LEE'S SUMMIT R-7 SCHOOL DISTRICT KINZIE WOODERSON 301 NE TUDOR ROAD 500 E. 8TH STREET, ROOM 1146 KANSAS CITY, MISSOURI 64106 LEE'S SUMMIT, MO 64086 (816) 275-1550 EMAIL: RG7910@ATT.COM (816) 986-1050 JEFF R. WILLIAMS- ENGINEER-CENTRAL DESIGN 401 SE BAILEY ROAD LEE'S SUMMIT, MO 64081 (816) 969-1900 (816) 347-4310 ÈMAIL: JEFF.WILLIAMS@KCPL.COM

CONSOLIDATED COMMUNICATIONS JOHN CASTILOW 14859 W. 95TH STREET LENEXA, KS 66215 (913) 322-9785 JOHN.CASTILOW@CONSOLIDATED.COM

GOOGLE FIBER LAUREN MARCUCCI (913) 663-1900

KINZÍE.WOODERSON@LRS7.NET LEE'S SUMMIT WATER UTILITIES 1200 SE HAMBLEN ROAD LEE'S SUMMIT, MO 64081 WASTE WATER LEE'S SUMMIT WATER UTILITIES 1200 SE HAMBLEN ROAD LEE'S SUMMIT, MO 64081 (816) 969-1900 RICHARD FROCK 3025 SE CLOVER DRIVE LEE'S SUMMIT, MO 64082

CHARTER/SPECTRUM 8221 W. 119TH STREET OVERLAND PARK, KS 66213 (816) 401-3573TROY.PREWITT@CHARTER.COM

RICHARD.FROCK@SPIREENERGY.COM

(816) 472-3489

LEGEND

•	SECTION CORNER	(M)	
	SET 1/2" REBAR W/LC 366 CAP	(P)	
0	FOUND MONUMENT AS NOTED		OVERHEAD POWER LINE
-	FIRE HYDRANT	— с —	GAS LINE
⊠ w∨	WATER VALVE	-P-UG-	UNDERGROUND POWER LINE
	WATER METER	—TEL —	UNDERGROUND TELEPHONE LIN
₩P	WATER METER PIT	— FO —	UNDERGROUND FIBER OPTIC LI
X _{GV}	GAS VALVE	— ss —	SANITARY SEWER LINE
GM	GAS METER	- SD $-$	STORM LINE
s	SPRINKLER BOX	-w $-$	WATER LINE
<u> </u>	SANITARY SEWER MANHOLE	T	TELEPHONE MANHOLE
<u></u>	TRAFFIC SIGNAL BOX	TP	TELEPHONE PEDESTAL
000	TRAFFIC SIGNAL POLE	TC	TELEPHONE CABINET
F	FIBER OPTIC BOX	(D)	STORM SEWER MANHOLE
TVP	TELEVISION PEDESTAL		SANITARY SEWER CLEANOUT
TB	TELEVISION BOOTH	E	ELECTRIC BOX
\blacksquare	GRATE INLET	В	BREAKER BOX
\blacksquare	4"x4" WOOD POST	ЕМ	ELECTRIC METER
₩	BOLLARD	ER	ELECTRIC RISER
₩	STEEL POST		TRANSFORMER
	COLUMN	(D)	POWER POLE
	SIGN	HLPPP	POWER POLE/W LIGHT
\odot	TREE	· —	GUY WIRE
⋈scv	SPRINKLER VALVE	\Diamond	LIGHT POLE
•	BOREHOLE	⊙ _{BU}	BUSH
_	_		

DEVELOPMENT TEAM CONTACT INFORMATION				
OWNER/DEVELOPER				
SCANNELL PROPERTIES #603, LLC	8801 RIVER CROSSING BOULEVARD SUITE 300 INDIANAPOLIS, INDIANA 46240			
CIVIL ENGINEER				
MITCH PLEAK OLSSON	7301 W 133RD STREET SUITE 200 OVERLAND PARK, KS 66213 PH: 913-381-1170 mpleak@olsson.com			

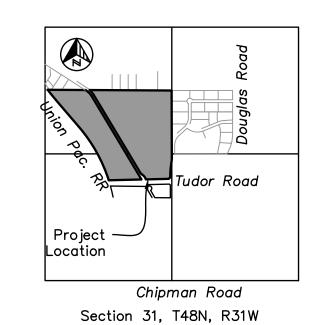
PROPERTY DESCRIPTION

CONTAINING 2,375,437 SQUARE FEET OR 54.5325 ACRES, MORE OR LESS.

ALL THAT PART OF AN UNPLATTED TRACT OF LAND, TOGETHER WITH ALL THAT PART OF NORTH MAIN STREET RIGHT OF WAY, ALL LYING IN THE WEST HALF OF SECTION 31, TOWNSHIP 48 NORTH, RANGE 31 WEST, LYING IN THE CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, DESCRIBED BY PATRICK ETHAN WARD, MO PLS-20050071, OF OLSSON MOLC-366, ON OCTOBER 14, 2021, AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF THE SOUTHWEST QUARTER OF SECTION 31, TOWNSHIP 48 NORTH, RANGE 31 WEST; THENCE SOUTH 01 DEGREE 59 MINUTES 47 SECONDS WEST, ON THE EAST LINE OF SAID SOUTHWEST QUARTER, A DISTANCE OF 65.98 FEET TO A POINT ON THE WEST LINE OF NW SLOAN STREET RIGHT OF WAY, AS ESTABLISHED IN DOCUMENT 2013E0075031 SAID POINT ALSO LYING ON A NON-TANGENT CURVE; THENCE IN A SOUTHERLY DIRECTION, DEPARTING SAID EAST LINE, ON SAID WEST LINE AND ON A CURVE TO THE RIGHT WHOSE INITIAL TANGENT BEARS SOUTH 02 DEGREES 47 MINUTES 37 SECONDS WEST, HAVING A RADIUS OF 970.00 FEET, THROUGH A CENTRAL ANGLE OF 6 DEGREES 27 MINUTES 07 SECONDS, AN ARC DISTANCE OF 109.23 FEET TO A POINT OF TANGENCY; THENCE SOUTH 09 DEGREES 14 MINUTES 44 SECONDS WEST, CONTINUING ON SAID WEST LINE, A DISTANCE OF 111.80 FEET TO A POINT OF CURVATURE; THENCE IN A SOUTHERLY DIRECTION, CONTINUING ON SAID WEST LINE AND ON A CURVE TO THE LEFT, HAVING A RADIUS OF 1030.00 FEET, THROUGH A CENTRAL ANGLE OF 7 DEGREES 14 MINUTES 57 SECONDS, AN ARC DISTANCE OF 130.32 FEET TO A POINT OF TANGENCY; THENCE SOUTH 01 DEGREE 59 MINUTES 47 SECONDS WEST, CONTINUING ON SAID WEST LINE, A DISTANCE OF 69.49 FEET TO A POINT ON THE NORTH LINE OF NE TUDOR ROAD RIGHT OF WAY, AS ESTABLISHED IN SAID DOCUMENT 2013E0075031; THENCE SOUTH 46 DEGREES 15 MINUTES 48 SECONDS WEST, DEPARTING SAID WEST LINE, ON SAID NORTH LINE, A DISTANCE OF 46.09 FEET TO A POINT; THENCE NORTH 89 DEGREES 24 MINUTES 16 SECONDS WEST, CONTINUING ON SAID NORTH LINE, AND ON THE NORTH LINE OF NW TUDOR ROAD RIGHT OF WAY, AS ESTABLISHED IN DOCUMENT 2013E0075030, A DISTANCE OF 1249.23 FEET TO A POINT ON THE EAST LINE OF UNION PACIFIC RAILROAD RIGHT OF WAY, AS NOW ESTABLISHED, SAID POINT ALSO LYING ON A NON-TANGENT CURVE; THENCE IN A NORTHERLY AND NORTHWESTERLY DIRECTION, DEPARTING SAID NORTH LINE, ON SAID EAST LINE AND ON A CURVE TO THE LEFT WHOSE INITIAL TANGENT BEARS NORTH 15 DEGREES 46 MINUTES 27 SECONDS WEST, HAVING A RADIUS OF 3203.90 FEET, THROUGH A CENTRAL ANGLE OF 22 DEGREES 48 MINUTES 11 SECONDS, AN ARC DISTANCE OF 1275.12 FEET TO A POINT OF TANGENCY; THENCE NORTH 38 DEGREES 34 MINUTES 39 SECONDS WEST, CONTINUING ON SAID EAST LINE, A DISTANCE OF 738.40 FEET TO A POINT OF CURVATURE; THENCE IN A NORTHWESTERLY DIRECTION, CONTINUING ON SAID EAST LINE AND ON A CURVE TO THE RIGHT, HAVING A RADIUS OF 5981.13 FEET, THROUGH A CENTRAL ANGLE OF 2 DEGREES 39 MINUTES 22 SECONDS, AN ARC DISTANCE OF 277.27 FEET TO A POINT ON THE NORTH LINE OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SAID SECTION 31, SAID POINT ALSO LYING ON A NON-TANGENT LINE; THENCE SOUTH 87 DEGREES 40 MINUTES 30 SECONDS EAST, DEPARTING SAID EAST LINE, ON SAID NORTH LINE, A DISTANCE OF 884.17 FEET TO A POINT ON A NON-TANGENT CURVE; THENCE IN A SOUTHEASTERLY DIRECTION, DEPARTING SAID NORTH LINE, ON A CURVE TO THE RIGHT WHOSE INITIAL TANGENT BEARS SOUTH 45 DEGREES 29 MINUTES 38 SECONDS EAST, HAVING A RADIUS OF 544.00 FEET, THROUGH A CENTRAL ANGLE OF 16 DEGREES 50 MINUTES 44 SECONDS, AN ARC DISTANCE OF 159.94 FEET TO A POINT OF TANGENCY; THENCE SOUTH 28 DEGREES 38 MINUTES 55 SECONDS EAST A DISTANCE OF 437.58 FEET TO A POINT OF CURVATURE; THENCE IN A SOUTHEASTERLY AND EASTERLY DIRECTION, ON A CURVE TO THE LEFT, HAVING A RADIUS OF 476.00 FEET, THROUGH A CENTRAL ANGLE OF 63 DEGREES 19 MINUTES 59 SECONDS, AN ARC DISTANCE OF 526.16 FEET TO A POINT OF TANGENCY; THENCE NORTH 88 DEGREES 01 MINUTE 06 SECONDS EAST A DISTANCE OF 416.85 FEET TO A POINT OF CURVATURE; THENCE IN AN EASTERLY AND SOUTHEASTERLY DIRECTION, ON A CURVE TO THE RIGHT, HAVING A RADIUS OF 544.00 FEET, THROUGH A CENTRAL ANGLE OF 65 DEGREES 51 MINUTES 08 SECONDS, AN ARC DISTANCE OF 625.24 FEET TO A POINT ON A NON-TANGENT LINE, SAID POINT ALSO LYING ON THE EAST LINE OF SAID NORTHWEST QUARTER; THENCE SOUTH 01 DEGREE 53 MINUTES 30 SECONDS WEST, ON SAID EAST LINE, A DISTANCE OF 338.00 FEET TO THE POINT OF BEGINNING,





VICINITY MAP Scale: 1" = 2000'

	Sheet List Table
Sheet Number	Sheet Title
C1.00	COVER SHEET
C1.01	GENERAL NOTES
C2.00	GENERAL LAYOUT PLAN
C3.00	TYPICAL ROADWAY & PAVEMENT SECTIONS
C4.00	OVERALL DIMENSION PLAN
C4.01	DIMENSION PLAN
C4.02	DIMENSION PLAN
C4.03	DIMENSION PLAN
C4.04	DIMENSION PLAN
C5.00	OVERALL GRADING PLAN
C5.01	GRADING PLAN
C5.02	GRADING PLAN
C5.03	GRADING PLAN
C5.04	GRADING PLAN
C5.05	GRADING DETAILS
C5.06	GRADING DETAILS
C5.07	RETAINING WALL DETAILS
C5.08	RETAINING WALL DETAILS
C6.00	OVERALL UTILITY PLAN
C6.01	UTILITY PLAN
C6.02	UTILITY PLAN
C6.03	UTILITY PLAN
C6.04	UTILITY PLAN
C6.05	OVERALL SANITARY SEWER PLAN
C6.06	SANITARY GENERAL NOTES
C6.07	PROPOSED LINE 2 - PLAN & PROFILE
C6.08	SANITARY SEWER CONNECTION PLAN
C6.09	SANITARY SEWER DETAILS SHEET
C7.00	OVERALL STORM SEWER PLAN
C7.01	STORM SEWER PLAN & PROFILE LINE A
C7.02	STORM SEWER PLAN & PROFILE LINE B
C7.03	STORM SEWER PLAN & PROFILE LINE C
C7.04	STORM SEWER PLAN & PROFILE NORTHERN OUTFL
C7.05	STORM SEWER PLAN & PROFILE SOUTHERN OUTFL
C7.07	STORM CALCULATIONS
C8.00	STANDARD DETAILS
C8.01	STANDARD DETAILS
C8.02	STANDARD DETAILS
C8.03	STANDARD DETAILS
L1.00	OVERALL LANDSCAPE PLAN
L1.01	LANDSCAPE PLAN
L1.02	LANDSCAPE PLAN
L1.03	LANDSCAPE PLAN
L1.04	LANDSCAPE PLAN
	LANDSCAPE NOTES & DETAILS
E1.01	SITE LIGHTING PHOTOMETRICS PLAN
E2.00	SITE LIGHTING POWER PLAN
E3.0	SITE LIGHTING PHOTOMETRICS PLAN
E4.0	SITE LIGHTING SPECIFICATIONS



THE CONTRACTOR SHALL ADHERE TO THE PROVISIONS OF THE SENATE BILL NUMBER 583, 78TH GENERAL ASSEMBLY OF THE STATE OF MISSOURI. THE BILL REQUIRES THAT ANY PERSON OR FIRM DOING EXCAVATION ON PUBLIC RIGHT-OF-WAY DO SO ONLY AFTER GIVING NOTICE TO, & OBTAINING INFORMATION FROM, UTILITY COMPANIES. STATE LAW REQUIRES 48 HOURS ADVANCE NOTICE. CALL 1-800-DIG-RITE.

approved by: QA/QC by: project no.: <u>B21-04157</u> drawing ro..TTL01_B2104157.dwg date: 03.11.2022

Ш-

S_a

NUMBER PE-2009018764

SHEET C1.00

- 1. THE EXISTING UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MAY NOT INCLUDE ALL LINES PRESENT. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALL "1-800-DIG-RITE", 1(800)344-7483, OR 811 AND COORDINATE FIELD LOCATION OF EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING GRADING ACTIVITIES. !!STOP!! CALL BEFORE YOU DIG!!
- 2. THE CONTRACTOR SHALL NOT CHANGE OR DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE OWNER AND ENGINEER.
- ALL WORK AND MATERIALS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE OWNER OR THE OWNER'S REPRESENTATIVE.
- 4. ALL ESTIMATES OF QUANTITIES ARE FOR INFORMATION PURPOSES ONLY. CONTRACTOR AND SUBCONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING ALL QUANTITIES AND FOR BRINGING THE PROJECT TO THE LINES AND GRADES SHOWN HEREIN. CONTRACTOR SHALL PROVIDE ALL WORK AND MATERIALS REQUIRED TO COMPLETE THE WORK SHOWN IN THESE PLANS. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE EARTHWORK QUANTITIES AND TO ACCOUNT FOR HAUL IN OR HAUL OFF OF MATERIAL AS NECESSARY TO MEET THE LINES AND GRADES OF THE PLANS EVEN IF QUANTITY ESTIMATES ARE SHOWN WITHIN THESE DOCUMENTS. NO ADDITIONAL PAYMENTS WILL BE MADE FOR IMPORT OR EXPORT OF MATERIAL OR FOR ADJUSTMENTS TO QUANTITY ESTIMATES.
- 5. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST STANDARDS AND SPECIFICATIONS OF THE CITY OF LEE'S SUMMIT, EXCEPT WHERE SHOWN OTHERWISE. NOTIFY ENGINEER OF DISCREPANCIES.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS. PAYING ALL FEES AND FOR OTHERWISE COMPLYING WITH ALL APPLICABLE REGULATIONS GOVERNING THE WORK.
- 7. THE CONTRACTOR SHALL ADHERE TO THE PROVISIONS OF MISSOURI STATE LAW WHICH REQUIRES THAT ANY PERSON OR FIRM DOING EXCAVATION ON PUBLIC RIGHT—OF—WAY DO SO ONLY AFTER GIVING NOTICE TO, AND OBTAINING INFORMATION FROM UTILITY COMPANIES.
- 8. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL NOTIFY ALL THOSE COMPANIES WHICH HAVE FACILITIES IN THE NEAR VICINITY OF THE CONSTRUCTION TO BE PERFORMED.
- 9. THE CONTRACTOR SHALL PROTECT ALL MAJOR TREES SHOWN TO REMAIN FROM DAMAGE. NO TREE SHALL BE REMOVED WITHOUT PERMISSION OF THE OWNER, UNLESS SHOWN FOR REMOVAL ON THESE PLANS.
- 10. CLEARING AND GRUBBING OPERATIONS AND DISPOSAL OF ALL DEBRIS THEREFROM SHALL BE PERFORMED BY THE CONTRACTOR IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND ORDINANCES.
- 11. ALL WASTE MATERIAL RESULTING FROM THE PROJECT SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR.
- 12. ALL UTILITY EXTENSIONS AND CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE APPLICABLE UTILITY COMPANIES.
- 13. ALL MANHOLES, CATCH BASINS, UTILITY VALVES AND METER PITS ARE TO BE ADJUSTED OR REBUILT TO GRADE AS REQUIRED.
- 14. ALL DISTURBED AREAS SHALL BE LANDSCAPED, SEEDED OR SODDED, AS SHOWN ON THE LANDSCAPE PLAN.
- 15. HANDICAP PARKING STALLS SHALL BE SIGNED WITH CITY/ADA APPROVED SIGN AND CONSTRUCTED IN STRICT ACCORDANCE WITH CITY/ADA STANDARDS AND SHALL NOT EXCEED 2.00 PERCENT IN ANY DIRECTION. ACCESSIBLE SIDEWALKS HAVE A MAXIMUM CROSS SLOPE OF 2 PERCENT AND A MAXIMUM LONGITUDINAL SLOPE OF 5 PERCENT.
- 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROL OF SURFACE EROSION DURING CONSTRUCTION AND UNTIL THE OWNER ACCEPTS THE WORK AS COMPLETE. EROSION CONTROL MEASURES INCLUDING, BUT NOT LIMITED TO, THE SILT FENCES AND GRAVEL FILTER BAGS SHOWN ON THE EROSION CONTROL PLAN SHALL BE IN PLACE FOR THE DURATION OF THE SITE IMPROVEMENTS.
- 17. ALL HDPE PIPE SHALL BE ADS (N-12) OR APPROVED EQUAL, AND CONFORM TO AASHTO M294 SPECIFICATIONS. ALL PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
- 18. IF PRECAST CONCRETE STORM SEWER STRUCTURES ARE TO BE USED ON THIS PROJECT, THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND HAVE THEM APPROVED BY THE ENGINEER PRIOR TO FABRICATION OF THE STRUCTURES. FAILURE TO DO SO SHALL BE CAUSE FOR REJECTION.
- 19. EXISTING TOPSOIL SHALL BE STRIPPED TO A POINT WHERE ALL VEGETATION IS REMOVED.
- 20. THE CONTRACTOR SHALL, BY HIS OWN INVESTIGATION, AND PRIOR TO COMMENCING WORK, SATISFY HIMSELF AS TO THE SURFACE AND SUBSURFACE CONDITIONS TO BE ENCOUNTERED.
- 21. ALL WATER SERVICE LINES SHALL BE INSTALLED PER LEE'S SUMMIT WATER UTILITIES STANDARDS. ALL WATER LINES SHALL BE A MINIMUM OF 48 INCHES BELOW THE FINISHED GRADE ELEVATIONS SHOWN HEREIN.
- 22. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL BOUNDARY CORNERS AND SECTION CORNERS. ANY BOUNDARY CORNER AND/OR SECTION CORNER DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE RESET BY A LAND SURVEYOR LICENSED IN THE STATE OF MISSOURI, AT THE CONTRACTOR'S EXPENSE.
- 23. NO FEDERALLY OWNED MAILBOX MAY BE DISTURBED. THE CONTRACTOR SHALL GIVE AT LEAST TWENTY-FOUR (24) HOURS ADVANCE NOTICE TO THE MANAGER OF DELIVERY AND COLLECTIONS. TAMPERING WITH FEDERAL MAIL FACILITIES MAY SUBJECT THE CONTRACTOR TO PROSECUTION BY THE FEDERAL GOVERNMENT.
- 24. THE CONTOUR LINES, SPOT ELEVATIONS AND BUILDING FLOOR ELEVATIONS SHOWN ARE TO FINISH GRADE FOR SURFACE OF PAVEMENT, TOP OF SIDEWALKS AND CURBS, TOP OF FLOOR SLABS, ETC. REFER TO TYPICAL SECTIONS
- FOR PAVING, SLAB AND AGGREGATE BASE THICKNESS TO DEDUCT FOR GRADING LINE ELEVATIONS.

25. THE CONTRACTOR SHALL FINISH GRADE SLOPES AS SHOWN NO STEEPER THAN 1 FOOT VERTICAL IN 3 FEET HORIZONTAL

- 26. THE CONTRACTOR SHALL GRADE LANDSCAPED AREAS TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING AND SIDEWALKS WHEN FINISH LANDSCAPE MATERIALS ARE IN PLACE.
- 27. ALL EXTERIOR CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI AND BE AIR ENTRAINED. FLYASH IS NOT A SUITABLE REPLACEMENT FOR PORTLAND CEMENT.
- 28. ALL ON-SITE WIRING AND CABLES SHALL BE PLACED UNDERGROUND
- 29. THE CONTRACTOR SHALL MAKE HIS OWN ASSUMPTIONS ON THE LOCATION AND CONSISTENCY OF ANY EXISTING ROCK LAYERS UNDERLYING THE PROJECT SITE. ALL ROCK EXCAVATION AND REMOVAL SHALL BE INCLUDED IN THE
- 30. CONCRETE PAVEMENT JOINTS SHALL AT A MINIMUM BE CONSTRUCTED AS FOLLOWS (REFER TO HARDSCAPE PLANS FOR SPECIFIC TREATMENT OF THESE AREAS):
 - LONGITUDINAL CONSTRUCTION JOINTS SPACED AT INTERVALS NOT GREATER THAN 12 FEET, TOOLED TO 1/3 THE SLAB THICKNESS AND OF THE BAR TYPE
 - CONSTRUCTION JOINTS AT THE END OF EACH POUR AND WHEN PAVING OPERATIONS ARE SUSPENDED FOR 30 MINUTES OR MORE AND DOWELED WITH SMOOTH DOWELS. TRANSVERSE JOINTS SPACED AT INTERVALS NOT GREATER THAN 15 FEET AND TOOLED TO 1/3 OF THE SLAB THICKNESS.
 - ISOLATION JOINTS PLACED WHERE THE PAVEMENT ABUTS THE BUILDING, DRAINAGE STRUCTURES AND OTHER FIXED STRUCTURES, CONSTRUCTED WITH A 3/4" NONEXTRUDING FILLER, CLOSED-CELL FOAM RUBBER OR A BITUMEN-TREATED FIBER-BOARD, AND WITH A THICKENED EDGE, INCREASED BY 20 PERCENT, TAPERED TO THE REGULAR THICKNESS IN 5 FEET. ALL EXPANSION JOINTS SHALL BE FILLED AND SEALED WITH A PLASTIC JOINT SEALANT MATERIAL.
- 32. CONTRACTOR TO FIELD VERIFY ELEVATIONS AND LOCATIONS OF EXISTING UTILITIES AND INFRASTRUCTURE PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES BETWEEN PLANS AND FIELD CONDITIONS.
- 33. TELEPHONE AND COMMUNICATION SERVICE ROUTING AND CONDUITS NOT SHOWN ON PLANS. CONTRACTOR SHALL INSTALL NECESSARY CONDUIT PRIOR TO PAVEMENT INSTALLATION. CONTRACTOR SHALL COORDINATE ROUTING AND INSTALLATION SCOPE WITH SERVICE PROVIDER.
- 34. BY ACCEPTING AND UTILIZING ANY ELECTRONIC FILE OF ANY DRAWING, REPORT OR DATA TRANSMITTED BY OLSSON, THE RECIPIENT AGREES FOR ITSELF, ITS SUCCESSORS, ASSIGNS, INSURERS AND ALL THOSE CLAIMING UNDER OR THROUGH IT, THAT BY USING ANY OF THE INFORMATION CONTAINED IN THE ELECTRONIC FILE. ALL USERS AGREE TO BE BOUND BY THE FOLLOWING TERMS. ALL OF THE INFORMATION CONTAINED IN THIS ELECTRONIC FILE IS THE WORK PRODUCT AND INSTRUMENT OF SERVICE OF OLSSON, WHO SHALL BE DEEMED THE AUTHOR, AND SHALL RETAIN ALL COMMON LAW, STATUTORY LAW AND OTHER RIGHTS, INCLUDING COPYRIGHTS, UNLESS THE SAME HAVE PREVIOUSLY BEEN TRANSFERRED IN WRITING TO THE RECIPIENT. THE INFORMATION CONTAINED IN THE ELECTRONIC FILE IS PROVIDED FOR THE CONVENIENCE OF THE RECIPIENT AND IS PROVIDED IN "AS IS" CONDITION. THE RECIPIENT IS AWARE THAT DIFFERENCES MAY EXIST BETWEEN THE ELECTRONIC FILES AND THE PRINTED HARD—COPY ORIGINAL SIGNED AND SEALED DRAWINGS OR REPORTS. IN THE EVENT OF A CONFLICT BETWEEN THE SIGNED AND SEALED ORIGINAL DOCUMENTS PREPARED BY OLSSON AND THE ELECTRONIC FILES TRANSFERRED HEREWITH, THE SIGNED AND SEALED ORIGINAL DOCUMENTS SHALL GOVERN. OLSSON SPECIFICALLY DISCLAIMS ALL WARRANTIES. EXPRESSED OR IMPLIED. INCLUDING WITHOUT LIMITATION. ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ELECTRONIC FILES. IT SHALL BE THE RECIPIENT'S RESPONSIBILITY TO CONFIRM THE ACCURACY OF THE INFORMATION CONTAINED IN THE ELECTRONIC FILE AND THAT IF ACCURATELY REFLECTS THE INFORMATION NEEDED BY THE RECIPIENT. THE RECIPIENT SHALL NOT RETRANSMIT THE ELECTRONIC FILE, OR ANY PORTION THEREOF, WITHOUT INCLUDING THIS DISCLAIMER AS PART OF ANY SUCH TRANSMISSION. IN ADDITION, THE RECIPIENT AGREES, TO THE FULLEST EXTENT PERMITTED BY LAW, TO INDEMNIFY AND HOLD HARMLESS OLSSON, ITS OFFICERS, DIRECTORS, EMPLOYEES AND SUBCONSULTANTS AGAINST ANY AND ALL DAMAGES, LIABILITIES, CLAIMS OR COSTS, INCLUDING REASONABLE ATTORNEY'S AND EXPERT WITNESS FEES AND DEFENSE COSTS, ARISING FROM ANY CHANGES MADE BY ANYONE OTHER THAN OLSSON OR FROM ANY REUSE OF THE ELECTRONIC FILES WITHOUT THE PRIOR WRITTEN CONSENT OF OLSSON.
- 35. DESIGN PROFESSIONAL SHALL REVIEW SHOP DRAWINGS OR SAMPLES FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPTS ON THE PROJECT AND FOR COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS, AND SHALL NOT EXTEND TO MEANS OR METHODS OF CONSTRUCTION. THE DESIGN PROFESSIONAL'S REVIEW SHALL NOT RELIEVE CONTRACTOR FROM RESPONSIBILITY FOR ANY VARIATION FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS UNLESS CONTRACTOR HAS IN WRITING CALLED DESIGN PROFESSIONAL'S ATTENTION TO EACH SUCH VARIATION AT THE TIME OF SUBMISSION, AND DESIGN PROFESSIONAL HAS GIVEN WRITTEN APPROVAL OF EACH SUCH VARIATION BY SPECIFIC WRITTEN NOTATION THEREOF INCORPORATED INTO OR ACCOMPANYING THE SHOP DRAWING OR SAMPLE; NOR WILL ANY APPROVAL BY THE DESIGN PROFESSIONAL RELIEVE CONTRACTOR FROM RESPONSIBILITY FOR ERRORS OR OMISSIONS IN SHOP DRAWINGS WITH CONFORMANCE TO CONTRACT DOCUMENTS.
- BEFORE SUBMITTING EACH SHOP DRAWING OR SAMPLE, CONTRACTOR SHALL HAVE DETERMINED AND VERIFIED:
- a. ALL FIELD MEASUREMENTS, QUANTITIES, DIMENSIONS, SPECIFIED PERFORMANCE CRITERIA, INSTALLATION REQUIREMENTS, MATERIALS, CATALOG NUMBERS AND SIMILAR INFORMATION WITH RESPECT THERETO;
- b. ALL MATERIALS WITH RESPECT TO INTENDED USE, FABRICATION, SHIPPING, HANDLING, STORAGE, ASSEMBLY AND INSTALLATION PERTAINING TO THE PERFORMANCE OF THE WORK; c. ALL INFORMATION RELATIVE TO MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION AND SAFETY PRECAUTIONS AND PROGRAMS INCIDENT THERETO;
- d. CONTRACTOR SHALL ALSO HAVE REVIEWED AND COORDINATED EACH SHOP DRAWING OR SAMPLE WITH OTHER SHOP DRAWINGS AND SAMPLES, AND WITH THE REQUIREMENTS OF THE WORK AND THE CONTRACT DOCUMENTS.
- ALL SUBMITTED SHOP DRAWINGS SHALL BEAR A STAMP OR SPECIFIC WRITTEN INDICATION AND SIGNATURE THAT CONTRACTOR HAS FULLY REVIEWED THE SUBMISSION AND CHECKED ALL DATA AND DETAILS. BY CONTRACTOR SIGNATURE, CONTRACTOR CERTIFIES SHOP DRAWING CONFORMANCE AND ACCURACY TO THE CONTRACT DOCUMENTS.
- 36. ANY CONTRACTOR BIDDING ANY PORTION OF THIS WORK SHALL HAVE IN HIS OR HER POSSESSION A COMPLETE SET OF CONSTRUCTION DOCUMENTS AND BE FAMILIAR WITH ALL SCOPES OF WORK AND TRADES TO UNDERSTAND
- 37. CONTRACTOR TO PROVIDE A STRUCTURAL DESIGN FOR ALL STORM STRUCTURES WITH A ("L"+"H") AND ("W" + "H") GREATER THAN 20 FEET. "L" IS THE LENGTH OF THE BOX, "W" IS THE WIDTH OF THE BOX, AND "H" IS THE HEIGHT OF THE BOX. STRUCTURAL DESIGN SHOULD INCLUDE DETAILS AND CALCULATIONS SEALED BY A LICENSED ENGINEER. DESIGN SHALL BE SUBMITTED FOR REVIEW PRIOR TO ANY FABRICATION AND ORDERING OF PIPE PRODUCTS. IN THE EVEN THIS NOTE IS LESS STRINGENT THAN THE LOCAL JURISDICTION, THE MORE STRINGENT REQUIREMENTS SHOULD APPLY.

DEMOLITION NOTES

- 1. CONTRACTOR TO PRESERVE ALL SURVEY CONTROL.
- 2. CONTRACTOR TO COMPLETE DEMOLITION PER THE INTENT OF THESE PLANS.
- 3. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE ENGINEER MAKES NO GUARANTEES THAT THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE ENGINEER HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. THIS INCLUDES PRIVATE AND PUBLIC UTILITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT MISSOURI ONE CALL AT 1-800-344-7483 IN ADVANCE OF ANY EXCAVATION TO COORDINATE UTILITY LOCATIONS.
- 4. CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER EXISTING LINES NOT OF RECORD OR SHOWN ON THESE PLANS.
- 5. REMOVAL AND DISPOSAL OF BUSHES AND TREES SMALLER THAN 12" IN DIAMETER SHALL BE CONSIDERED SUBSIDIARY TO THE PRICE BID FOR CLEARING AND GRUBBING.
- 6. ALL ITEMS REMOVED SHALL BE LEGALLY DISPOSED OFF SITE BY THE CONTRACTOR.
- 7. DO NOT DISRUPT UTILITY SERVICE TO ADJACENT BUSINESSES OR RESIDENCES WITHOUT PRIOR WRITTEN APPROVAL BY THE ENGINEER.
- 8. DO NOT DISRUPT TRAFFIC ON ADJACENT PUBLIC STREETS WITHOUT PRIOR WRITTEN APPROVAL BY THE CITY.
- 9. ALL SIDEWALK AND PAVEMENT TO REMAIN SHALL BE PROTECTED IN PLACE INCLUDING PROTECTION FROM DAMAGE CAUSED BY REMOVAL OF ABUTTING PAVEMENT. CONTRACTOR SHALL SAW CUT WHERE NECESSARY.
- 10. CONTRACTOR SHALL GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DISCONNECTION, DEMOLITION, AND REMOVAL OF SERVICE LINES. CAP ALL LINES BEFORE PROCEEDING WITH WORK ON THIS CONTRACT.
- 11. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANIES WORK FORCE AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES.
- 12. CONTRACTOR SHALL PROTECT THE PUBLIC AT ALL TIME WITH FENCING, BARRICADES, ENCLOSURES, ETC. TO THE BEST PRACTICES AND AS APPROVED BY THE ENGINEER AND THE CITY.
- 13. DAMAGE TO ALL EXISTING CONDITIONS TO REMAIN SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 14. DEMOLITION OF BUILDINGS SHALL INCLUDE THE BUILDING STRUCTURE, PAD, FOOTINGS, FOUNDATIONS, BASEMENT WALLS, BASEMENT FLOORS, TRUCK DOCKS, STEPS, DECKS, ALL ITEMS REMAINING IN BUILDING, ALL BUILDING UTILITY SERVICES, SIDEWALKS, AND BACKFILLING AND RESTORING REMAINING EXCAVATIONS, BASEMENTS AND TRENCHES PER SPECIFICATIONS.
- 15. ALL LIGHT POLE DEMOLITION SHALL INCLUDE FIXTURES, BASES AND WIRING.
- 16. ALL UTILITY DEMOLITION SHALL INCLUDE METERS, MANHOLES AND OTHER STRUCTURES ASSOCIATED WITH THE UTILITY SERVICE LINE.

PAVEMENT MARKING NOTES:

- 1. PAVEMENT MARKING PAINT: LATEX, WATER-BASE EMULSION, READY-MIXED, COMPLYING WITH FS TT-P-1952 WITH DRYING TIME OF LESS THAN 45 MINUTES.
- 2. DO NOT APPLY PAVEMENT MARKING PAINT UNTIL LAYOUT, COLORS AND PLACEMENT HAVE BEEN VERIFIED WITH THE ARCHITECT.
- 3. ALLOW PAVING TO AGE FOR 24 HOURS BEFORE MARKING.
- 4. SWEEP AND CLEAN SURFACE.
- 5. APPLY PAINT WITH MECHANICAL EQUIPMENT TO PRODUCE MARKINGS WITH UNIFORM STRAIGHT EDGES. PROVIDE A MINIMUM WET FILM THICKNESS OF 15 MILS.
- 6. THIS WORK SHALL CONSIST OF FURNISHING AND APPLYING PAINT ON PAVEMENT SURFACES, IN TRAFFIC LANES, PARKING BAYS, AREAS RESTRICTED TO HANDICAPPED PERSONS, CROSSWALKS, AND OTHER DETAIL PAVEMENT MARKINGS, IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS.
- 7. DETAILS NOT SHOWN SHALL BE IN CONFORMITY WITH THE STATE STANDARDS FOR TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, AND SIMILAR REQUIREMENTS ESTABLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.
- 8. ALL PARKING LOT STRIPING SHALL BE SINGLE LINE 4" WIDE AS PER THE SITE PLANS.
- 9. PAINT FOR MARKING PAVEMENT SHALL CONFORM TO FEDERAL HIGHWAY MARKING STANDARDS. USE SHERWIN WILLIAMS PROMAR TRAFFIC MARKING PAINT, COLORS TO MATCH THE EXISTING ADJACENT INSTALLATIONS. USE FLAT BLACK, WHITE OR YELLOW, WHERE APPROPRIATE. UNLESS OTHERWISE DIRECTED, USE THE FOLLOWING: A. BLACKTOP OR BITUMINOUS ASPHALT PAVING: USE WHITE COLOR.
- B. PORTLAND CEMENT CONCRETE PAVING: USE YELLOW COLOR. C. HANDICAPPED ACCESSIBLE PARKING AND ENTRYWAYS: USE WHITE COLOR WITH WHITE STRIPES.

D. PROVIDE PAINTED CURBS AT FIRE LANE DESIGNATIONS PER FIRE MARSHAL REQUIREMENTS.

- 10. APPLY ALL MARKINGS USING APPROVED MECHANICAL EQUIPMENT (WITH PROVISIONS FOR CONSTANT AGITATION OF PAINT), CAPABLE OF APPLYING THE MARKING WIDTHS AS SHOWN. USE PNEUMATIC SPRAY GUNS FOR HAND APPLICATION OF PAINT. ALL PAINTING EQUIPMENT AND OPERATIONS SHALL BE UNDER THE CONTROL OF EXPERIENCED TECHNICIANS THOROUGHLY FAMILIAR WITH EQUIPMENT AND MATERIALS AND MARKING LAYOUTS.
- 11. DETAIL PAVEMENT MARKINGS SHALL BE THAT MARKING, EXCLUSIVE OF ACTUAL TRAFFIC LANE MARKING, AT EXIT AND ENTRANCE ISLANDS AND TURNOUTS, ON CURBS, AT CROSSWALKS, AT PARKING BAYS AND AT SUCH OTHER LOCATIONS AS SHOWN. HANDICAPPED PARKING SPACES SHALL BE MARKED BY THE INTERNATIONAL HANDICAPPED SYMBOL AT INDICATED PARKING SPACES. USE A SUITABLE TEMPLATE THAT WILL PROVIDE A PAVEMENT MARKING WITH TRUE, SHARP EDGES AND ENDS.

