELY THEREAFTER IF CORRECTIVE ACTION

A. CONCRETE: SECTION 1705.3 AND TABLE 1705.3 CONCRETE MATERIAL SAMPLING AND TESTING, REBAR OBSERVATIONS. TAKE SET OF (3) CYLINDERS FOR EVERY 50 C.Y.,

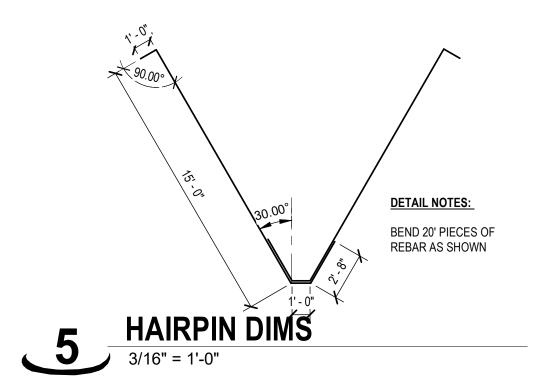
PRE-ENGINEERED METAL BUILDING:

1. THE FRAMING OF THE PRE-ENGINEERED METAL BUILDINGS IS THE RESPONSIBILITY OF THE OTHER PARTIES AND THEIR ENGINEER OF RECORD, AND NOT PART OF THESE STRUCTURAL DOCUMENTS.

2. ALL BASE REACTIONS ARE ASSUMED TO BE PINNED.

3. METAL BUILDING REACTIONS AND FOUNDATIONS HAVE BEEN ESTIMATED ONLY BASED ON STANDARD METAL BUILDING DETAILING PRACTICES. PRELIMINARY METAL BUILDING REACTIONS AND LAYOUT HAS NOT BEEN PROVIDED. FINAL METAL BUILDING DRAWINGS MUST BE PROVIDED FOR VERIFICATION OF ALL FOUNDATION SIZES AND LOCATIONS. OTHERWISE, ALL DRAWINGS ARE CONSIDERED NULL AND VOID.

SPECIAL INSPECTION OF SOILS - TABLE 1704.7					
REQ'D	VERIFICATION & INSPECTION	CONTINUOUS	PERIODIC		
Х	1. VERIFY MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY		Х		
Х	2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH & HAVE REACHED PROPER MATERIAL		Х		
Х	3. PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS		Х		
Х	4. VERIFY USE OF PROPER MATERIALS, DESITIES & LIFT THICKNESSES DURING PLACEMENT & COMPACTION OF CONTROLLED FILL	Х			
Х	5. PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY		Х		



## **DETAIL NOTES:**

1) COL AND BASE PLATE, RE: PLAN & COL SCHEDULE

(2) PROVIDE OVERSIZED HOLES IN BASE PLATE AND 1/4" PL WASHER WITH HEAVY HEX NUTS ON ANCHOR RODS. WELD WASHERS TO BASE PLATE 1" MIN ALL 4 SIDES

(3) 1 1/2" MIN NON-SHRINK NON-METALLIC GROUT

( 4 ) 3" SQ x 1/4" PL WASHER WITH HEAVY HEX NUT. TACK WELD WASHER TO ANCHOR ROD

(5) 3/4"ø ANCHOR ROD. RODS TO EXTEND 1/2" MIN THRU NUTS TOP AND BOT

A. ACCOUNT FOR GROUT THICKNESS WHEN DETERMINING BOTTOM OF BASE PLATE ELEVATION B. ANCHOR RODS SHALL BE F1554 GR. 36 UNO



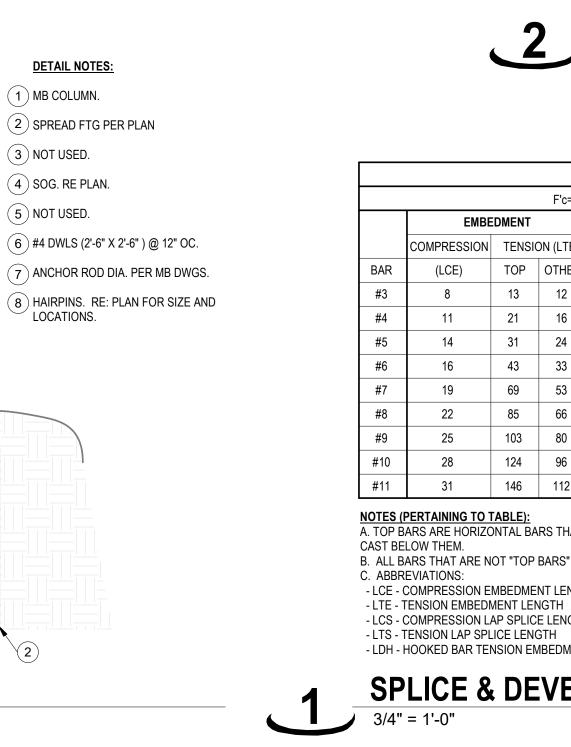
GRID

(2)

7

**EXTERIOR FTG** 

3/4" = 1'-0"



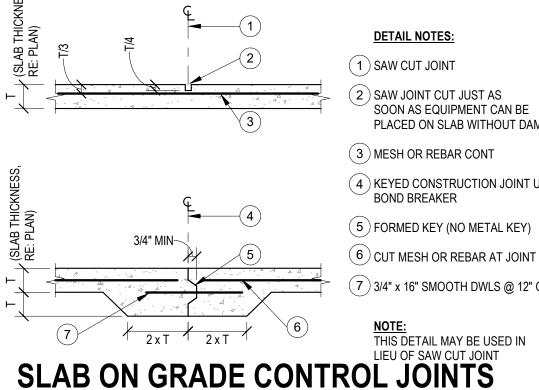
SPECIAL INSPECTION OF CONCRETE CONSTRUCTION - TABLE 1704.4						
REQ'D	VERIFICATION & INSPECTION	CONTINUOUS	PERIODIC			
Х	1. INSPECTION OF REINFORCING STEEL & PLACEMENT		Х			
	2. INSPECTION OF REINFORCING STEEL WELDING IN ACCORDANCE W/ TABLE 1704.3 ITEM 5B	х				
Х	3. INSPECT BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO & DURING PLACEMENT OF CONCRETE	Х				
Х	4. VERIFYING USE OF REQUIRED MIX DESIGN		Х			
x	5. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUP & AIR CONTENT TESTS, & DETERMINE THE TEMPERATURE OF THE CONCRETE	х				
х	6. INSPECTION OF CONCRETE & SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	Х				
Х	7. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE & TECHNIQUES		х			
	8. INSPECTION OF PRESTRESSED CONCRETE		х			
	9. ERECTION OF PRECAST CONCRETE MEMBERS		Х			
х	10. VERIFICATION OF IN-SITU CONCRETE STRENGTH PRIOR TO REMOVAL OF SHORES & FORMS FROM BEAMS & STRUCTURAL SLABS		х			
х	11. INSPECT FORMWORK FOR SHAPE, LOCATION, & DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED		Х			

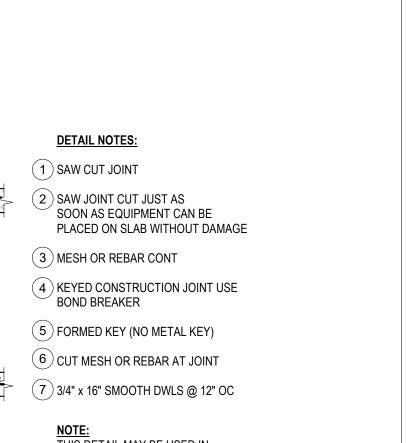


Architecture: MO 310 / KS 73 Engineering: MO 4 / KS 241 Land Surveying: MO 123 / KS 36

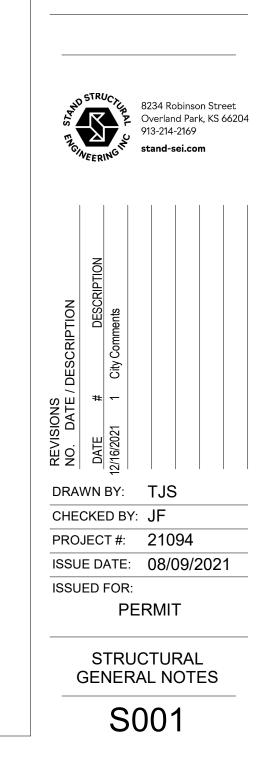
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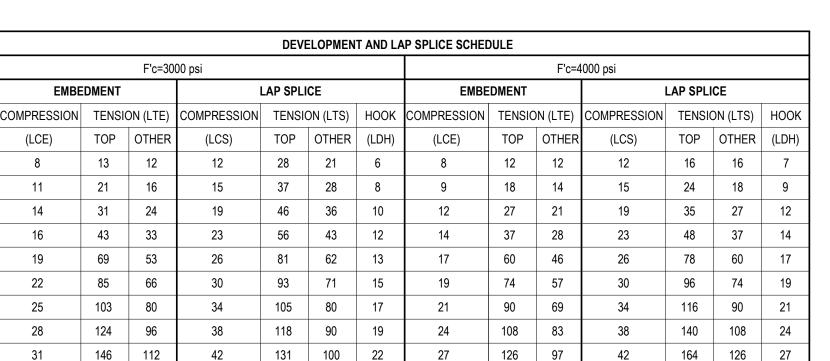
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NOTES (GENERAL)

MULTIPLIERS:

A. TOP BARS ARE HORIZONTAL BARS THAT HAVE MORE THAN 12" OF FRESH CONCRETE A. STAGGER ALL SPLICES 12 db MIN, BUT NOT LESS THAN 12"

B. ALL BARS THAT ARE NOT "TOP BARS" ARE "OTHER" BARS

- LCE - COMPRESSION EMBEDMENT LENGTH

8

11

14

16

19

22

25

28

31

- LCS - COMPRESSION LAP SPLICE LENGTH

- LDH - HOOKED BAR TENSION EMBEDMENT LENGTH

**SPLICE & DEVELOPMENT SCHEDULE** 

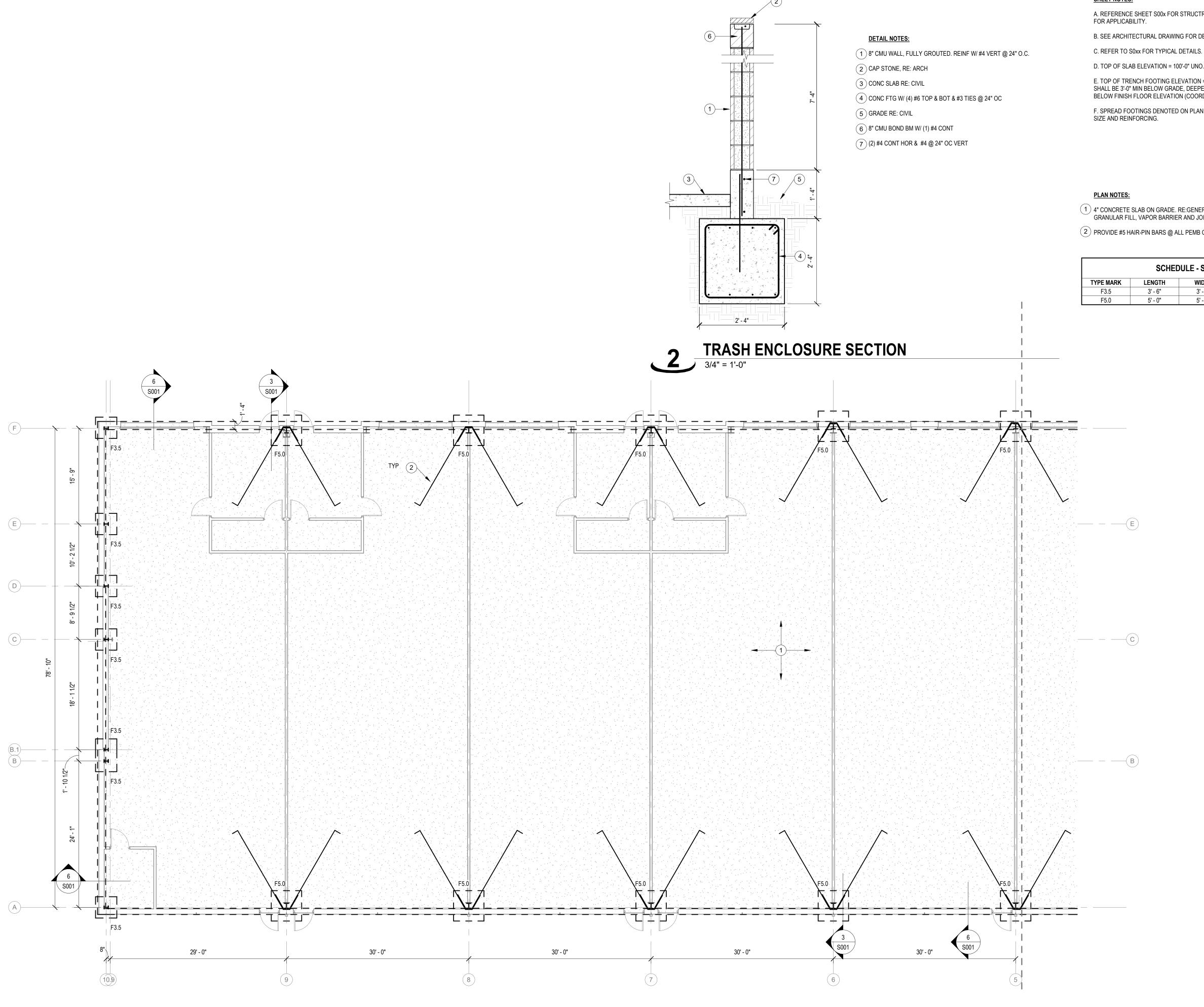
ALL EMBEDMENT AND LAP SPLICE LENGTHS SHALL BE INCREASED AS REQ'D BY THE MULIPLIERS BELOW. APPLY MULTIPLE MULTIPLIERS IF APPLICABLE

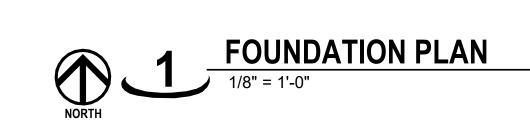
B. ALL DIMENSIONS INDICATED IN TABLE ARE IN INCHES

C. BARS GREATER THAN #11 SHALL BE MECHANICALLY SPLICED

D. ALL SPLICES SHALL BE WIRED IN CONTACT STACKED VERTICAL

1.3 -- IF CONC CONTAINS LIGHT WEIGHT AGGREGATES 1.3 -- IF EPOXY COATED REBAR USED





## SHEET NOTES:

A. REFERENCE SHEET S00x FOR STRUCTRURAL GENERAL NOTES. REVIEW NOTES & DETAILS

B. SEE ARCHITECTURAL DRAWING FOR DETAILS & DIMENSIONS NOT SHOWN.

D. TOP OF SLAB ELEVATION = 100'-0" UNO.

E. TOP OF TRENCH FOOTING ELEVATION = 99'-4" UNO. THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE 3'-0" MIN BELOW GRADE, DEEPEN FOOTINGS AS REQUIRED. GRADE IS GENERALLY 6" BELOW FINISH FLOOR ELEVATION (COORDINATE WITH CIVIL).

F. SPREAD FOOTINGS DENOTED ON PLAN BY "Fx.x". REFER TO SCHEDULE ON THIS SHEET FOR SIZE AND REINFORCING.

1 4" CONCRETE SLAB ON GRADE. RE:GENERAL NOTES FOR REINFORCING, GRANULAR FILL, VAPOR BARRIER AND JOINTING REQUIREMENTS

2 PROVIDE #5 HAIR-PIN BARS @ ALL PEMB COLUMNS RE: 5/S001

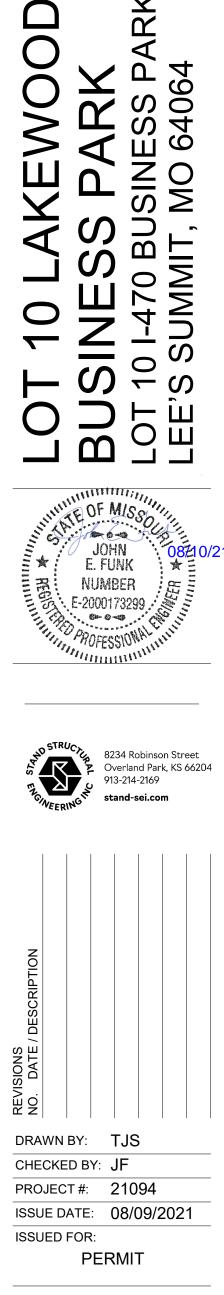
SCHEDULE - SPREAD FOOTING				
TYPE MARK	LENGTH	WIDTH	THICKNESS	REINF
F3.5	3' - 6"	3' - 6"	3' - 0"	(5) #4 EW TOP & BOT
F5.0	5' - 0"	5' - 0"	3' - 0"	(8) #4 EW TOP & BOT



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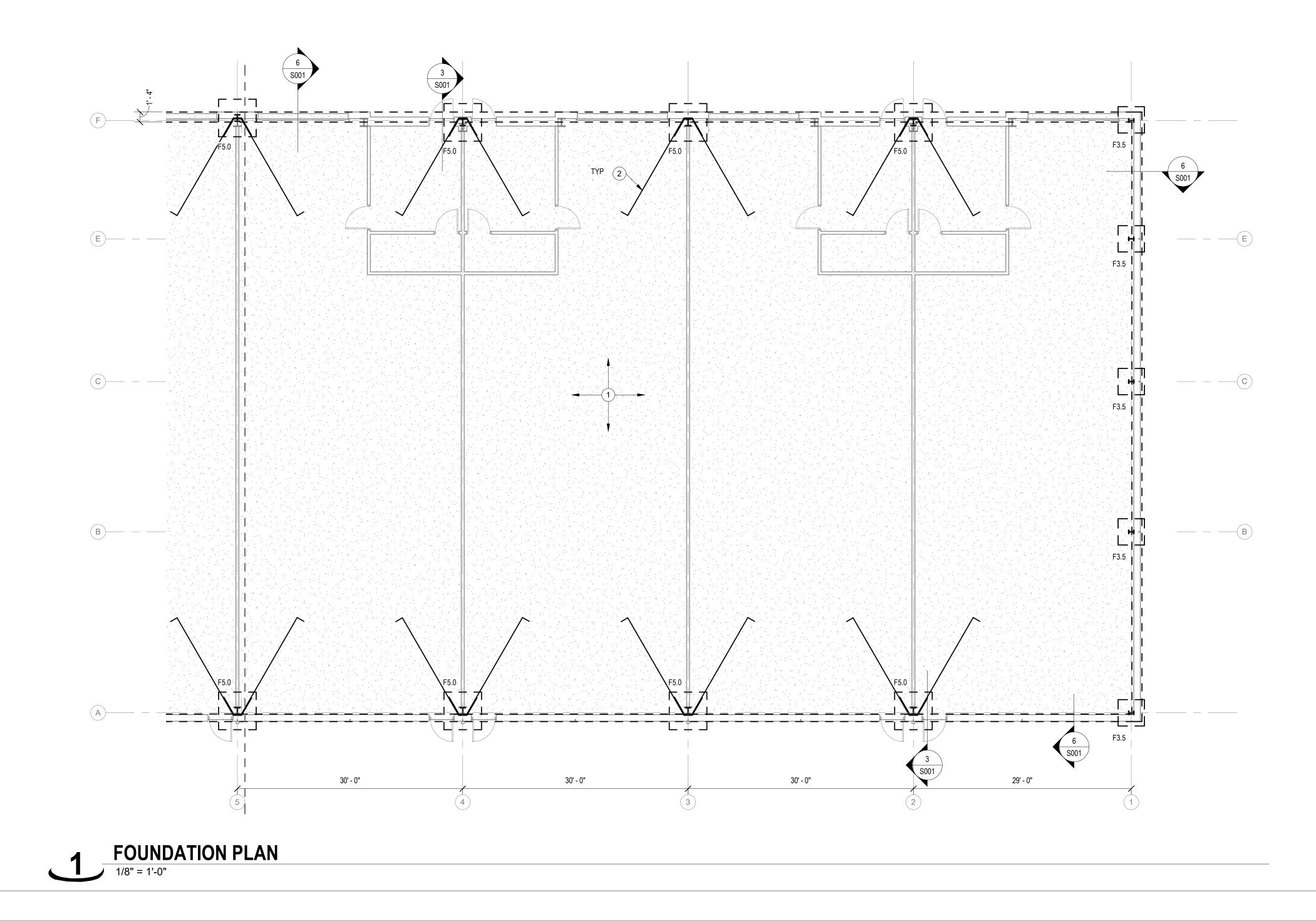
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## FOUNDATION PLAN