EROSION & SEDIMENT CONTROL NOTES

- 1. PRIOR TO LAND DISTURBANCE ACTIVITIES. THE FOLLOWING SHALL OCCUR: A. DELINEATE THE OUTER LIMITS OF ANY NATURAL STREAM CORRIDOR DESIGNATED IN ACCORDANCE WITH THE CITY'S DESIGN AND CONSTRUCTION MANUAL SHALL BE APPLICABLE TO DEVELOPMENT IN THE ADP.
- B. CONSTRUCT A STABILIZED ENTRANCE/PARKING/DELIVERY AREA.
- C. INSTALL PERIMETER CONTROLS AND REQUEST THE INSPECTION OF THE PRECONSTRUCTION EROSION AND SEDIMENT CONTROL MEASURES DESIGNATED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN. LAND DISTURBANCE WORK SHALL NOT PROCEED UNTIL THERE IS A SATISFACTORY INSPECTION.
- D. IDENTIFY THE LIMITS OF CONSTRUCTION ON THE GROUND WITH EASILY RECOGNIZABLE INDICATIONS SUCH AS CONSTRUCTION STAKING, CONSTRUCTION FENCING, AND PLACEMENT OF PHYSICAL BARRIERS OR OTHER MEANS ACCEPTABLE TO THE CITY INSPECTOR AND IN CONFORMANCE WITH THE EROSION AND SEDIMENT CONTROL PLAN.
- 2. THE SITE SHALL COMPLY WITH ALL REQUIREMENTS OF THE MISSOURI WATER POLLUTION CONTROL AND NPDES STORMWATER RUNOFF FROM CONSTRUCTION SITES GENERAL PERMIT, AND LEE'S SUMMIT STANDARDS AND SPECIFICATIONS LIMITED TO:
- A. STABILIZATION OF ANY DISTURBED AREA WHERE THE LAND DISTURBANCE ACTIVITY HAS CEASED FOR MORE THAN 14 DAYS.
- B. INSPECTIONS OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PERFORMED TO MEET OR EXCEED THE MINIMUM INSPECTION FREQUENCY IN THE MISSOURI GENERAL PERMIT. AT A MINIMUM, INSPECTIONS SHALL BE PERFORMED DURING ALL PHASES OF CONSTRUCTION AT THE FOLLOWING INTERVALS: I AT LEAST ONCE EVERY 14 DAYS
- II BY THE END OF THE NEXT DAY, EXCLUDING WEEKENDS AND FEDERAL HOLIDAYS, AFTER A RAIN EVENT OF ½ INCH OR MORE.
- C. AN INSPECTION LOG SHALL BE MAINTAINED AND SHALL BE AVAILABLE FOR REVIEW BY THE REGULATORY AUTHORITY.
- D. THE EROSION AND SEDIMENT CONTROL PLAN SHALL BE ROUTINELY UPDATED PER THE SWPPP AND NOI TO SHOW ALL CHANGES AND AMENDMENTS TO THE PLAN. A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN SHALL BE KEPT ON SITE AND MADE AVAILABLE FOR REVIEW BY THE REGULATORY AUTHORITY.
- 3. UNLESS OTHERWISE NOTED IN THE PLANS. ALL SEEDING MUST CONFORM TO THE CITY OF LEE'S SUMMIT STANDARDS AND SPECIFICATIONS.
- 4. EROSION AND SEDIMENT CONTROL SHALL BE PROVIDED FOR THE DURATION OF A PROJECT. ALL INSTALLED EROSION AND SEDIMENT CONTROL DEVICES SHALL BE MAINTAINED IN A MANNER THAT PRESERVES THEIR EFFECTIVENESS. IF THE CITY DETERMINES THAT THE BMPS IN PLACE DO NOT PROVIDE ADEQUATE EROSION AND SEDIMENT CONTROL AT ANY TIME DURING THE PROJECT, ADDITIONAL OR ALTERNATE MEASURES THAT PROVIDE EFFECTIVE CONTROL SHALL BE REQUIRED. FAILURE TO DO SO IS A VIOLATION.
- 5. SILT FENCES AND SEDIMENT CONTROL BMPS WHICH ARE SHOWN ALONG THE BACK OF CURB MUST BE INSTALLED WITHIN TWO WEEKS OF CURB BACKFILL AND PRIOR TO PLACEMENT OF BASE ASPHALT. EXACT LOCATIONS OF THESE EROSION CONTROL METHODS MAY BE FIELD ADJUSTED TO MINIMIZE CONFLICTS WITH UTILITY CONSTRUCTION; HOWEVER. ANTICIPATED DISTURBANCE BY UTILITY CONSTRUCTION SHALL NOT DELAY INSTALLATION.
- 6. THE ABOVE REQUIREMENTS ARE THE RESPONSIBILITY OF THE PERMITTEE FOR THE SITE. RESPONSIBILITY MAY BE TRANSFERRED TO ANOTHER PARTY BY THE PERMITTEE ACCORDING TO THE SWPPP, BUT THE PERMITTEE SHALL REMAIN LIABLE BY THE CITY OF LEE'S SUMMIT IF ANY OF THE ABOVE CONDITIONS ARE NOT MET.
- 7. APWA EROSION AND SEDIMENT CONTROL/BMPS USED ON THE PROJECT SHALL BE CONSTRUCTED, INSPECTED, AND MAINTAINED AT A MINIMUM TO APWA STANDARDS AND
- 8. THE SITE SHALL COMPLY WITH ALL REQUIREMENTS OF THE MISSOURI WATER POLLUTION CONTROL AND NPDES STORMWATER RUNOFF FROM CONSTRUCTION SITES GENERAL PERMIT, OTHER PERMIT REQUIREMENTS, AND CITY OF LEE'S SUMMIT.
- 9. CONTRACTOR SHALL, BY HIS OWN INVESTIGATION, AND PRIOR TO BIDDING, SATISFY HIMSELF AS TO THE CONDITION OF EXISTING BMPS INCLUDING SEDIMENT TRAPS AND BASINS UNDER CURRENT OPERATION/NOI FROM THE DEMOLITION PLANS CONSTRUCTION DOCUMENTS. AT NOTICE TO PROCEED, BMPS, EXISTING PERMITS, SWPPP OPERATIONS, AND MAINTENANCE BECOMES THE CONTRACTOR'S RESPONSIBILITY.

SANITARY SEWER NOTES

- 1. ALL SANITARY SEWER SERVICE PIPE SHALL BE PVC SDR-26. SEWER SERVICE LINE W/PUSH ON JOINTS.
- 2. INSTALL 6" ONE-WAY CLEANOUT 10' FROM BUILDING OR AS NOTED ON PLANS.
- 3. NO FOUNDATION DRAINS ARE PLANNED FOR THIS PROJECT. DOWNSPOUTS SHALL NOT BE CONNECTED TO SANITARY SEWER. DOWNSPOUTS WILL DISCHARGE AT GRADE USING SPLASHBLOCK OR TO PROPOSED STORM SEWER.
- 4. TEN FEET OF HORIZONTAL SEPARATION AND TWO FEET OF VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN WATER LINES AND THE SANITARY SEWER SERVICE LINE.
- 5. IN THE EVENT OF WORK IN OR ON THE SANITARY MAIN, ANY TREES OR PLANTINGS PLACED WITHIN THE SEWER EASEMENT MAY BE REMOVED WITHOUT REPLACEMENT OR COMPENSATION THERE-OF.
- 6. 90-DEGREE TURNS TO BE ACCOMPLISHED WITH TWO 45-DEGREE BENDS WITH A MINIMUM OF ONE FOOT OF PIPE BETWEEN THE 45-DEGREE BENDS.
- 7. FOR VERTICAL RISERS AND ENCASEMENTS, SEE SANITARY SEWER CONNECTION SHEETS.
- 8. SANITARY SERVICE LINES SHALL BE INSTALLED BY BUILDING PLUMBER AND IN ACCORDANCE WITH THE CURRENT SERVICE LINE DESIGN AND CONSTRUCTION STANDARDS.
- 9. ROOF DRAINS SHALL NOT BE CONNECTED TO THE SANITARY SEWER.
- 10. REPLACE/ADD BARREL SECTIONS AS REQUIRED TO MEET THE GRADE REQUIREMENTS.
- 11. MANHOLE STATIONS AND PIPE LENGTHS SHOWN ON PLANS ARE TO THE CENTER OF MANHOLES. DO NOT SCALE DRAWINGS.
- 12. CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY PAVEMENT OR SIDEWALKS DAMAGED DURING THE CONSTRUCTION OF THE SANITARY SEWER SERVICE LINE.

AMERICAN WITH DISABILITIES ACT. (ADA)

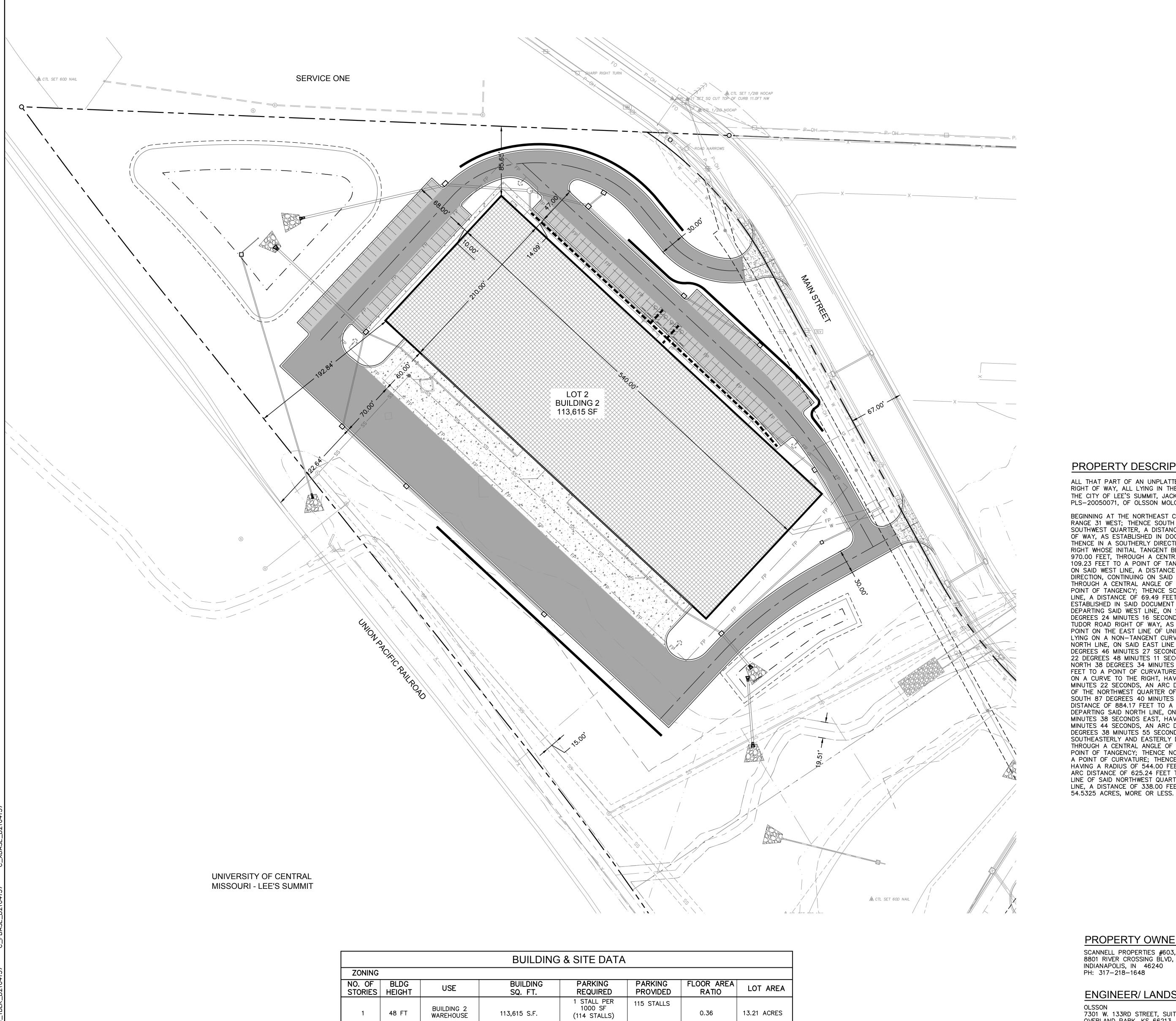
- 1. ADA PARKING SPACES, MARKINGS AND ACCESS TO THE BUILDING(S) SHALL COMPLY WITH ADA.
- 2. ALL CONSTRUCTION TRAFFIC, TEMPORARY TRAFFIC CONTROL DEVICES,
- AND PAVEMENT MARKINGS SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.





06-29-07-26-09-13-

drawn by: checked by: approved by: QA/QC by: project no.: drawing no_:TTL01_B2104157.dwg



LOT 2 PROPOSED OPEN SPACE= 315,719 S.F. (7.2479 ACRES) 54.85%

LOT 2 PROPOSED IMPERVIOUS AREA= 259,930 S.F. (5.9671 ACRES)

REQUIRED OPEN SPACE= REFERENCE LANDSCAPE PLAN

PROPERTY OWNER/ DEVELOPER SCANNELL PROPERTIES #603, LLC 8801 RIVER CROSSING BLVD, SUITE 300

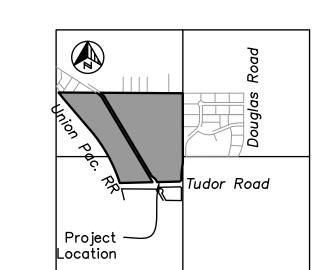
OVERLAND PARK, KS 66213 PH: 913-381-1170 F: 913-381-1174

PH: 317-218-1648

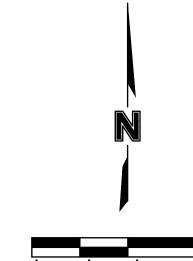
INDUSTRIAL

SITE AREA

NET SITE AREA= 3,439,837 SQ. FT., (78.9678 AC±)



Chipman Road Section 31, T48N, R31W VICINITY MAP Scale: 1" = 2000'



SCALE IN FEET

drawing @c.GLP01_B2104157.dwg SHEET C2.00

project no.: B21-04157

drawn by:

checked by:

approved by: QA/QC by:

— G — NATURAL GAS PIPE --- CATV ------ CABLE TELEVISION CONDUIT ——ss——ss—— sanitary sewer service line PROPOSED STORM SEWER INSTALL STANDARD "WET" CURB & GUTTER (PER LEE'S SUMMIT STANDARD DETAIL) INSTALL STANDARD "DRY" CURB & GUTTER (PER LEE'S SUMMIT STANDARD DETAIL) INSTALL "ADA RAMP" CURB & GUTTER (PER LEE'S SUMMIT STANDARD DETAIL) INSTALL MEDIUM DUTY ASPHALT SEE PAVEMENT SECTION ON C3.00 INSTALL HEAVY DUTY ASPHALT SEE PAVEMENT SECTION ON C3.00 INSTALL HEAVY DUTY CONCRETE SEE PAVEMENT SECTION ON C3.00 INSTALL CONCRETE SIDEWALK SEE PAVEMENT SECTION ON C3.00

MITCHELL ALAN

NUMBER

PE-2009018764

LEGEND

PROPERTY LINE

ADA PATH - SIDEWALKS NOT

EXISTING OVERHEAD POWER LINE

BE ADA COMPLIANT.

EXISTING WATER PIPE

EXISTING STORM

P-UG ----- EXISTING UNDERGROUND POWER LINE

DELINEATED AS ADA PATHS WILL NOT

——— SECTION LINE

PROPERTY DESCRIPTION

ALL THAT PART OF AN UNPLATTED TRACT OF LAND, TOGETHER WITH ALL THAT PART OF NORTH MAIN STREET RIGHT OF WAY, ALL LYING IN THE WEST HALF OF SECTION 31, TOWNSHIP 48 NORTH, RANGE 31 WEST, LYING IN THE CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, DESCRIBED BY PATRICK ETHAN WARD, MO

PLS-20050071, OF OLSSON MOLC-366, ON OCTOBER 14, 2021, AS FOLLOWS: BEGINNING AT THE NORTHEAST CORNER OF THE SOUTHWEST QUARTER OF SECTION 31, TOWNSHIP 48 NORTH, RANGE 31 WEST; THENCE SOUTH 01 DEGREE 59 MINUTES 47 SECONDS WEST, ON THE EAST LINE OF SAID SOUTHWEST QUARTER, A DISTANCE OF 65.98 FEET TO A POINT ON THE WEST LINE OF NW SLOAN STREET RIGHT OF WAY, AS ESTABLISHED IN DOCUMENT 2013E0075031, SAID POINT ALSO LYING ON A NON-TANGENT CURVE; THENCE IN A SOUTHERLY DIRECTION, DEPARTING SAID EAST LINE, ON SAID WEST LINE AND ON A CURVE TO THE RIGHT WHOSE INITIAL TANGENT BEARS SOUTH 02 DEGREES 47 MINUTES 37 SECONDS WEST, HAVING A RADIUS OF 970.00 FEET, THROUGH A CENTRAL ANGLE OF 6 DEGREES 27 MINUTES 07 SECONDS, AN ARC DISTANCE OF 109.23 FEET TO A POINT OF TANGENCY; THENCE SOUTH 09 DEGREES 14 MINUTES 44 SECONDS WEST, CONTINUING ON SAID WEST LINE, A DISTANCE OF 111.80 FEET TO A POINT OF CURVATURE; THENCE IN A SOUTHERLY DIRECTION, CONTINUING ON SAID WEST LINE AND ON A CURVE TO THE LEFT, HAVING A RADIUS OF 1030.00 FEET, THROUGH A CENTRAL ANGLE OF 7 DEGREES 14 MINUTES 57 SECONDS, AN ARC DISTANCE OF 130.32 FEET TO A POINT OF TANGENCY; THENCE SOUTH 01 DEGREE 59 MINUTES 47 SECONDS WEST, CONTINUING ON SAID WEST LINE, A DISTANCE OF 69.49 FEET TO A POINT ON THE NORTH LINE OF NE TUDOR ROAD RIGHT OF WAY, AS ESTABLISHED IN SAID DOCUMENT 2013E0075031; THENCE SOUTH 46 DEGREES 15 MINUTES 48 SECONDS WEST, DEPARTING SAID WEST LINE, ON SAID NORTH LINE, A DISTANCE OF 46.09 FEET TO A POINT; THENCE NORTH 89 DEGREES 24 MINUTES 16 SECONDS WEST, CONTINUING ON SAID NORTH LINE, AND ON THE NORTH LINE OF NW TUDOR ROAD RIGHT OF WAY, AS ESTABLISHED IN DOCUMENT 2013E0075030, A DISTANCE OF 1249.23 FEET TO A POINT ON THE EAST LINE OF UNION PACIFIC RAILROAD RIGHT OF WAY, AS NOW ESTABLISHED, SAID POINT ALSO LYING ON A NON-TANGENT CURVE; THENCE IN A NORTHERLY AND NORTHWESTERLY DIRECTION, DEPARTING SAID NORTH LINE, ON SAID EAST LINE AND ON A CURVE TO THE LEFT WHOSE INITIAL TANGENT BEARS NORTH 15 DEGREES 46 MINUTES 27 SECONDS WEST, HAVING A RADIUS OF 3203.90 FEET, THROUGH A CENTRAL ANGLE OF 22 DEGREES 48 MINUTES 11 SECONDS, AN ARC DISTANCE OF 1275.12 FEET TO A POINT OF TANGENCY; THENCE NORTH 38 DEGREES 34 MINUTES 39 SECONDS WEST, CONTINUING ON SAID EAST LINE, A DISTANCE OF 738.40 FEET TO A POINT OF CURVATURE; THENCE IN A NORTHWESTERLY DIRECTION, CONTINUING ON SAID EAST LINE AND ON A CURVE TO THE RIGHT, HAVING A RADIUS OF 5981.13 FEET, THROUGH A CENTRAL ANGLE OF 2 DEGREES 39 MINUTES 22 SECONDS, AN ARC DISTANCE OF 277.27 FEET TO A POINT ON THE NORTH LINE OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SAID SECTION 31, SAID POINT ALSO LYING ON A NON-TANGENT LINE; THENCE SOUTH 87 DEGREES 40 MINUTES 30 SECONDS EAST, DEPARTING SAID EAST LINE, ON SAID NORTH LINE, A DISTANCE OF 884.17 FEET TO A POINT ON A NON-TANGENT CURVE; THENCE IN A SOUTHEASTERLY DIRECTION, DEPARTING SAID NORTH LINE, ON A CURVE TO THE RIGHT WHOSE INITIAL TANGENT BEARS SOUTH 45 DEGREES 29 MINUTES 38 SECONDS EAST, HAVING A RADIUS OF 544.00 FEET, THROUGH A CENTRAL ANGLE OF 16 DEGREES 50 MINUTES 44 SECONDS, AN ARC DISTANCE OF 159.94 FEET TO A POINT OF TANGENCY; THENCE SOUTH 28 DEGREES 38 MINUTES 55 SECONDS EAST A DISTANCE OF 437.58 FEET TO A POINT OF CURVATURE; THENCE IN A SOUTHEASTERLY AND EASTERLY DIRECTION, ON A CURVE TO THE LEFT, HAVING A RADIUS OF 476.00 FEET, THROUGH A CENTRAL ANGLE OF 63 DEGREES 19 MINUTES 59 SECONDS, AN ARC DISTANCE OF 526.16 FEET TO A POINT OF TANGENCY; THENCE NORTH 88 DEGREES 01 MINUTE 06 SECONDS EAST A DISTANCE OF 416.85 FEET TO A POINT OF CURVATURE; THENCE IN AN EASTERLY AND SOUTHEASTERLY DIRECTION, ON A CURVE TO THE RIGHT, HAVING A RADIUS OF 544.00 FEET, THROUGH A CENTRAL ANGLE OF 65 DEGREES 51 MINUTES 08 SECONDS, AN ARC DISTANCE OF 625.24 FEET TO A POINT ON A NON-TANGENT LINE, SAID POINT ALSO LYING ON THE EAST LINE OF SAID NORTHWEST QUARTER; THENCE SOUTH 01 DEGREE 53 MINUTES 30 SECONDS WEST, ON SAID EAST LINE, A DISTANCE OF 338.00 FEET TO THE POINT OF BEGINNING, CONTAINING 2,375,437 SQUARE FEET OR

INDIANAPOLIS, IN 46240

ENGINEER/ LANDSCAPE ARCHITECT

7301 W. 133RD STREET, SUITE 200

PROPOSED SITE USE

EXISTING & PROPOSED ZONING EXISTING: PLANNED INDUSTRIAL PROPOSED: PLANNED INDUSTRIAL



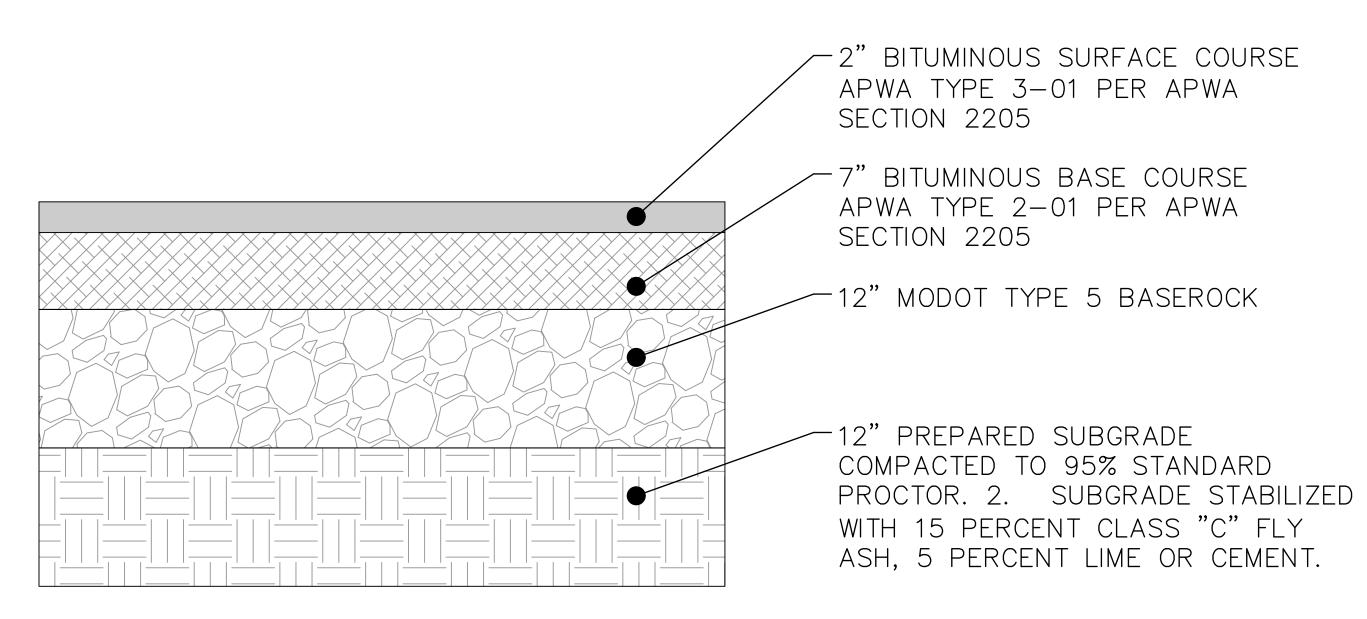
checked by: approved by:

QA/QC by: project no.: drawing @c.GLP01_B2104157.dwg

2" BITUMINOUS SURFACE COURSE APWA TYPE 3-01 PER APWA SECTION 2205 -5" BITUMINOUS BASE COURSE APWA TYPE 2-01 PER APWA SECTION 2205 -12" MODOT TYPE 5 BASEROCK -12" PREPARED SUBGRADE COMPACTED TO 95% STANDARD PROCTOR. 2. SUBGRADE STABILIZED WITH 15 PERCENT CLASS "C" FLY ASH, 5 PERCENT LIME OR CEMENT.

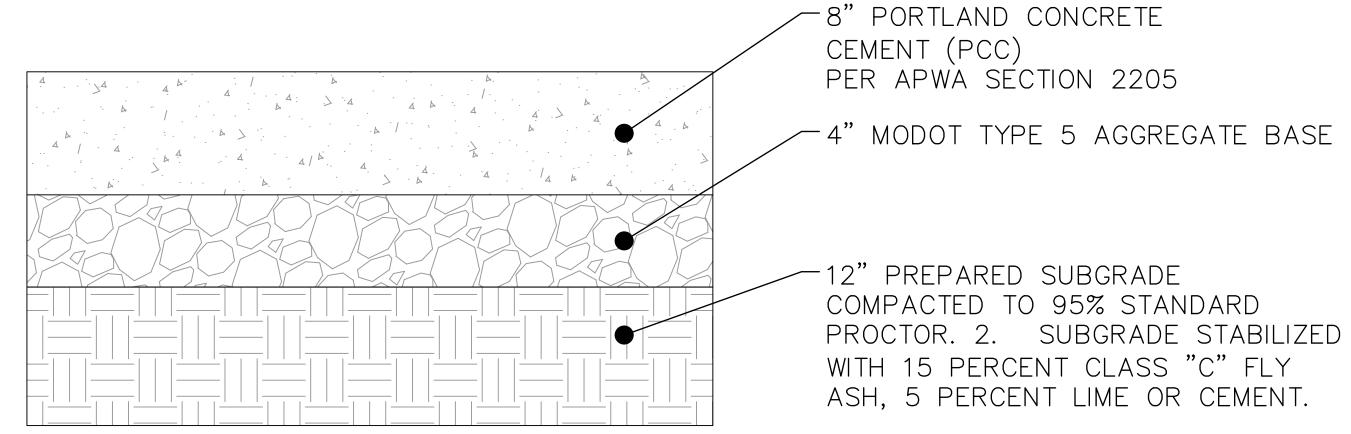
MEDIUM DUTY ASPHALT PAVEMENT SECTION

NOT TO SCALE PER GEOTECHNICAL REPORT



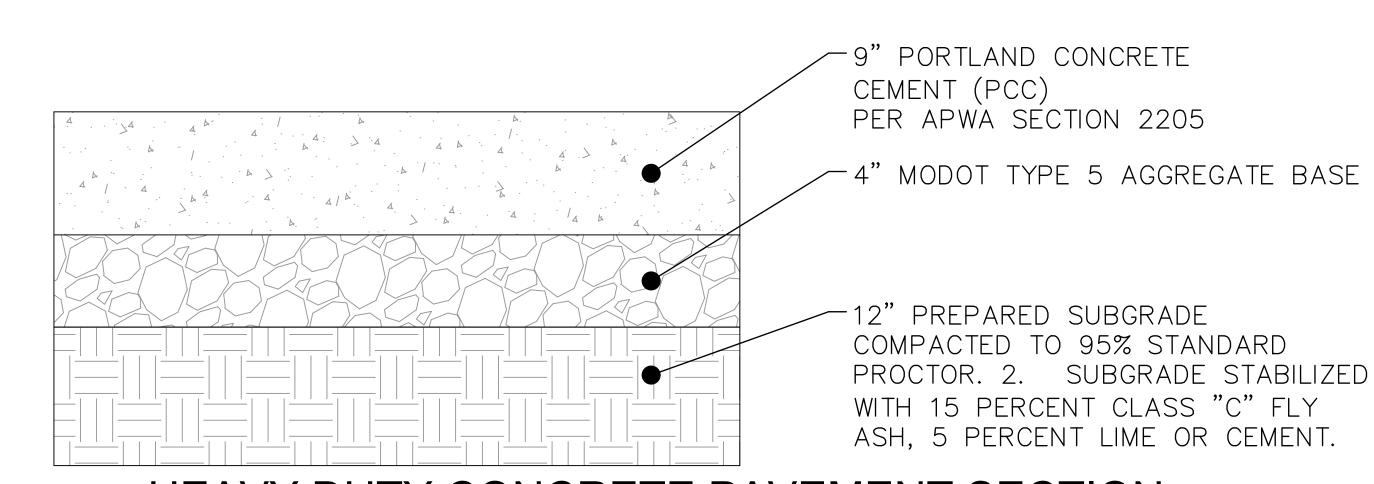
HEAVY DUTY ASPHALT PAVEMENT SECTION

NOT TO SCALE PER GEOTECHNICAL REPORT



MEDIUM DUTY CONCRETE PAVEMENT SECTION

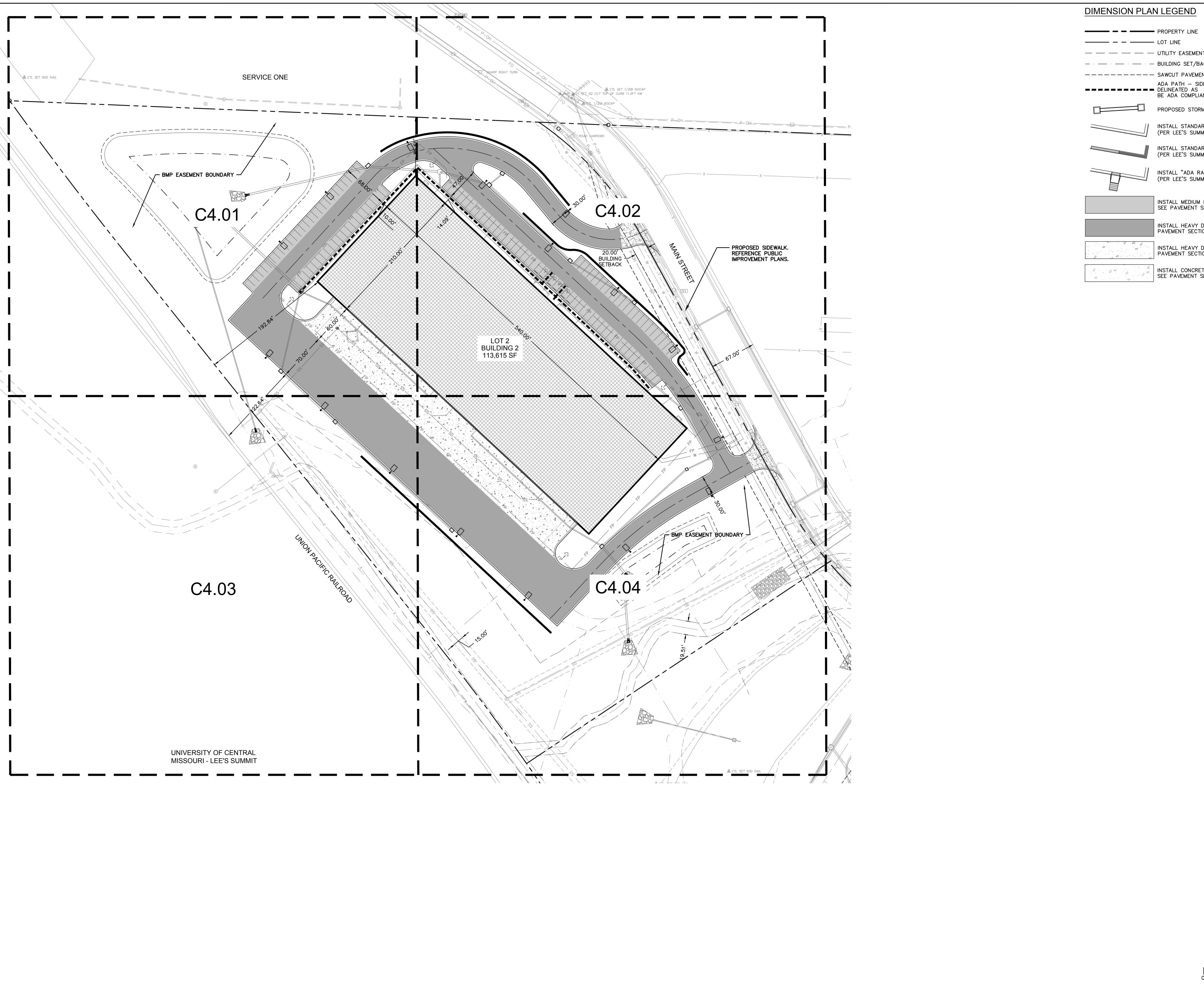
NOT TO SCALE PER GEOTECHNICAL REPORT



HEAVY DUTY CONCRETE PAVEMENT SECTION

NOT TO SCALE PER GEOTECHNICAL REPORT

- 1. ALL CONSTRUCTION, SITE PREPARATION, GRADING, AND EXCAVATION PROCEDURES SHALL CONFORM TO RECOMMENDATIONS AS OUTLINED IN THE GEOTECHNICAL REPORT INCLUDING ADDENDUMS. CONTRACTOR SHALL CONTACT ENGINEER WITH ANY DISCREPANCIES OR CONCERNS BASED ON ACTUAL SITE CONDITIONS.
- 2. GEOTECHNICAL REPORT GOVERNS ONLY IF IT MEETS OR EXCEEDS CITY REQUIREMENTS.
- 3. SUBGRADE STABILIZED WITH 15 PERCENT CLASS "C" FLY ASH, 5 PERCENT LIME



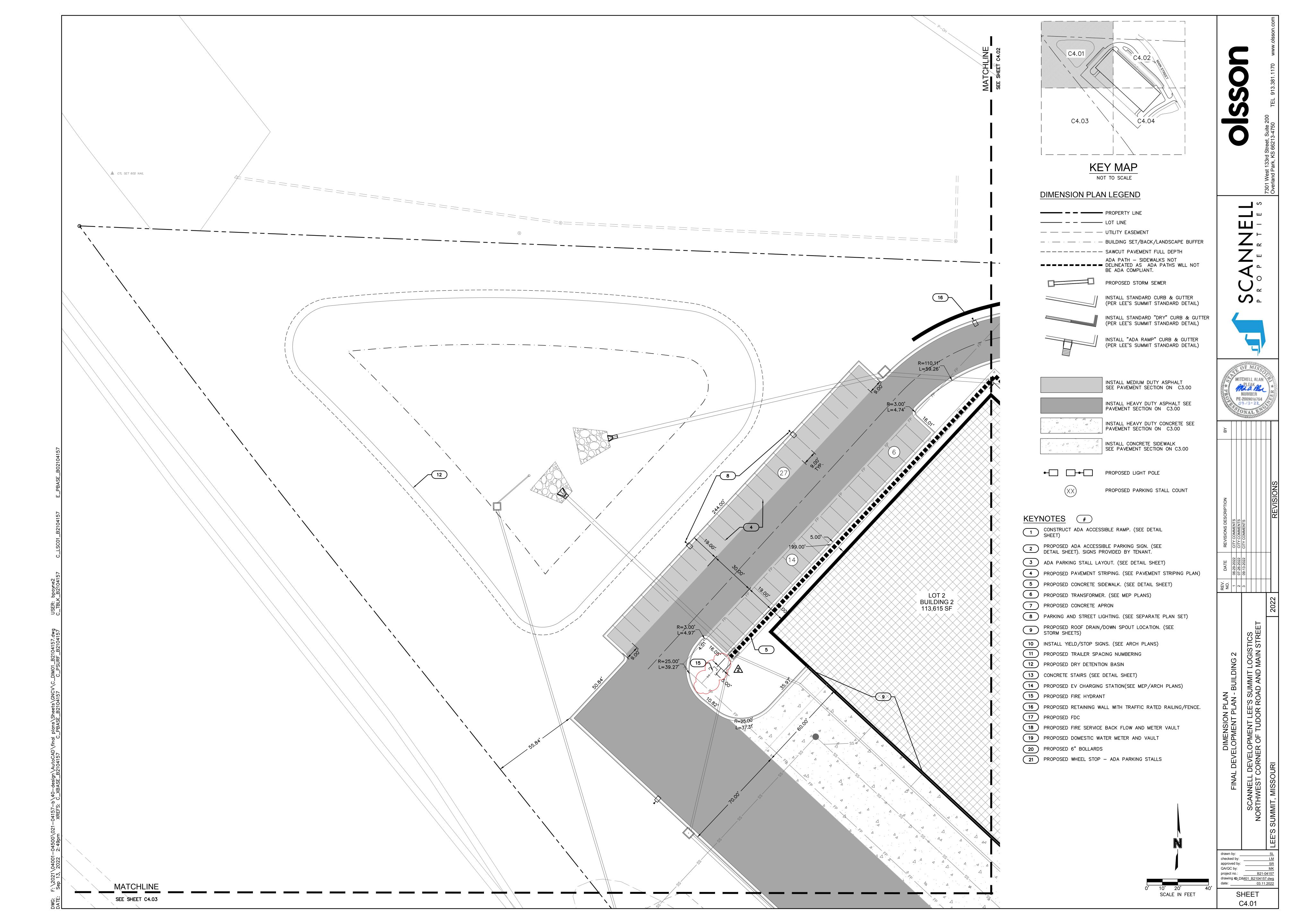
— — — — UTILITY EASEMENT — · · · · · · · BUILDING SET/BACK/LANDSCAPE BUFFER ---- SAWCUT PAVEMENT FULL DEPTH ADA PATH — SIDEWALKS NOT

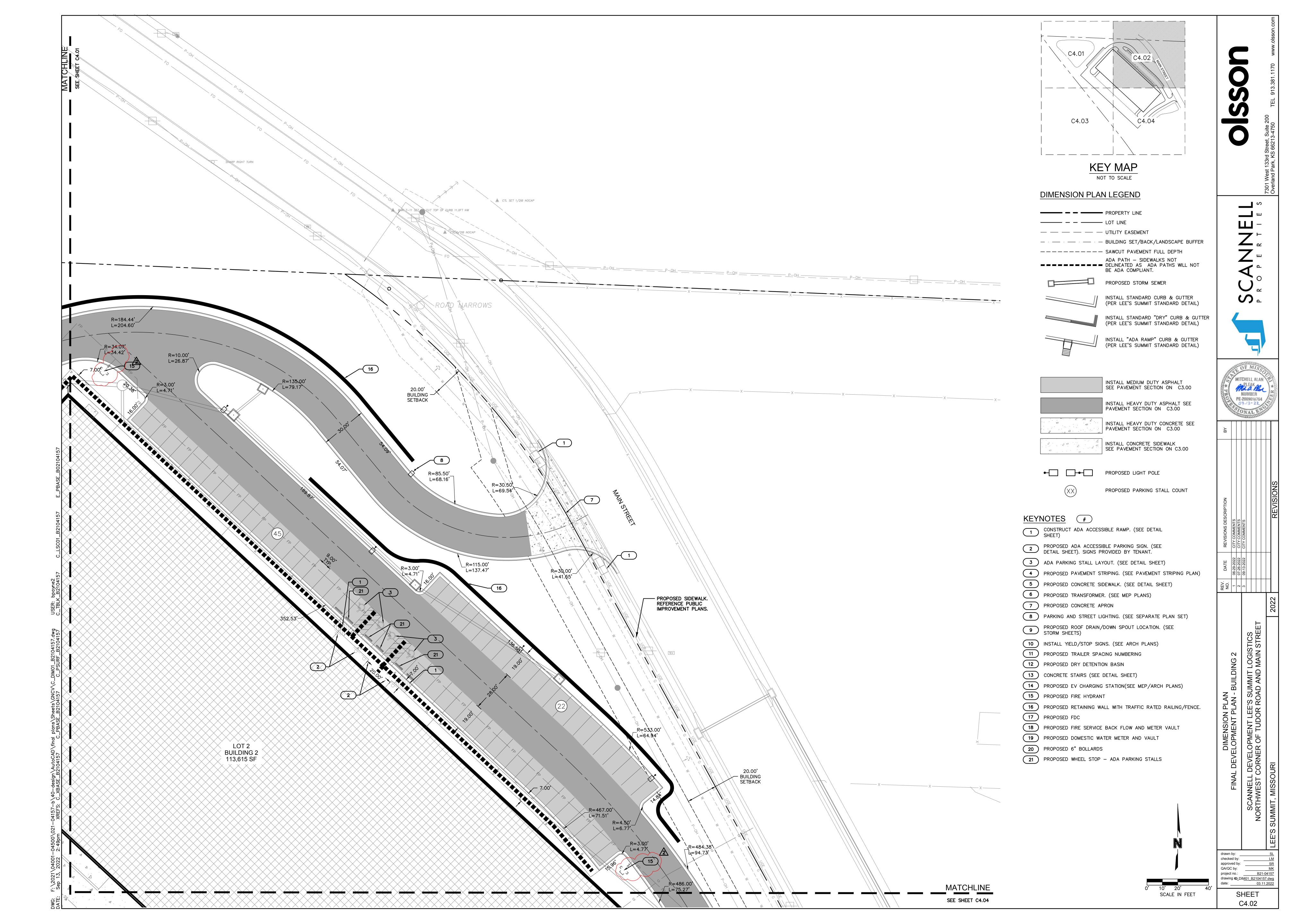
DELINEATED AS ADA PATHS WILL NOT
BE ADA COMPLIANT. PROPOSED STORM SEWER INSTALL STANDARD "WET" CURB & GUTTER (PER LEE'S SUMMIT STANDARD DETAIL) INSTALL STANDARD "DRY" CURB & GUTTER (PER LEE'S SUMMIT STANDARD DETAIL) INSTALL "ADA RAMP" CURB & GUTTER (PER LEE'S SUMMIT STANDARD DETAIL) INSTALL MEDIUM DUTY ASPHALT SEE PAVEMENT SECTION ON C3.00 INSTALL HEAVY DUTY ASPHALT SEE PAVEMENT SECTION ON C3.00 INSTALL HEAVY DUTY CONCRETE SEE PAVEMENT SECTION ON C3.00 INSTALL CONCRETE SIDEWALK SEE PAVEMENT SECTION ON C3.00