S100



# S101

FOUNDATION PLAN

## SHEET NOTES:

A. REFERENCE SHEET S00x FOR STRUCTRURAL GENERAL NOTES. REVIEW NOTES & DETAILS FOR APPLICABILITY.

B. SEE ARCHITECTURAL DRAWING FOR DETAILS & DIMENSIONS NOT SHOWN.

C. REFER TO S0xx FOR TYPICAL DETAILS.

D. TOP OF SLAB ELEVATION = 100'-0" UNO.

E. TOP OF TRENCH FOOTING ELEVATION = 99'-4" UNO. THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE 3'-0" MIN BELOW GRADE, DEEPEN FOOTINGS AS REQUIRED. GRADE IS GENERALLY 6" BELOW FINISH FLOOR ELEVATION (COORDINATE WITH CIVIL).

F. SPREAD FOOTINGS DENOTED ON PLAN BY "Fx.x". REFER TO SCHEDULE ON THIS SHEET FOR SIZE AND REINFORCING.

## PLAN NOTES:

1 4" CONCRETE SLAB ON GRADE. RE:GENERAL NOTES FOR REINFORCING, GRANULAR FILL, VAPOR BARRIER AND JOINTING REQUIREMENTS

2 PROVIDE #5 HAIR-PIN BARS @ ALL PEMB COLUMNS RE: 5/S001

SCHEDULE - SPREAD FOOTING				
TYPE MARK	LENGTH	WIDTH	THICKNESS	REINF
F3.5	3' - 6"	3' - 6"	3' - 0"	(5) #4 EW TOP & BOT
F5.0	5' - 0"	5' - 0"	3' - 0"	(8) #4 EW TOP & BOT



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

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# **ELECTRICAL SPECIFICATIONS**

		ELECTRIC
PART I – GENERAL A. CONDITIONS		2. THE CONTRACTOR SHALL SUBMIT S FOLLOWING ITEMS: A. LIGHTING FIXTURE CUTS AND PI
<ol> <li>FURNISH AND INSTALL A COMPLETELY WIRED AND OPERATION DRAWINGS AND SPECIFIED HEREIN, INCLUDING BUT NOT LIM A. LIGHTING FIXTURES AS INDICATED AND SPECIFIED ON TH B. ELECTRICAL PANELS, SERVICE, CONDUIT, WIRING, ETC., F C. TELEPHONE, TELEVISION, AND FIRE ALARM. OUTLETS AND</li> </ol>	ITED TO, THESE MAJOR ITEMS. E PLANS. OR ALL OUTLETS AND EQUIPMENT.	<ul> <li>B. OUTLINE DRAWINGS AND DATA PANELS.</li> <li>C. OUTLINE DRAWINGS OF ALL SWI</li> <li>D. WIRING DEVICES AND COVERPLA</li> <li>E. ALL CIRCUIT BREAKERS INSTALI</li> </ul>
2. OBTAIN AND REVIEW ALL OTHER DRAWINGS INCLUDING REFL ELEVATIONS, FURNITURE PLANS AND ALL MILL WORK DRAW ELECTRICAL DEVICES AND EQUIPMENT PRIOR TO ROUGH-IN.	ECTED CEILING PLAN, INTERIOR AND EXTERIOR INGS. COORDINATE INSTALLATION OF ALL	3. SUBMIT ITEMS AT ONE TIME IN A PARTIAL SUBMITTALS WILL NOT BE C. SYSTEM GROUNDING
OBTAIN SUBMITTAL AND SHOP DRAWINGS FROM OTHER TRA		1. GROUNDING SHALL COMPLY WITH F METALLIC PARTS OF ELECTRICAL E GROUNDING CONDUCTOR OF NONM
INSTALLATION SHALL COMPLY WITH ALL CURRENT APPLICAE JURISDICTION.	BLE CODES AND GOVERNING AGENCIES HAVING	2. GROUNDING CONDUCTOR (NEUTRAL GROUNDING CONDUCTOR AT A SIN
FIRE ALARM SYSTEM, IF REQUIRED PER IBC, SHALL BE DES CONTRACTOR. DESIGN SHALL BE IN ACCORDANCE WITH NFF SUBMIT STAMPED DRAWINGS TO AHJ FOR REVIEW AND APP RESPONSIBLE FOR TESTING AND VERIFYING THAT THE AUDII MINIMUM OF 15 DBA ABOVE AMBIENT NOISE LEVELS. ADD H	A 72. FIRE ALARM CONTRACTOR SHALL ROVAL. FIRE ALARM CONTRACTOR IS BILITY OF THE FIRE ALARM SYSTEM MEETS A	ACCORDING TO THE APPLICABLE F CONDUCTOR (NEUTRAL) TO THE G ENCLOSURE FOR THE SYSTEM'S O' PLANS OR SPECIFICATIONS. 3. A GROUND BUS SEPARATE FROM AND PANELBOARDS. PROPER TOR
LEVELS. PROVIDE FIRE STOP ON ALL PIPING THAT PENETRATES RAT WALL RATING. REFER TO ARCHITECTURAL DRAWINGS FOR LO CONTRACTOR SHALL PROVIDE FIRE RATED ENCLOSURES AR THAT ARE LOCATED IN FIRE RATED WALLS AND SHALL FIRE	OCATION OF FIRE RATED WALLS. THIS OUND ALL ROUGH—IN BOXES, PANELS, ETC.	<ul> <li>RECOMMENDATIONS, PRIOR TO ENE</li> <li>4. GROUND BUSES AND NEUTRAL BU THOSE PROVIDED IN ANY EQUIPME AS SPECIFIED ABOVE FOR THE SE</li> <li>5. WHEN INDICATED ON THE DRAWING THE GROUND BUS IN THE DISTRIBUTE</li> </ul>
RELATED WORK BY OTHERS THE ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT, THE ENTRANCE FROM THE MAIN SERVICE TO UTILITY POINT OF THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF TH	ELECTRICAL SERVICE. ELECTRICAL	WHERE THEY ARE PROVIDED. WHI SHALL BE CONNECTED TO EQUIPM REMOVAL OF THE RECEPTACLE, EC BUSING SHALL NOT AFFECT THE C
SERVING UTILITY COMPANY. THE ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT, THE AND CATV SERVICE FROM THE TELEPHONE TERMINAL BOAR CATV COMPANY POINT OF SERVICE COORDINATE WITH LOCA	RENCH, AND BACKFILL FOR PRIMARY PHONE D OR CABINET TO THE PHONE COMPANY AND	<ol> <li>RACEWAYS MAY NOT BE USED AS CONDUIT SHALL HAVE SEPARATE INSURE A CONTINUOUS GROUNDING</li> <li>IN INACCESSIBLE LOCATIONS, MAK</li> <li>IN ACCESSIBLE LOCATIONS, CONNE</li> <li>SOLDERLESS BRONZE CROUNDING</li> </ol>
CODES, REGULATIONS, AND STANDARDS THE INSTALLATION SHALL COMPLY WITH APPLICABLE LOCAL THE REGULATIONS OF THE LATEST EDITION OF THE NATION REQUIREMENTS OF THE POWER, TELEPHONE, AND CATV CON INSTALLATION. THE LATEST EDITIONS OF THE FOLLOWING INDUSTRY STAND MINIMUM REQUIREMENTS: A. THE NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIAT B. THE NATIONAL ELECTRICAL CODE, INCLUDING LOCAL AME C. UNDERWRITER LABORATORIES INCORPORATED STANDARDS D. AMERICAN NATIONAL STANDARDS INSTITUTE.	AL ELECTRIC CODE AND WITH THE MPANIES FURNISHING SERVICES TO THIS ARDS, SPECIFICATIONS, AND CODES ARE TON STANDARDS. ENDMENTS.	SOLDERLESS BRONZE GROUNDING D. WIRE 1. CONDUCTOR SIZES SHOWN ON THI SPECIFIED, ALL WIRE SHALL BE T AWG, TYPE THHN/THWN INSULATIO BRANCH CIRCUIT WIRING SHALL BI 2. ALUMINUM CONDUCTORS MAY BE SHALL BE ALUMINUM ALLOW AA 3. THE WIRES SHALL BE MARKED WI REQUIRED BY LOCAL ORDINANCES 120V-WHITE, AND LIVE WIRES 208
E. INTERNATIONAL BUILDING CODE. INSPECTION OF SITE PRIOR TO SUBMITTING A BID FOR ELECTRICAL WORK, THE O PROPOSED CONSTRUCTION AND SHALL THOROUGHLY ACQUA WORKING CONDITIONS TO BE ENCOUNTERED, ETC. ALLOWAN WITH THIS CONDITION AFTER BIDDING. ELECTRICAL INSTALLATION SHALL MEET THE EXISTING COND	AINT HIMSELF WITH EXISTING UTILITIES, AND NCE WILL NOT BE MADE FOR NONCOMPLIANCE	<ul> <li>AND BLUE (PHASE C). CIRCUIT S</li> <li>4. ALL CONDUCTORS SHALL BE RATE</li> <li>5. SPLICES IN EXTERIOR PULL BOXES</li> <li>SPLICE KIT OR APPROVED EQUAL.</li> <li>APPROVED EQUAL.</li> <li>6. PROVIDE SOLID CONDUCTOR FOR</li> <li>7. NO WIRE SHALL BE INSTALLED IN MINERALAC NO. 100 OR EQUIVALE</li> </ul>
STORAGE AND HANDLING OF MATERIAL DELIVER MATERIALS AND EQUIPMENT TO THE PROJECT IN T LABELED CONTAINERS. PROTECT AGAINST MOISTURE, TAMP OR STORAGE. CONTRACTOR SHALL PROTECT AND BE RESF MATERIALS UNTIL FINAL ACCEPTANCE BY THE OWNER, AND OWNER, ANY DAMAGE OR LOSS THAT MAY OCCUR DURING ARRANGE FOR TIMELY DELIVERY OF MATERIALS AND EQUIPM THE LENGTH OF TIME BETWEEN DELIVERY AND INSTALLATIO COVER AND PROTECT ANY MATERIAL WHICH MAY BE AFFEC STORED AT THE PROJECT SITE. ANY MATERIAL FOUND DEI WITH THE CONTRACT DOCUMENTS MAY BE REJECTED BY TH	PERING, OR DAMAGE FROM IMPROPER HANDLING PONSIBLE FOR ANY DAMAGE TO WORK OR SHALL MAKE GOOD WITHOUT COST TO THE THIS PERIOD. MENT TO THE JOB SITE IN ORDER TO MINIMIZE N. CTED BY THE WEATHER WHILE IN TRANSIT OR FECTIVE OR NOT INSTALLED IN ACCORDANCE	CONDUCTORS IN THE CONDUIT SY 8. MC CABLE WITH COPPER CONDUC <u>E. CONDUIT</u> 1. ALL WIRING SHALL BE INSTALLED SECTIONS. RGS, WITH A 20 MIL BE USED IN INDOOR LOCATIONS N LOCATIONS NOT IN CONTACT WITH DAMAGE. PVC MAY BE USED IN CONDUIT SHALL BE USED FOR INI 72". LIQUID-TIGHT FLEXIBLE STE EQUIPMENT NOT TO EXCEED 48".
<u>CLEANUP</u> KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE EMPLOYEES OR WORK UNDER THIS DIVISION OF THE SPECIF REMOVE ALL SURPLUS MATERIALS, TOOLS, ETC., AND LEAV	ICATIONS. AT THE COMPLETION OF THE WORK	2. WHERE CONDUIT ENTERS OUTLET COMPRESSION CONNECTORS, OR I OR INSULATED THROAT CONNECTO EXPOSED CONDUIT PARALLEL TO T & B OR APPLETON, OR EQUAL
EXCAVATION, CUTTING, AND FITTING PERFORM ALL EXCAVATION AND BACK FILLING REQUIRED FO THE SPECIFICATIONS. USE EXCAVATED MATERIALS FOR BA DEEMED NECESSARY. PERFORM THE EXCAVATION, CUTTING, FITTING, REPAIRING, A THE INSTALLATION OF THE EQUIPMENT OF THIS SECTION. OTHER TRADES OR OF ANY STRUCTURAL MEMBERS SHALL	CKFILL UNLESS OFF SITE MATERIALS ARE AND FINISHING OF THE WORK NECESSARY FOR HOWEVER, NO CUTTING OF THE WORK OF	<ol> <li>COVER METALLIC CONDUIT IN CON LAPPED TO PROVIDE 20 MIL. THIC NOT UNDER BUILDINGS AND FEED COMPOUND TO BE WATERTIGHT.</li> <li>SCHEDULE 40 PVC CONDUIT SHAL APPROVED AND CEMENTED JOINTS 22° SHALL BE WRAPPED RIGID GA</li> </ol>
ARCHITECT. DRAWINGS THE DRAWINGS INDICATE THE GENERAL ARRANGEMENT AND PRESENTED ON THESE DRAWINGS ARE AS ACCURATE AS P VERIFICATION OF ALL DIMENSIONS, LOCATIONS, LEVELS, ETC REVIEW ALL ARCHITECTURAL, STRUCTURAL, AND MECHANIC/ THE REQUIREMENTS OF CONDITIONS SHOWN. THE ARCHITEC OVER ALL OTHER DRAWINGS. DISCREPANCIES BETWEEN DIF SPECIFICATIONS, OR REGULATIONS AND CODES GOVERNING ATTENTION OF THE ENGINEER IN WRITING BEFORE THE DATH NOT REPORTED, THE CONTRACTOR SHALL BID THE GREATEF APPROPRIATE ADJUSTMENTS WILL BE MADE AFTER CONTRA RESPONSIBLE TO FIELD MEASURE AND CONFIRM MOUNTING EQUIPMENT WITH RESPECT TO COUNTERS, RADIATION, ETC. ELECTRICAL DRAWINGS, USE ACTUAL BUILDING DIMENSIONS. COOPERATE WITH THE OTHER TRADES SO THAT THE INSTAIL EQUIPMENT WILL BE PROPERLY COORDINATED. CONDUIT, LI LOCATIONS SHALL BE VERIFIED WITH OTHER TRADES TO AV	LOCATIONS OF THE ELECTRICAL WORK DATA LANNING CAN DETERMINE, BUT FIELD 2., TO SUIT FIELD CONDITIONS IS REQUIRED. AL DRAWINGS AND ADJUST ALL WORK TO MEET CTURAL DRAWINGS SHALL TAKE PRECEDENCE FERENT PLANS, OR BETWEEN DRAWINGS AND THE INSTALLATION SHALL BE BROUGHT TO THE E OF BID OPENING. IF DISCREPANCIES ARE R QUANTITY OR BETTER QUALITY, AND CT AWARD. CONTRACTOR SHALL BE HEIGHTS AND LOCATION OF ELECTRICAL DO NOT SCALE DISTANCES OFF THE	<ol> <li>FITTINGS AND CONDUIT BODIES SH</li> <li>FITTINGS AND CONDUIT BODIES SH</li> <li>CONDUIT SIZES SHALL BE AS REG</li> <li>ALL EMPTY CONDUIT SYSTEMS SH INSTALLATION OF FUTURE WIRE.</li> <li>WIRING, CONDUITS, AND OUTLETS CERTAIN MOTOR AND LIGHTING FE INDICATED ON THE DRAWINGS.</li> <li>CONDUIT PENETRATION THROUGH FLASHING SLEEVE. INSTALLATION</li> <li>CONDUITS SHALL BE ROUTED PAR</li> <li>CONDUITS SHALL BE ROUTED PAR</li> <li>ALL JUNCTION AND OUTLET BOXES</li> <li>ALL JUNCTION AND OUTLET BOXES</li> <li>BOXES INSTALLED IN POURED CEM WATERTIGHT GASKETED COVERS. COVERING, COVERS SHALL BE OF</li> <li>BOXES INSTALLED FOR THE ALARN APPROPRIATE COVER PLATES.</li> <li>BOXES FOR TELEPHONE, COMPUTE MINIMUM 2-1/8" DEEP.</li> </ol>
LOCATIONS SHALL BE VERIFIED WITH OTHER TRADES TO AVSTEEL, BEAMS, OR OTHER OBSTRUCTIONS.CAREFULLY VERIFY THE LOCATIONS OF THE OUTLET BOXIBEEN DISTURBED DURING THE INSTALLATION OF MATERIALSCOORDINATE THE LOCATION OF THE TRENCHES AND CONDUSERVICES WITH THE GENERAL CONTRACTOR.COORDINATE HVAC AND PLUMBING EQUIPMENT CONNECTIONCONTRACTORS.RECORD DRAWINGSTHE ELECTRICAL CONTRACTOR SHALL MAINTAIN A SET OF IEXCLUSIVE PURPOSE OF MAINTAINING A RECORD OF ALL WFROM THE WORK INDICATED ON THE DRAWINGS.AT THE COMPLETION OF THE PROJECT, ONE SET OF REPROCONDITIONS, SHALL BE DELIVERED TO THE OWNER FOR ACC	ES AND DETERMINE THAT THEY HAVE NOT OF OTHER TRADES. ITS FOR ELECTRICAL AND TELEPHONE UTILITY REQUIREMENTS WITH HVAC AND PLUMBING DRAWINGS AT THE JOB SITE FOR THE ORK INSTALLED AND TO SHOW ANY DEVIATIONS	<ul> <li><u>G WIRING DEVICES (COMMERCIAL)</u></li> <li>1. WALL SWITCHES SHALL BE SPECIFIC</li> <li>2. RECEPTACLES SHALL BE SPECIFIC GROUNDED TYPE. SPECIAL APPLIC GROUND DOWN.</li> <li>3. DEVICE PLATES SHALL BE EQUAL WHITE, UNLESS OTHERWISE NOTED</li> <li>4. RECEPTACLES IN OUTDOOR AND V COVER/ENCLOSURE CLEARLY MAR EQUAL TO TAYMAC SPECIFICATION</li> <li>H. SERVICE ENTRANCE SECTION</li> <li>1. THE SERVICE ENTRANCE EQUIPMENT</li> </ul>
ART II – PRODUCTS AND EXECUTION A. MATERIALS ALL MATERIALS SHALL BE NEW AND OF QUALITY AS SPECI MUST CARRY THE UNDERWRITER'S LABORATORIES APPROVA		CARRY THE U.L. LABEL AND SHAL 2. SERVICE ENTRANCE EQUIPMENT SH HORIZONTALLY TAPERED BUSSING <u>I. DISTRIBUTION PANELS</u> 1. DISTRIBUTION PANELS SHALL BE F TAPERED BUSSING SHALL NOT BE

## UBMIT SEVEN (7) IDENTICAL BOUND SETS OF SHOP DRAWINGS ON THE

AND PERFORMANCE DATA. DATA SHEETS OF EACH PANELBOARD, LOAD CENTERS, AND DISTRIBUTION ALL SWITCH GEAR COMPONENTS.

VERPLATES. INSTALLED IN PANELBOARDS, LOAD CENTERS, AND DISTRIBUTION PANELS. IN A NEAT AND ORDERLY MANNER WITHIN 15 DAYS OF AWARD OF CONTRACT. NOT BE ACCEPTABLE.