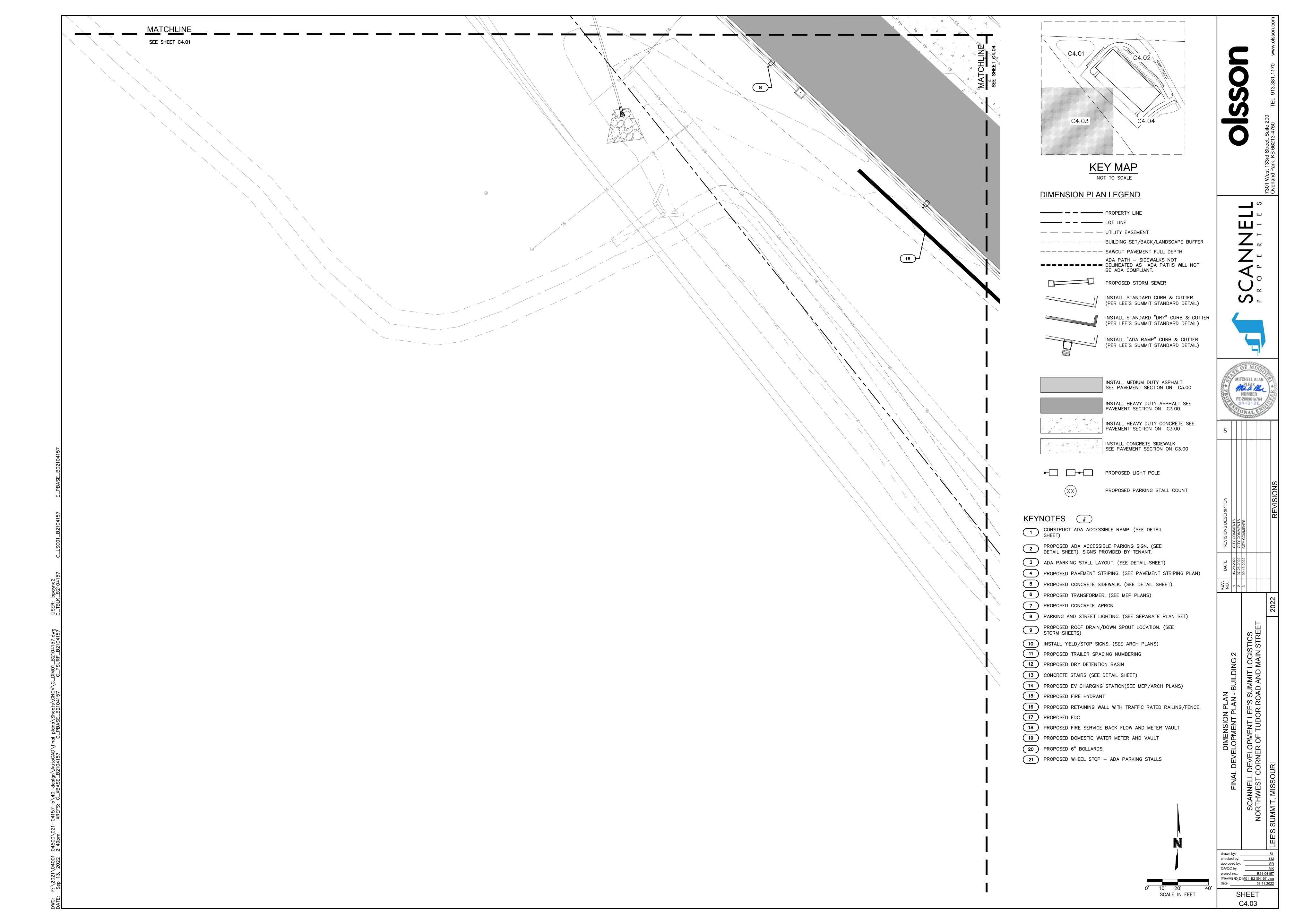
MITCHELL ALAN PLEAK NUMBER PE-2009016764

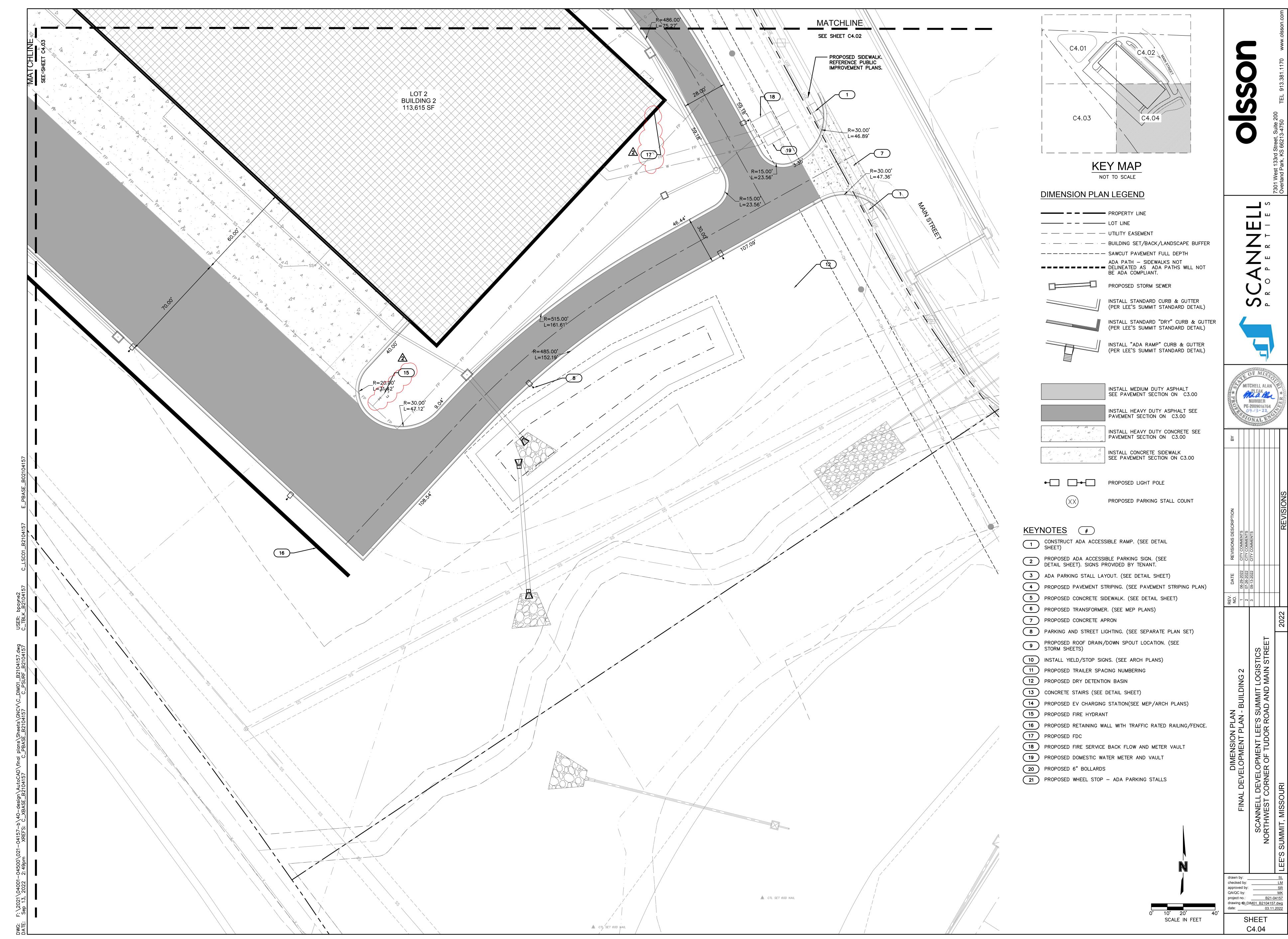
QA/QC by: MK
project no.: B21-04157
drawing ©_DIM01 B2104157.dwg
date: 03.11.2022

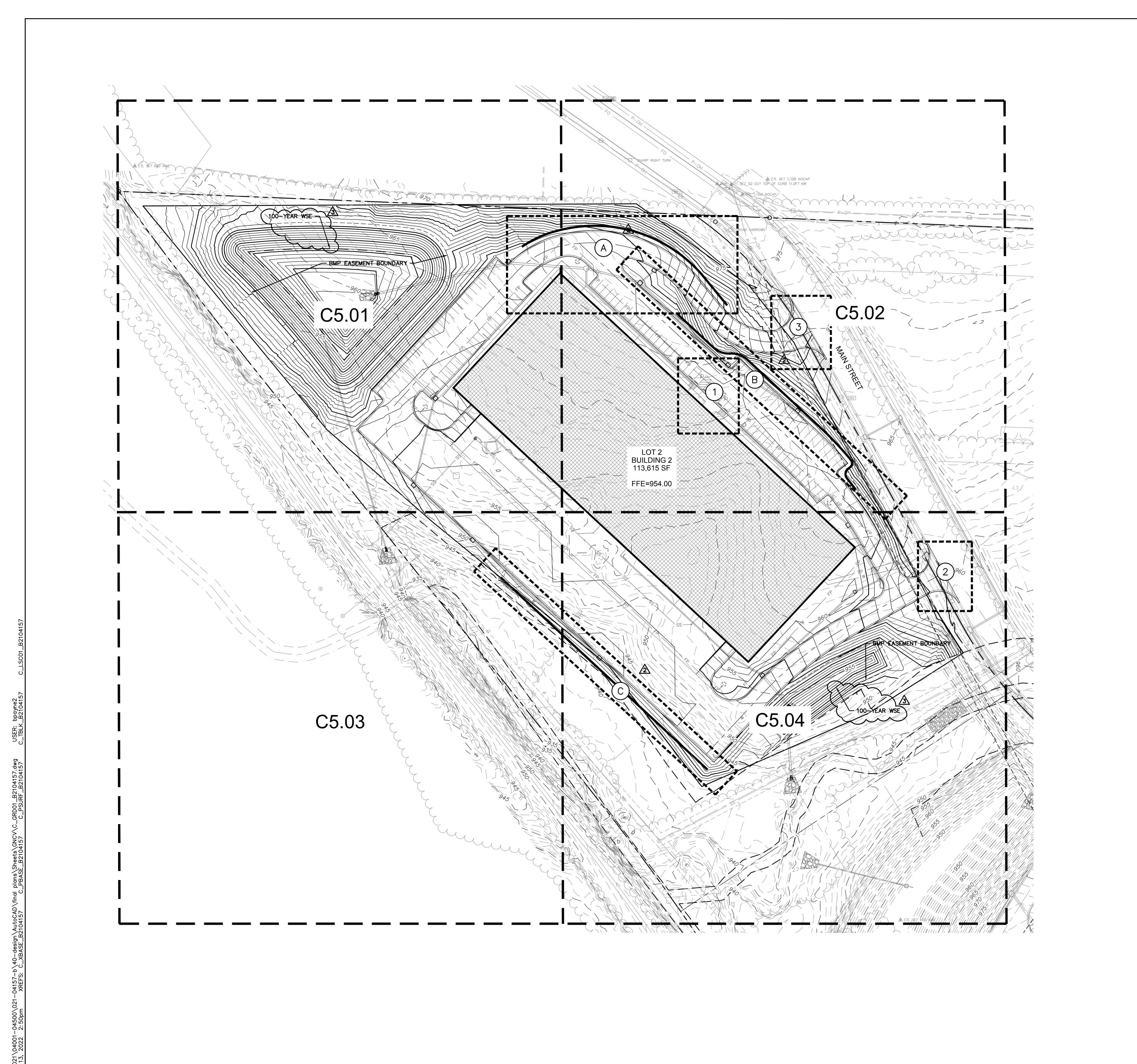
SHEET C4.00











LEGEND

PROPERTY LINE ———— SURROUNDING PROPERTY LINES ---- EXISTING UTILITY EASEMENT ---- EXISTING CONTOUR

CONSTRUCT CONCRETE

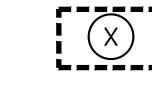
CURB & GUTTER ---- W ----- PROPOSED WATER SERVICE LINE PROPOSED UNDERGROUND POWER SERVICE LINE

PROPOSED FIRE PROTECTION LINE

PROPOSED COMMUNICATIONS SERVICE LINE

(SEE SHEETS C5.05-C5.08)

GRADING DETAILS



NOTES:

CONTRACTOR TO NOTIFY ENGINEER IF EXISTING GRADES VARY

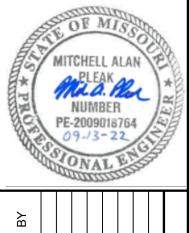
OF 5.00%.

- SIGNIFICANTLY FROM THOSE SHOWN IN THESE PLANS. 2. ALL ADA ACCESSIBLE SIDEWALK CROSS SLOPES SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.00%
- 3. ALL ADA ACCESSIBLE PARKING AREAS SHALL NOT EXCEED 2.00% IN ANY DIRECTION. SEE SLOPE ARROWS IN PLAN VIEW ON THIS SHEET.

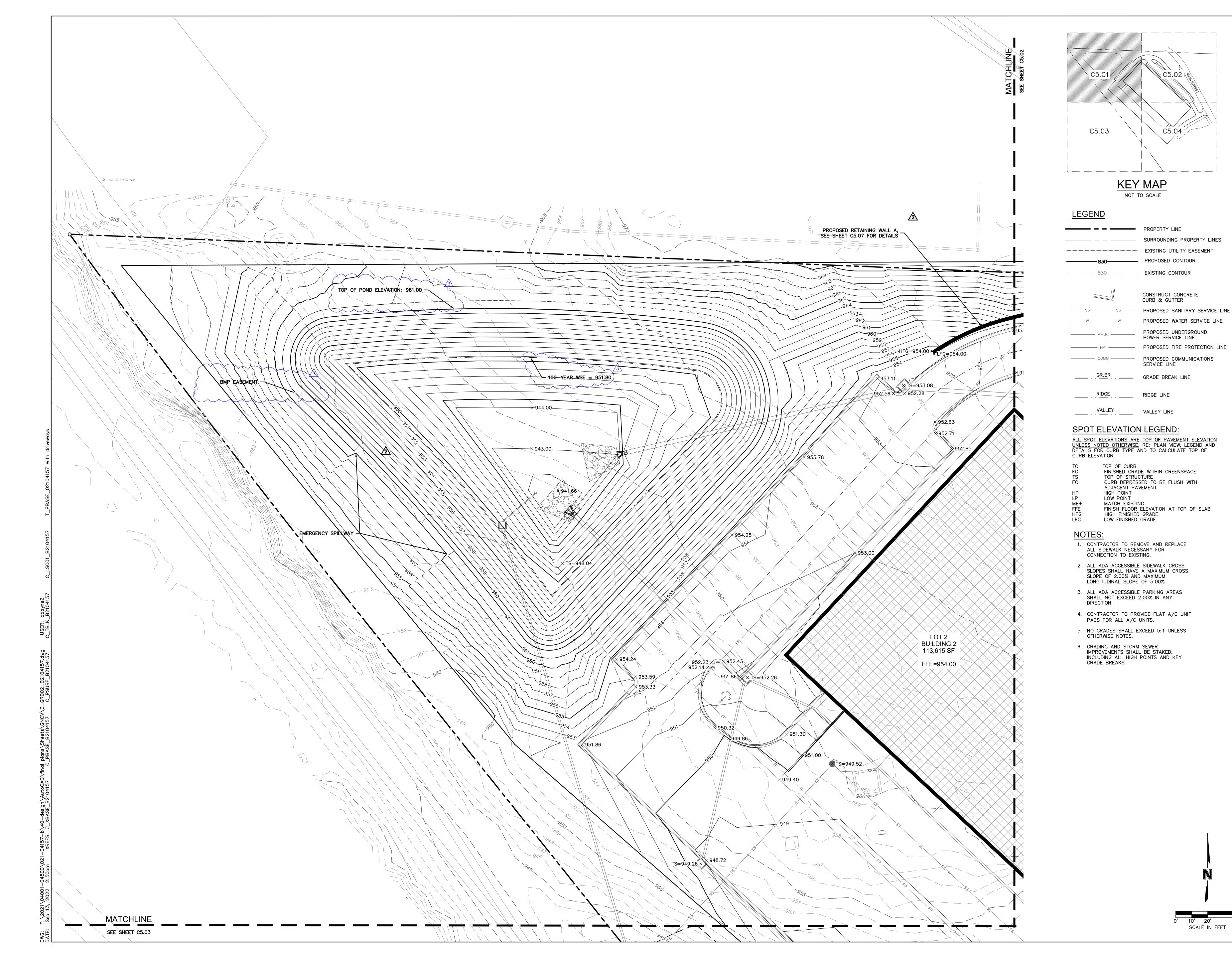
AND MAXIMUM LONGITUDINAL SLOPE

- 4. FINISHED GRADE ADJACENT TO BUILDINGS (GREEN SPACE) SHOULD BE MINIMUM 6" BELOW FFE.
- DO NOT DISTURB GRADES IN EXISTING UTILITY EASEMENT





QA/QC by: MK
project no.: B21-04157
drawing@oGRD01 B2104157.dwg
date: 03.11.2022 SHEET



01 West 133rd Street, Suite 2 rerland Park, KS 66213-4750

SCANNELL



MITCHELL ALAN
PLEAK
NUMBER
PE-2009016764
09-/3-22

ON BY

04-29-2022 CITY COMMENTS
07-26-2022 CITY COMMENTS
09-13-2022 CITY COMMENTS

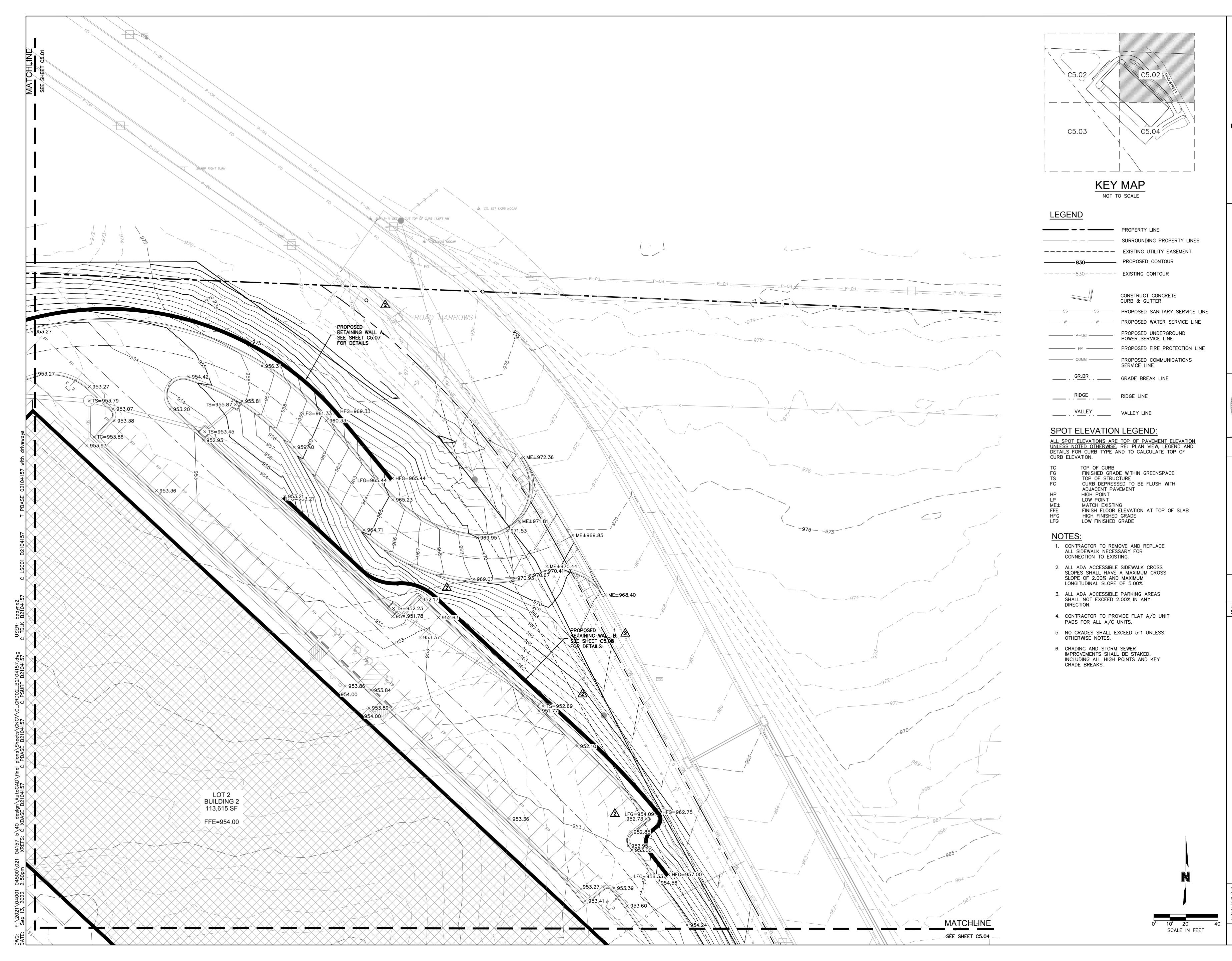
NO. CITY
1 06-29-2022 CITY
2 07-26-2022 CITY
3 09-13-2022 CITY
S
REET

NT PLAN - BUILDING 2 T LEE'S SUMMIT LOGISTICS IDOR ROAD AND MAIN STRI

CANNELL DEVELOPMENT L THWEST CORNER OF TUDO

SCANNELL NORTHWEST LEE'S SUMMIT, MISSC

drawn by: SL
checked by: LM
approved by: SR
QA/QC by: MK
project no.: B21-04157
drawing@oGRD02 B2104157.dwg
date: 03.11.2022



Suite 200

7301 West 133rd Street, Suite 20 Overland Park, KS 66213-4750

SCAN



SEVISIONS

NO. DATE REVISIONS DESCR 1 06-29-2022 CITY COMMENTS 2 07-26-2022 CITY COMMENTS 3 09-13-2022 CITY COMMENTS

LEE'S SUMMIT LOGISTICS

JOR ROAD AND MAIN STREET

SCANNELL DEVELOPM NORTHWEST CORNER OF SUMMIT, MISSOURI

T: SI by: LM by: SF by: MH by: B21-04157 dwg

 drawn by:
 SL

 checked by:
 LM

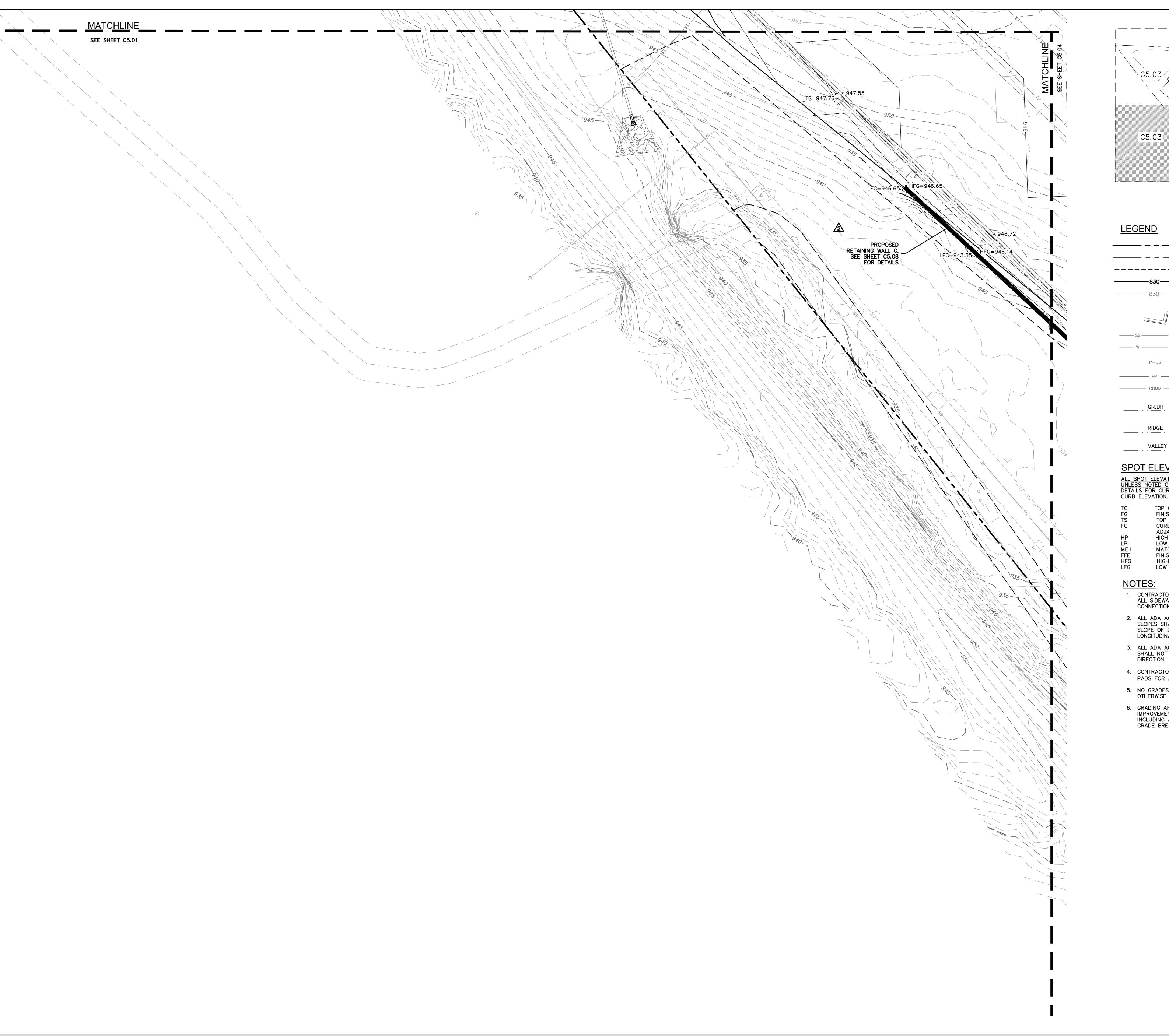
 approved by:
 SR

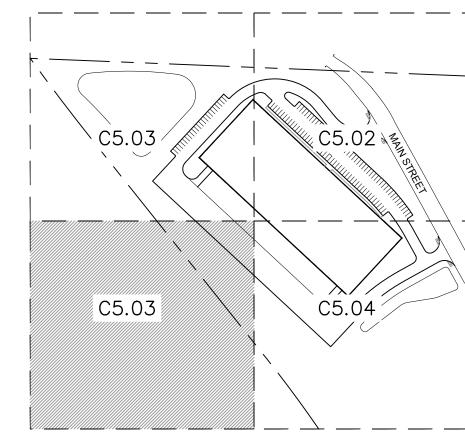
 QA/QC by:
 MK

 project no.:
 B21-04157

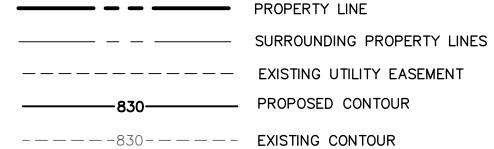
 drawing@oGRD02
 B2104157.dwg

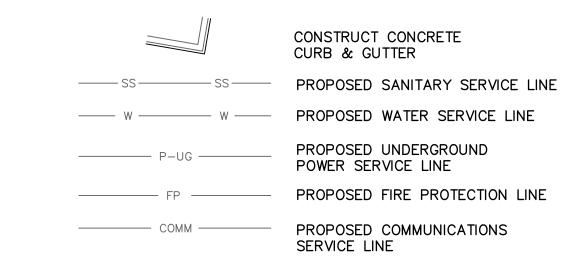
 date:
 03.11.2022





KEY MAP NOT TO SCALE





	GRADE BREAK LINE
RIDGE	RIDGE LINE

_____ VALLEY LINE

SPOT ELEVATION LEGEND:

ALL SPOT ELEVATIONS ARE TOP OF PAVEMENT ELEVATION UNLESS NOTED OTHERWISE. RE: PLAN VIEW, LEGEND AND DETAILS FOR CURB TYPE AND TO CALCULATE TOP OF CURB ELEVATION.

TOP OF CURB FINISHED GRADE WITHIN GREENSPACE TOP OF STRUCTURE
CURB DEPRESSED TO BE FLUSH WITH ADJACENT PAVEMENT HIGH POINT

LOW POINT MATCH EXISTING FINISH FLOOR ELEVATION AT TOP OF SLAB HIGH FINISHED GRADE

LOW FINISHED GRADE

CONTRACTOR TO REMOVE AND REPLACE ALL SIDEWALK NECESSARY FOR CONNECTION TO EXISTING.

ALL ADA ACCESSIBLE SIDEWALK CROSS SLOPES SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.00% AND MAXIMUM LONGITUDINAL SLOPE OF 5.00%.

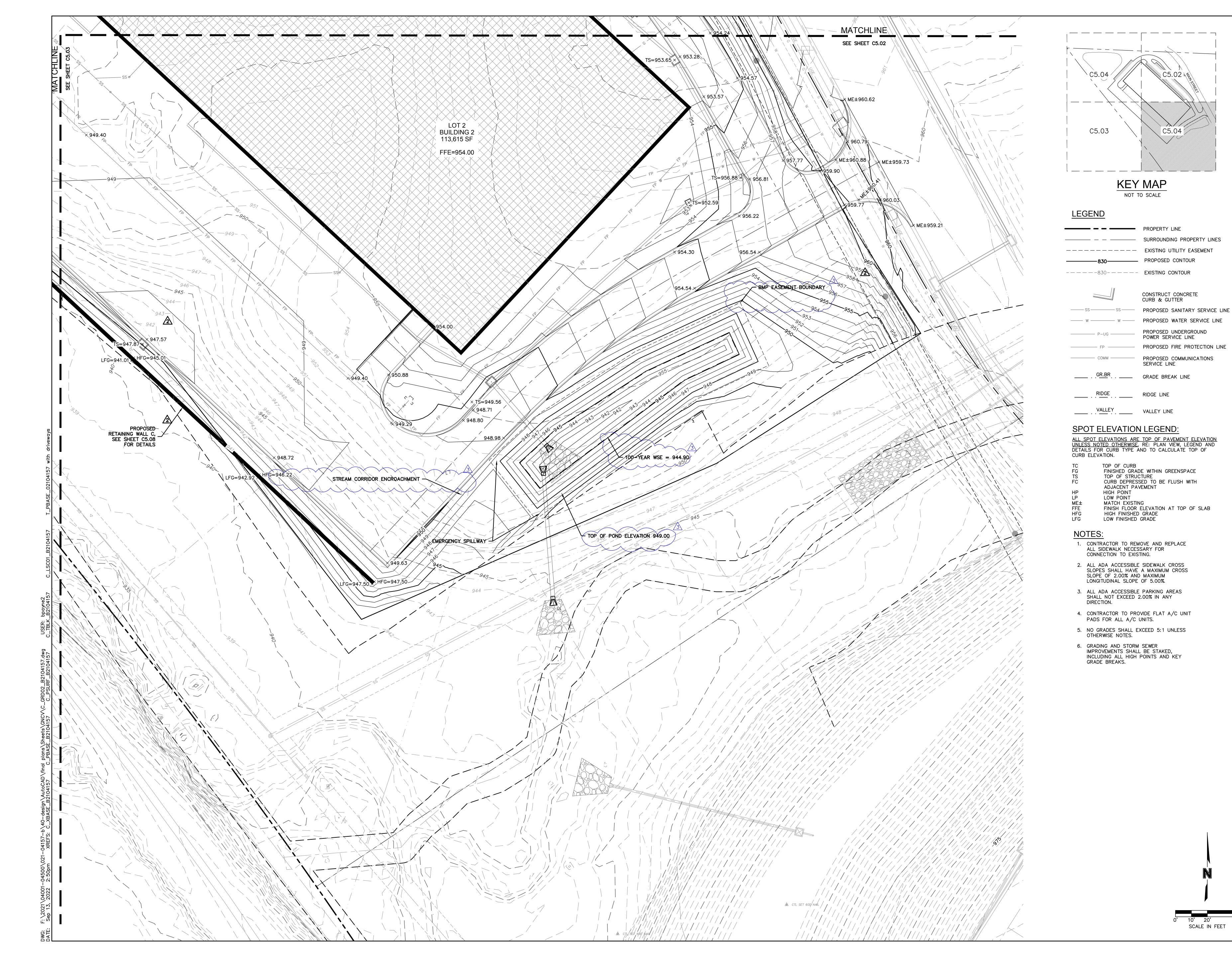
- ALL ADA ACCESSIBLE PARKING AREAS SHALL NOT EXCEED 2.00% IN ANY DIRECTION.
- 4. CONTRACTOR TO PROVIDE FLAT A/C UNIT PADS FOR ALL A/C UNITS.
- NO GRADES SHALL EXCEED 5:1 UNLESS OTHERWISE NOTES.

6. GRADING AND STORM SEWER
IMPROVEMENTS SHALL BE STAKED,
INCLUDING ALL HIGH POINTS AND KEY
GRADE BREAKS.





QA/QC by: MK
project no.: B21-04157
drawing@oGRD02 B2104157.dwg
date: 03.11.2022



Olsson

7301 West 133rd Street, Suite 200 Overland Park, KS 66213-4750

SCANNELL



NUMBER
PE-2009018764
09-/3-22

1022 CITY COMMENTS
1022 CITY COMMENTS
1022 CITY COMMENTS

1 06-29-2022 CITY COM
2 07-26-2022 CITY COM
3 09-13-2022 CITY COM

ET

MENT PLAN - BUILDING 2

1ENT LEE'S SUMMIT LOGISTIC:
TUDOR ROAD AND MAIN STR

SCANNELL DEVELOPI NORTHWEST CORNER O SUMMIT, MISSOURI

drawn by:

checked by:
approved by:
QA/QC by:
project no.:
B21-04157
drawing@oGRD02
B2104157.dwg
date:
03.11.2022

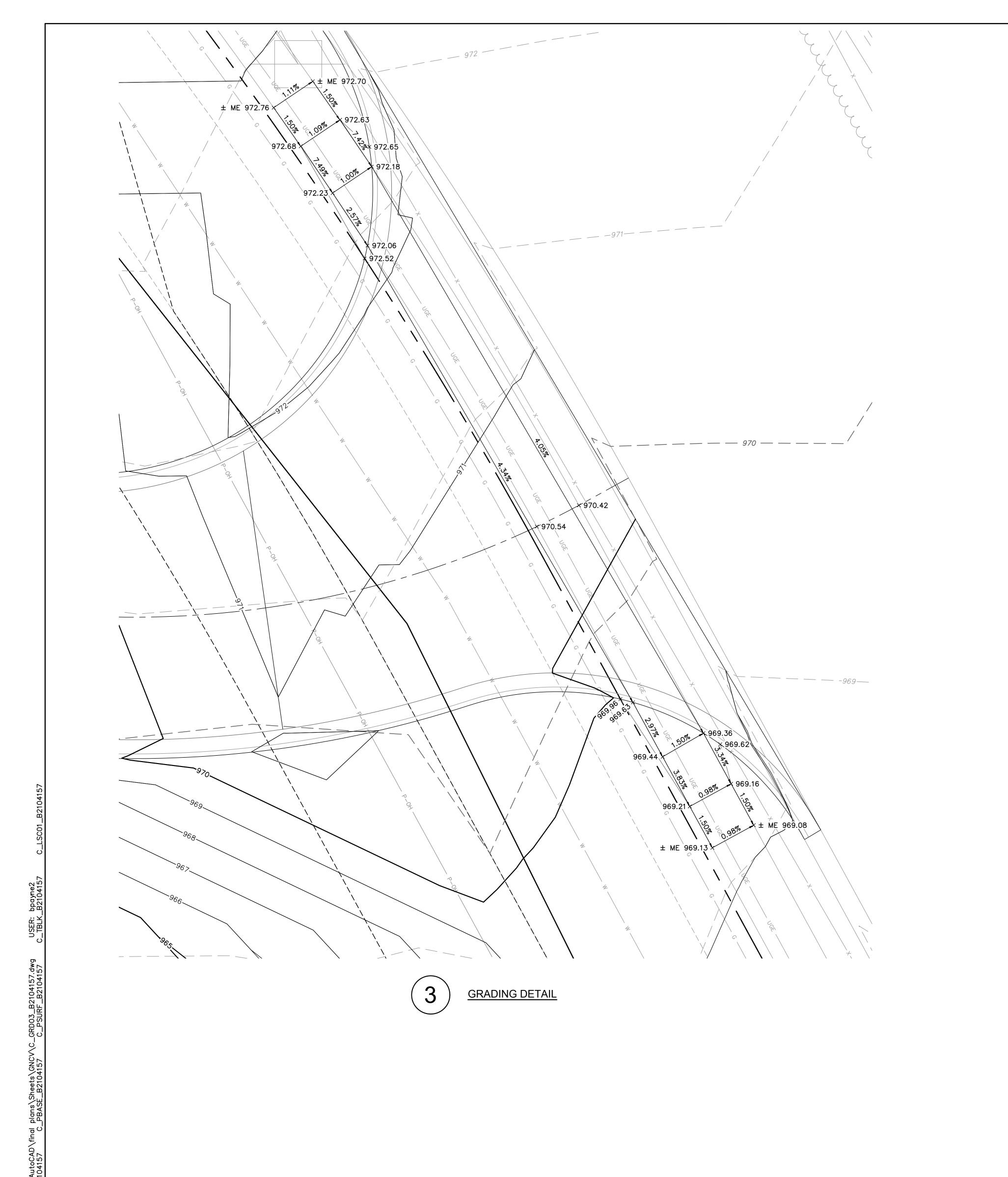


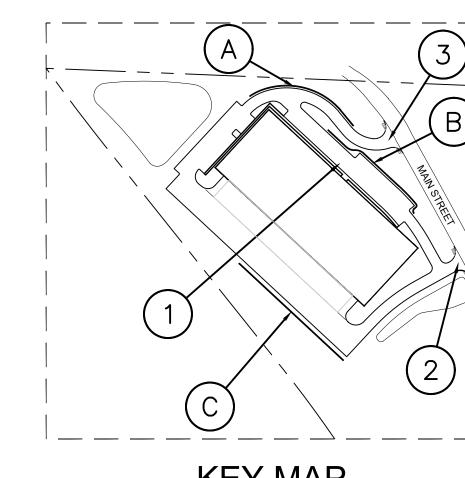


MITCHELL ALAN
PLEAK
NUMBER
PE-2009018764

QA/QC by: MK
project no.: B21-04157
drawing@oGRD03 B2104157.dwg
date: 03.11.2022 SHEET

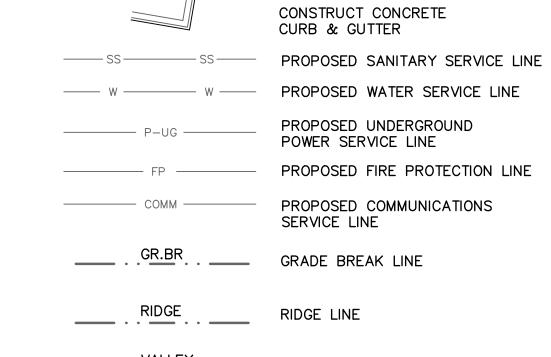
C5.05





<u>LEGEND</u>

PROPERTY LINE
SURROUNDING PROPERTY L
EXISTING UTILITY EASEMEN
PROPOSED CONTOUR
EXISTING CONTOUR

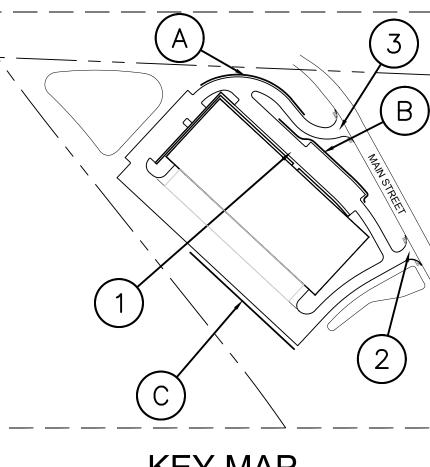


ALL SPOT ELEVATIONS ARE TOP OF PAVEMENT ELEVATION UNLESS NOTED OTHERWISE. RE: PLAN VIEW, LEGEND AND DETAILS FOR CURB TYPE AND TO CALCULATE TOP OF CURB ELEVATION.