WITH REQUIREMENTS OF ARTICLE 250. ALL EXPOSED NONCURRENT CARRYING RICAL EQUIPMENT, METALLIC RACEWAY SYSTEMS, METALLIC CABLE ARMOR, NONMETALLIC SHEATHED CABLES, GROUNDING CONDUCTOR IN NONMETALLIC CONDUCTORS OF THE WIRING SYSTEM SHALL BE GROUNDED. EUTRAL) OF THE WIRING SYSTEM SHALL BE CONNECTED TO THE SYSTEM

A SINGLE PLACE IN EACH SYSTEM BY REMOVABLE BONDING JUMPERS, SIZED ABLE PROVISIONS OF THE NATIONAL ELECTRICAL CODE. THE GROUNDED THE GROUNDING CONDUCTOR CONNECTION SHALL BE LOCATED IN THE EM'S OVERCURRENT PROTECTION OR WHERE OTHERWISE INDICATED ON THE

FROM THE NEUTRAL BUS SHALL BE PROVIDED IN ALL DISTRIBUTION PANELS PER TORQUE ON GROUND BUS SHALL BE VERIFIED, PER MANUFACTURER'S TO ENERGIZING EQUIPMENT.

RAL BUSES IN ALL DISTRIBUTION PANELS, LOAD CENTERS, PANELBOARDS, AND QUIPMENT SHALL BE ISOLATED EXCEPT WHERE REQUIRED TO BE CONNECTED HE SERVICE ENTRANCE

AWINGS, EQUIPMENT GROUNDING CONDUCTORS SHALL BE EXTENDED FROM ISTRIBUTION EQUIPMENT TO THE RECEPTACLE, FIXTURE OR DEVICE LUGS WHERE LUGS ARE NOT PROVIDED, EQUIPMENT GROUNDING CONDUCTORS EQUIPMENT ENCLOSURES. THE CONNECTIONS SHALL BE ARRANGED SUCH THAT CLE, EQUIPMENT GROUND CONDUCTORS, OR GROUND JUMPERS FROM GROUND THE GROUND SYSTEM.

SED AS A GROUNDING CONDUCTOR FOR POWER AND LIGHTING CIRCUITS. ALL ARATE CODE SIZED GREEN GROUND WIRE INSTALLED IN THE CONDUIT TO UNDING PATH.

, MAKE CONNECTIONS BY EXOTHERMIC WELD PROCESS. CONNECTIONS SHALL BE MADE WITH BOLTED THROUGH, APPROVED NDING DEVICES.

ON THE DRAWINGS ARE BASED ON COPPER WIRE. UNLESS OTHERWISE BE TYPE XHHW OR SE FOR FEEDERS OR BRANCH CIRCUITS LARGER THAN 4 SULATION FOR FEEDERS AND BRANCH CIRCUITS 4 AWG AND SMALLER. ALL

HALL BE COPPER. AY BE UTILIZED FOR SERVICE ENTRANCE AND PANEL FEEDERS. CONDUCTORS AA-8000 SERIES.

ED WITH COLOR TO SIMPLIFY CIRCUIT IDENTIFICATION. UNLESS OTHERWISE ANCES GROUND WIRES SHALL BE GREEN, NEUTRAL WIRES SHALL BE ES 208Y/120V AND 120/240 SHALL BE BLACK (PHASE A), RED (PHASE B), CUIT SHALL BE LABELED IN EACH J-BOX. RATED 600 VOLT.

BOXES AND MANHOLES SHALL BE WEATHERPROOF USING "SCOTCHCAST" EQUAL. SEAL ENDS OF CONDUITS AND DUCTS WITH "DUCTSEAL" OR

R FOR 12 AWG AND SMALLER. LED IN THE CONDUIT SYSTEM UNTIL THE CONDUIT SYSTEM IS COMPLETE. USE UIVALENT AS A LUBRICANT TO FACILITATE THE INSTALLATION OF THE UIT SYSTEM.

ONDUCTORS AND GROUND WIRE MAY BE USED WHERE PERMITTED.

ALLED IN LISTED METALLIC CONDUIT EXCEPT AS PERMITTED IN OTHER MIL PVC COATING WILL BE USED WHEN IN CONTACT WITH EARTH. IMC MAY IONS NOT IN CONTACT WITH THE EARTH. EMT MAY BE USED IN INDOOR WITH EARTH, NOT IN CONCRETE SLABS OR WALLS AND NOT SUBJECT TO ED IN OR BELOW CONCRETE AND DIRECT BURIED IN EARTH. FLEXIBLE STEEL OR INDOOR FINAL CONNECTIONS TO EQUIPMENT IN LENGTHS NOT TO EXCEED STEEL CONDUIT SHALL BE FOR OUTDOOR FINAL CONNECTIONS TO

JTLET BOXES, FIXTURES OR CABINETS, FIRMLY FASTEN WITH STEEL SET SCREW, OR DOUBLE LOCKNUTS FOR GRC. ALL CONNECTIONS SHALL HAVE BUSHINGS NECTORS. FIRMLY FASTEN CONDUIT TO THE BUILDING CONSTRUCTION. RUN TO THE BUILDING LINES, SUPPORTED BY APPROPRIATE HANGERS (UNISTRUT,

N CONTACT WITH EARTH WITH POLYETHYLENE TAPED SPIRAL WRAPPED, 1/2 THICKNESS. TAPE SHALL BE SCOTCH NO. 50 TAPE. CONDUIT AND DUCTS FEEDER DUCTS SHALL BE INSTALLED PER N.E.C. 300-5. MAKE JOINTS WITH

SHALL BE PERMITTED UNDERGROUND WITH PROPER FITTINGS, ALL UL JOINTS. PENETRATIONS THROUGH FLOOR SLABS AND BENDS GREATER THAN GID GALVANIZED STEEL ELBOWS.

DIES SHALL BE STEEL. DIECAST FITTINGS ARE NOT ACCEPTABLE. S REQUIRED BY CODE AND AS INDICATED OR SPECIFIED. MS SHALL HAVE A 200 LB. TEST NYLON PULL STRING TO FACILITATE

TLETS SHALL BE CONCEALED WITH THE BUILDING STRUCTURE, EXCEPT THAT NG FEEDER CONDUITS MAY BE RUN EXPOSED IN CERTAIN AREAS AS

ROUGH ROOF SHALL HAVE ROOF FLASHING WITH CAULK TYPE COUNTER

LATION SHALL BE WATERTIGHT. ED PARALLEL AND PERPENDICULAR TO THE STRUCTURE.

BOXES CONCEALED IN WALLS SHALL BE STEEL D CEMENT FLOORS SHALL BE FLUSH TYPE CAST IRON OR STEEL WITH ERS. WHERE BOXES ARE INSTALLED IN FLOORS WITH TILE OR CARPET FLOOR BE OF THE RECESSED TYPE TO ACCOMMODATE THE FLOOR COVERING. ALARM, COMPUTER, AND SECURITY SYSTEM SHALL BE PROVIDED WITH

OMPUTER, T.V., FIRE ALARM, SECURITY, AND SIMILAR SYSTEMS SHALL BE

SPECIFICATION GRADE AC SILENT TYPE SWITCHES, 20A 120/277 VOLT. PECIFICATION GRADE, DUPLEX TYPE. NEMA5-20R, 20 AMPERE, 120VOLT APPLICATION RECEPTACLES SHALL BE INDICATED ON PLANS. MOUNT WITH THE

EQUAL TO SIERRA SMOOTH-LINE PLASTIC WALL PLATES. COLOR SHALL BE

AND WET LOCATIONS SHALL BE INSTALLED WITH A HINGED OUTLET MARKED AND U.L. LISTED SUITABLE FOR WET LOCATIONS WHILE IN USE, CATION GRADE.

UIPMENT SHALL BE AS INDICATED ON THE DRAWINGS. EQUIPMENT SHALL SHALL CONFORM TO THE POWER COMPANY REGULATIONS. ENT SHALL BE PROVIDED WITH A FULLY RATED COPPER OR ALUMINUM BUS. JSSING SHALL NOT BE ALLOWED.

BE PROVIDED WITH FULLY RATED COPPER OR ALUMINUM BUS. HORIZONTAL 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.
- 4. 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
- 6. 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. 8. ALL CIRCUIT BREAKERS SHALL BE BOLT-ON TYPE.

. PANEL BOARDS

- 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 PANELS
- 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 OF 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.

K. LOAD CENTER

- 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 DRAWINGS.
- 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 - 3. DEGREES C.
- 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. 5. PANEL BOARDS/LOAD CENTERS TO BE PROVIDED WITH COPPER BUSSIING ONLY.
- <u>. LIGHTING FIXTUR</u>ES
- 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 PLASTER FRAMES AND HANGERS AS REQUIRED. CEILING CONSTRUCTION, ARCHITECTURAL ACCESSORIES, VOLTAGE, AND BALLASTS TO MEET THE EXISTING CEILING CONDITION.

M. LIGHTING CONTROL

- 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
- CABLE TELEVISION OUTLETS SHALL CONSIST OF STANDARD BOXES MOUNTED 18" ABOVE THE FLOOR 2. UNLESS OTHERWISE INDICATED. PROVIDE A TERMINAL MOUNTING BOARD FOR THE INCOMING SERVICE CABLE.

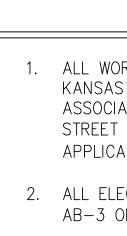
<u>O. GUARANTEI</u>

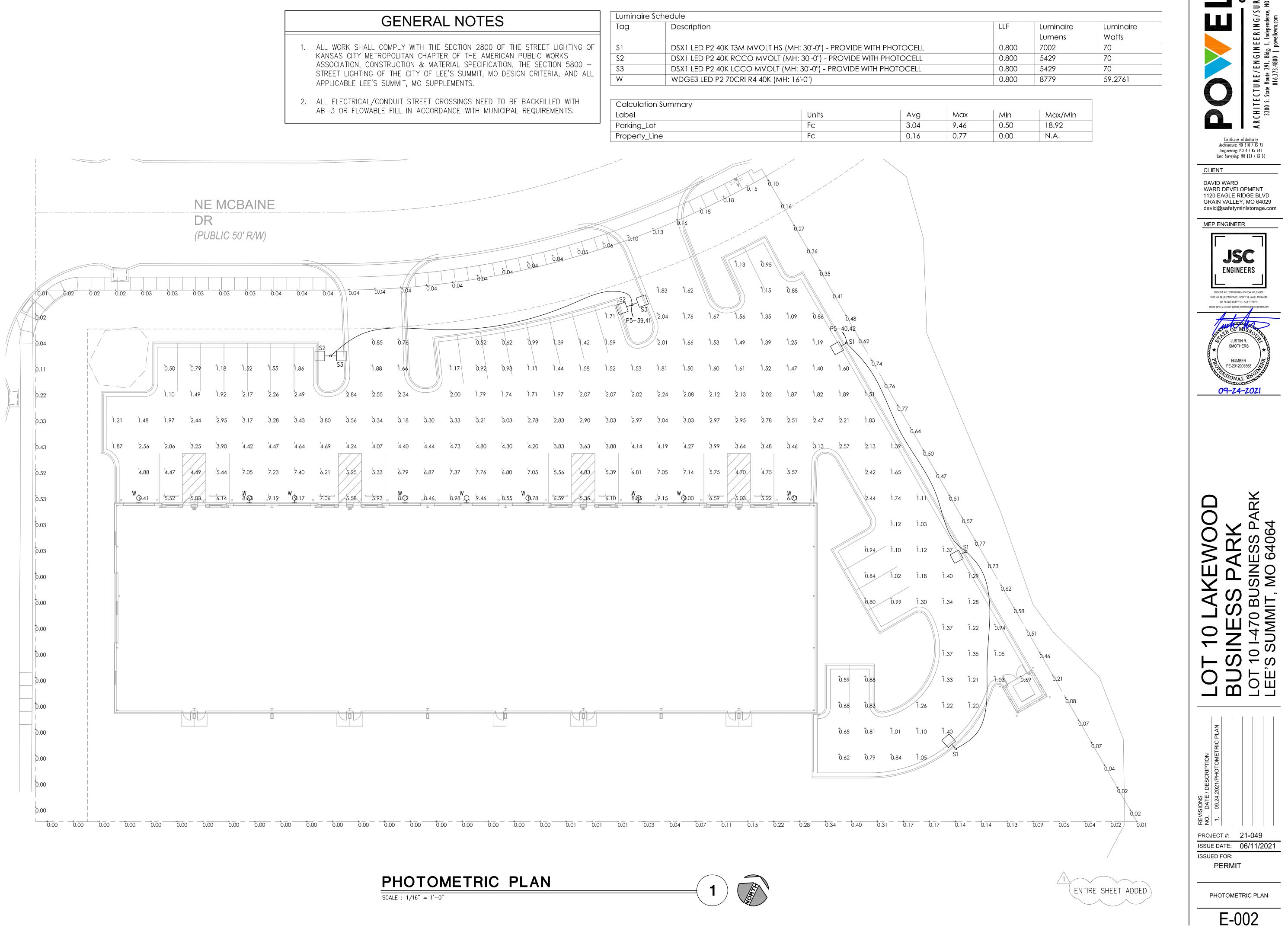
GUARANTEE ALL MATERIAL FURNISHED AND ALL WORKMANSHIP PERFORMED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE OF WORK. ANY DEFECTS DEVELOPING WITHIN THIS PERIOD, TRACEABLE TO MATERIAL FURNISHED AS A PART OF THIS SECTION OR WORKMANSHIP PERFORMED HEREUNDER, SHALL BE MADE GOOD AT NO EXPENSE TO THE OWNER.

	SYMBOLS LEGEND	E R I N G / S U R V E Y I N G hellowm.com
	NOTE: THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS, ETC, ARE NECESSARILY USED ON THE DRAWINGS.	E E R I N G / S U I, Independence, M owellcwm.com
	FLUORESCENT OR LED FIXTURE (SEE SCHEDULE)	GINEERING/ Bldg. 1, Independend
	FIXTURE WITH EMERGENCY BATTERY BALLAST UNIT SITE POLE MOUNT LIGHT FIXTURE WALL MOUNTED FIXTURE-WITH EMERGENCY BATTERY BALLAST UNIT DOWNLIGHT FIXTURE WALL MOUNTED FIXTURE PENDANT MOUNTED FIXTURE WALL WASHER SINGLE FACE EXIT SIGN – UNIVERSAL MOUNTED SINGLE FACE EXIT SIGN W/ DIRECTIONAL ARROWS – UNIVERSAL MTD DOUBLE FACE EXIT SIGN W/ DIRECTIONAL ARROWS – UNIVERSAL MTD DUBLE FACE EXIT SIGN W/ DIRECTIONAL ARROWS – UNIVERSAL MTD DUAL HEADED EMERGENCY UNIT COMBO DUAL HEADED EMERGENCY AND EXIT SIGN UNIT LETTER INDICATES LIGHT FIXTURE AS INDICATED ON FIXTURE SCHED	Image: Second
S Sabc S2 S3 S4 SD S3Dxy Ss SM OS	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 DIMMER 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	MEP ENGINEER USSC USSC ENGINEERS DO COA NO. 2012006766 / KS COA NO. E-2818 1901 NW BLUE PARKWAY, UNITY VILLAGE, MO 64065 3rd FLOOR UNITY VILLAGE, MO 64065 3rd FLOOR UNITY VILLAGE TOWER phone: (816) 272-5289 [email: jamothers@jscangiheers.com
Sos	WALL SWITCH WITH OCCUPANCY SENSOR. TWO BUTTON DIGITAL LOW VOLTAGE WALL SWITCH. PROVIDES ON/OFF/0-10V DIMMING. SWITCH @ +48" UNLESS NOTED.	SMOTHERS NUMBER PE-2012003568
SD 문 옐 역 도 王	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 FLOW SWITCH FIRE SUPPRESSION TAMPER SWITCH SPRINKLER ALARM NOTIFICATION HORN	09-24-2021
	CAMERA SPEAKER TELEPHONE OUTLET® +18" UNLESS NOTED DATA OUTLET ® +18" UNLESS NOTED COMBINATION TELEPHONE/DATA OUTLET ® +18" UNLESS NOTED TELEVISION OUTLET ® +18" UNLESS NOTED DUCT DETECTOR HEAT DETECTOR 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.	AKEWOOD S PARK BUSINESS PARK T, MO 64064
® ⊑ ∕ ⊟ ®	GENERATOR TRANSFORMER MOTOR OUTLET DISCONNECT SWITCH – SIZE AND TYPE NOTED COMBINATION FUSED STARTER DISCONNECT SWITCH FUSE SIZE AS INDICATED, STARTER SIZE '1'	T 10 L/ SINES 10 I-470 E
	MECHANICAL EQUIP. CONNECTION, SEE SCHED. ON MECH. PLAN JUNCTION BOX CONDUIT RUN CONCEALED IN WALL OR ABOVE CEILING CONDUIT RUN BELOW FLOOR OR GRADE	
↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	SPECIAL HEAVY DUTY RECEPTACLE – SIZE AS NOTED. @ +18" UNLESS NOTED 1/2 SWITCHED RECEPTACLE @ +18" UNLESS NOTED FIRE RATED POKE THRU WITH TYPE INDICATED FLUSH FLOOR BOX WITH TYPE INDICATED SINGLE RECEPTACLE @ +18" UNLESS NOTED DUPLEX RECEPTACLE @ +18" UNLESS NOTED GFI DUPLEX RECEPTACLE @ +18" UNLESS NOTED GFI DUPLEX RECEPTACLE FULL SWITCHED RECEPTACLE DUPLEX RECEPTACLE INSTALLED ABOVE COUNTERTOP DUPLEX RECEPTACLE WITH WEATHERPROOF COVERPLATE @ 18" UNLESS NOTED	REVISIONS NO. DATE / DESCRIPTION 1. 09.24.2021/PHOTOMETRIC PLAN BLOJECT #: 51-046
P1–3,5,7	HOMERUN TO PANELBOARD, INFORMATION AT ARROWS ARE CIRCUIT NUMBERS AND PANELBOARD FOR TERMINATION. REFER TO ASSOCIATED NOTE FOR BRANCH CIRCUIT CONDUCTOR SIZES. INDICATES 1/2" CONDUIT CONCEALED IN CEILING OR WALL WITH (3) CONDUCTORS. (1) PHASE,	ISSUE DATE: 06/11/2021 ISSUED FOR: PERMIT
	(1) NEUTRAL AND (1) GROUND WIRE. ALL ARE #12 AWG UNLESS NOTED OTHERWISE. WHIP COUNT INDICATES NUMBER OF HOT CONDUCTORS	ELECTRICAL SPECIFICATIONS AND SYMBOLS