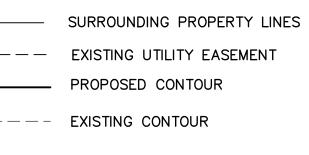
TC	TOP OF CURB
FG	FINISHED GRADE WITHIN GREENSPACE
TS	TOP OF STRUCTURE
FC	CURB DEPRESSED TO BE FLUSH WITH
	ADJACENT PAVEMENT
HP	HIGH POINT
LP	LOW POINT

MATCH EXISTING
FINISH FLOOR ELEVATION AT TOP OF SLAB
HIGH FINISHED GRADE
LOW FINISHED GRADE ME± FFE HFG LFG

- ALL ADA ACCESSIBLE PARKING AREAS SHALL NOT EXCEED 2.00% IN ANY DIRECTION.



KEY MAP NOT TO SCALE



____ VALLEY LINE

SPOT ELEVATION LEGEND:

NOTES:

- CONTRACTOR TO REMOVE AND REPLACE ALL SIDEWALK NECESSARY FOR CONNECTION TO EXISTING.
- ALL ADA ACCESSIBLE SIDEWALK CROSS SLOPES SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.00% AND MAXIMUM LONGITUDINAL SLOPE OF 5.00%.

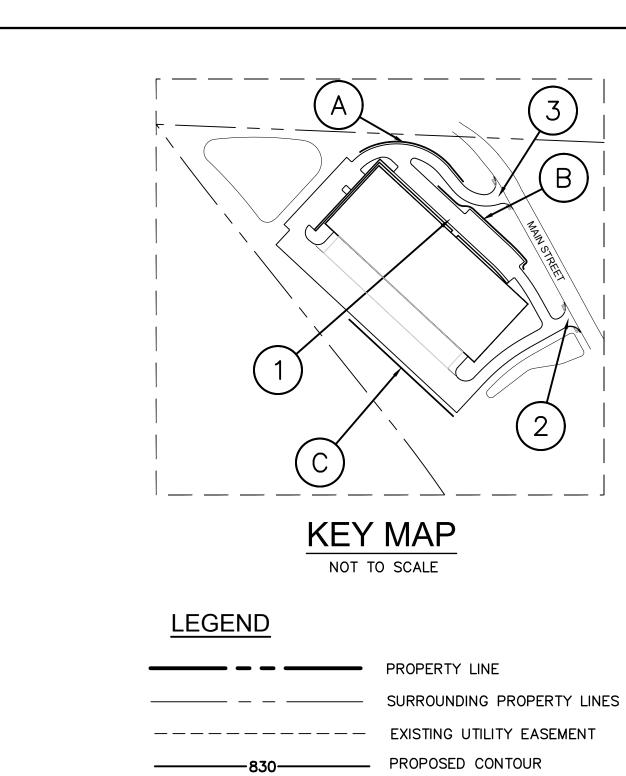


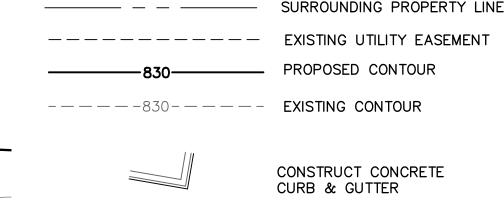
QA/QC by: MK
project no.: B21-04157
drawing@oGRD03 B2104157.dwg
date: 03.11.2022 SHEET

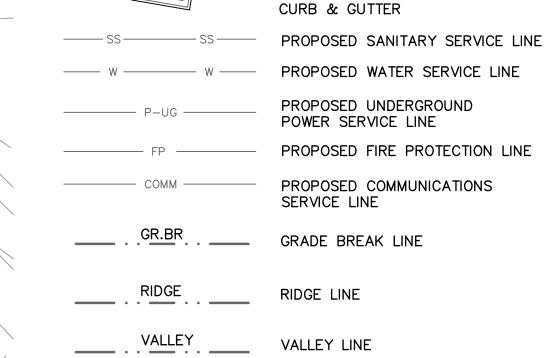
C5.06

MITCHELL ALAN
PLEAK
NUMBER
PE-2009018764
09-/3-22

REV. DATE REVISIONS C 1 06-29-2022 CITY COMMENT 2 07-26-2022 CITY COMMENT 3 09-13-2022 CITY COMMENT







SPOT ELEVATION LEGEND:

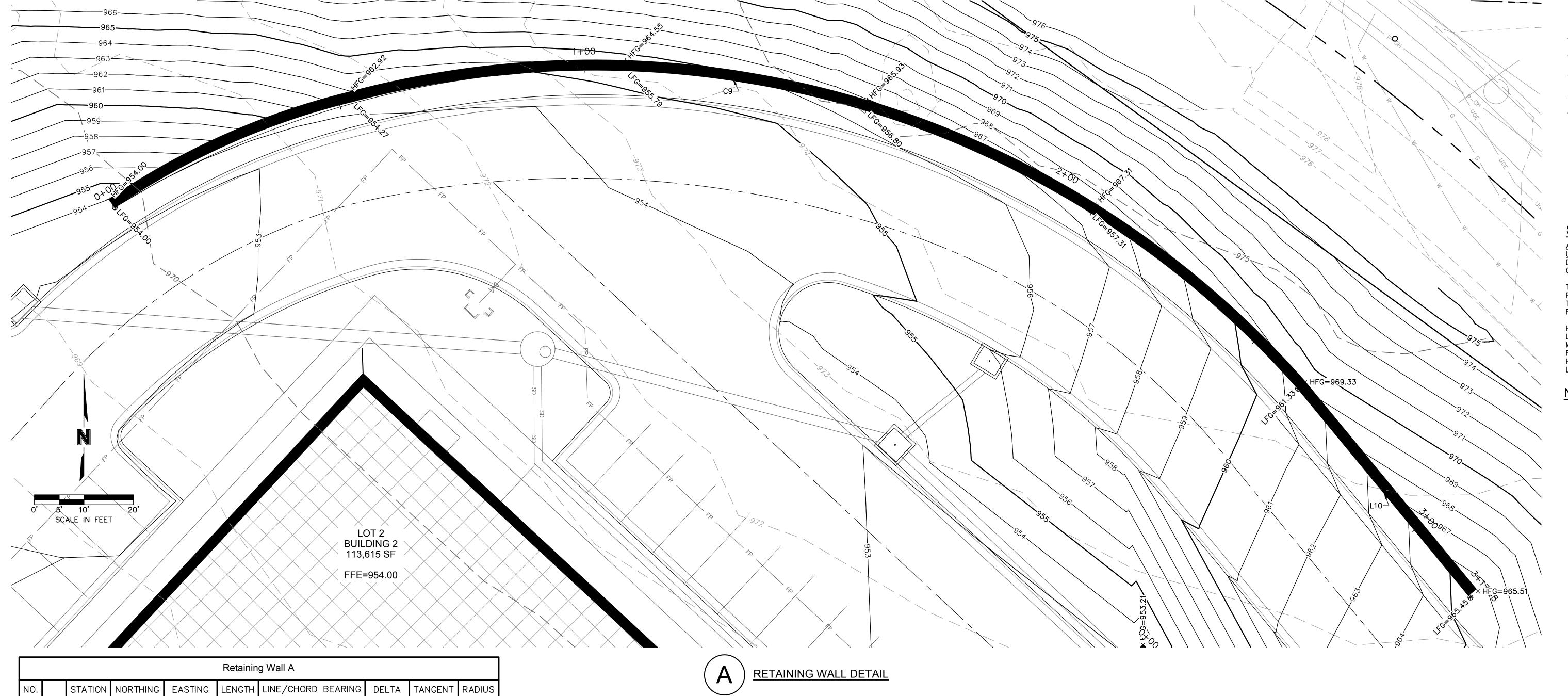
ALL SPOT ELEVATIONS ARE TOP OF PAVEMENT ELEVATION UNLESS NOTED OTHERWISE. RE: PLAN VIEW, LEGEND AND DETAILS FOR CURB TYPE AND TO CALCULATE TOP OF CURB ELEVATION.

COND LLLVATION.			
TC	TOP OF CURB		
FG	FINISHED GRADE WITHIN GREENSPACE		
TS	TOP OF STRUCTURE		
FC	CURB DEPRESSED TO BE FLUSH WITH		
	ADJACENT PAVEMENT		
HP	HIGH POINT		
LP	LOW POINT		
ME±	MATCH EXISTING		
FFE	FINISH FLOOR ELEVATION AT TOP OF SLAB		
HFG	HIGH FINISHED GRADE		
LFG	LOW FINISHED GRADE		
	LOW THRISTIED ONADE		

NOTES

1. WALL TYPE, COLOR, AND MATERIAL SPECIFICATIONS TO BE DETERMINED BY OWNER AND DEVELOPER. CONTRACTOR TO COORDINATE ALL MATERIALS WITH OWNER AND DEVELOPER PRIOR TO CONSTRUCTION.

 WALL STATION VALUES AND GEOMETRY IS BOTTOM/FACE OF WALL. WALL ELEVATION INFORMATION SHOWN HERE IS FOR FINISH GRADE REFERENCE PURPOSES. VERIFY ANY REQUIRED STRUCTURAL DETAILS WITH STRUCTURAL ENGINEER.



C9 PC= 0+00.00 53846.9303 54116.0500 1+58.73 53930.3253 54251.1054 263.00' 53810.3212 54354.9982

53810.3212 54354.9982 53768.1562 54389.8110 S81°17'22"E

S39*****32**'**39"E

80°48'38"

158.73' 186.47'

ATERIAL TRINIPART OF THE PROPERTY OF THE PROPE

 RETAINING WALL DETAILS
 REV. DATE NOTE OF SCRIPTION
 REVISIONS DESCRIPTION

 DEVELOPMENT PLAN - BUILDING 2
 1 06-29-2022 CITY COMMENTS

 2 07-26-2022 CITY COMMENTS
 3 09-13-2022 CITY COMMENTS

 EVELOPMENT LEE'S SUMMIT LOGISTICS
 3 09-13-2022 CITY COMMENTS

 PRNER OF TUDOR ROAD AND MAIN STREET
 A 09-13-2022 CITY COMMENTS

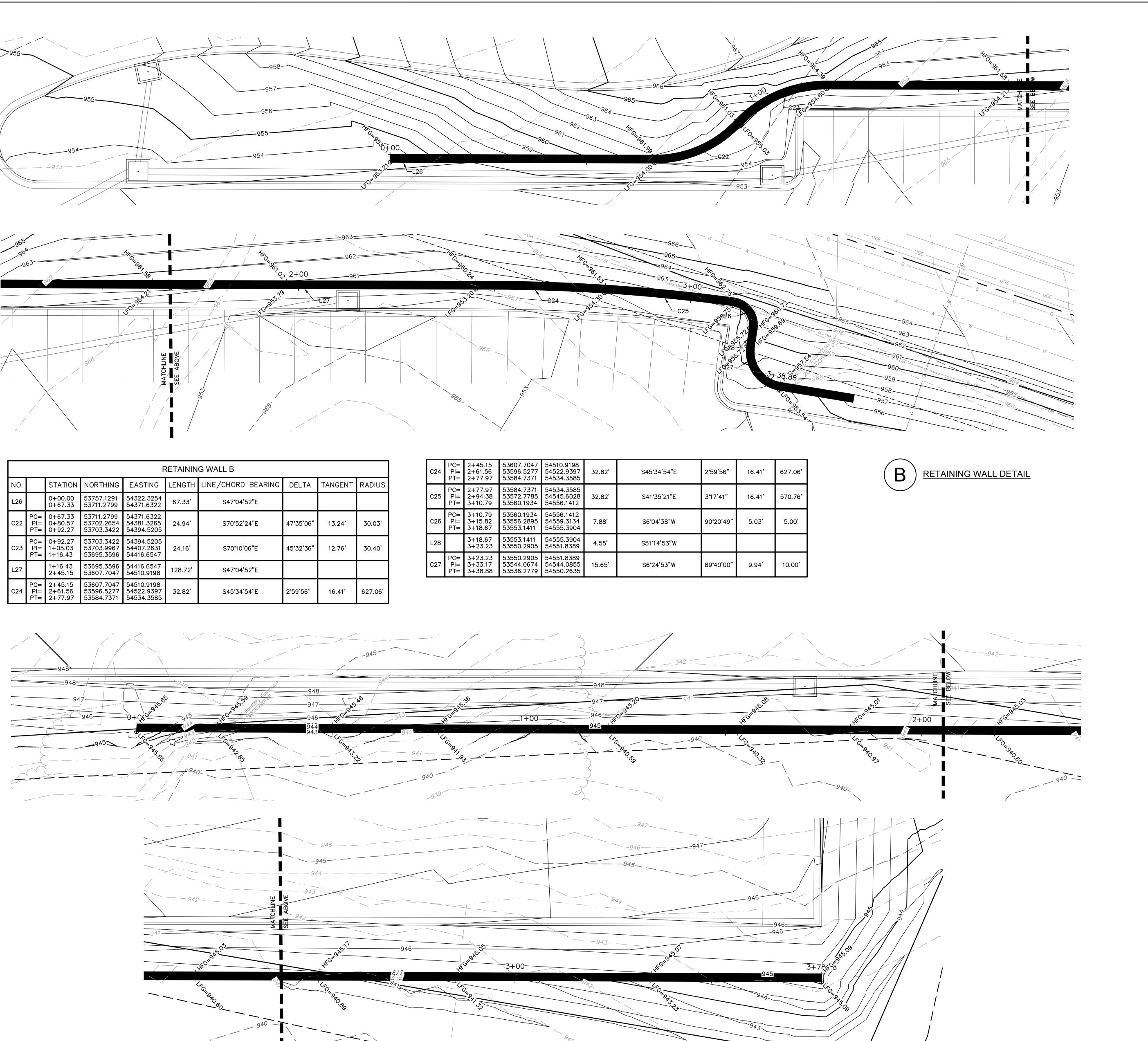
 RINER OF TUDOR ROAD AND MAIN STREET
 A 09-13-2022 CITY COMMENTS

Ш –

MITCHELL ALAN
PLEAK
NUMBER
PE-2009018764

SCANNELL DEVELO
SCANNELL DEVELOP
NORTHWEST CORNER (
E'S SUMMIT, MISSOURI

drawn by: SL checked by: LM approved by: SR QA/QC by: MK project no.: B21-04157 drawing@oGRD03 B2104157.dwg date: 03.11.2022



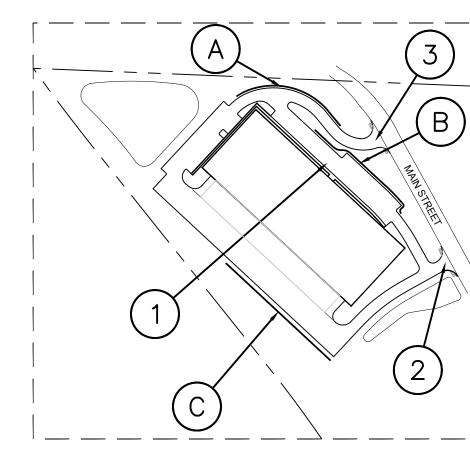
RETAINING WALL DETAIL

Retaining Wall C

0+00.00 53402.9468 54086.1676 3+78.08 53145.4873 54363.0426

LENGTH LINE/CHORD BEARING DELTA TANGENT

S47°04'52"E



KEY MAP NOT TO SCALE

<u>LEGEND</u>

	PROPERTY LINE
	SURROUNDING PROPERTY LINES
	EXISTING UTILITY EASEMENT
830	PROPOSED CONTOUR
————830———	EXISTING CONTOUR
	CONSTRUCT CONCRETE CURB & GUTTER
SSSS	PROPOSED SANITARY SERVICE LIN
——— W ———— W ———	PROPOSED WATER SERVICE LINE
——————————————————————————————————————	PROPOSED UNDERGROUND POWER SERVICE LINE
FP	PROPOSED FIRE PROTECTION LINE
COMM	PROPOSED COMMUNICATIONS SERVICE LINE
	GRADE BREAK LINE
RIDGE	RIDGE LINE

SPOT ELEVATION LEGEND:

ALL SPOT ELEVATIONS ARE TOP OF PAVEMENT ELEVATION UNLESS NOTED OTHERWISE. RE: PLAN VIEW, LEGEND AND DETAILS FOR CURB TYPE AND TO CALCULATE TOP OF CURB ELEVATION.

VALLEY LINE

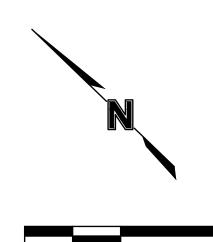
TC	TOP OF CURB
FG	FINISHED GRADE WITHIN GREENSPACE
TS	TOP OF STRUCTURE
FC	CURB DEPRESSED TO BE FLUSH WITH
	ADJACENT PAVEMENT
HP	HIGH POINT
LP	LOW POINT
ME±	MATCH EXISTING
FFE	FINISH FLOOR ELEVATION AT TOP OF SLAB
HFG	HIGH FINISHED GRADE

LOW FINISHED GRADE

NOTES:

WALL TYPE, COLOR, AND MATERIAL SPECIFICATIONS TO BE DETERMINED BY OWNER AND DEVELOPER. CONTRACTOR TO COORDINATE ALL MATERIALS WITH OWNER AND DEVELOPER PRIOR TO CONSTRUCTION.

WALL STATION VALUES AND GEOMETRY IS BOTTOM/FACE OF WALL. WALL ELEVATION INFORMATION SHOWN HERE IS FOR FINISH GRADE REFERENCE PURPOSES. VERIFY ANY REQUIRED STRUCTURAL DETAILS WITH STRUCTURAL ENGINEER.

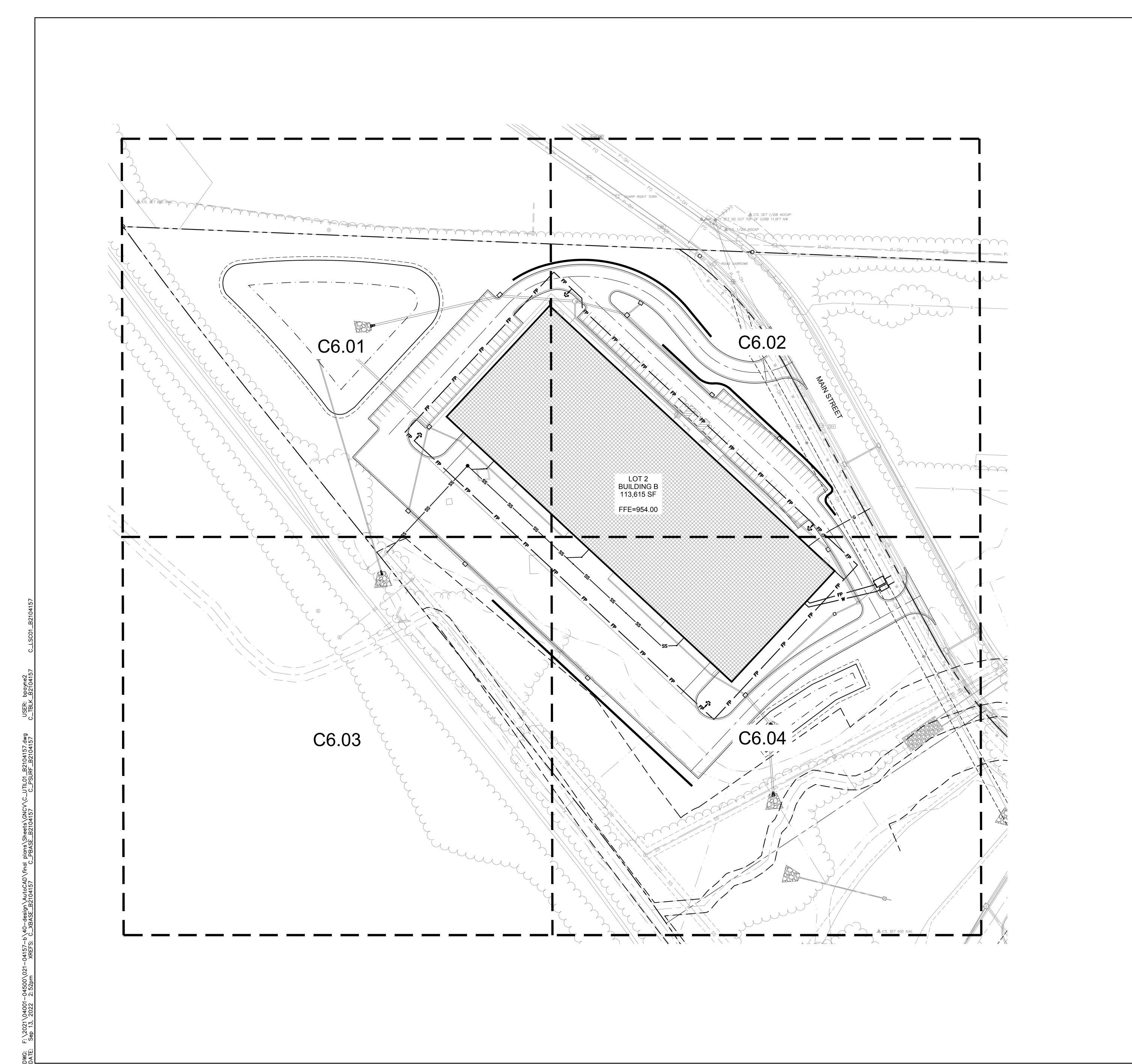


QA/QC by: MK
project no.: B21-04157
drawing@oGRD03 B2104157.dwg
date: 03.11.2022 SHEET C5.08

Ш-

MITCHELL ALAN
PLEAK
NUMBER
PE-2009018764

DATE REVISIG 06-29-2022 CITY CON 07-26-2022 CITY CON 09-13-2022 CITY CON



UTILITY PLAN LEGEND

PROPERTY LINE

SS SS EXISTING SANITARY SEWER

EXISTING STORM

EXISTING WATER PIPE

EXISTING OVERHEAD POWER LINE

EXISTING UNDERGROUND POWER LINE

STORM SEWER

SD SD STORM HEADER PIPE AND ROOF DRAINS

P-UG UNDERGROUND POWER CONDUIT

G G G NATURAL GAS PIPE

CATY CABLE TELEVISION CONDUIT

W W WATER PIPE

SS SANITARY SEWER SERVICE LINE

SANITARY SEWER MAIN (PER SHEETS C6.05-C6.09)

SANITARY SEWER MAIN (PER SHEETS C6.05-C6.09)

1 N

1. NO GAS WELLS ARE PRESENT ON THE PROPERTY BASED ON THE "ENVIRONMENTAL IMPACT STUDY OF ABANDONED OIL AND GAS WELLS IN LEE'S SUMMIT, MISSOURI", BY EDWARD ALTON MAY, JR. DATED 1995.

S3rd Street Suite 200

SCANDELL



MITCHELL ALAN
PLEAK
NUMBER
PE-2009018764
09-/3-22

06-29-2022 CITY COMMENTS
07-26-2022 CITY COMMENTS
09-13-2022 CITY COMMENTS

REVISIONS

TICS

STREET

2 07-26-2022 CIT
3 09-13-2022 CIT

ENT PLAIN - BUILDING Z NT LEE'S SUMMIT LOGISTICS TUDOR ROAD AND MAIN STR

CANNELL DEVELOPMENT LE THWEST CORNER OF TUDOF IT, MISSOURI

SCANNELL DE NORTHWEST COI

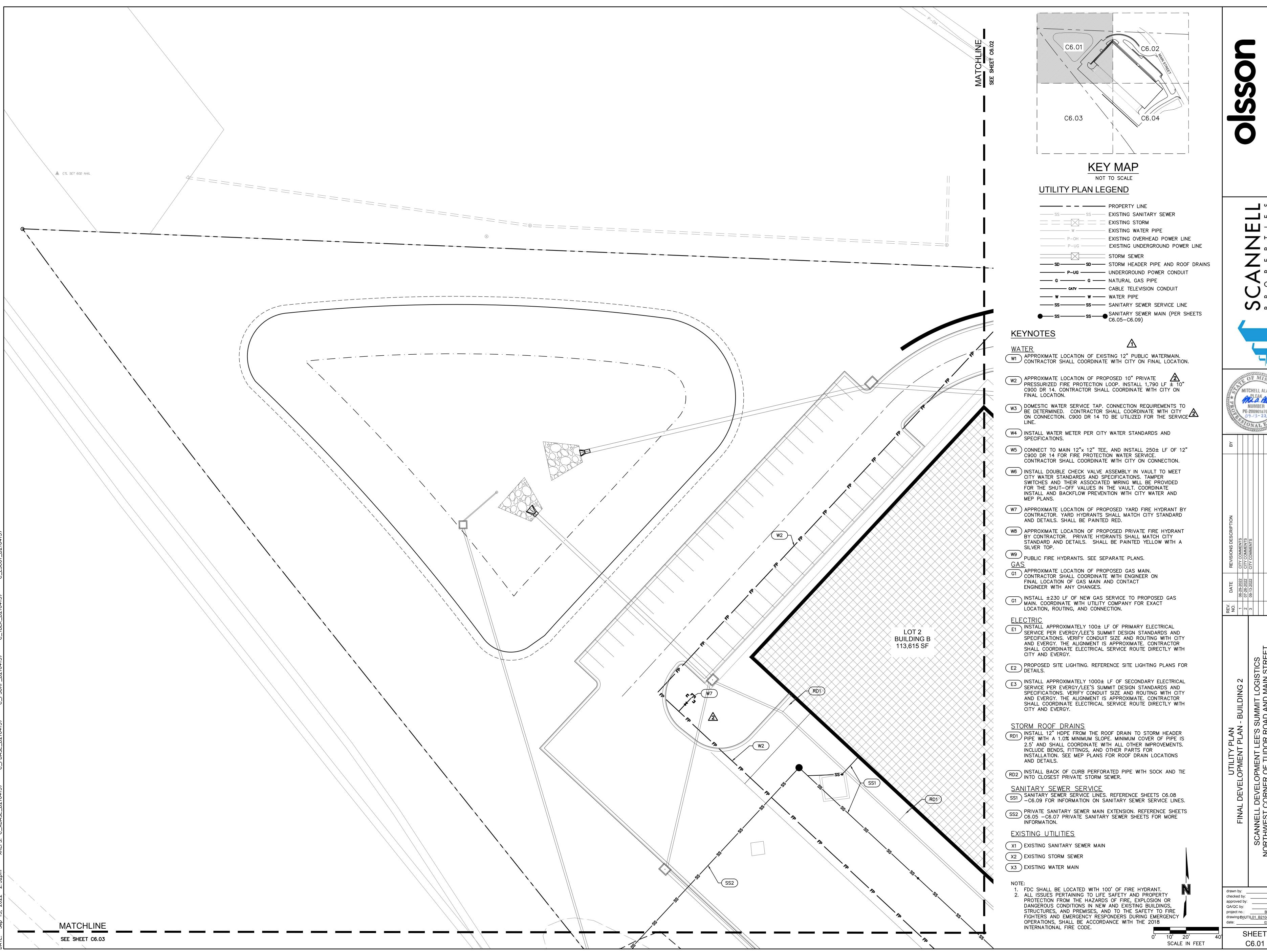
drawn by: SL checked by: LM approved by: SR QA/QC by: MK project no.: B21-04157 drawing ©oUTIL01 B2104157.dwg date: 03.11.2022

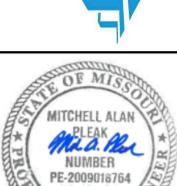
drawing @oUTIL01 date:

50' 100'

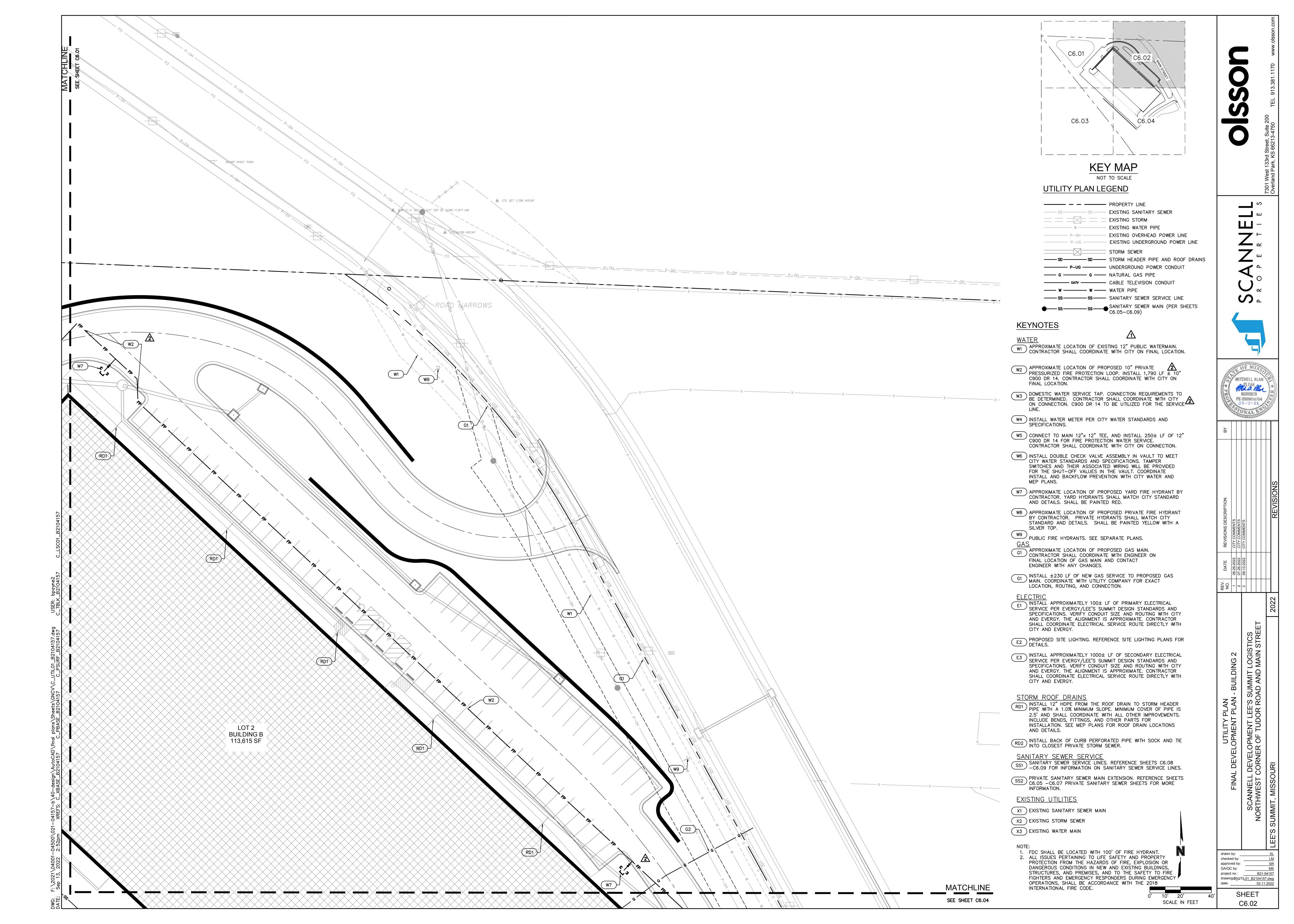
IN FEET

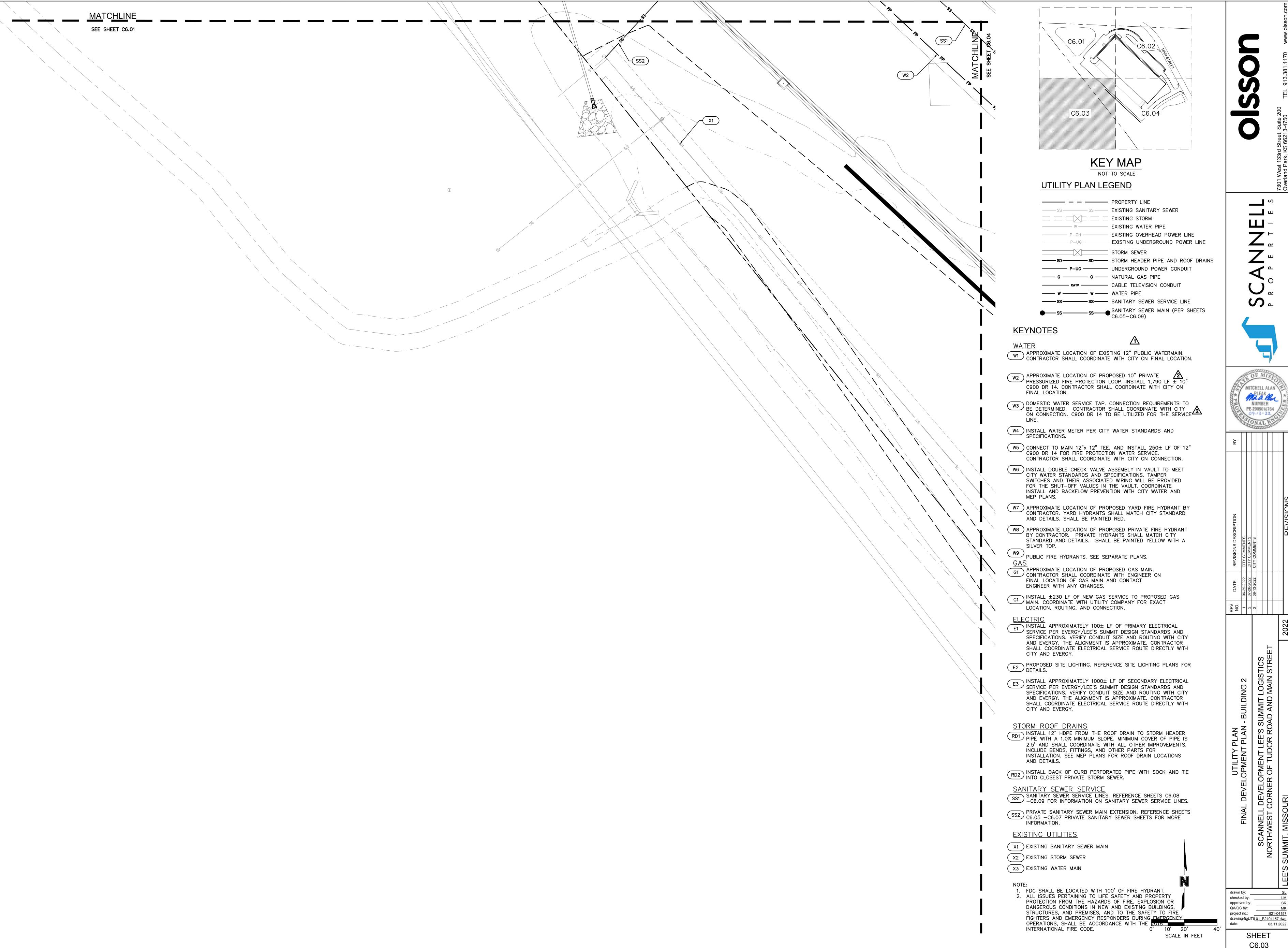
SHEET C6.00





project no.: <u>B21-04157</u> drawing OoUTIL01_B2104157.dwg date: 03.11.2022





Ш-

MITCHELL ALAN

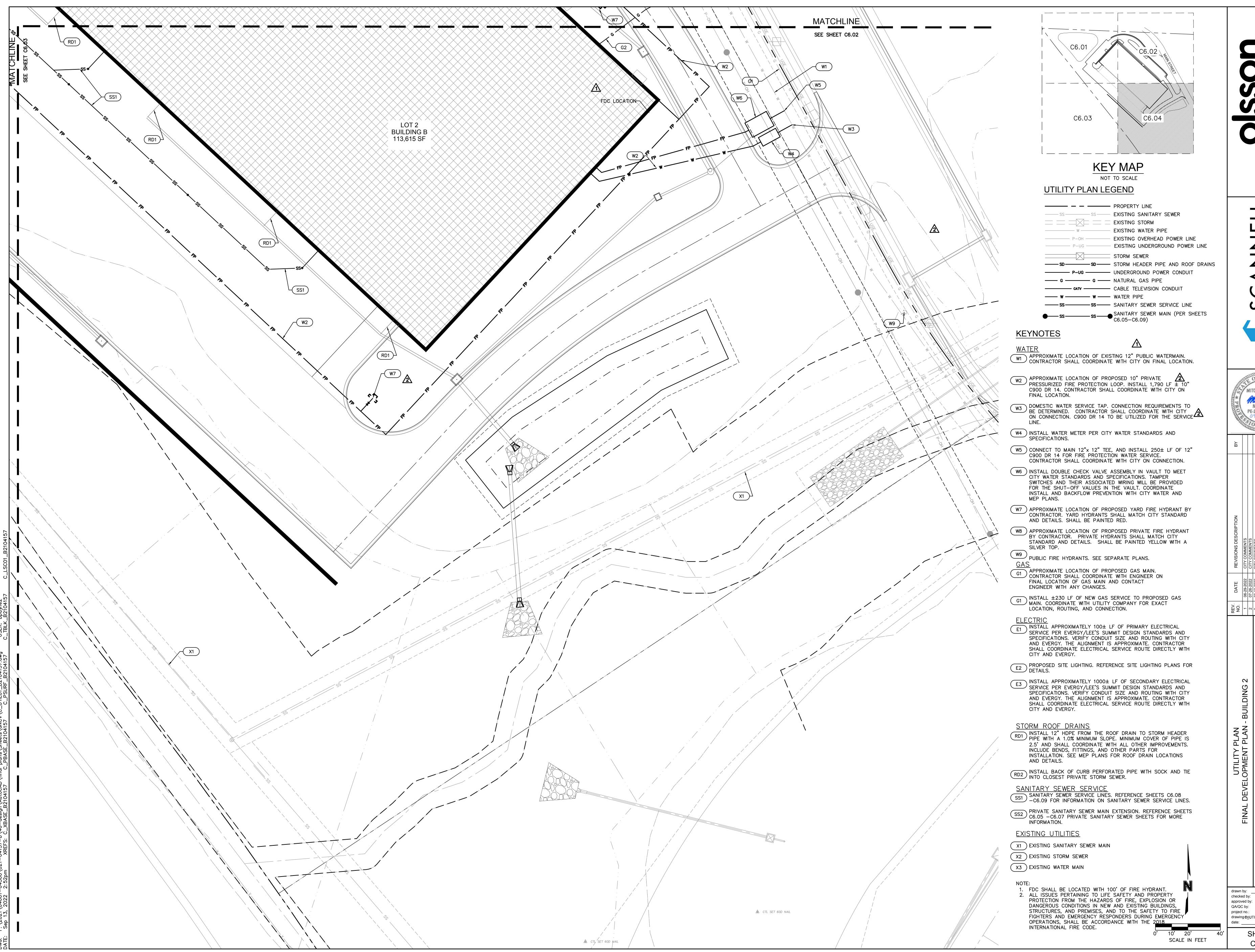
Maa. Red NUMBER PE-2009018764

06-29-2 07-26-2 09-13-2

S'S R

project no.: B21-04157 drawing @oUTIL01_B2104157.dwg

> SHEET C6.03



West 133rd Street, Suite 200 Ind Park, KS 66213-4750

SCANNELL

MITCHELL ALAN

PLEAK

NUMBER

PE-2009018764

MITCHELL ALAN
PLEAK
NUMBER
PE-2009018764
09-/3-22

CITY COMMENTS
CITY COMMENTS
CITY COMMENTS

CITY COMMENTS

GISTICS AIN STREET

MENT LEE'S SUMMIT LOGIST OF TUDOR ROAD AND MAIN S

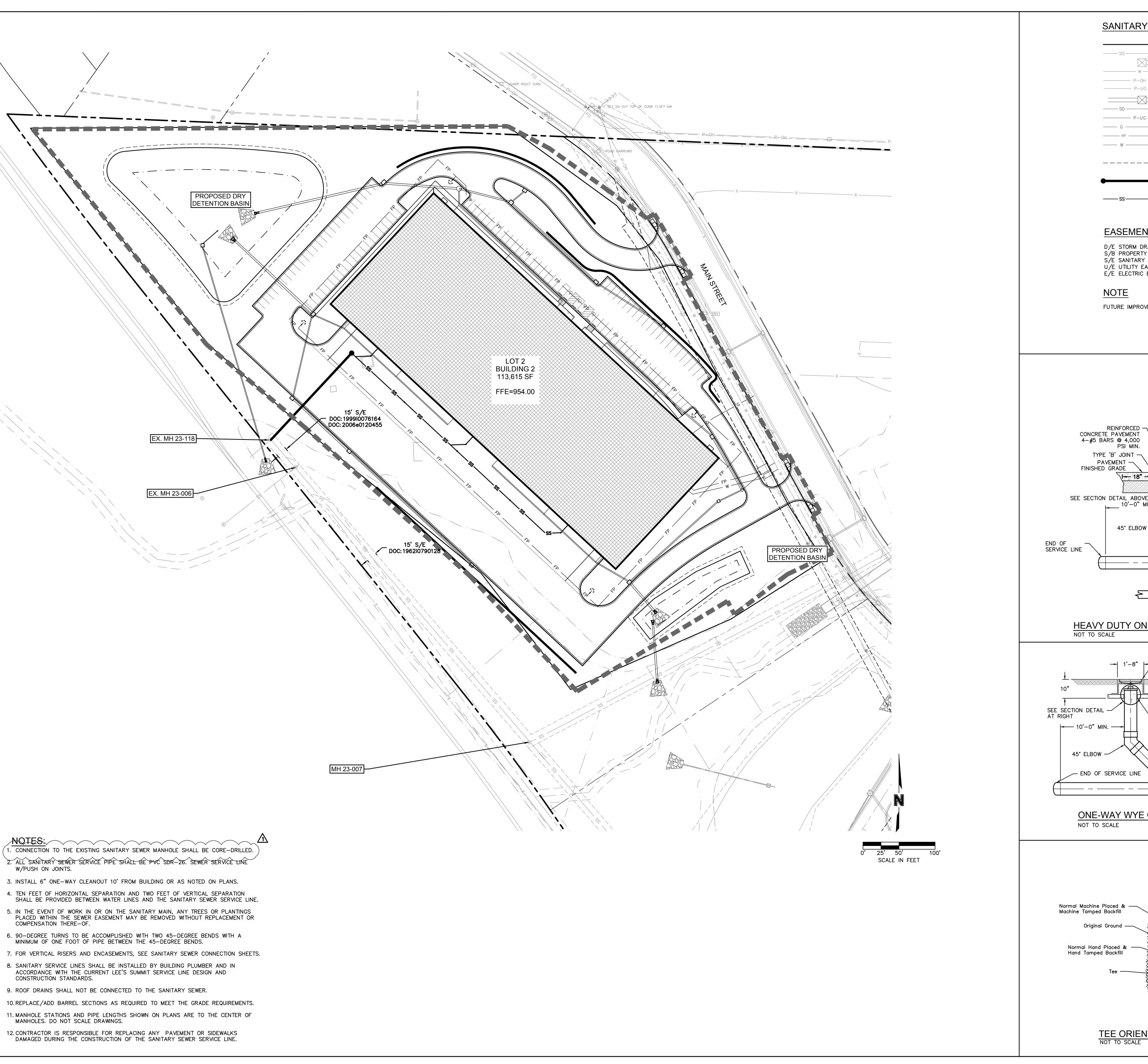
ANNELL DEVELOPMENT L HWEST CORNER OF TUDC

SCANNELL DE NORTHWEST COF E'S SUMMIT, MISSOURI

SL
by: LM
by: SR
/: MK
.: B21-04157
oUTIL01 B2104157.dwg
03.11.2022

QA/QC by: MK
project no.: B21-04157
drawing @oUTIL01 B2104157.dwg
date: 03.11.2022

SHEET C6.04



SANITARY SEWER PLAN LEGEND

PROPERTY LINE EXISTING STORM - EXISTING WATER PIPE EXISTING OVERHEAD POWER LINE - EXISTING UNDERGROUND POWER LINE _ STORM SEWER P-UG ----- UNDERGROUND POWER CONDUIT --- G --- G --- NATURAL GAS PIPE —— FP —— FP —— FIRE PROTECTION ---- W ----- WATER PIPE

---- UTILITY EASEMENT

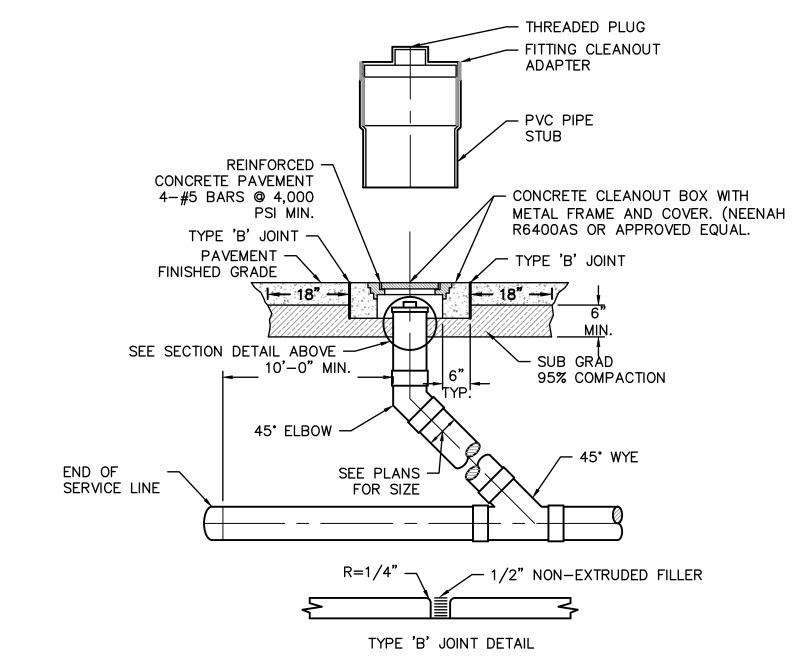
PROPOSED PRIVATE SANITARY SEWER (SEE SHEETS C6.08 & C6.09) PROPOSED SANITARY SEWER

EASEMENT/SETBACK LEGEND

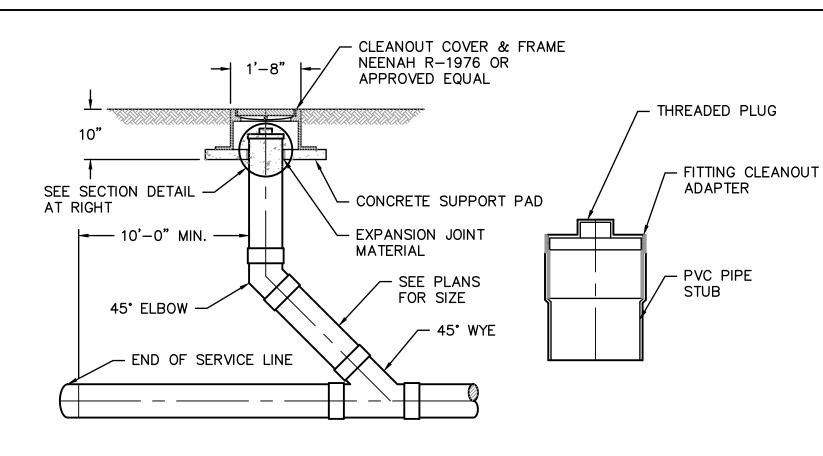
D/E STORM DRAINAGE EASEMENT S/B PROPERTY SETBACK S/E SANITARY SEWER EASEMENT U/E UTILITY EASEMENT E/E ELECTRIC EASEMENT

NOTE

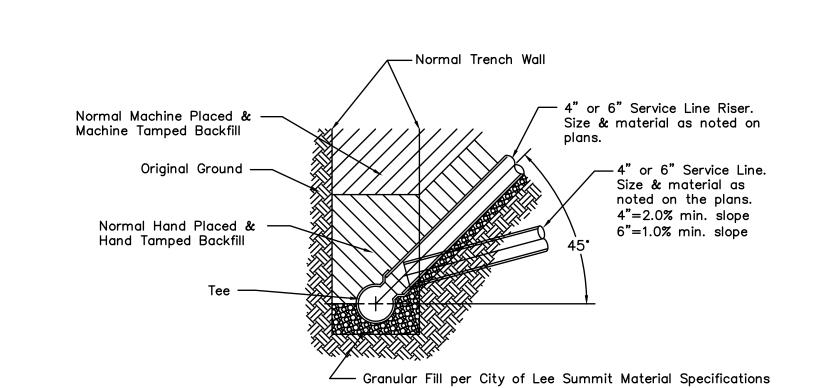
FUTURE IMPROVEMENTS ARE SHOWN FOR REFERENCE ONLY.



HEAVY DUTY ONE-WAY CLEANOUT (IN PAVEMENT) DETAIL



ONE-WAY WYE CLEANOUT (NOT IN PAVEMENT) DETAIL



TEE ORIENTATION AND RISER DETAIL

Ш-

MITCHELL ALAN NUMBER PE-2009018764

drawn by: checked by: approved by:

QA/QC by: project no.: <u>B21-04157</u> drawing **6**0.\$AN01_B2104157.dwg date: 03.11.2022 SHEET

C6.05

- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEVIATIONS FROM THESE PLANS UNLESS WRITTEN APPROVAL FROM ENGINEER, OWNER, AND DEVELOPER.
- 3. ALL WORK AND MATERIALS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE OWNER OR THE OWNER'S REPRESENTATIVE.
- 4. ALL ESTIMATES OF QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING QUANTITIES AND ITEMS OF WORK.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO COMPLETE THE WORK SHOWN IN THE PLANS.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS, PAYING ALL FEES, AND FOR OTHERWISE COMPLYING WITH ALL APPLICABLE REGULATIONS GOVERNING THE WORK.
- 7. THE CONTRACTOR SHALL NOT ENGAGE IN ACTIVITIES THAT MAY ENCROACH ON WATERS OF THE U.S., INCLUDING WETLANDS, UNTIL ANY NECESSARY PERMITS MAY BE OBTAINED. THE CONTRACTOR SHALL REVIEW AND COMPLY WITH ALL CONDITIONS DESCRIBED IN THE PERMIT.
- 8. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, THE SAFETY OF ALL PERSONS INCLUDING VISITORS AND THE GENERAL PUBLIC, AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY THROUGHOUT THE PROJECT AND NOT BE LIMITED BY WORKING HOURS. ANY CONSTRUCTION OBSERVATION BY THE ENGINEER OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES.
- 9. PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE WITH ALL UTILITY COMPANIES AND OBTAIN ANY RELEVANT INFORMATION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- 10. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL BOUNDARY CORNERS AND SECTION CORNERS. ANY BOUNDARY CORNER AND/OR SECTION CORNER DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE RESET BY A LAND SURVEYOR LICENSED IN THE STATE OF MISSOURI, AT THE CONTRACTOR'S EXPENSE.
- 11. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ADJACENT PROPERTIES AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE DURING CONSTRUCTION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR REPAIRING ANY DAMAGE RESULTING FROM CONSTRUCTION ACTIVITIES.
- 12. PRIOR TO MOVING OFF THE JOB THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER TO PERFORM A FINAL WALK-THROUGH OF THE CONSTRUCTION SITE.

REFERENCES

- 1. UNLESS EXPLICITLY DESCRIBED OTHERWISE WITHIN THESE PLANS THE FOLLOWING SHALL APPLY:
- A. ALL CONSTRUCTION, INCLUDING THOSE LISTED BELOW, SHALL CONFORM TO THE LATEST CODES AND ORDINANCES OF LEE'S SUMMIT, MISSOURI.
- B. ALL CONSTRUCTION IN MODOT RIGHT-OF-WAY SHALL CONFORM TO THE LATEST SPECIFICATIONS ADOPTED BY U.S. DEPARTMENT OF TRANSPORTATION AND MODOT.
- C. ALL TRAFFIC CONTROL SIGNAGE SHALL CONFORM WITH THE CURRENT EDITION OF THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES
- D. ALL UTILITY EXTENSIONS AND CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE UTILITY COMPANIES.
- E. ALL EXTERIOR PAVEMENT (PCC, ASPHALT, ETC.) SHALL BE IN CONFORMANCE WITH THE SPECIFICATIONS OF LEE'S SUMMIT. MISSOURI
- 4. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE DELIVERY MANAGER AND COORDINATING ANY MAILBOXES THAT MAY BE DISTURBED. FAILURE TO DO SO MAY SUBJECT THE CONTRACTOR TO PROSECUTION BY THE FEDERAL GOVERNMENT.

EXISTING CONDITIONS

- 1. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS OF THE PROJECT AREA.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING THEIR OWN INVESTIGATIONS AND MAKING THEIR OWN ASSUMPTIONS REGARDING SITE SURFACE AND SUBSURFACE CONDITIONS. THIS INCLUDES THE LOCATION AND CONSISTENCY OF ANY EXISTING ROCK LAYERS UNDERLYING THE PROJECT SITE. CONTACT THE ENGINEER REGARDING ANY DISCREPANCIES THAT MAY AFFECT THE ABILITY TO CONSTRUCT FROM THESE PLANS AS DESIGNED.
- 3. EXISTING CONDITIONS WERE DETERMINED THROUGH A VARIETY OF METHODS THAT MAY INCLUDE SURVEY, AERIAL IMAGERY, AVAILABLE RECORDS, GIS DATA, ETC. SUBSURFACE CONDITIONS ARE APPROXIMATE AND MAY NOT INCLUDE ALL UTILITIES AND OTHER SITE IMPROVEMENTS PRESENT ON SITE. THE CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING UNDERGROUND UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS WHEN CONFLICTS AND DISCREPANCIES ARE FOUND.

CONSTRUCTION

- 1. THE CONTRACTOR SHALL INSTALL TRAFFIC CONTROL WHILE WORKING IN THE PUBLIC RIGHT-OF-WAY AS SHOWN IN THESE PLANS. IF PLANS ARE NOT PROVIDED, CONTRACTOR SHALL COORDINATE AND PROVIDE CONTROLS TO THE SATISFACTION OF THE RIGHT-OF-WAY OWNER.
- 2. THE CONTRACTOR SHALL PROTECT ALL TREES OVER 3" CALIPER FROM DAMAGE. NO TREE SHALL BE REMOVED WITHOUT PERMISSION OF THE OWNER, UNLESS SHOWN OTHERWISE ON THESE PLANS.
- 3. THE CONTRACTOR SHALL DISPOSE ALL WASTE MATERIAL RESULTING FROM THE PROJECT OFF-SITE AND IN STRICT CONFORMANCE WITH ALL LOCAL CODES AND ORDINANCES.
- 4. ALL MANHOLES, CATCH BASINS, UTILITY VALVES AND METER PITS ARE TO BE ADJUSTED OR REBUILT TO GRADE AS REQUIRED. NOT ALL ADJUSTMENTS ARE INDICATED IN THE PLANS.
- 5. THE CONTRACTOR SHALL STREET SWEEP OR OTHERWISE CLEAN ALL ACCESS ROUTES TO THE SITE AT CONCLUSION OF THE PROJECT.

SHOP DRAWINGS

- THE CONTRACTOR SHALL SUBMIT SHOP DRAWING A MINIMUM OF 7 DAYS PRIOR TO THE REQUESTED DATE OF APPROVAL. ENGINEER SHALL REVIEW SHOP DRAWINGS OR SAMPLES CONFORMANCE WITH THE DESIGN FOR THIS PROJECT AS DESCRIBED IN THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ERRORS OR OMISSIONS IN SHOP DRAWINGS. THE ENGINEER'S REVIEW SHALL NOT EXTEND TO MEANS OR METHODS OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY VARIATION FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS UNLESS CONTRACTOR HAS NOTIFIED ENGINEER OF EACH SUCH VARIATION AT THE TIME OF SUBMISSION, AND OBTAINED ENGINEER'S WRITTEN APPROVAL OF EACH SUCH VARIATION. PRIOR TO SUBMITTING EACH SHOP DRAWING OR SAMPLE, CONTRACTOR SHALL HAVE REVIEWED AND
- A. ALL FIELD MEASUREMENTS, QUANTITIES, DIMENSIONS, SPECIFIED PERFORMANCE CRITERIA, INSTALLATION REQUIREMENTS, MATERIALS, CATALOG NUMBERS AND SIMILAR INFORMATION WITH RESPECT
- B. ALL MATERIALS WITH RESPECT TO INTENDED USE, FABRICATION, SHIPPING, HANDLING, STORAGE, ASSEMBLY AND INSTALLATION
- PERTAINING TO THE PERFORMANCE OF THE WORK; C. ALL INFORMATION RELATIVE TO MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION AND SAFETY
- PRECAUTIONS AND PROGRAMS INCIDENT THERETO: D. CONTRACTOR SHALL ALSO HAVE REVIEWED AND COORDINATED EACH SHOP DRAWING OR SAMPLE WITH OTHER SHOP DRAWINGS AND SAMPLES, AND WITH THE REQUIREMENTS OF THE WORK AND THE CONTRACT DOCUMENTS.
- E. ALL SUBMITTED SHOP DRAWINGS SHALL BEAR A STAMP OR SPECIFIC WRITTEN INDICATION AND SIGNATURE THAT CONTRACTOR HAS FULLY COMPLETED THE ABOVE TASKS.
- 2. SHOP DRAWINGS AS DESCRIBED ABOVE ARE REQUIRED FOR, BUT NOT LIMITED TO, THE FOLLOWING: A. ALL SANITARY SEWER STRUCTURES TO BE INSTALLED WITH THIS
- B. ANY ITEMS IN THESE PLANS THAT ALLOW FOR AN "APPROVED

EQUAL" ALTERNATIVE.

SANITARY SEWER GENERAL NOTES

- PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE CONSTRUCTION WITH CITY OF LEE'S SUMMIT, MISSOURI.
- 2. ALL PIPE LENGTHS ARE CALCULATED LINEARLY FROM CENTER OF
- STRUCTURE TO CENTER OF STRUCTURE. 4. ALL STRUCTURE DIMENSIONS ARE TO INSIDE FACE OF STRUCTURE.
- COORDINATES ARE PROVIDED AT THE CENTER OF STRUCTURE. ADDITIONAL COORDINATES PROVIDED ARE PER LOCAL CODES AND ORDINANCES OR AS AN AID WHEN ORIENTING THE LID DURING INSTALLATION.
- 6. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICT AND POINTS OF CONNECTION PRIOR TO ANY CONSTRUCTION OF SANITARY SEWER.
- 7. SANITARY SEWER TRENCHES SHALL BE CONSTRUCTED SUCH THAT UNDISTURBED EXISTING SOIL OR FILL COMPACTED TO 95% PROCTOR DENSITY IS AT A DEPTH THAT IS 18" ABOVE TOP OF PROPOSED PIPE.
- MANHOLE INVERT CHANNELS SHALL BE SMOOTH, CIRCULAR, AND CONFORMING TO 1/2 THE ADJACENT PIPE SECTION (INVERT TO CENTER). CHANGES IN DIRECTION OF FLOW SHALL BE MADE WITH A SMOOTH CURVE AND MAINTAIN SHAPE THROUGHOUT. CHANGES IN GRADE OF ADJACENT PIPES SHALL BE TRANSITIONED SMOOTHLY AND EVENLY THROUGH THE MANHOLE.
- 9. PIPE PENETRATIONS SHALL USE GASKETS TO ENSURE WATERTIGHT
- 10. TRACING TAPE SHALL BE INSTALLED ALONG ALL NON-METALLIC SURFACES OR AS DIRECTED BY LOCAL CODES AND ORDINANCES.
- 11. SEWER LINE INSPECTIONS AND TESTING MUST BE SCHEDULED A MINIMUM OF TWO FULL BUSINESS DAYS IN ADVANCE. CONTRACTOR SHALL FURNISH
- ALL TESTING EQUIPMENT. TESTING SHALL INCLUDE A. MANDREL TEST OF ALL GRAVITY SEWERS. IF THE MANDREL TEST FAILS ON ANY SECTION OF PIPE, THAT SECTION SHALL BE UNCOVERED AND REPLACED.
- B. AIR PRESSURE TEST OF ALL GRAVITY SEWERS. C. VACUUM TEST OF ALL MANHOLES.
- 12. REFER TO SHEETS C6.07-C6.08 FOR SANITARY DESIGN & SEWER LATERAL INFORMATION.
- 13. ALL SERVICE LINE CONNECTIONS SHALL BE MADE WITH AN 8"X8" PVC WYE, 8"PVC 45° BEND, AND THE APPROPRIATE LENGTH OF 8" PVC LATERAL (UNLESS OTHERWISE SHOWN) AND CAP. SEE DETAIL SHEET
- 14. MSFE- INDICATES LOWEST FLOOR SERVICEABLE BY PROPOSED SANITARY
- 15. MAXIMUM DEVIATION FROM LATERAL STATION LOCATIONS AS CALLED OUT SHALL BE 2.0' TO AVOID PIPE JOINT.
- 16. SANITARY LATERALS ARE DESIGNED @ 2.00% SLOPE. IF RISER IS INDICATED, IT IS TO BE AT THE SANITARY MAIN, UNLESS OTHERWISE
- 17. REFER TO CURRENT CITY SPECIFICATIONS FOR MINIMUM PIPE SLOPES.
- 18. CONTRACTOR MAY BE REQUIRED TO RECONSTRUCT PIPE AND STRUCTURE IF MINIMUM INVERT DROP OR PIPE SLOPE REQUIREMENTS ARE NOT MET.
- 19. SANITARY STRUCTURES SHALL BE PER CURRENT CITY DETAILS. IF CITY DOES NOT HAVE PUBLISHED DETAILS STRUCTURES SHALL BE PER CURRENT APWA SPECIFICATIONS.
- 20. GRAVITY SANITARY SEWER AND WATER LINES SHALL BE SEPARATED BY A MINIMUM OF 10'HORIZONTALLY WHEN PARALLEL AND 2'VERTICALLY WHEN CROSSING. WATER LINES SHALL CROSS ABOVE SANITARY SEWERS.

ESTIMATE OF QUANTITIES					
ITEM NO.	DESCRIPTION	QUANTITIY	UNIT	AS-BUILT QUANTITY	UNIT
1	CONNECT TO EXISTING SANITARY SEWER	1	EA.		EA.
2	10" PVC SDR-26 PIPE (MAIN LINE)	150.34	L.F.		L.F.
3	STANDARD 4'-0" I.D. MANHOLE (8' DEEP)	2	EA.		EA.

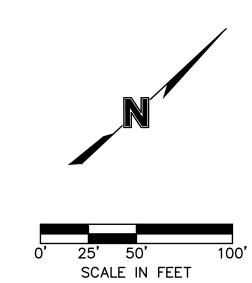
SUMMARY OF QUANTITIES AS INDICATED ABOVE AND ANY QUANTITIES AS SHOWN WITHIN THE PLANS HAVE BEEN PROVIDED FOR PERMITTING PURPOSES ONLY AND ARE NOT INTENDED FOR USE IN PREPARATION OF CONTRACT DOCUMENTS. QUANTITIES INTENDED FOR, BUT NOT LIMITED TO, THE PREPARATION OF PROPOSALS AND BID DOCUMENTS SHALL BE INDEPENDENTLY EVALUATED BY THE ESTIMATING PARTY BASED UPON THE CONTENTS OF THESE PLANS.



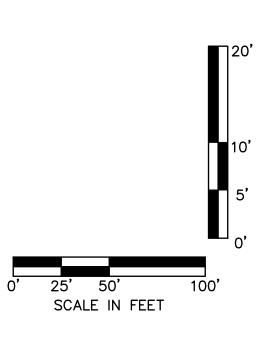


06-29-2 07-26-2 09-13-2

drawing noc_SAN02_GNL_B210415



PROPOSED SANITARY SEWER - LINE 2 980 975 970 965 965 ____960 FINISHED GRADE 955 945 935 930 930 925 920 905 895 895



	PROPERTY LINE
— — <i>830</i> — — —	EXISTING CONTOUR
830	PROPOSED CONTOUR

EASEMENT/SETBACK LEGEND

D/E STORM DRAINAGE EASEMENT S/B PROPERTY SETBACK S/E SANITARY SEWER EASEMENT U/E UTILITY EASEMENT E/E ELECTRIC EASEMENT

SANITARY SEWER NOTES:

- 1. ALL SANITARY SEWER SERVICE PIPE SHALL BE PVC SDR-26. SEWER SERVICE LINE W/PUSH ON JOINTS.
- 2. TEN FEET OF HORIZONTAL SEPARATION AND TWO FEET OF VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN WATER LINES AND THE SANITARY SEWER SERVICE LINE.
- 3. IN THE EVENT OF WORK IN OR ON THE SANITARY MAIN, ANY TREES OR PLANTINGS PLACED WITHIN THE SEWER EASEMENT MAY BE REMOVED WITHOUT REPLACEMENT OR COMPENSATION THERE-OF.
- 4. FOR VERTICAL RISERS AND ENCASEMENTS, SEE SANITARY SEWER CONNECTION SHEETS. 5. ROOF DRAINS SHALL NOT BE CONNECTED TO THE SANITARY
- 6. REPLACE/ADD BARREL SECTIONS AS REQUIRED TO MEET
- THE GRADE REQUIREMENTS. 7. MANHOLE STATIONS AND PIPE LENGTHS SHOWN ON PLANS
- ARE TO THE CENTER OF MANHOLES. DO NOT SCALE DRAWINGS.
- 8. CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY PAVEMENT OR SIDEWALKS DAMAGED DURING THE CONSTRUCTION OF THE SANITARY SEWER MAIN.

RIM ADJUSTMENT NOTES:

REPLACE/ADD BARREL SECTIONS AS REQUIRED TO MEET THE GRADE REQUIREMENTS.

STRUCTURES		
ID DESCRIPTION		
	4' ID STD MANHOLE	
MH 2-1	PROPOSED SANITARY SEWER - LIN RIM= 949.52	
1+64.38	INV IN = 938.96 (6" PVC) INV OUT = 938.66 (8" PVC) N: 53590.121; E: 54052.436	

<u>LEGEND</u>

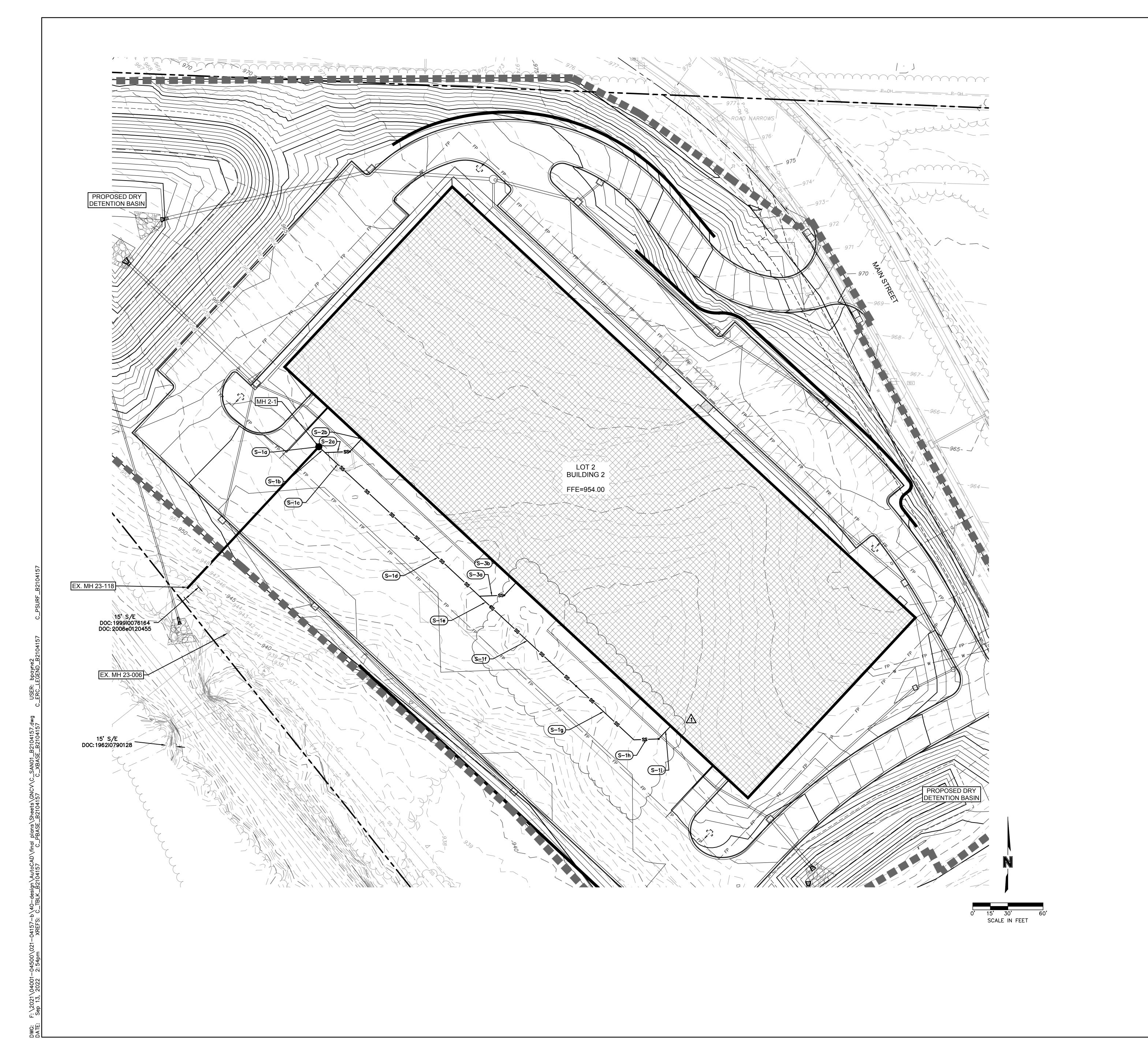
TOUR





EVISIONS DESCRIPTION	
IY COMMENTS	
IY COMMENTS	
Y COMMENTS	
SNOISIME	

QA/QC by: MK
project no.: B21-04157
drawinspand_PLP01_B2104157.dwg
date: 03.11.2022



SANITARY SEWER PLAN LEGEND

---- W ----- WATER PIPE

(SEE SHEETS C6.08 & C6.09)

SANITARY SEWER

1 - BUILDING A CONNECTION

 a. PROPOSED MANHOLE MH 2-1. REFERENCE SHEETS C6.07 FOR DETAILS. INV. EL (OUT) @ MANHOLE (8" PVC)= 938.66

SDR-26 W/ PUSH ON JOINTS @ 1.25%. THEN INSTALL WYE CONNECTION.

c. CONNECT TO WYE AND INSTALL 92.7 L.F. OF 6" PVC SDR-26 W/ PUSH ON JOINTS @ 1.25%. THEN INSTALL CLEANOUT CONNECTION. REFERENCE CLEANOUT DETAIL PER SHEET C6.09. INV. EL @ CLEANOUT= 940.21

e. CONNECT TO WYE AND INSTALL 12.7 L.F. OF 6" PVC SDR-26 W/ PUSH ON JOINTS @ 1.25%. THEN INSTALL CLEANOUT CONNECTION. REFERENCE CLEANOUT DETAIL PER SHEET

CONNECT TO CLEANOUT AND INSTALL 100± L.F. OF 6" PVC SDR-26 W/ PUSH ON JOINTS @ 1.25%. THEN INSTALL CLEANOUT CONNECTION. REFERENCE CLEANOUT DETAIL PER SHEET C6.09.

SDR-26 W/ PUSH ON JOINTS @ 1.25%. THEN INSTALL 45 DEGREE BEND. INV. EL @ BEND= 943.55

CONNECT TO CLEANOUT AND INSTALL 15.0± L.F. OF 6" PVC SDR-26 W/ PUSH ON JOINTS @ 1.23%. THEN INSTALL REDUCER ÁS NEEDED AND CONNECT TO BUILDING WITH FERNCO STRONGBACK RC COUPLING FOR DISSIMILAR PIPE CONNECTION. FG @ BUILDING=949.71

INV. EL @ BUILDING=944.00

a. CONNECT TO WYE CONNECTION AND INSTALL 21.2± L.F. OF 6" PVC SDR-26 W/ PUSH ON JOINTS @ 13.67% THEN INSTALL CLEANOUT CONNECTION. REFERENCE CLEANOUT DETAIL PER SHEET C6.09. INV. EL @ CLEANOUT= 941.95

CONNECT TO CLEANOUT AND INSTALL 15.0± L.F. OF 6" PVC SDR-26 W/ PUSH ON JOINTS @ 13.67%. THEN INSTALL REDUCER ÁS NEEDED AND CONNECT TO BUILDING WITH FERNCO STRONGBACK RC COUPLING FOR DISSIMILAR PIPE CONNECTION. FG @ BUILDING=949.71 INV. EL @ BUILDING=944.00

a. CONNECT TO WYE CONNECTION AND INSTALL 21.2± L.F. OF 6" PVC SDR-26 W/ PUSH ON JOINTS @ 7.46% THEN INSTALL CLEANOUT CONNECTION. REFERENCE CLEANOUT DETAIL PER SHEET C6.09.
INV. EL @ CLEANOUT= 941.30

		PROPERTY LINE
——— SS————	- SS	EXISTING SANITARY SEWER
		EXISTING STORM
W		EXISTING WATER PIPE
————— P-OH —		EXISTING OVERHEAD POWER LINE
———— P-UG -		EXISTING UNDERGROUND POWER LINE
		STORM SEWER
——— SD ————	- SD	STORM HEADER PIPE AND ROOF DRA
———— P-UG -		UNDERGROUND POWER CONDUIT
—— G —	- G	NATURAL GAS PIPE
——— FP ————	FP ———	FIRE PROTECTION

---- UTILITY EASEMENT

PROPOSED PRIVATE SANITARY SEWER PROPOSED SANITARY SEWER SERVICE LINE

MITCHELL ALAN

NUMBER

PE-2009018764

FUTURE IMPROVEMENTS ARE SHOWN FOR REFERENCE ONLY.