ELECTRICAL SPECIFICATIONS AND SYMBOLS E-001



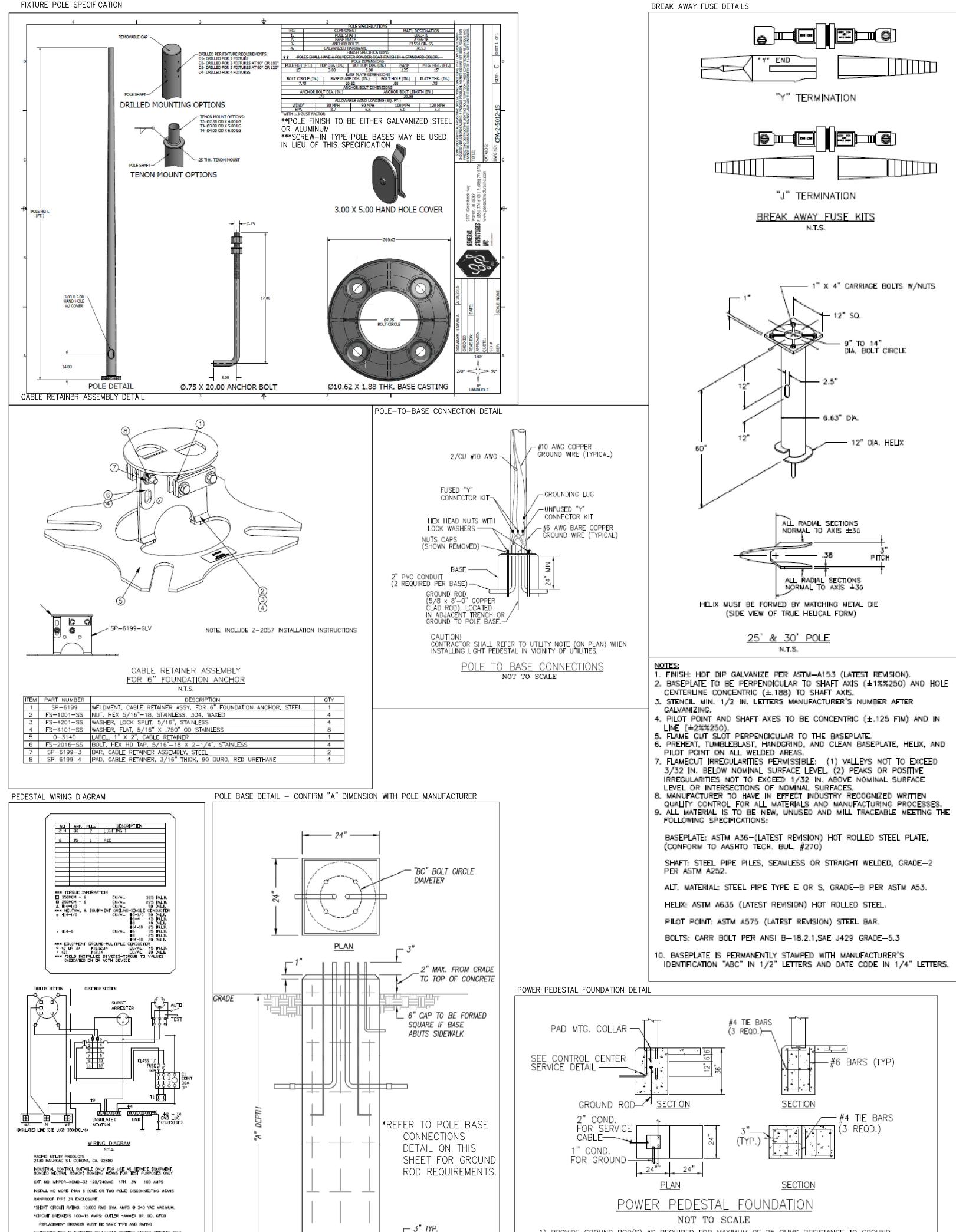


S1 DSX1 LED P2 40K T3M MVOLT HS (MH: 30'-0'') - PRO	
S2 DSX1 LED P2 40K RCCO MVOLT (MH: 30'-0'') - PRC	OVIDE
S3 DSX1 LED P2 40K LCCO MVOLT (MH: 30'-0'') - PRC	VIDE \
W WDGE3 LED P2 70CRI R4 40K (MH: 16'-0'')	

Label	Units
Parking_Lot	Fc
Property_Line	Fc







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

"AUTOMATIC TRIP IS INDICATED BY HANDLE POSITION MOWAY BETWEEN (ON) AND (OFF). TO RESTORE POWER MOVE HANDLE TO (OFF). THEN ON.

"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

WOISTURE KIT AWAILABLE-CONTACT FACTORY, CALNO, MSK-1

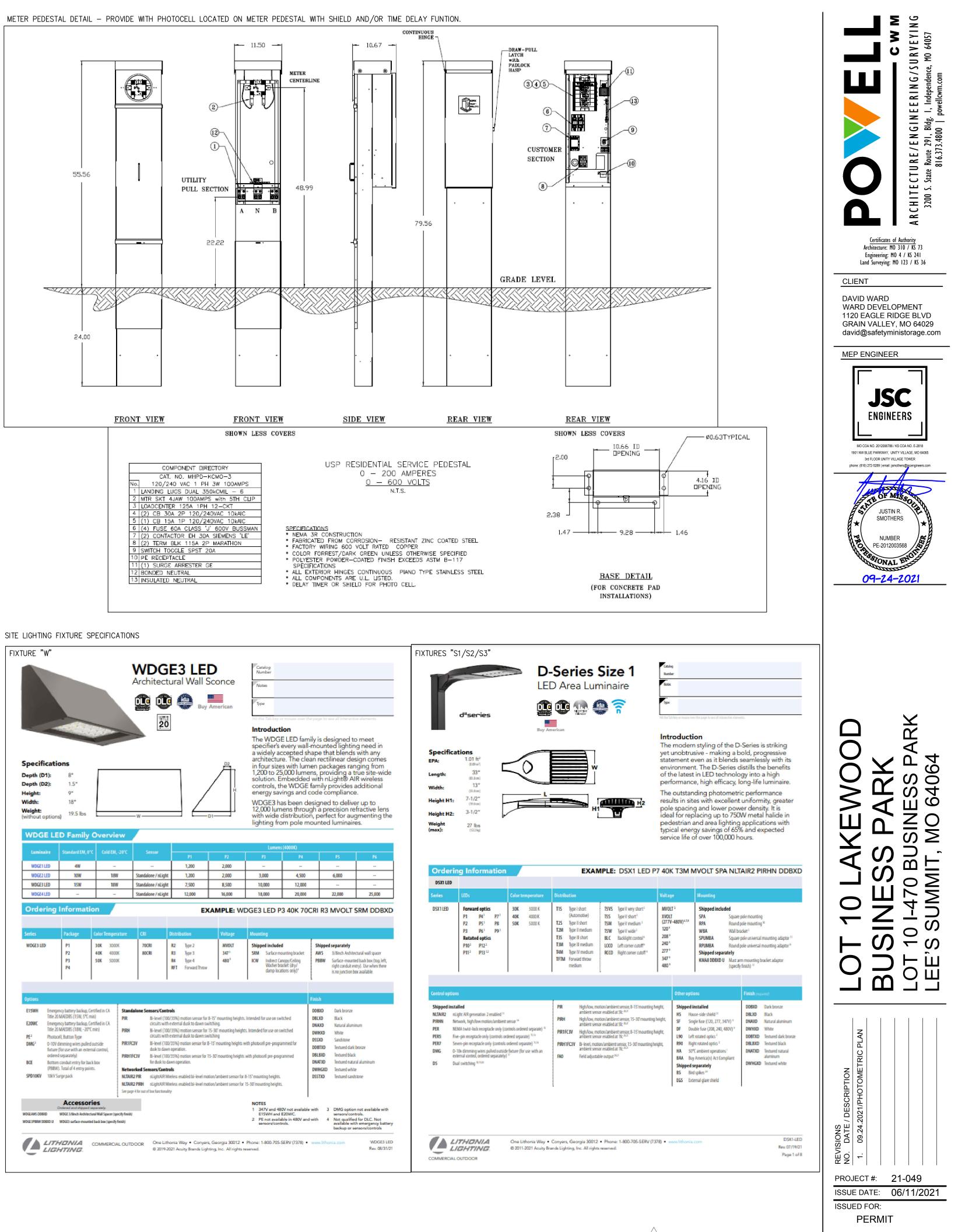
\*SHIPPING TENDS TO LOOSEN ELECTRICAL CONNECTIONS-TIGHTEN ALL CONNECTIONS BEFORE ENERGIZING UNIT.

AT-GRADE POLE BASE ELEVATION

\_\_\_\_

1) PROVIDE GROUND ROD(S) AS REQUIRED FOR MAXIMUM OF 25 OHMS RESISTANCE TO GROUND. EXOTHERMIC WELD ONE END OF NO. 6 AWG GROUND CONDUCTOR TO THE GROUND ROD(S) AND BRUSH ON 2 COATS OF AN INSULATING VARNISH TO THE WELDED AREAS.

2) 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.



fixture ( ordered BCE Bottom	Imming wires pulled outside (for use with an external control, Iseparately) conduit entry for back box L Total of 4 entry points.	PIRIFC3V PIRHIFC3V	Bi-level (100/35%) motion sensor for 8-15' mounting heights with photocell pre-programmed for dusk to dawn operation. Bi-level (100/35%) motion sensor for 15-30' mounting heights with photocell pre-programmed for dusk to dawn operation.	DISSID DOBTXD DBLBXD DNATXD DWHGXD	Sandstone Textured dark bronze Textured black Textured natural aluminum Textured white
	irge pack	NLTAIR2 PIR	nLightAIR Wireless enabled bi-level motion/ambient sensor for 8-15' mounting heights. nLiahtAIR Wireless enabled bi-level motion/ambient sensor for 15-30' mounting heights.	DSSTXD	Textured sandstone
		See page 4 for out o	of box functionality		
c	Accessories Indexed and shipped separately.		NOTES 1 347V and 480V not available	e with 3	DMG option not available wi
	WDGE 3/8in/h Architectural Wall Spacer (spe WDGE) surface-mounted back box (specify fi		E15WH and E20WC. 2 PE not available in 480V and semens/controls.	d with 4	sensors/controls. Not qualified for DUC. Not available with emergency ba
		-	sensory controls.		backup or sensors/controls
LITH		LOUTDOOR	One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) •	www.lithon	iia.com WDGE3