KEYNOTES

INV. EL (IN) @ MANHOLE (6" PVC)= 938.96

b. CONNECT TO MANHOLE AND INSTALL 7.3± L.F. OF 6" PVC INV. EL @ WYE= 939.05

d. CONNECT TO CLEANOUT AND INSTALL 87.3± L.F. OF 6" PVC SDR-26 W/ PUSH ON JOINTS @ 1.25%. THEN INSTALL WYE

INV. EL @ CLEANOUT= 941.46

INV. EL @ CLEANOUT= 942.71

CONNECT TO CLEANOUT AND INSTALL 67.2± L.F. OF 6" PVC

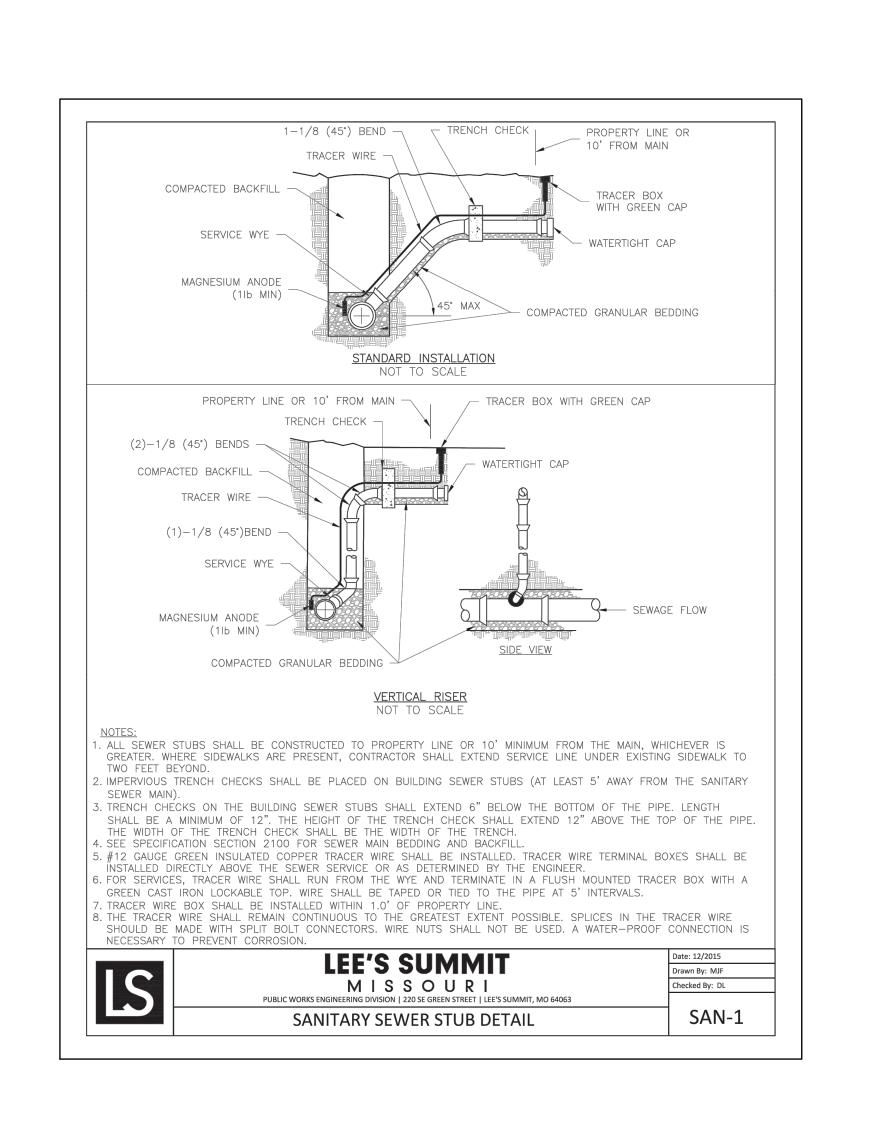
CONNECT TO BEND AND INSTALL 21.2± L.F. OF 6" PVC SDR-26 W/ PUSH ON JOINTS @ 1.25%. THEN INSTALL CLEANOUT CONNECTION. REFERENCE CLEANOUT DETAIL PER SHEET C6.09. INV. EL @ CLEANOUT= 943.82

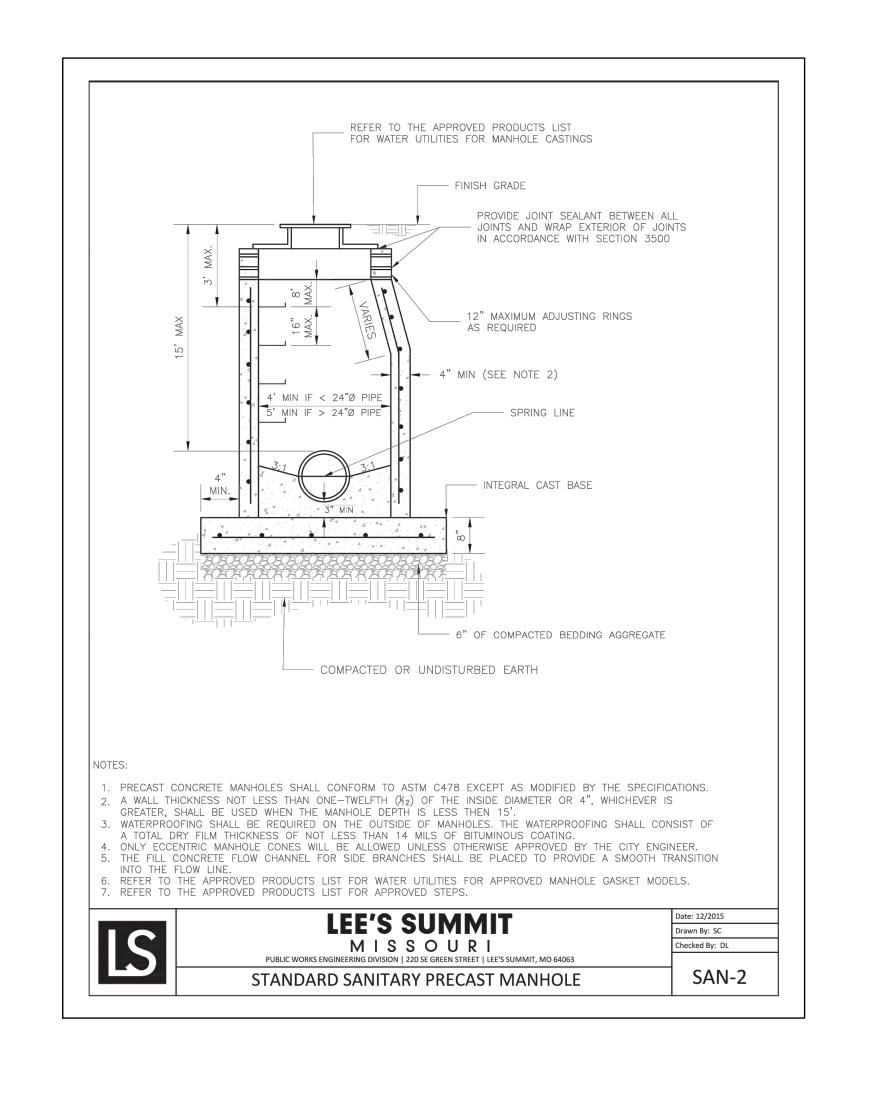
3 - BUILDING CONNECTION

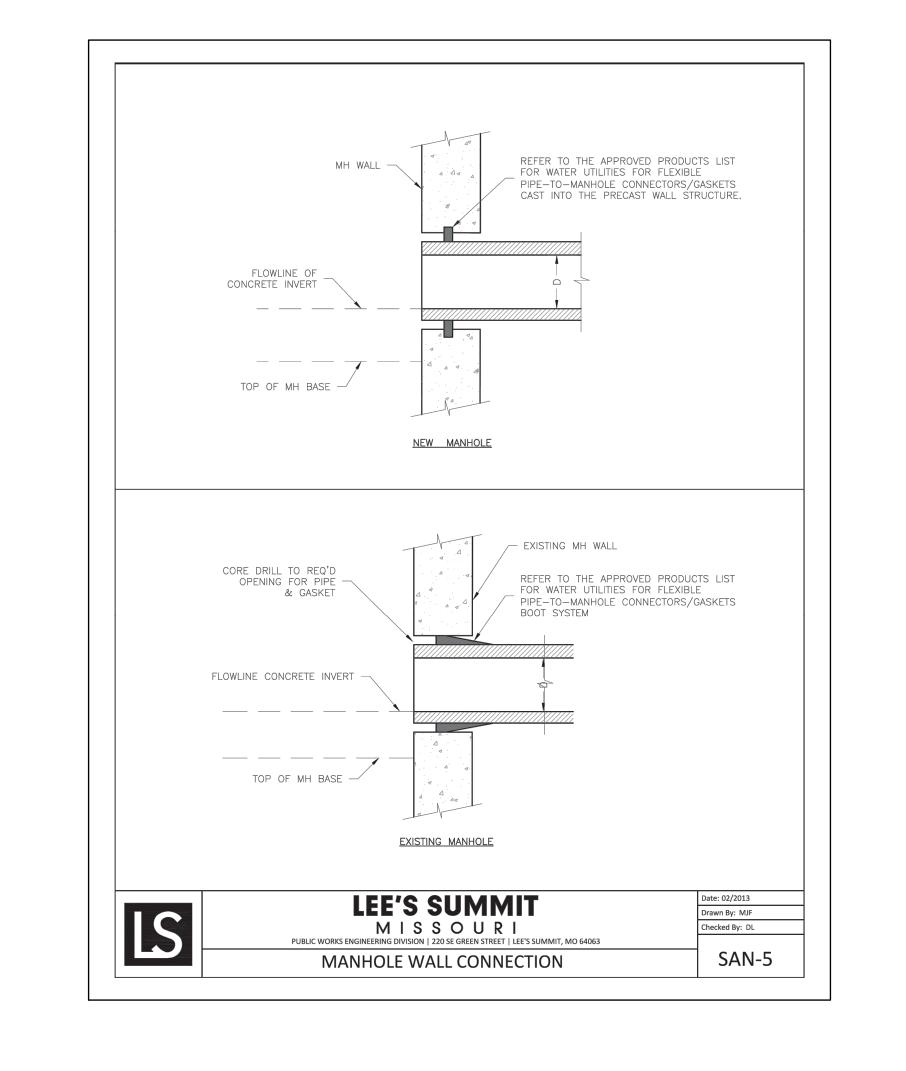
b. CONNECT TO CLEANOUT AND INSTALL 15.0± L.F. OF 6" PVC SDR-26 W/ PUSH ON JOINTS @ 7.46%. THEN INSTALL REDUCER AS NEEDED AND CONNECT TO BUILDING WITH FERNCO STRONGBACK RC COUPLING FOR DISSIMILAR PIPE CONNECTION. FG @ BUILDING=949.71 INV. EL @ BUILDING=944.00

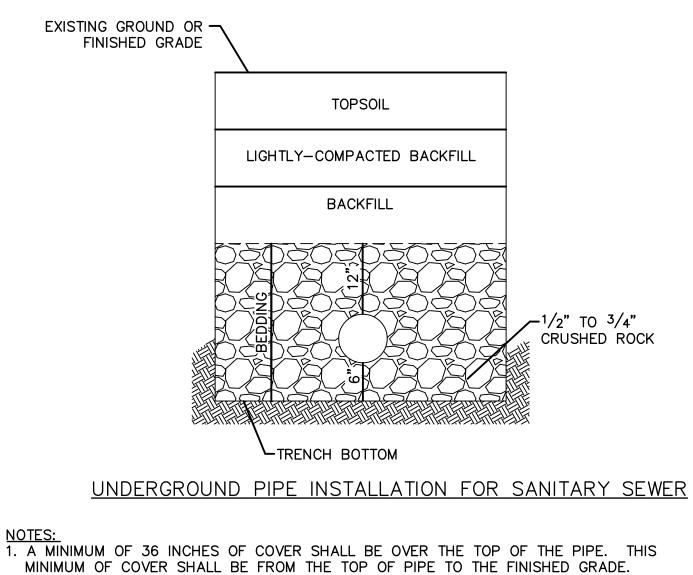
drawn by: checked by: approved by: QA/QC by: project no.: B21-04157 drawing 60_SAN01_B2104157.dwg SHEET

C6.08



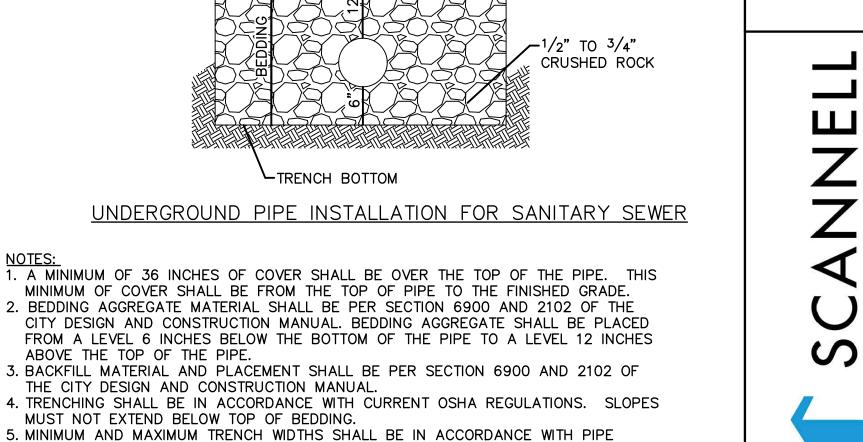


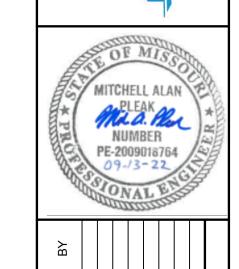




ABOVE THE TOP OF THE PIPE. 3. BACKFILL MATERIAL AND PLACEMENT SHALL BE PER SECTION 6900 AND 2102 OF THE CITY DESIGN AND CONSTRUCTION MANUAL. 4. TRENCHING SHALL BE IN ACCORDANCE WITH CURRENT OSHA REGULATIONS. SLOPES MUST NOT EXTEND BELOW TOP OF BEDDING. 5. MINIMUM AND MAXIMUM TRENCH WIDTHS SHALL BE IN ACCORDANCE WITH PIPE

MANUFACTURERS RECOMMENDATION AS APPROVED ON ENGINEERING PLANS.

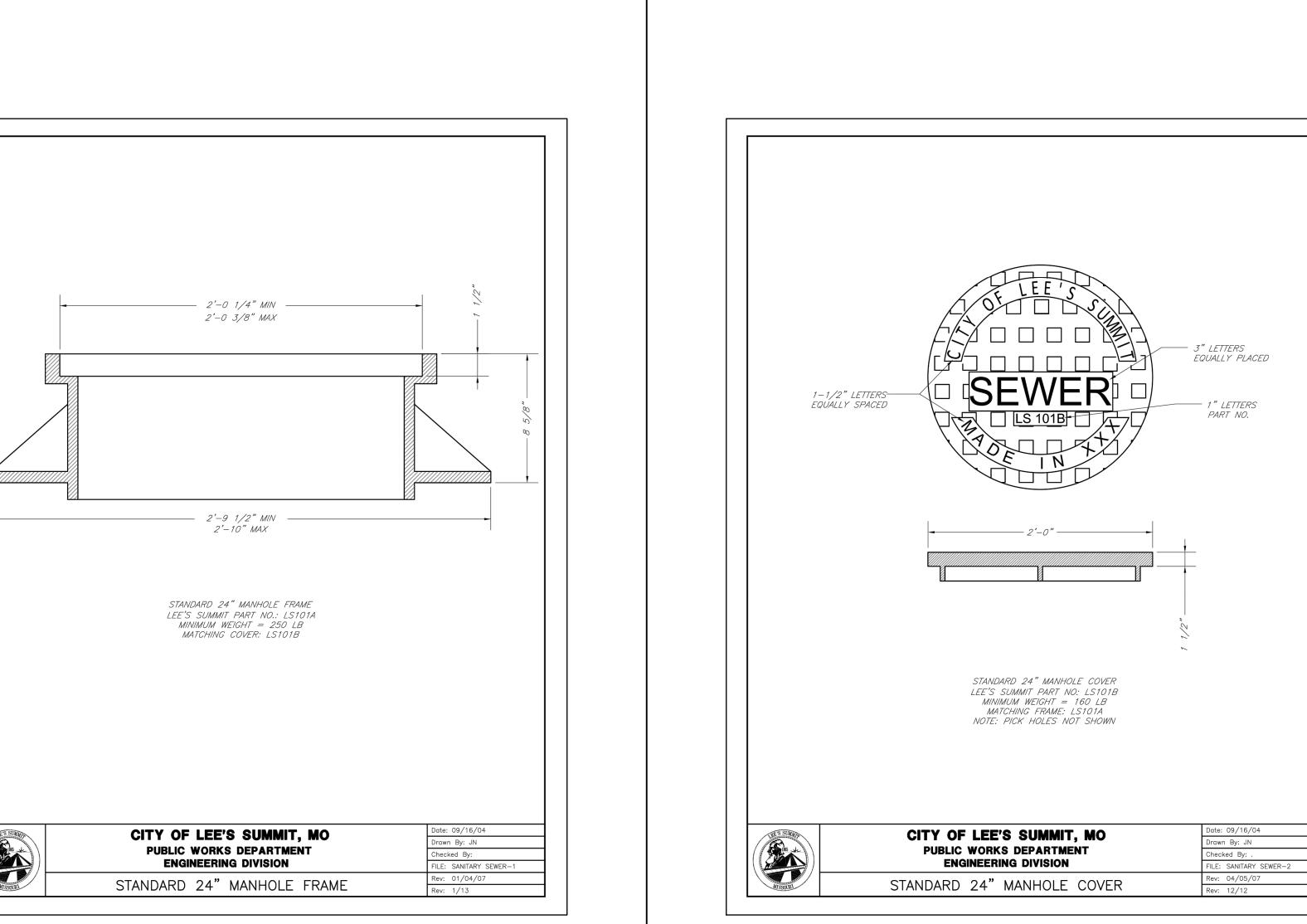


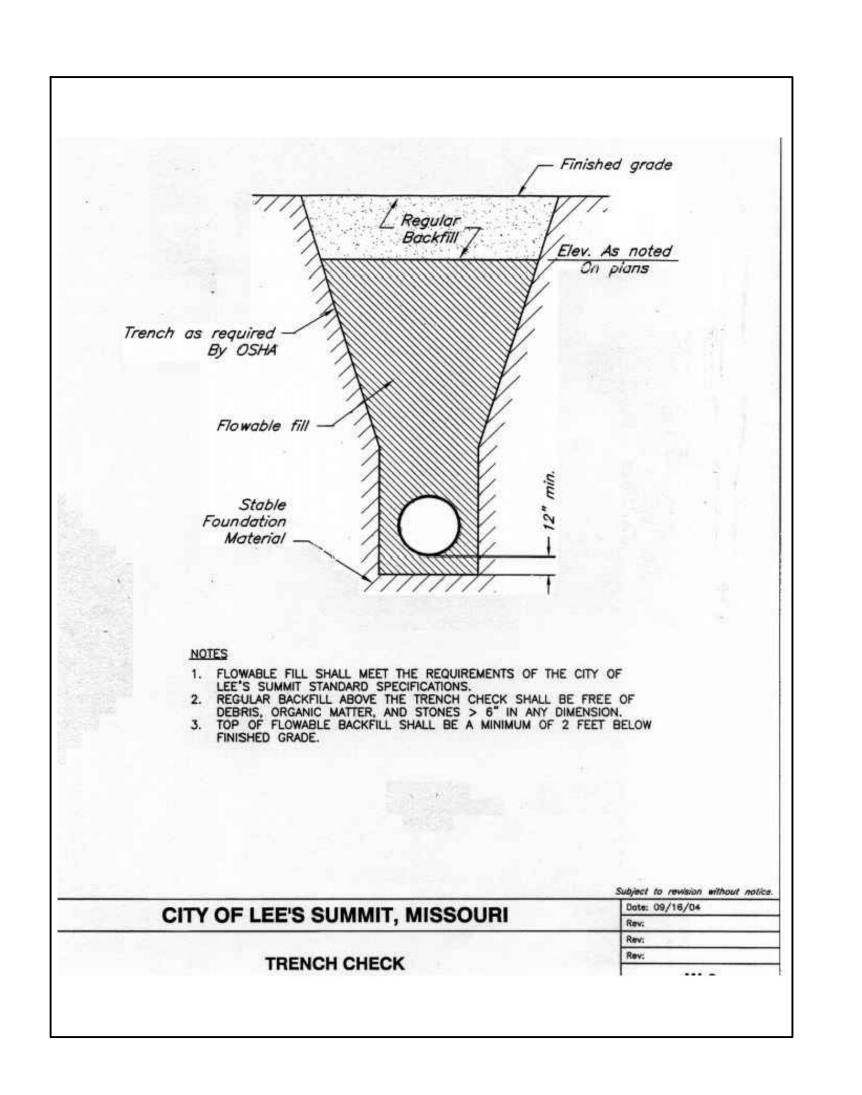


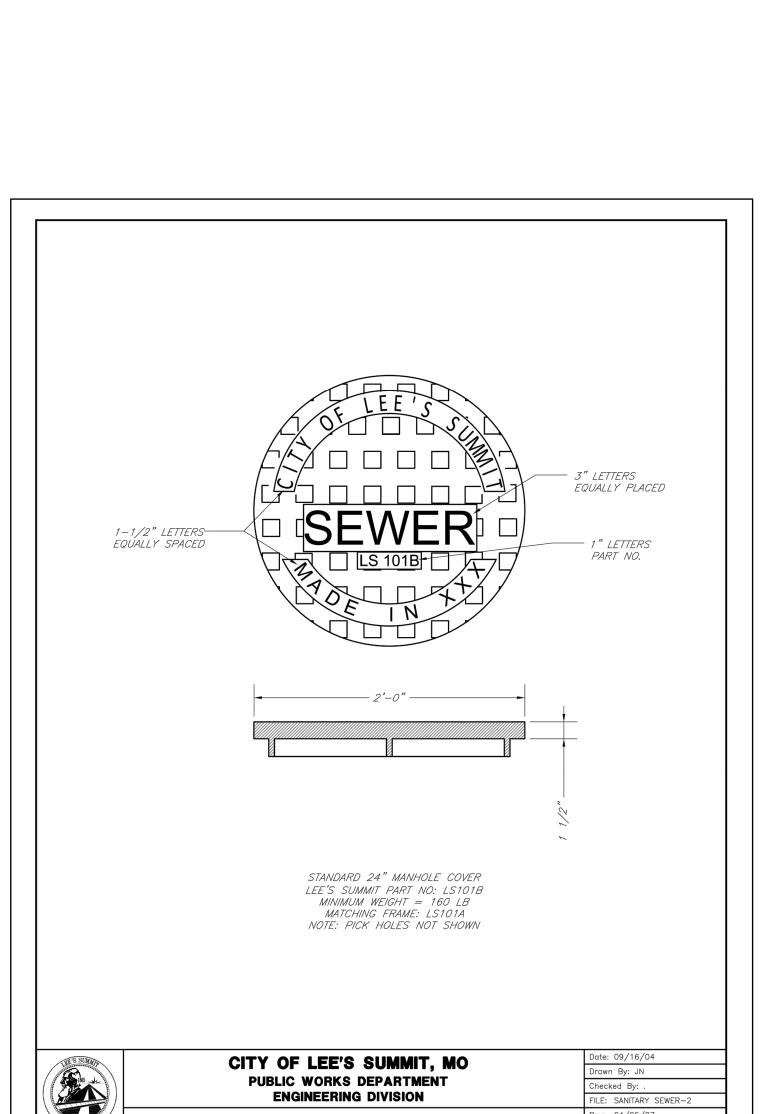
DATE REVISIONS I
06-29-2022 CITY COMMEN
07-26-2022 CITY COMMEN
09-13-2022 CITY COMMEN

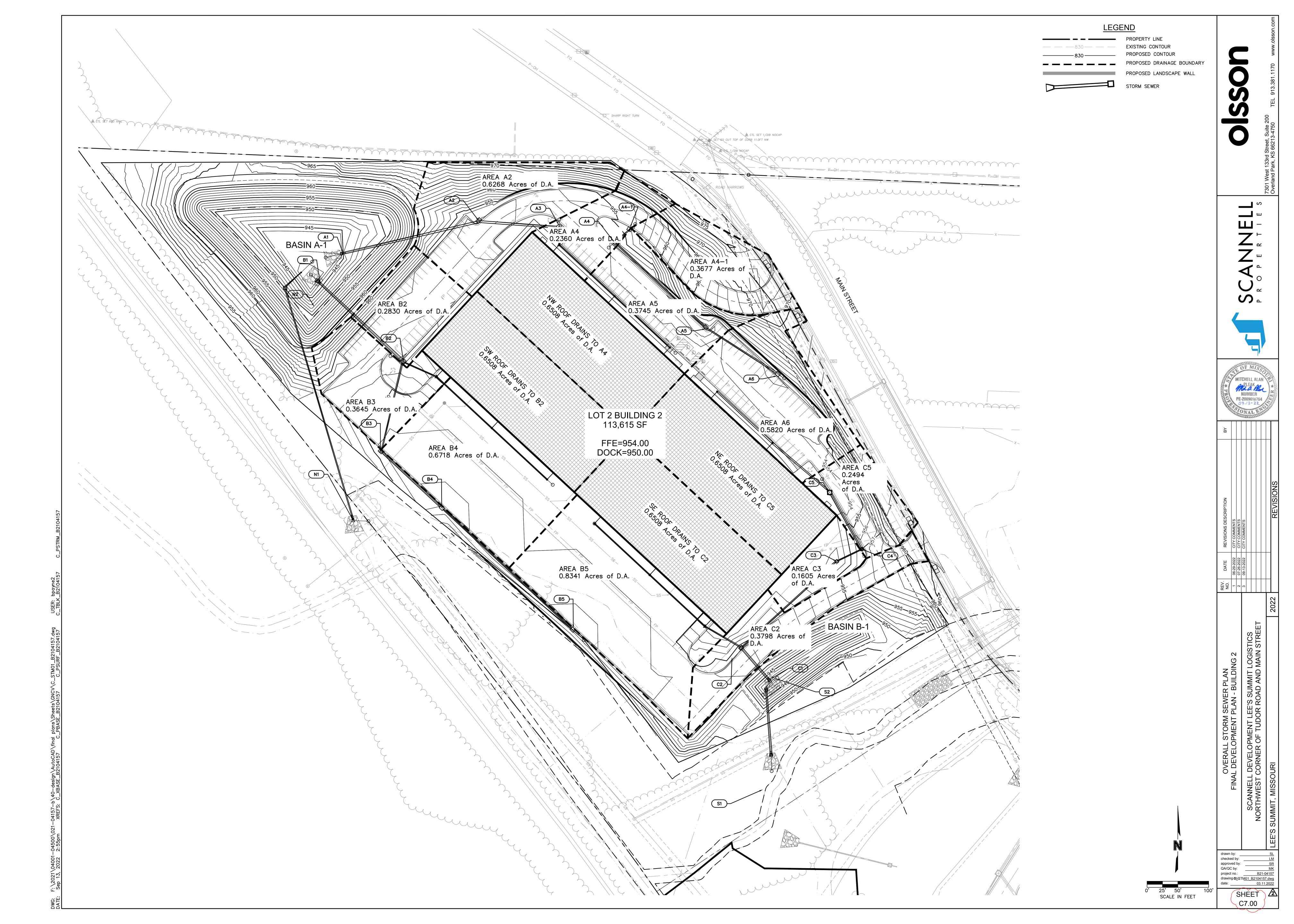
project no.: B21-04157 drawing noc_SAN02_GNL_B2104157

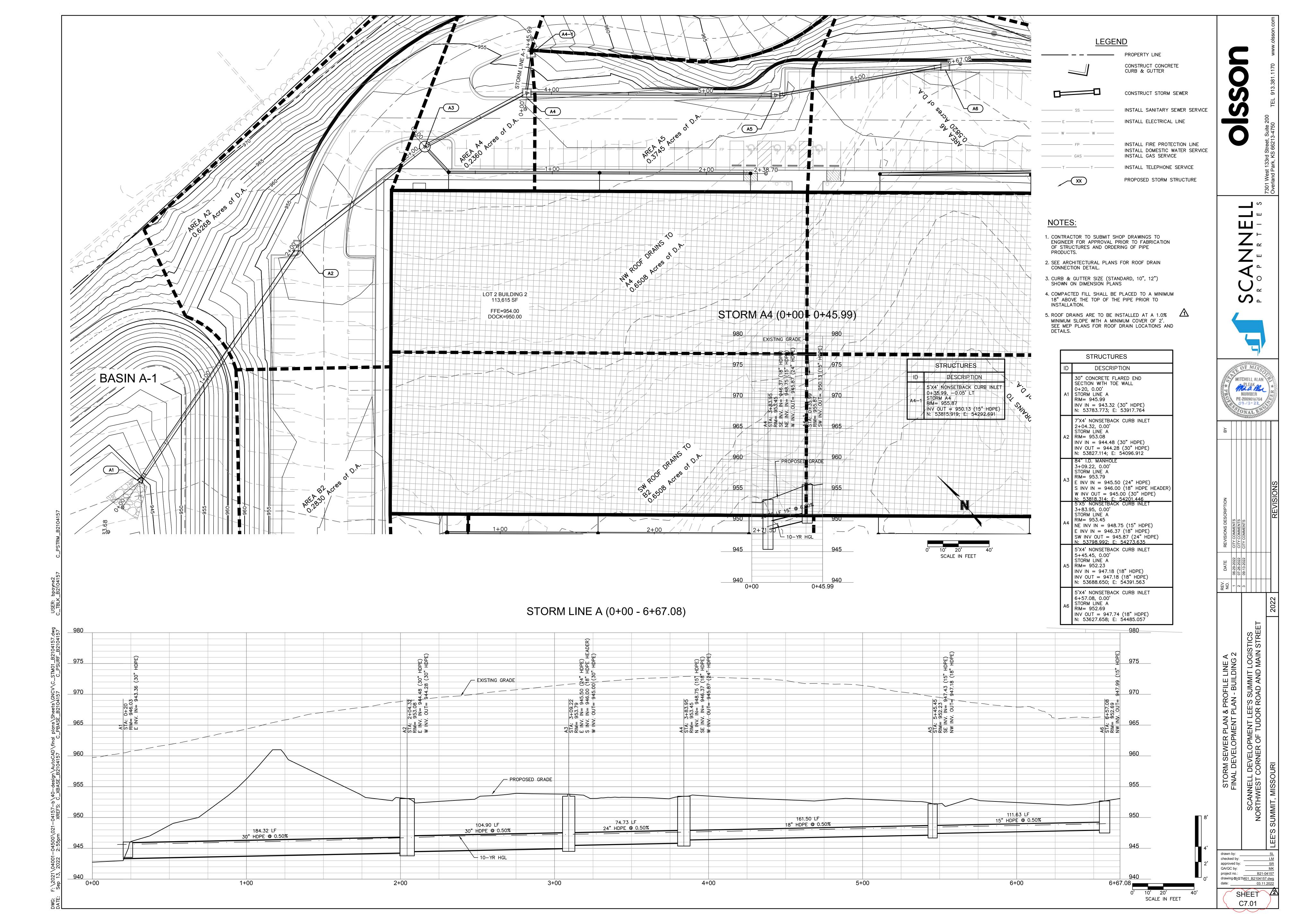
drawn by: checked by: approved by: QA/QC by: SHEET C6.09

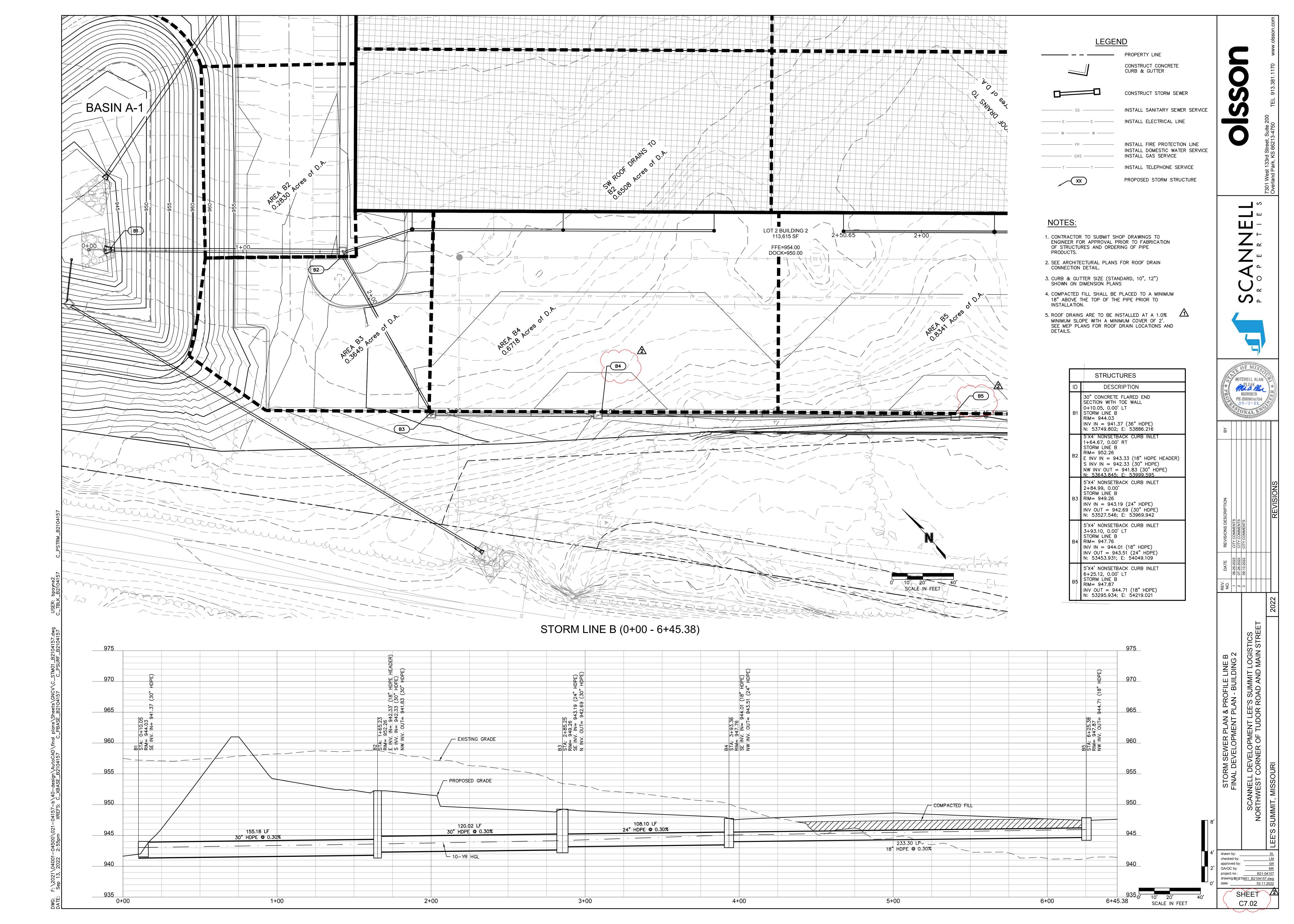


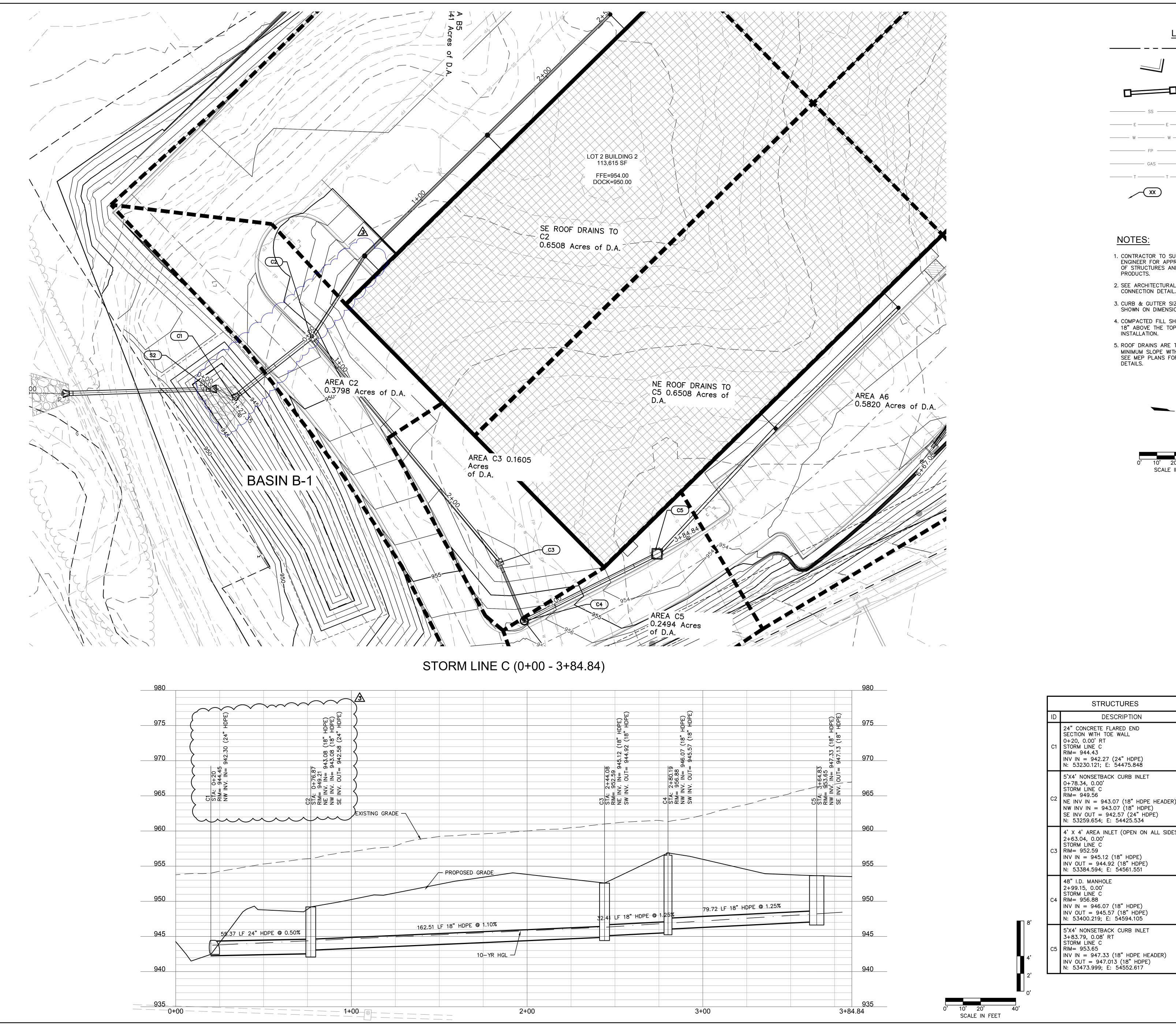












LEGEND

— — — PROPERTY LINE CONSTRUCT CONCRETE CURB & GUTTER CONSTRUCT STORM SEWER

INSTALL SANITARY SEWER SERVICE -----E ------- INSTALL ELECTRICAL LINE

INSTALL DOMESTIC WATER SERVICE ————— GAS —————— INSTALL GAS SERVICE

INSTALL TELEPHONE SERVICE

PROPOSED STORM STRUCTURE

- CONTRACTOR TO SUBMIT SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION OF STRUCTURES AND ORDERING OF PIPE PRODUCTS.
- 2. SEE ARCHITECTURAL PLANS FOR ROOF DRAIN CONNECTION DETAIL.
- 3. CURB & GUTTER SIZE (STANDARD, 10", 12") SHOWN ON DIMENSION PLANS
- 4. COMPACTED FILL SHALL BE PLACED TO A MINIMUM 18" ABOVE THE TOP OF THE PIPE PRIOR TO
- 5. ROOF DRAINS ARE TO BE INSTALLED AT A 1.0% MINIMUM SLOPE WITH A MINIMUM COVER OF 2'. SEE MEP PLANS FOR ROOF DRAIN LOCATIONS AND DETAILS.