PHOTOMETRIC	PLAN

E-003

ENTIRE SHEET ADDED

PANELBOARD: P5 (NEW) BUS AMPS: 225A MAIN SIZE/TYPE: 200A MCB					FED FROM:     SERVICE ENTRANCE       AIC RATING:     42000 FULLY RATED       SERVES: TENANT SPACE							LINE-SIDE LUGS: MECHANICAL EQUIPMENT GROUND BUS					
- L.		ΓS/PHASE: 208Υ/120V, ΓΙΟ <mark>Ν: 1</mark>	3PH, 4VV					MOUNTING: SURFACE LOCATION: WAREHOUSE									
(	CKT	DESCRIPTIC	N	VOL	TAMPS/P	HASE	WRE	BKR	Ρ	Ρ	BKR	WRE	VOLT	AMPS/PH	ASE	DESCRIPTION	С
	NO.			A	B	С	NO.	AMP			AMP	NO.	Α	В	С		N
F	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	4
	5	SPARE						20	1	1	20	12			600	PWR - UH-1	
	7	SPARE						20	1	1	20					SPARE	8
		SPARE						20	1	1	20					SPARE	1
		SPARE						20	1	1	20					SPARE	1
		SPARE						20	1	1	20					SPARE	1
		SPARE						20	1	1	20					SPARE	1
Γ		SPARE						20	1	1	20					SPARE	1
Γ	19	SPARE						20	1	1	20					SPARE	2
	21	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	2
		PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	2
Γ	25	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	2
	27	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	2
	29	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	3
		PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	3
F		PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	3
		PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	3
F	37	PROVISIONAL SPACE							1	1	$\sim$			$\frown$	$\frown$	PROVISIONAL SPACE	3
F	39 41	LTG - SITE 1			140	140	10	20	1	1	20	10		105	105	LTG - SITE 2	4
	$\overline{\ }$	SUBTOTAL		880	860	140		$\sim$	$\sum$		$\wedge$	$\sim$	1,000	1,105	705	SUBTOTAL	
		TOTAL PHASE A - VA	1,880	LOAD		CONN.	VA	DF		LO			C	onn. Va	DF		
		AMPS 16 COOLING						RE	EFRIG				1.00				
		TOTAL PHASE B - VA	1,965	HEATING		600	)	1.00			SN/DIS				1.25	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
		AMPS	16	LIGHTIN	G	1,370	)	1.25			CHEN				1.00	~	
		TOTAL PHASE C - VA	845	RECEPT	ACLES	720	)	1.0/.5	5	EX	ISTIN	G			1.00	1	
		AMPS	7	MOTORS	S	2,000	)	1.00			g Mo				1.25	TOTAL DEMAND	
		TOTAL PNLBD - VA	4,690	SUPP HI				1.00				NDW			1.25	5,033 V	/A
Г		AMPS 13 MISC EQUIP					1.00	-	I T	G TRA	CK			1.00	14.	Δ	

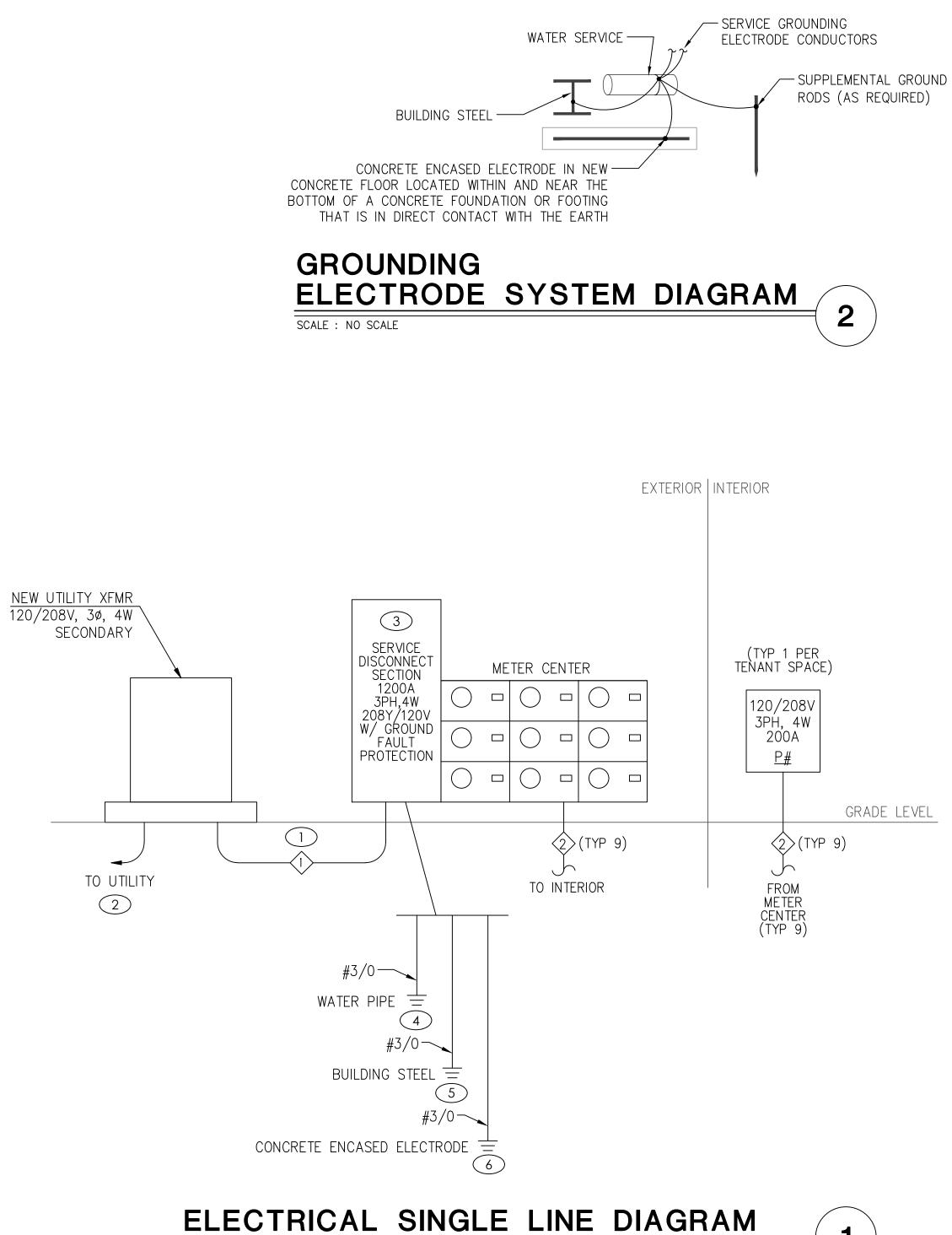
BUS MAIN /OL <sup>-</sup>	NELBOARD: P1,2 AMPS: 225A SIZE/TYPE: 200A MCB S/PHASE: 208Y/120V, 3PH,		6,7,8,9	(NEV	V)	AIC R SER\ MOUI	/ES: T	B: EN/ B: SI		SPAC	lly ra E	ice enti Ted	RANCE		LINE-SIDE LUGS: MECHAN EQUIPMENT GROUND	
CKT	DESCRIPTION		VOLT	AMPS/PI	HASE	WRE	BKR	Р	Р	BKR	WRE	VOL	TAMPS/PH	HASE	DESCRIPTION	CK
NO.			A	В	С	NO.	AMP	61		AMP	NO.	Α	B	С		NO
1	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			4
5	RCPT - OFFICE QUAD				360	12	20	1	1	-30	10			1,987	PWR - CU-1	6
7	RCPT - OFFICE GEN		540			12	20	1	1	20	12	600			PWR - UH-1	8
9	RCPT - RR GFI			180		12	20	1	1	20	12		1,650		PWR - WH	10
11	RCPT - WAREHOUSE GEN				720	12	20	1	1	15	12			924	PWR - F-1	12
13	SPARE						20	1	1	30	10	1,500			PWR - EWH-1 (PNLBD 1 ONLY)	14
15	SPARE						20	1	1	30	10		1,500		PVR - EVH-1 (PNLBD 1 ONLT)	16
17	SPARE						20	1	1	20					SPARE	18
19	SPARE						20	1	1	20					SPARE	20
21	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	22
23	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	24
25	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	26
27	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	28
29	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	3
31	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	3
33	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	3
35	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	3
37	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	3
39	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	4
41	PROVISIONAL SPACE							1	1						PROVISIONAL SPACE	4
	SUBTOTAL		1,391	256	1,080							3,100	5,137	2,911	SUBTOTAL	, <b>-</b>
	TOTAL PHASE A - VA 4,4	191	LOAD		CONN. \	/A	DF		LO	AD		C	ONN. VA	DF		
	AMPS 3	37	COOLING	3	2,772		0		RE	FRIG				1.00		
	TOTAL PHASE B - VA 5,3	393	HEATING	6	5,250		1.00		SIC	GN/DIS	SP			1.25	1	
	AMPS 4	5	LIGHTIN	G	927		1.25		KIT	CHEN	N			1.00	~	
				1,800		1.0/.5 EXISTING			G			1.00				
		33	MOTORS	3	1,924		1.00		LR	G MO	TOR			1.25	TOTAL DEMAND	1
	TOTAL PNLBD - VA 13,	875	SUPP HE	EAT			1.00		SH	IOW W	NDW			1.25	11,335 VA	
	,	39	MISC EQ	UIP	1,202		1.00		LT	G TRA	CK			1.00	31 A	

SCHEDULE IS TYPICAL FOR PANELBOARDS "P#" LISTED

ELECTRICAL PANEL SCHEDULES

SCALE : NO SCALE

		ELECTR		GHTING SC	HEDULE (OR EQUAL. VERIF	Y ALL SELECTIONS AND FINISHES WITH OWNER AND ARCHITECT PRIOR TO ORDERING).				
FIXTURE TYPE		MANUFACTURER	VOLT AMPS	MOUNTING	LAMP TYPE	REMARKS				
	NAME	SERIES								
A	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</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			



SCALE : NO SCALE

3

	FEEDER SCHEDULE
FEEDER NUMBER	CONDUIT AND CONDUCTOR SIZES
$\langle 1 \rangle$	(4) 4" EA W/ 4 #500KCM AL
$\langle 2 \rangle$	(1) 2" W/ 4 #3/0 CU & #6 CU GND
VOLTAGE FEEDERS	GIGN PROFESSIONAL HAS PERFORMED ALL THE REQUIRED DROP CALCULATIONS FOR ALL BRANCH CIRCUITS AND PER THE NATIONAL ELECTRICAL CODE, ARTICLE (1) FPN NO. 4.
THE DES	GIN PROFESSIONAL HAS PERFORMED ALL THE REQUIRED

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.

## GRADE LEVEL

# **# KEYED SLD NOTES**

- 1. PROVIDE NEW CONDUCTORS TO UTILITY SOURCE. VERIFY EXACT LOCATION AND REQUIREMENTS WITH UTILITY PRIOR TO ROUGH-IN.
- 2. CONTRACTOR TO PROVIDE AND INSTALL TWO 4" PVC CONDUITS FOR SERVICE PRIMARY TO LOCATION DETERMINED BY UTILITY.
- 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).