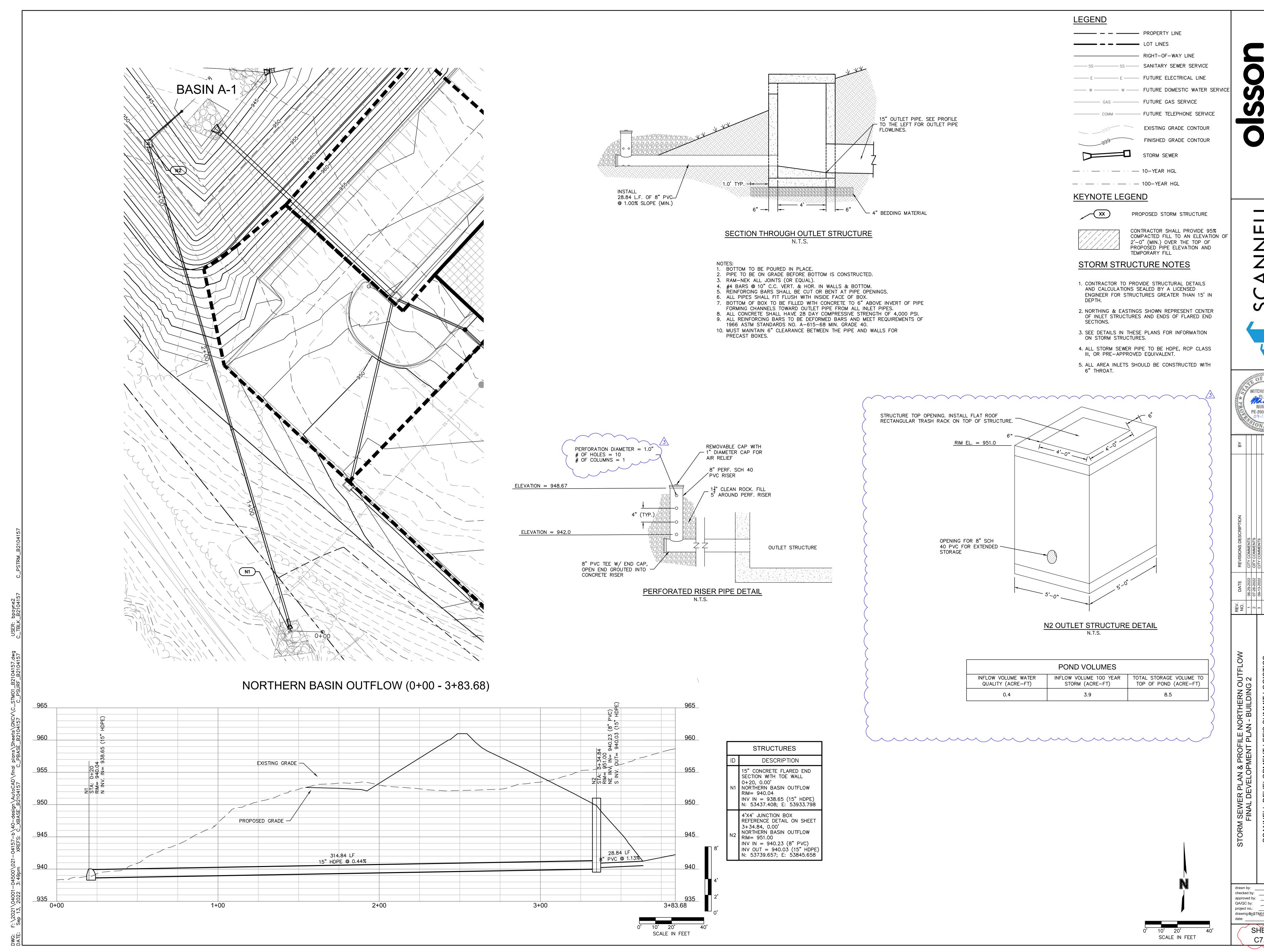




	STRUCTURES
ID	DESCRIPTION
C1	24" CONCRETE FLARED END SECTION WITH TOE WALL 0+20, 0.00' RT STORM LINE C RIM= 944.43 INV IN = 942.27 (24" HDPE) N: 53230.121; E: 54475.848
C2	5'X4' NONSETBACK CURB INLET 0+78.34, 0.00' STORM LINE C RIM= 949.56 NE INV IN = 943.07 (18" HDPE HEADER) NW INV IN = 943.07 (18" HDPE) SE INV OUT = 942.57 (24" HDPE) N: 53259.654; E: 54425.534
C3	4' X 4' AREA INLET (OPEN ON ALL SIDES) 2+63.04, 0.00' STORM LINE C RIM= 952.59 INV IN = 945.12 (18" HDPE) INV OUT = 944.92 (18" HDPE) N: 53384.594; E: 54561.551
C4	48" I.D. MANHOLE 2+99.15, 0.00' STORM LINE C RIM= 956.88 INV IN = 946.07 (18" HDPE) INV OUT = 945.57 (18" HDPE) N: 53400.219; E: 54594.105
C5	5'X4' NONSETBACK CURB INLET 3+83.79, 0.08' RT STORM LINE C RIM= 953.65 INV IN = 947.33 (18" HDPE HEADER) INV OUT = 947.013 (18" HDPE) N: 53473.999; E: 54552.617

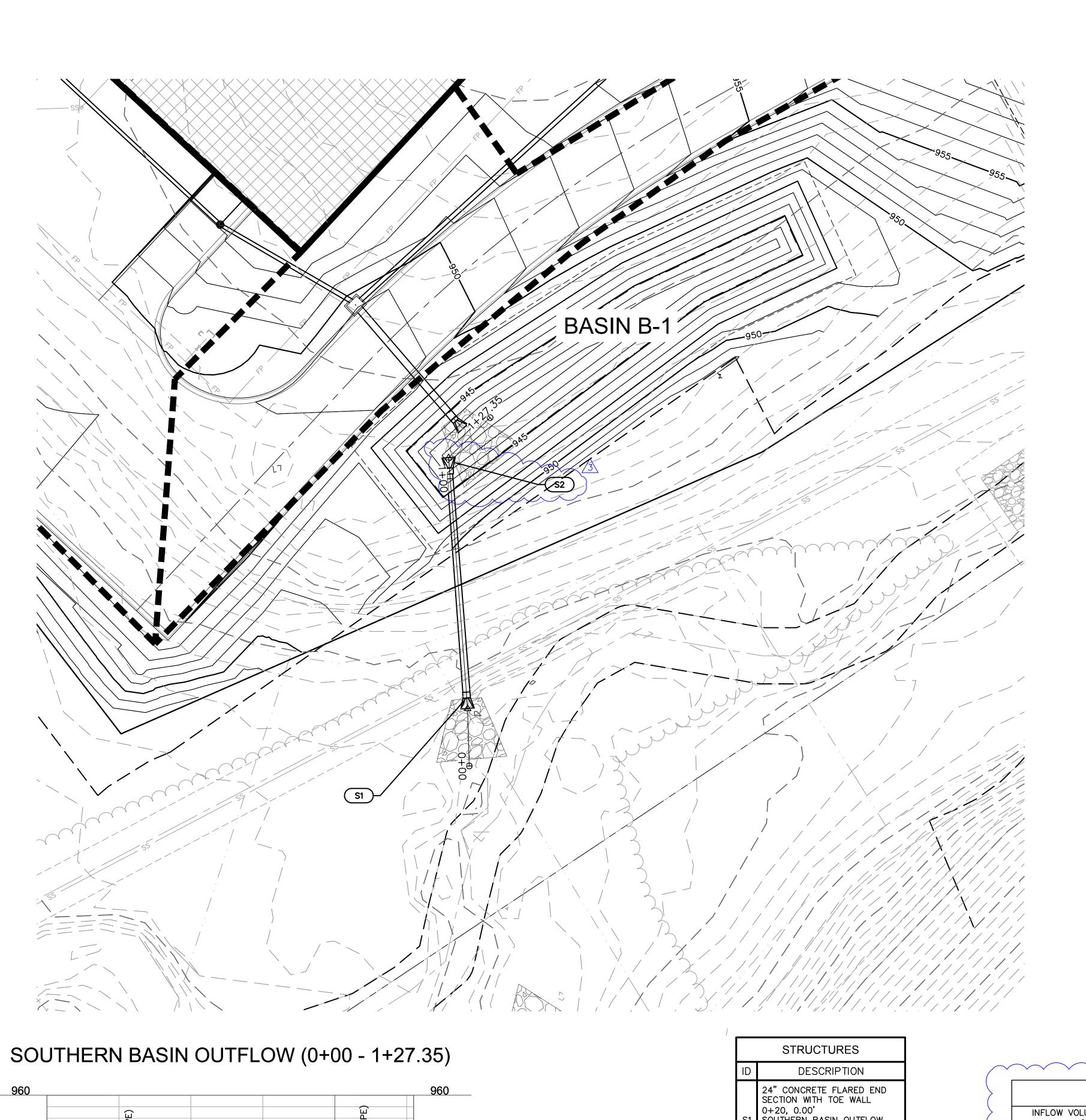


QA/QC by: MK
project no.: B21-04157
drawing ©oSTM01 B2104157.dwg
date: 03.11.2022 SHEET 2



MITCHELL ALAN PLEAK NUMBER PE-2009018764

QA/QC by: MK
project no.: B21-04157
drawing 6o.\$TM01 B2104157.dwg
date: 03.11.2022



950___

945____

935____

955

945

935

EXISTING GRADE —

PROPOSED GRADE -

81.65 LF 24" HDPE @ 0.50%

	STRUCTURES	
D	DESCRIPTION	
61	24" CONCRETE FLARED END SECTION WITH TOE WALL 0+20, 0.00' SOUTHERN BASIN OUTFLOW RIM= 943.25 INV IN = 941.09 (24" HDPE) N: 53132.124; E: 54476.706	INFL QL
32	24" CONCRETE FLARED END SECTION WITH TOE WALL 1+01.65, 0.00' SOUTHERN BASIN OUTFLOW RIM= 943.66 INV OUT = 941.50 (24" HDPE) N: 53213.537; E: 54470.533	DETENTION

	POND VOLUMES	
INFLOW VOLUME WATER QUALITY (ACRE-FT)	INFLOW VOLUME 100 YEAR STORM (ACRE-FT)	TOTAL STORAGE VOLUME TO TOP OF POND (ACRE-FT)
0.1	1.5	0.4*

LEGEND

— — — LOT LINES ----- RIGHT-OF-WAY LINE —— E —— E —— FUTURE ELECTRICAL LINE

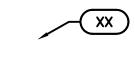
---- w ----- w ---- FUTURE DOMESTIC WATER SERVICE ———— GAS ———— FUTURE GAS SERVICE ----- COMM ------ FUTURE TELEPHONE SERVICE

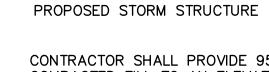
EXISTING GRADE CONTOUR FINISHED GRADE CONTOUR STORM SEWER

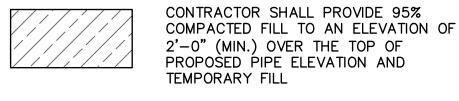
— · · · — · · — 10-YEAR HGL

— · — · — · — · — 100-YEAR HGL

KEYNOTE LEGEND





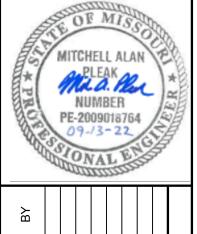


STORM STRUCTURE NOTES

- 1. CONTRACTOR TO PROVIDE STRUCTURAL DETAILS AND CALCULATIONS SEALED BY A LICENSED ENGINEER FOR STRUCTURES GREATER THAN 15' IN
- 2. NORTHING & EASTINGS SHOWN REPRESENT CENTER OF INLET STRUCTURES AND ENDS OF FLARED END SECTIONS.
- SEE DETAILS IN THESE PLANS FOR INFORMATION ON STORM STRUCTURES.
- 4. ALL STORM SEWER PIPE TO BE HDPE, RCP CLASS III, OR PRE—APPROVED EQUIVALENT.
- 5. ALL AREA INLETS SHOULD BE CONSTRUCTED WITH 6" THROAT.

	ш
Ш	_
7	Н
	₩
Z	ш
1	L
	0
	∝
S	_





- -	Ö		
	~	06-29-2022	CIT
	2	07-26-2022	CIT
	ဇ	09-13-2022	Ę
SIL			
0			
STREET			

QA/QC by: MK
project no.: B21-04157
drawing ©oSTM01 B2104157.dwg
date: 03.11.2022 SHEET

944.15

947.54

946.59

941.83 941.37

0.09

0.49

0.19

1.37

0.40

0.40

0.40

0.40

943.67 0.29 0.40 0.40 0.16 0.45 944.02 944.12

														S	TORM SEW	ER PIPE A	AND STRUCT	TURE TAE	LE - 100 Y	EAR												
E: Lee's Su	mmit Logistic	s Building B																														
#: B021-04																																
		VATE - 100 \	YEAR STO																													
STRUCT	URES			RL	NOFF C	ALCULA	ATIONS	<u> </u>											P	IPE DESIGN		-										
		DIRECT	TOTAL	_			FLOW	INTENSITY	/ DESIGN C		PIPE LENGTH	H PIPE	PIPE DIA	Q FULL	PIPE AREA	V FULL	DESIGN V		MH TOP	LIDSTDEAM	DOWNSTREAM	DOWNSTREAM	FRICTION	ENTRY LOSS		ENTRY	hf+hm	HW, INLET	. HW,	HYDRAULIC	HYDRAULIC	
ROM	TO	AREA	AREA	C	KC (K=1)	Tc (MIN)	TIME	(IN/HR)	DESIGN C	DESCRIPTION	(L.F.)	SLOPE (%)		(CFS)	(SQ.FT.)	(F/S)	(F/S)	Hw/D		FLOWLINE	FLOWLINE	WATER		COEFFICIENT	ENTRY	LOSS (h m)		CONTROL	OUTLET	GRADE	GRADE	Comments
		(ACRES)	(ACRES	S)			(MIN)	(IIV FIR)	(CFS)		(L.F.)	SLOPE (%)	(IN)	(CFS)	(5Q.F1.)	(F/S)	(୮/٥)		ELEVATION	FLOVVLINE	FLOVVLINE	ELEVATION	HEAD (h f)	(k)	LOSS (k)	LOSS (II III)	(F1)	CONTROL	CONTROL	ELEV.	(MAX)	
46		0.58		0.90	1.00	5.0		10.32	6.01										952.69											950.52	951.19	
	A5		0.58		1.00	5.0	0.38	10.32	6.01		111.63	0.50	15	4.58	1.23	3.73	4.90	1.43		947.74	947.43	949.18	0.98	0.40	1.00	0.37	1.35	949.53	950.52			
\5		0.37		0.90	1.00	5.0		10.32	3.87										952.23											950.06	950.73	
	A4		0.96	0.90	1.00	5.4	0.49		9.73		161.50	0.50	18	7.45	1.77	4.21	5.50	1.47		947.18	946.37	948.47	1.40	0.40	0.40	0.19	1.59	949.39	950.06			
A4		0.24		0.90	1.00	5.0		10.32	2.44										953.45											948.37	951.95	
	A3		1.56	0.90	1.00	5.9	0.21	9.97	15.56	Storm Line A + Storm Line A4	74.73	0.50	24	16.04	3.14	5.11	5.81	1.16		945.87	945.50	947.80	0.36	0.40	0.40	0.21	0.57	948.19	948.37			
\3		0.00		0.90	1.00	5.0		10.32	0.00										953.79											947.47	952.29	
	A2		2.21		1.00	6.1	0.27	9.89	21.87	Storm Line A + NW Roof Drains	104.90	0.50	30	29.08	4.91	5.92	6.49	0.99		945.00	944.48	946.90	0.30	0.40	0.40	0.26	0.56	947.47	947.46			
42		0.63		0.90	1.00	5.0		10.32	6.47										953.08											947.35	951.58	
	A1		2.84	0.90	1.00	6.4	0.46	9.79	27.78		184.32	0.50	30	29.08	4.91	5.92	6.73	1.18		944.28	943.36	946.22	0.85	0.40	0.40	0.28	1.13	947.23	947.35			
4-1		0.37		0.90	1.00	5.0		10.32	3.80										955.87											951.39	954.37	
	A4		0.37	0.90	1.00	5.0	0.04	10.32	3.80		24.00	6.00	15	15.87	1.23	12.93	10.60	0.97		950.13	948.75	949.56	0.08	0.40	1.00	1.74	1.83	951.35	951.39			
B5		0.83		0.90	1.00	5.0		10.32	8.61										947.38											948.03	945.88	
	B4		0.83		1.00	5.0	0.80	10.32	8.61		233.30	0.30	18	5.77	1.77	3.26	4.87	1.30		944.71	944.01	946.08	1.58	0.40	1.00	0.37	1.95	946.66	948.03			
B4		0.67		0.90	1.00	5.0		10.32	6.93										947.76											946.57	946.26	
	B3		1.51	0.90	1.00	5.0	0.36	10.32	15.54		108.11	0.30	24	12.42	3.14	3.95	4.95	1.16		943.51	943.19	945.90	0.52	0.40	0.40	0.15	0.67	945.83	946.57			
33		0.23		0.90	1.00	5.0		10.32	2.36										949.26											945.09	947.76	
	B2		1.73	0.90	1.00	5.4	0.39	10.17	17.65		120.02	0.30	30	22.53	4.91	4.59	5.07	0.88		942.69	942.33	944.71	0.22	0.40	0.40	0.16	0.38	944.88	945.09			
B2		0.38		0.90	1.00	5.0		10.32	3.89										952.26											945.67	950.76	
	B1		2.76	0.90	1.00	5.8	0.46		27.66	Storm Line B + SW Roof Drains	155.18	0.30	30	22.53	4.91	4.59	5.64	1.18		941.83	941.37	944.77	0.71	0.40	0.40	0.20	0.91	944.77	945.67			
C5		0.58		0.90	1.00	5.0		10.32	6.01										953.65											950.20	952.15	
	C4		1.23	0.90	1.00	5.0	0.18	10.32	12.73	Storm Line C + NE Roof Drains	79.72	1.25	18	11.78	1.77	6.66	7.20	2.05		947.13	946.07	948.24	1.18	0.40	0.40	0.32	1.51	950.20	949.75			
C4		0.00		0.90	1.00	5.0		10.32	0.00										956.88											948.61	955.38	
	C3		1.23	0.90	1.00	5.2	0.08	10.25	12.63		32.41	1.25	18	11.78	1.77	6.66	7.15	2.03		945.57	945.12	947.29	0.47	0.40	0.40	0.32	0.79	948.61	948.08			
C3		0.16		0.90	1.00	5.0		10.32	1.66										952.59											949.01	951.09	
	C2		1.39	0.90	1.00	5.3	0.37	10.22	14.23		179.98	1.00	18	10.53	1.77	5.96	8.05	2.39		944.92	943.07	945.26	3.34	0.40	0.40	0.40	3.74	948.51	949.01			
C2		0.38		0.90	1.00	5.0		10.32	3.92										949.56											946.31	948.06	
	C1		2.42	0.90	1.00	5.6	0.12	10.07	24.40	Storm Line C + SE Roof Drains	56.79	0.50	24	16.04	3.14	5.11	7.77	1.87		942.57	942.28	945.15	0.67	0.40	0.40	0.37	1.04	946.31	946.19			

3.14 3.95 4.39

 179.98
 1.00
 18
 10.53
 1.77
 5.96
 6.70
 1.38

4.91 4.59 4.58

1.77 6.66 7.18 1.24

1.77 6.66 7.17 1.23

952.26

TITLE: Lee's Summit Logistics Building B

TO

C3

DESIGN CONDITIONS: PRIVATE - 10 YEAR STORM EVENT

AREA AREA

0.58

RUNOFF CALCULATIONS

0.90 | 5.4 | 0.57

0.90 6.2 0.30 6.99

0.90 0.90 6.5 0.50 6.90 17.63

0.90 | 5.0 | 0.41 | 7.35

 1.23
 0.90
 0.90
 5.0
 0.19
 7.35
 8.16

1.23 | 0.90 | 0.90 | 5.2 | 0.08 | 7.30 | 8.10

0.90 | 0.90 | 5.0 | 7.35

 1.39
 0.90
 0.90
 5.3
 0.45
 7.27
 9.12

1.56 0.90 0.90 6.0 0.23 7.05

0.83 | 0.90 | 0.90 | 5.0 | 1.05 | 7.35

1.73 0.90 0.90 5.4 0.44 7.23

0.90 | 5.0 |

0.90 | 0.90 | 5.0 |

0.90 0.90 5.0

INTENSITY DESIGN Q

9.90

13.90

4.15

7.35

7.35

7.35 2.76 0.90 0.90 5.8 0.51 7.10 17.65 Storm Line B + SW Roof Drains

DESCRIPTION

Storm Line A + Storm Line A4

Storm Line A + NW Roof Drains

Storm Line C + NE Roof Drains

 0.38
 0.90
 0.90
 5.0
 7.35
 2.51
 949

 2.42
 0.90
 0.90
 5.7
 0.16
 7.14
 15.58
 Storm Line C + SE Roof Drains
 56.79
 0.50
 24
 16.04
 3.14
 5.11
 5.80
 1.16

(L.F.) SLOPE (%) (IN)

161.50 0.50 18

79.72 1.25 18 11.78

C KC (K=1) Tc (MIN) TIME

0.90 | 0.90 | 5.0

0.90

JOB #: B021-04157

A5

C3

STRUCTURES

Ш-



947.76

950.76

955.38

951.09

948.98 952.15

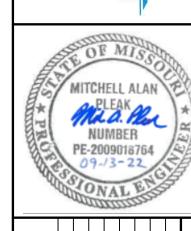
944.12

947.41

0.40 0.13 0.22 944.58 944.37

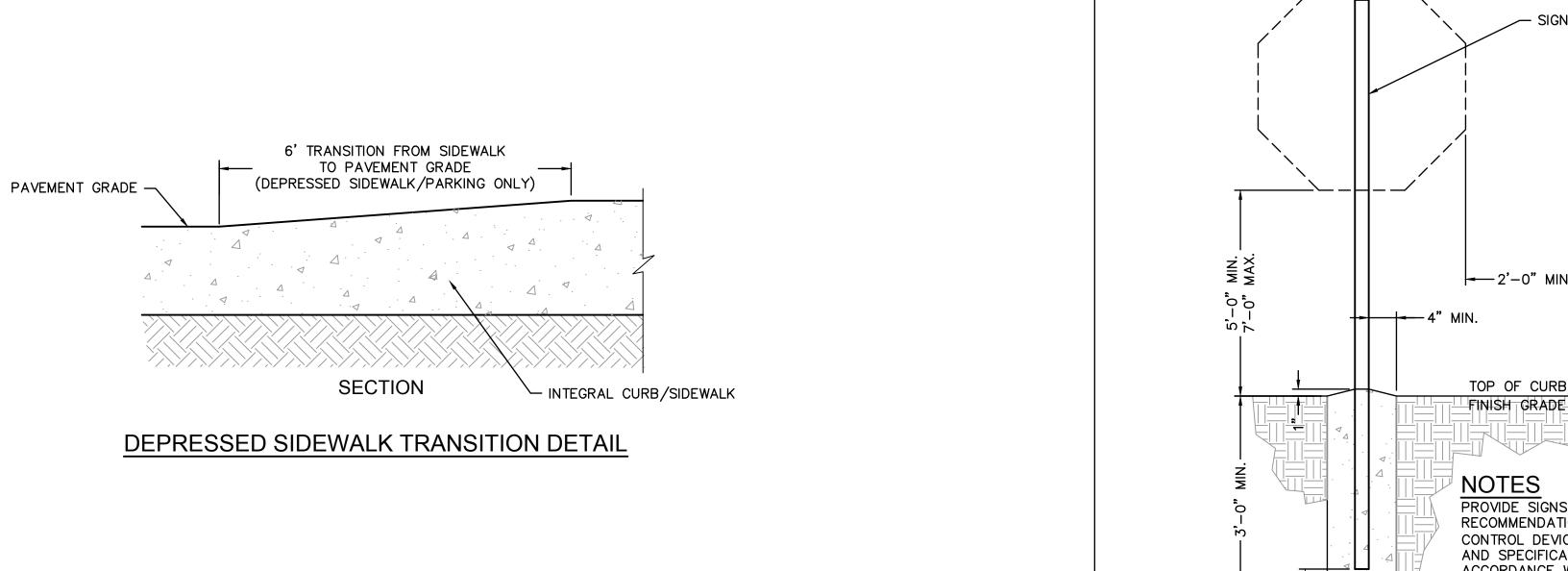
0.40 0.32 0.81 948.98 948.35

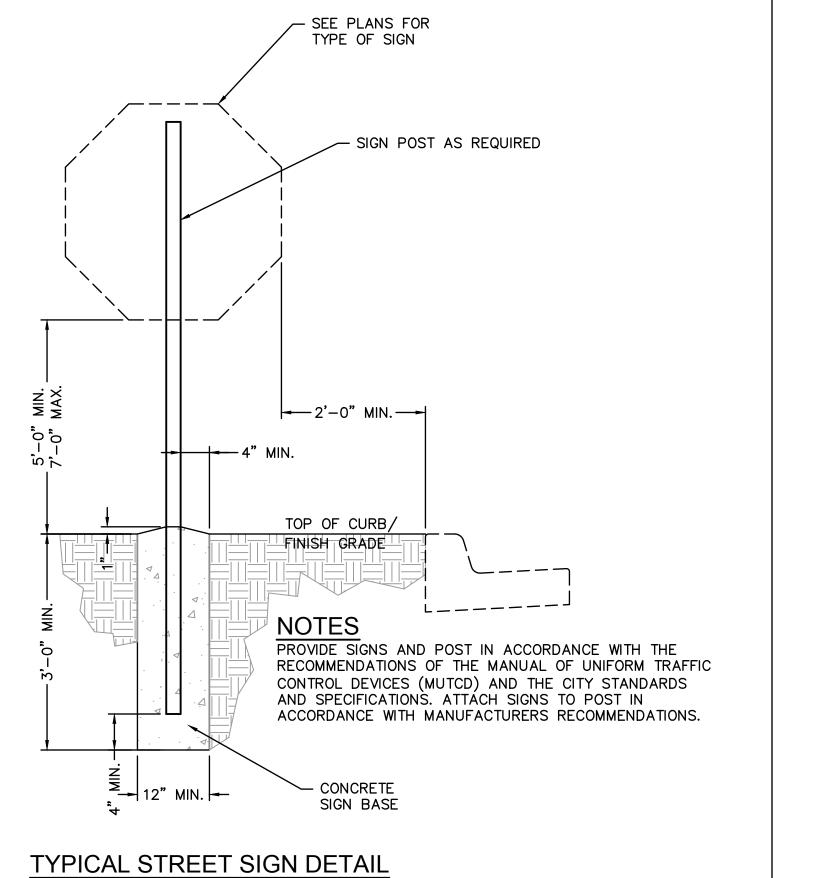
0.40 0.32 0.51 947.41 947.10



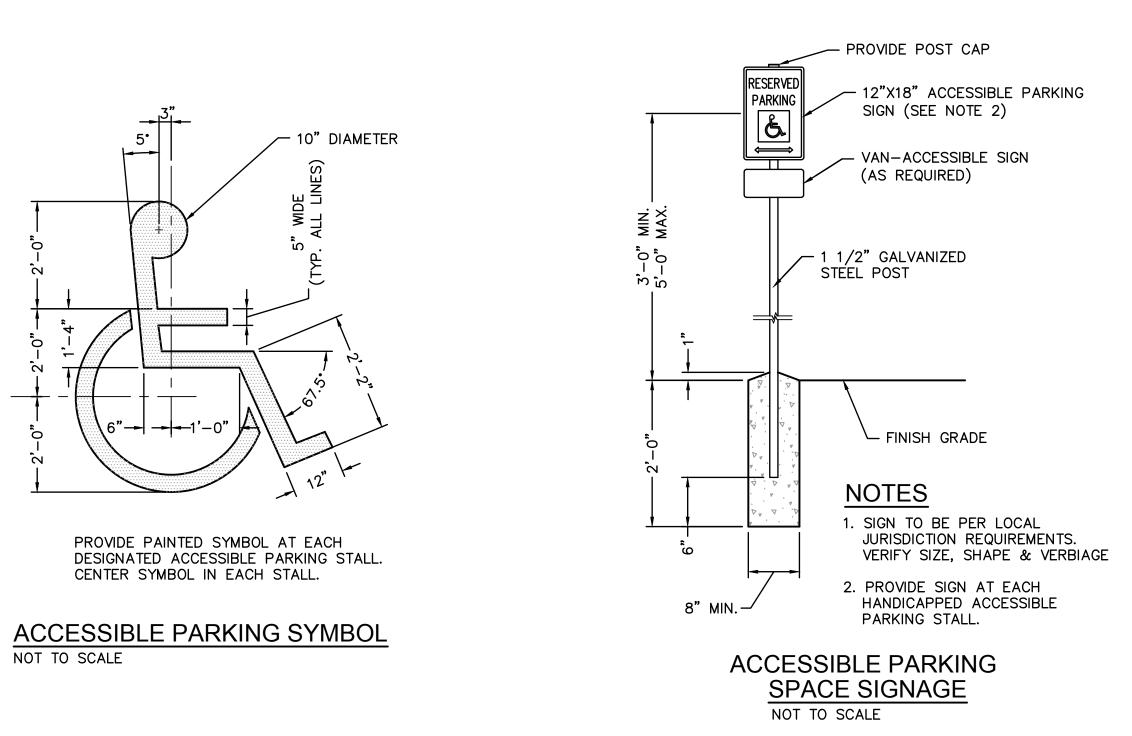
checked by:

project no.: B21-04157 drawing 60STM02_B2104157.dwg





NOT TO SCALE



Ш-

MITCHELL ALAN

DATE REVISIONS I
06-29-2022 CITY COMMEN
07-26-2022 CITY COMMEN
09-13-2022 CITY COMMEN

checked by:

QA/QC by:

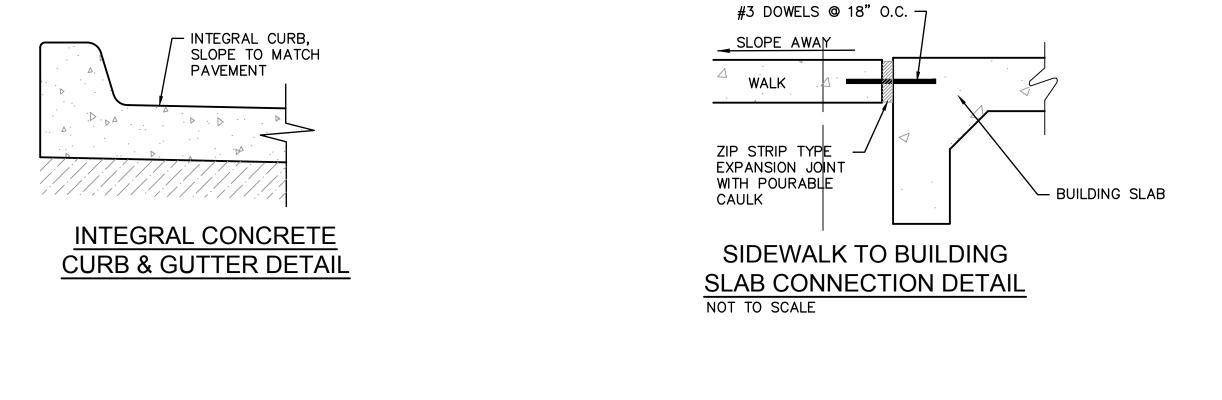
project no.:

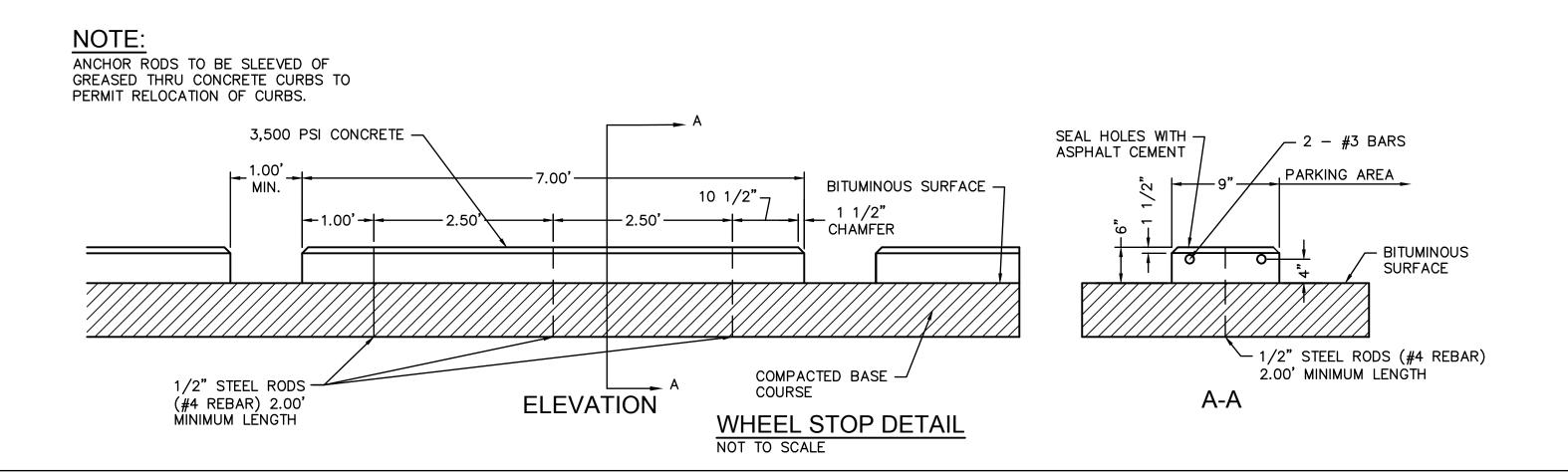
drawing 100_DTL01_B2104157.dwg

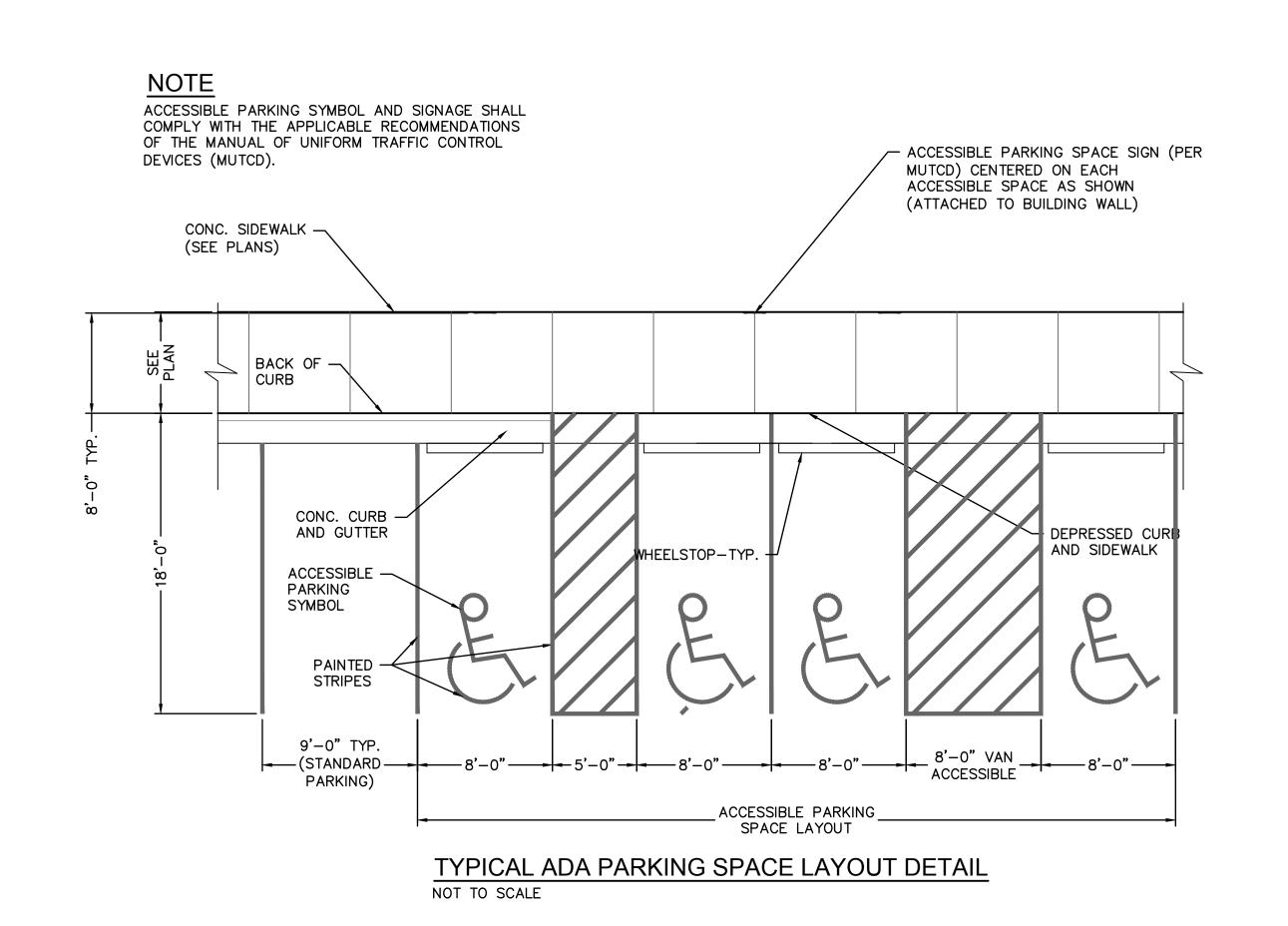
SHEET

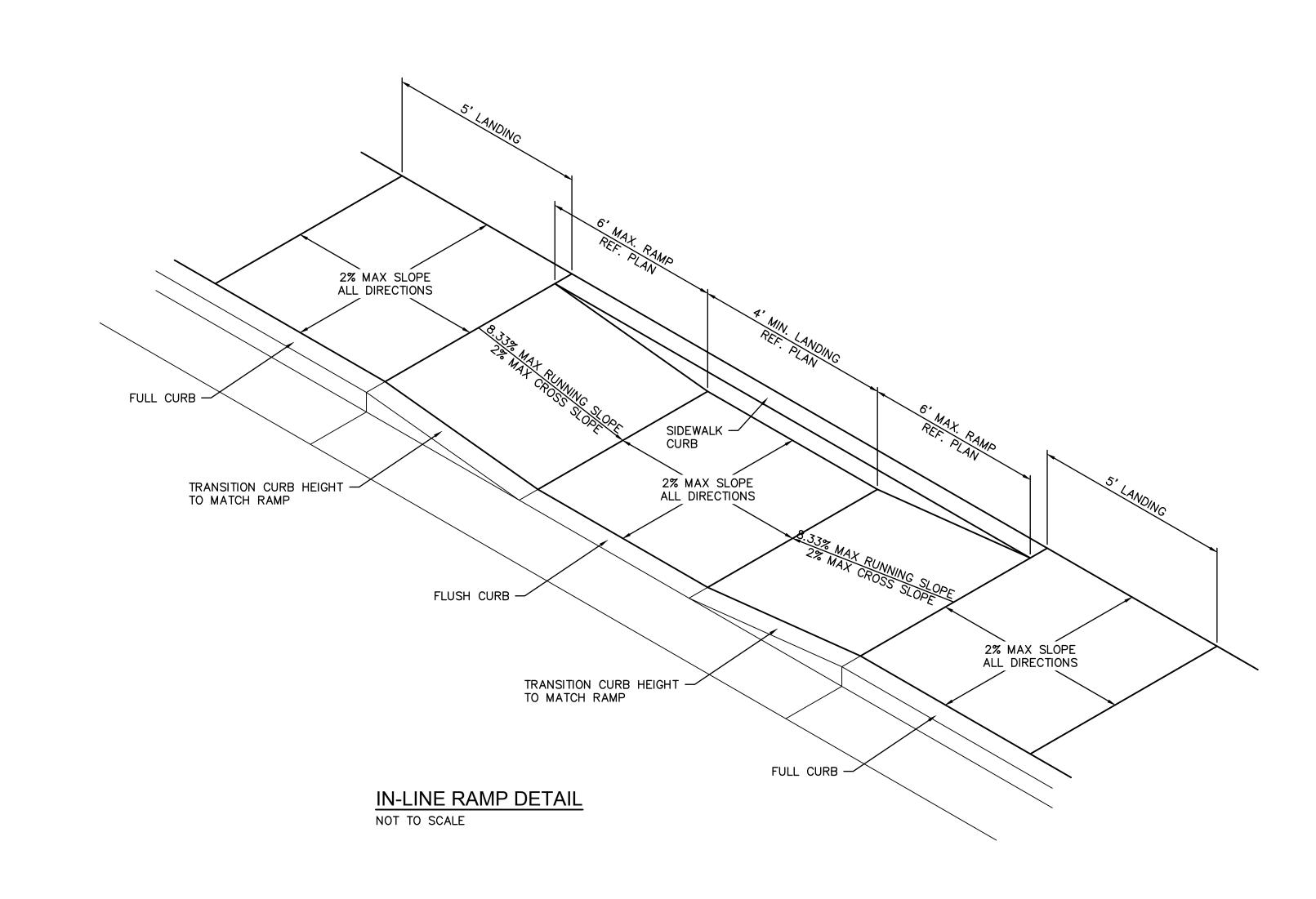
C8.00

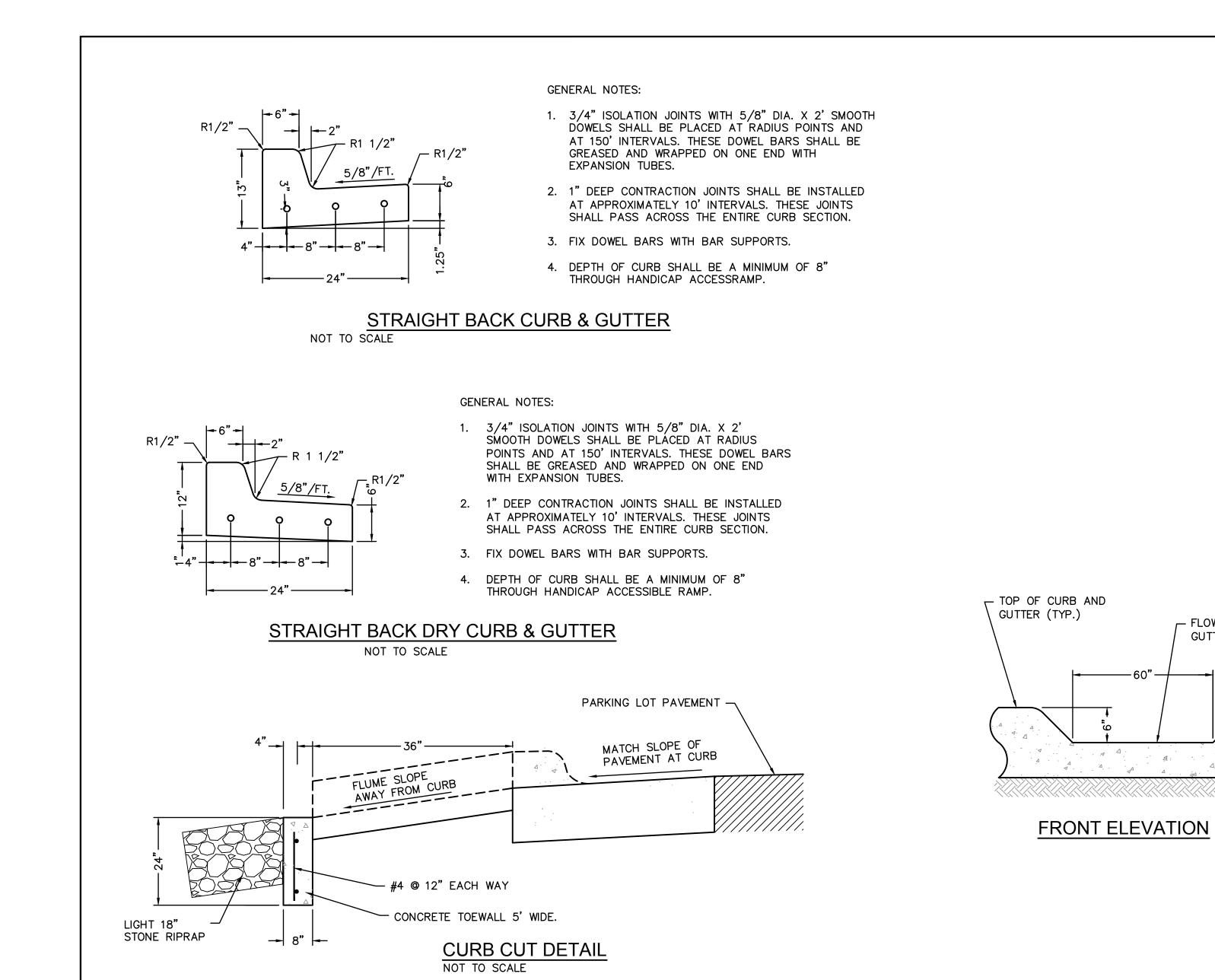
PLEAK NUMBER PE-2009018764

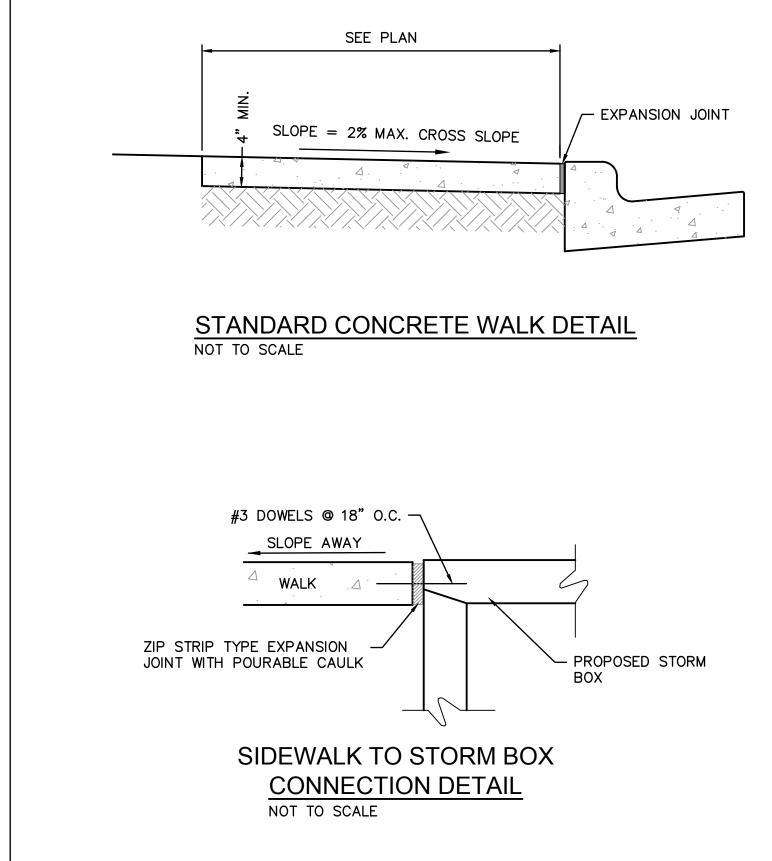








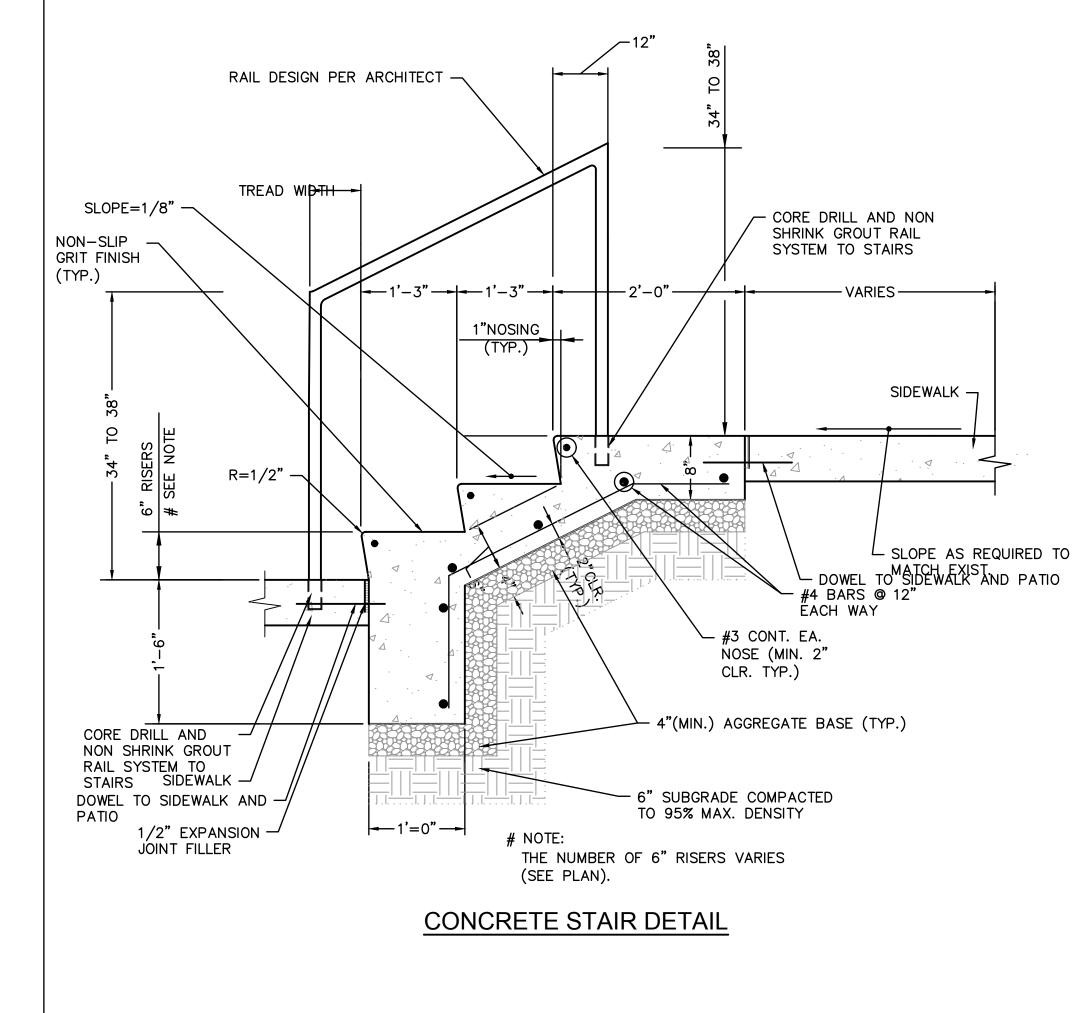


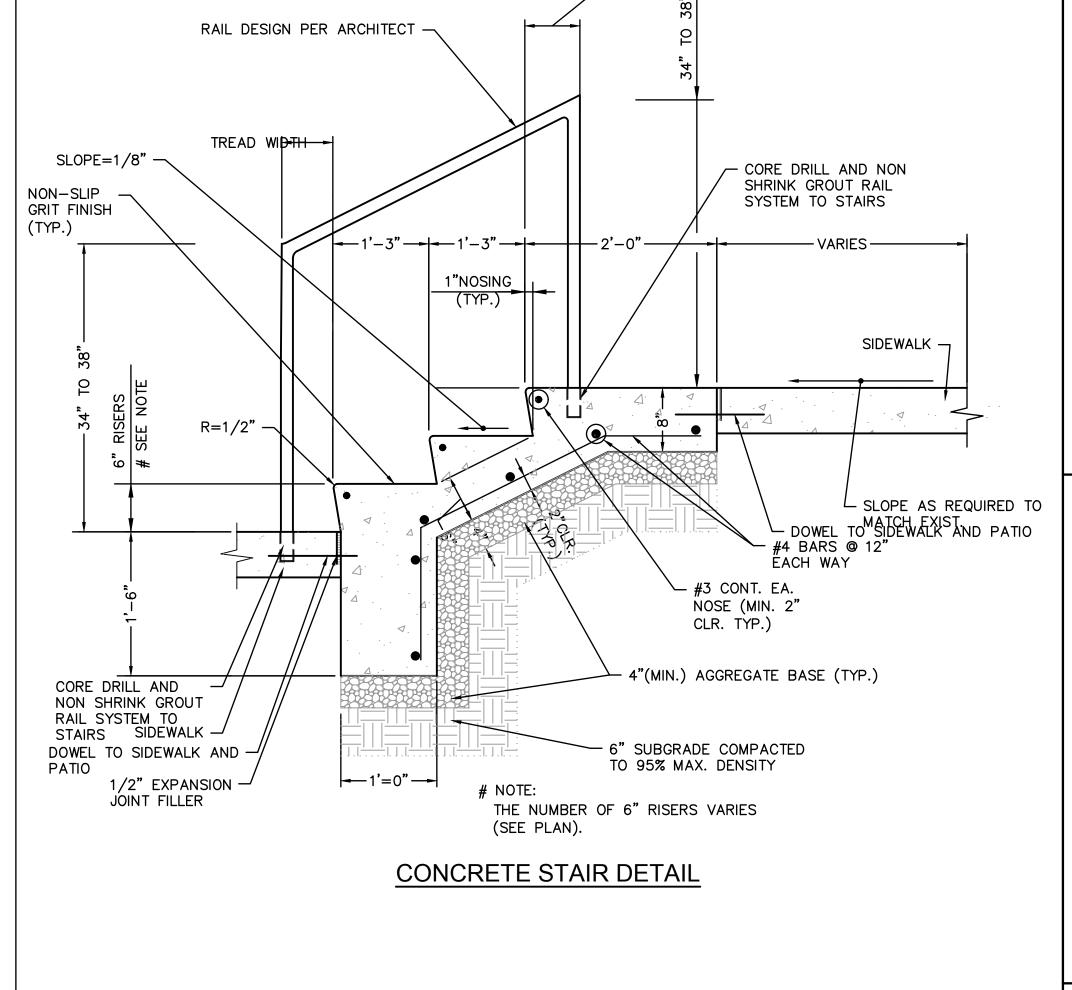


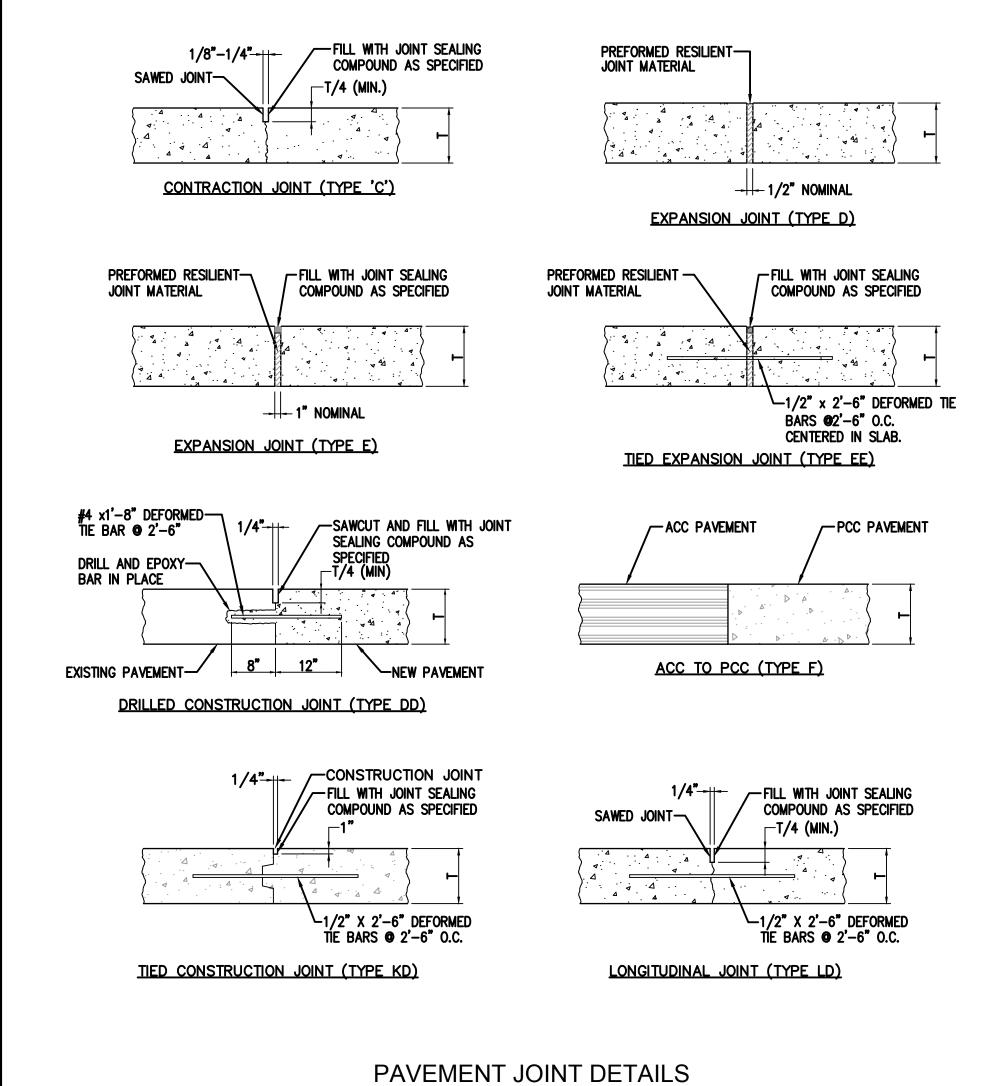
- FLOW LINE OF CURB AND

←6" TRANSITION

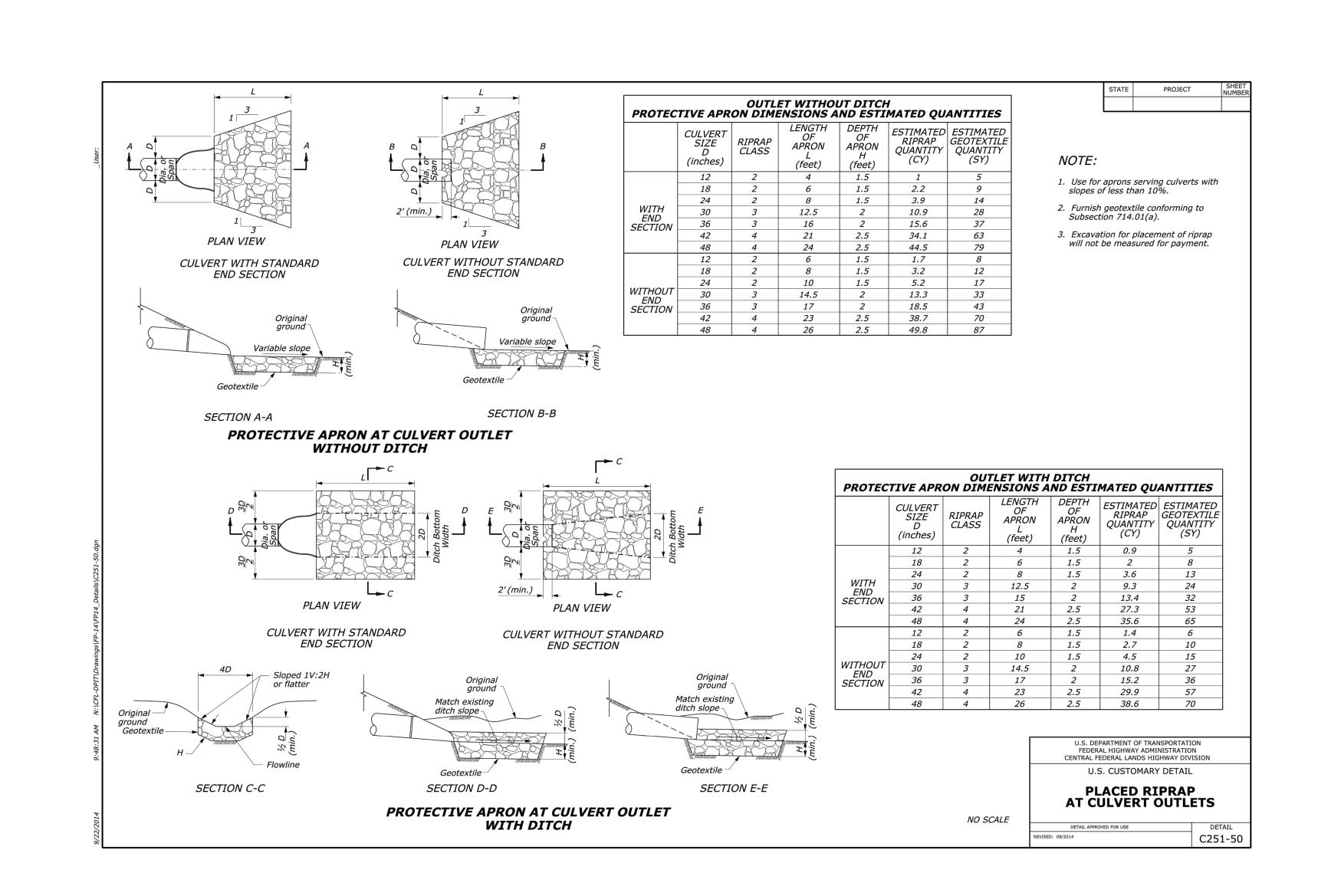
GUTTER (TYP.)

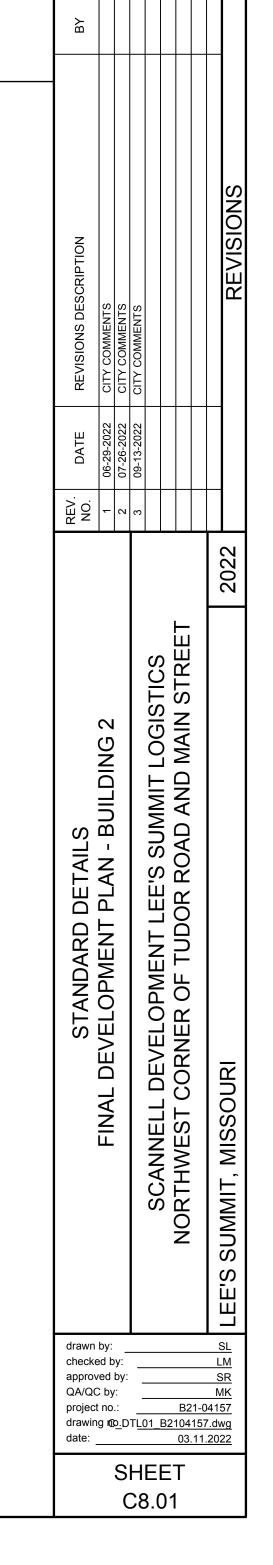






NOT TO SCALE

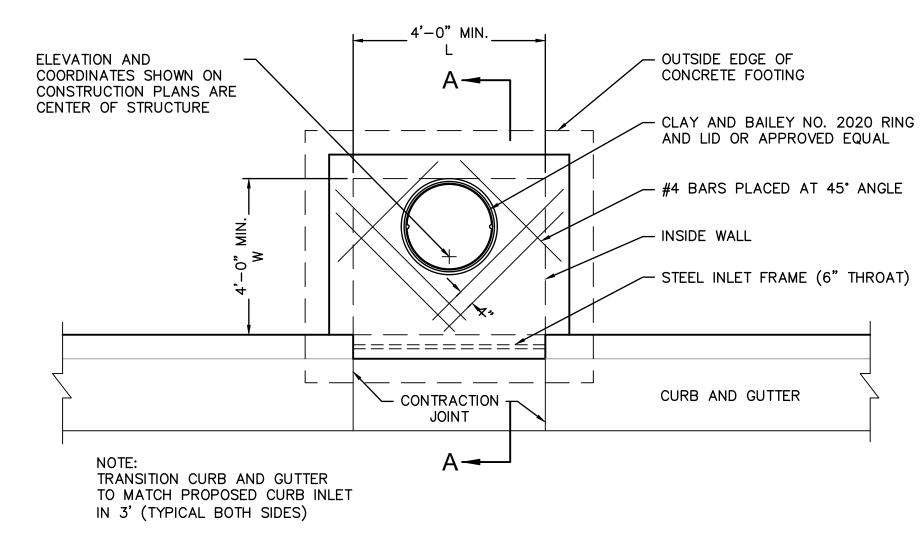




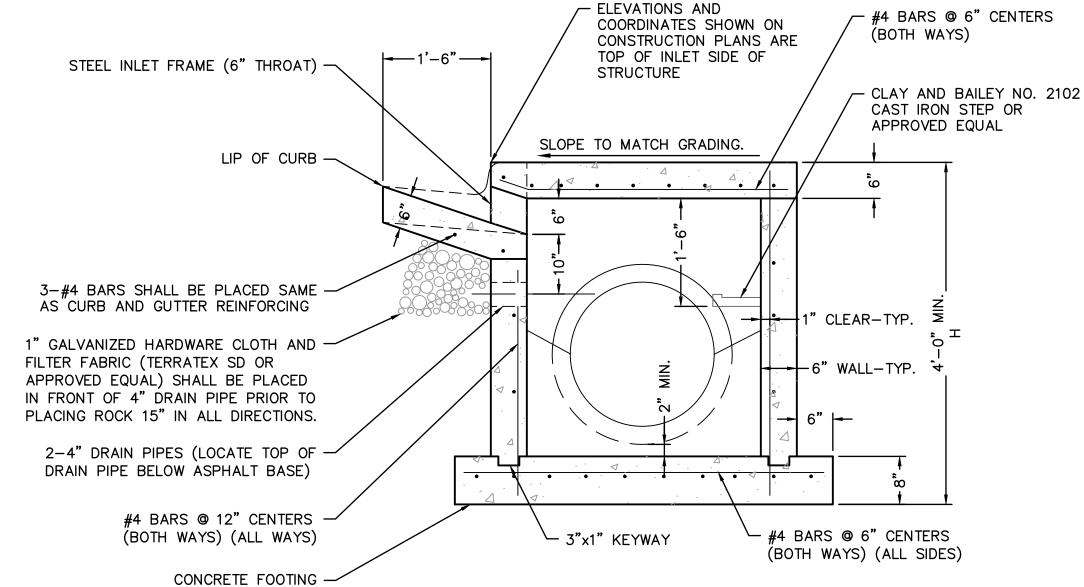
Ш-

MITCHELL ALAN

NUMBER



PLAN



NOT TO SCALE

8" MIN. LOW PERMEABLE SOIL -

REINFORCED SOIL

GRID DEPTH

DIM PER ENGINEERED

PLANS BY CONTRACTOR

SEGMENTAL RETAINING WALL

APPROXIMATE -

RETAINED SOIL

DRAINAGE TILE

4" PERFORATED PVC

LIMITS OF **EXCAVATION**

SECTION A-A NON-SETBACK CURB INLET

NON-SETBACK CURB INLET NOTES

- 1. USE CITY APPROVED CONCRETE THROUGHOUT.
- 2. THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION.
- 3. FLOOR OF INLET SHALL BE SHAPED TO PROVIDE SMOOTH FLOW.
- 4. EXPANSION JOINTS SHALL BE EITHER HOT OR COLD POURED JOINT
- SEALING COMPOUND, OR PREMOLDED EXPANSION JOINT FILLER.
- 5. STEEL INLET FRAME SPACERS SHALL BE PLACED AT EQUAL SPACINGS NOT TO EXCEED 4'-0".
- 6. CAST IRON STEPS TO BE CLAY & BAILEY 2102 OR APPROVED EQUAL. STEEL CORE, PLASTIC COATED STEPS MAY BE USED (M.A. IND., INC. NO. PS1-PF, PS2-PF, OR APPROVED EQUAL). CAST IRON STEPS SHALL BE SPACED AT 1'-4" O.C. VERTICALLY.
- 7. BEVEL ALL EXPOSED EDGES WITH TRIANGULAR MOLDING.
- 8. ON-GRADE INLETS SHALL CONFORM TO THE STREET GRADE AND SUMP INLETS SHALL BE LEVEL.
- 9. ALL STORM SEWER STRUCTURES SHALL BE PRECAST. PRECAST SHOP
- DRAWINGS SHALL BE APPROVED BY THE DESIGN ENGINEER. 10. REINFORCING STEEL SHALL BE NEW BILLET, MINIMUM GRADE 40 AS PER
- ASTM A615, AND SHALL BE BENT COLD. 11. ALL DIMENSIONS RELATIVE TO REINFORCING STEEL ARE TO CENTERLINE OF
- BARS. 2" CLEARANCE SHALL BE PROVIDED THROUGHOUT UNLESS NOTED OTHERWISE. TOLERANCE OF $\pm 1/8$ " SHALL BE PERMITTED.
- 12. ALL LAP SPLICES NOT SHOWN SHALL BE A MINIMUM OF 40 BAR DIAMETERS IN LENGTH.
- 13. ALL DOWELS SHALL BE ACCURATELY PLACED AND SECURELY TIED IN PLACE PRIOR TO PLACEMENT OF BOTTOM SLAB CONCRETE. STICKING OF DOWELS INTO FRESH OR PARTIALLY HARDENED CONCRETE WILL NOT BE ACCEPTABLE.
- 14. ALL REINFORCING STEEL SHALL BE SUPPORTED ON FABRICATED STEEL BAR SUPPORTS @ 3'-0" MAXIMUM SPACING.
- 15. DO NOT SCALE THESE DRAWINGS FOR DIMENSIONS OR CLEARANCES. ANY QUESTIONS REGARDING DIMENSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION.
- 16. THE BOTTOM SLAB SHALL BE AT LEAST 24 HOURS OLD BEFORE PLACING SIDEWALL CONCRETE. ALL SIDEWALL FORMS SHALL REMAIN IN PLACE A MINIMUM OF 24 HOURS AFTER SIDEWALLS ARE POURED BEFORE REMOVAL, AND AFTER REMOVAL SHALL BE IMMEDIATELY TREATED WITH MEMBRANE CURING COMPOUND.
- 17. ALL CURB INLET TOPS ARE TO BE CONSTRUCTED AFTER FINAL CURB STRING LINE HAS BEEN APPROVED BY THE ENGINEER AND PRIOR TO CURB CONSTRUCTION, OR AS DIRECTED BY THE CITY ENGINEER.
- 18. RCP CONNECTIONS TO PRECAST STRUCTURE SHALL MEET ALL CITY STANDARDS.
- 19. BACKFILL AROUND STRUCTURES SHALL BE COMPACTED AND SHALL BE OF THE MATERIAL SPECIFIED PER CITY STANDARDS.
- 20. NON-SETBACK CURB INLET TO BE USED ONLY WITH THE APPROVAL OF THE CITY ENGINEER.

HANDRAIL SEE SEPARATE DETAIL - KEYSTONE CAP UNIT ─ KEYSTONE COMPAC II UNIT - UNIT DRAINAGE FILL (3/4" CRUSHED ROCK OR STONE) - FINISHED GRADE

- INSTALL KCMMBK 4K CONCRETE

LEVELING BASE FOR WALLS

RETAINING WALL NOTES

- 1. RETAINING WALL SHALL BE "VERSA-LOK MOSAIC RETAINING WALL (NONWEATHERED) AND THE COLOR SHALL BE PALOMINO GRAY". THE DETAILS PROVIDED HERE ARE FOR GENERAL GUIDANCE ONLY. THE WALL SHALL BE "DESIGN-BUILD" PROVIDED COMPLETE IN-PLACE BY THE CONTRACTOR.
- 2. THE MODULAR WALL UNITS SHALL HAVE A STRAIGHT FACE WITH SPLIT FINISH TEXTURE. COLOR SHALL BE "PALOMINO GRAY".
- 3. THE WALL SHALL BE DESIGNED BY THE INSTALLER ACCORDING TO THE WALL UNIT MANUFACTURER'S DESIGN CRITERIA. THE DESIGN SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER AS A SHOP DRAWING FOR REVIEW. ALL DESIGN CALCULATIONS AND DESIGN CRITERIA, (ANGLE OF FRICTION, SOIL WEIGHT, ETC.), SHALL BE SUBMITTED WITH THE SHOP DRAWING. ALL DESIGN MUST BE SEALED BY A QUALIFIED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF MISSOURI.
- 4. FACTORS OF SAFETY SHALL BE AS FOLLOWS:

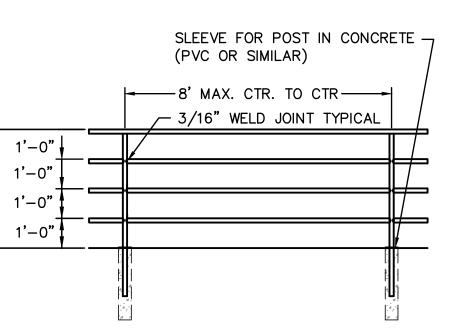
1.5 AGAINST REINFORCEMENT GRID PULLOUT OR RUPTURE 1.5 AGAINST EXTERNAL SLIDING FAILURE 2.0 AGAINST OVERTURNING

5. THE DESIGN, DIMENSIONS, AND MATERIAL SHOWN IN THIS DETAIL ARE GENERAL IN NATURE. THE AGGREGATE MATERIALS, GEOGRID SYSTEM, AND INSTALLATION SHALL BE AS WALL UNIT MANUFACTURER'S REQUIREMENTS.

6. SEE SPECIFICATIONS FOR MATERIAL SELECTION AND OTHER REQUIREMENTS.

7. WALL DESIGN SHALL INCLUDE GLOBAL STABILITY.

8. RETAINING WALL SHALL PROVIDE POSITIVE INTERLOCKING BETWEEN BLOCKS AND GRID.



NOTES:

- 1. ALL RAILING SHALL BE 2" SQUARE STEEL PIPE.
- 2. ALL EXPOSED STEEL SHALL BE PRIMED WITH ZINC OXIDE PAINT AND PAINTED WITH TWO COAT OF HIGH GLOSS EXTERIOR DARK BROWN PAINT. SUBMIT SAMPLE TO ARCHITECT PRIOR TO PAINTING FOR APPROVAL.
- 3. SPACING AND LOCATION AS SHOWN ON DETAILS.
- 4. SPACING OF VERTICAL POSTS SHALL BE EQUAL THROUGHOUT EACH SECTION OF THE HANDRAIL.

METAL PIPE HANDRAIL DETAIL NOT TO SCALE

drawn by: checked by: approved by: QA/QC by: project no.: drawing @_DTL01_B2104157.dwg date: 03.11.2022 SHEET

06-29-2 07-26-2 09-13-2

MITCHELL ALAN

Mis a. Plan

PE-2009018764

NUMBER

C8.02

VERT.

#4's @ 10"

#4's @ 10"

#4's @ 10"

SPECIAL PATTERN

DIAGONAL @ COVER

DOUBLE FOR "A" SECTION ONLY

"N" | "D"

8" **|** 8"

SKEW OF CROSS DRAIN

30°

7'-10" 9'-5"

9'-2" | 11'-0"

10'-6" 12'-6"

11'-10" | 14'-2"

13'-2" 15'-10"

45°

8"

REINFORCEMENT SCHEDULE, BASE

#4's @ 6" E.W.

WIDTH ("W")

BETWEEN 4' & 7'

GREATER THAN 7'

WIDTH ("W")

SKEW OF CROSS DRAIN

4'-0" 4'-0"

30°

4'-7"

5'-3"

5'-11"

6'-7"

7'-10"

BETWEEN 4' & 7'

GREATER THAN 7'

REINFORCEMENT SCHEDULE, WALLS

HOR.

#5's @ 4 1/2"

6" + PIPE THICKNESS

6" + PIPE THICKNESS

TABLE OF 'W' DIMENSIONS

SIZE

SINGLE STRAIGHT

24" 7'-0"

30" 8'-2"

36" 9'-4"

48" 11'-8"

10'-6"

#4's @ 9"

#6's @ 9"

TABLE OF "T" & "N" DIMENSIONS

REINFORCEMENT SCHEDULE, TOP

#4's @ 8" E.W.

#4's @ 8" E.W.

#4's @ 8" E.W.

#4'S @ 6" E.W.

#4's @ 6" E.W.

#4's @ 6" E.W.

45°

4'-10"

5'-8"

6'-5"

7'-3"

8'-0**"**

9'-8"

STEEL

SECTION

SECTION

SECTION

DIMENSIONS

L = 7' OR LESS

W = 7' OR LESS

L = 7' OR LESS

SIZE

SINGLE

24"

30**"**

36"

W = 7' OR GREATER

L = 7' OR GREATER

W = 7' OR GREATER

STRAIGHT

4'-0"

4'-0"

5'**–**3"

5'**–**10"

7'-0"

"A"

- 1. ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER.
- 2. ALL #4 & #5 REINFORCING BARS TO HAVE 1 1/2" COVER, LARGER SIZES TO HAVE 2" COVER.
- 3. SEE GRADING AND DRAINAGE PLAN FOR PIPE SIZES,

LOCATIONS, AND FLOW LINES.

CURB/GRATE INLET NOTES:

1. CONCRETE USED IN THIS WORK SHALL BE APPROVED BY THE CITY.

GENERAL NOTES:

2. THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION.

WITH PIPES.

3. EXPANSION JOINTS SHALL BE EITHER HOT OR COLD POURED JOINT SEALING COMPOUND, OR PREMOLDED EXPANSION

4. PIPES SHALL CONNECT TO THE ENDS OR SIDES OF THE INLET.

CONNECTION SHALL NOT BE MADE AT CORNERS OF BOX.

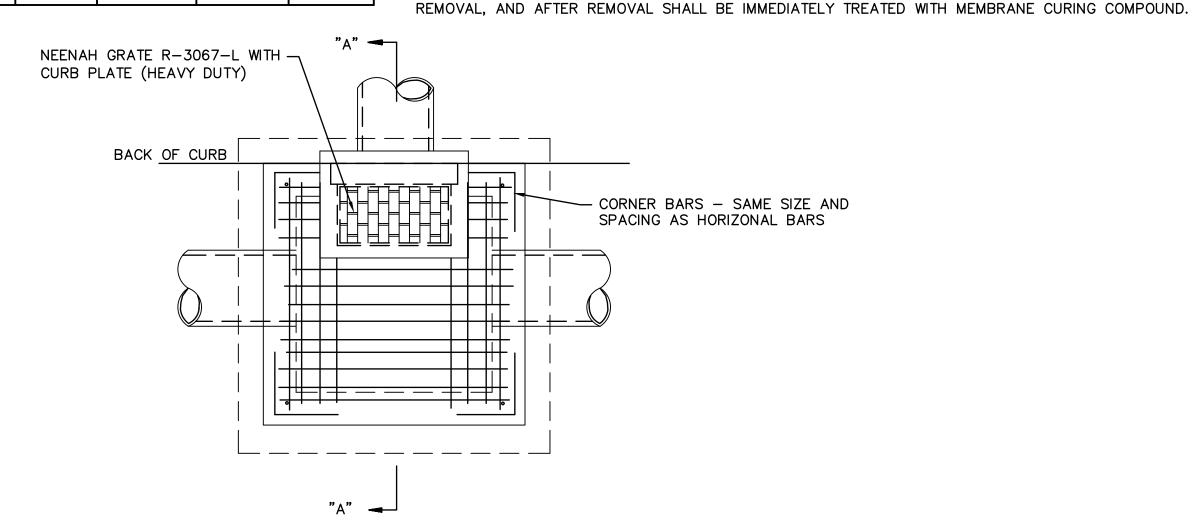
6. A 2' MINIMUM INTERIOR WALL WIDTH IS REQUIRED FOR SIDES

WITHOUT PIPES AND A 4' MINIMUM IS REQUIRED FOR SIDES

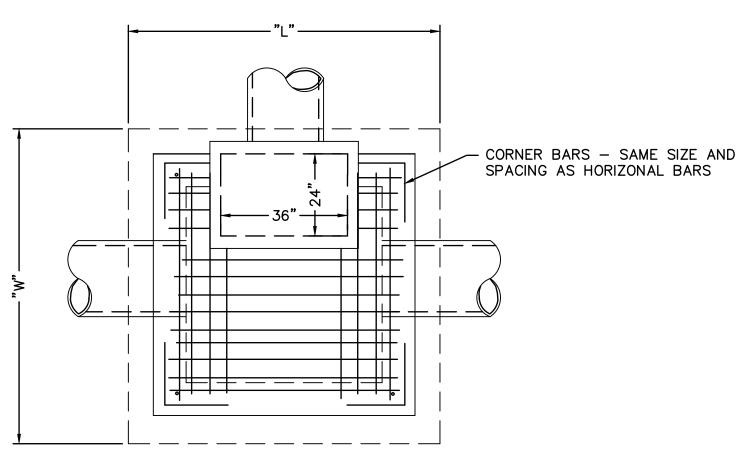
5. ALL REINFORCING BARS TO BE GRADE 40.

- 4. INSTALL ANGLE IRON FACE ON ALL INLETS.
- 5. STEEL INLET FRAME SPACERS SHALL BE PLACED AT EQUAL SPACINGS NOT TO EXCEED 4'-0".
- 6. CAST IRON STEPS TO BE CLAY & BAILEY 2102 OR APPROVED EQUAL. STEEL CORE, PLASTIC COATED STEPS MAY BE USED (M.A. IND.,INC. NO. PS1-PF, PS2-PF, OR APPROVED EQUAL). CAST IRON STEPS SHALL BE SPACED AT 1'-4" O.C. VERTICALLY. THE DISTANCE FROM THE LAST STEP TO THE TOP OF CONCRETE INVERT SHOULD BE A MAXIMUM OF 24".
- 7. BEVEL ALL EXPOSED EDGES WITH 3/4" TRIANGULAR MOLDING.
- 8. ON-GRADE INLETS SHALL CONFORM TO THE STREET GRADE AND SUMP INLETS SHALL BE LEVEL.
- 9. ALL STORM SEWER STRUCTURES SHALL BE PRECAST. PRECAST SHOP DRAWINGS SHALL BE APPROVED BY THE DESIGN ENGINEER.
- 10. REINFORCING STEEL SHALL BE NEW BILLET, MINIMUM GRADE 40 AS PER ASTM A615, AND SHALL BE BENT COLD.
- 11. ALL DIMENSIONS RELATIVE TO REINFORCING STEEL ARE TO CENTERLINE OF BARS. 2" CLEARANCE SHALL BE PROVIDED THROUGHOUT UNLESS NOTED OTHERWISE. ALL LAP SPLICES NOT SHOWN SHALL BE A MINIMUM OF 40 BAR DIAMETERS IN LENGTH.
- 12. ALL DOWELS SHALL BE ACCURATELY PLACED AND SECURELY TIED IN PLACE PRIOR TO PLACEMENT OF BOTTOM SLAB CONCRETE. STICKING OF DOWELS INTO FRESH OR PARTIALLY HARDENED CONCRETE WILL NOT BE ACCEPTABLE. ALL REINFORCING STEEL SHALL BE SUPPORTED ON FABRICATED STEEL.
- 13. BAR SUPPORTS @ 3'-0" MAXIMUM SPACING. DO NOT SCALE THESE DRAWINGS FOR DIMENSIONS OR CLEARANCES.
- CONSTRUCTION. THE BOTTOM SLAB SHALL BE AT LEAST 24 HOURS OLD BEFORE PLACING SIDEWALL CONCRETE. 15. ALL SIDEWALL FORMS SHALL REMAIN IN PLACE A MINIMUM OF 24 HOURS AFTER SIDEWALLS ARE POURED BEFORE

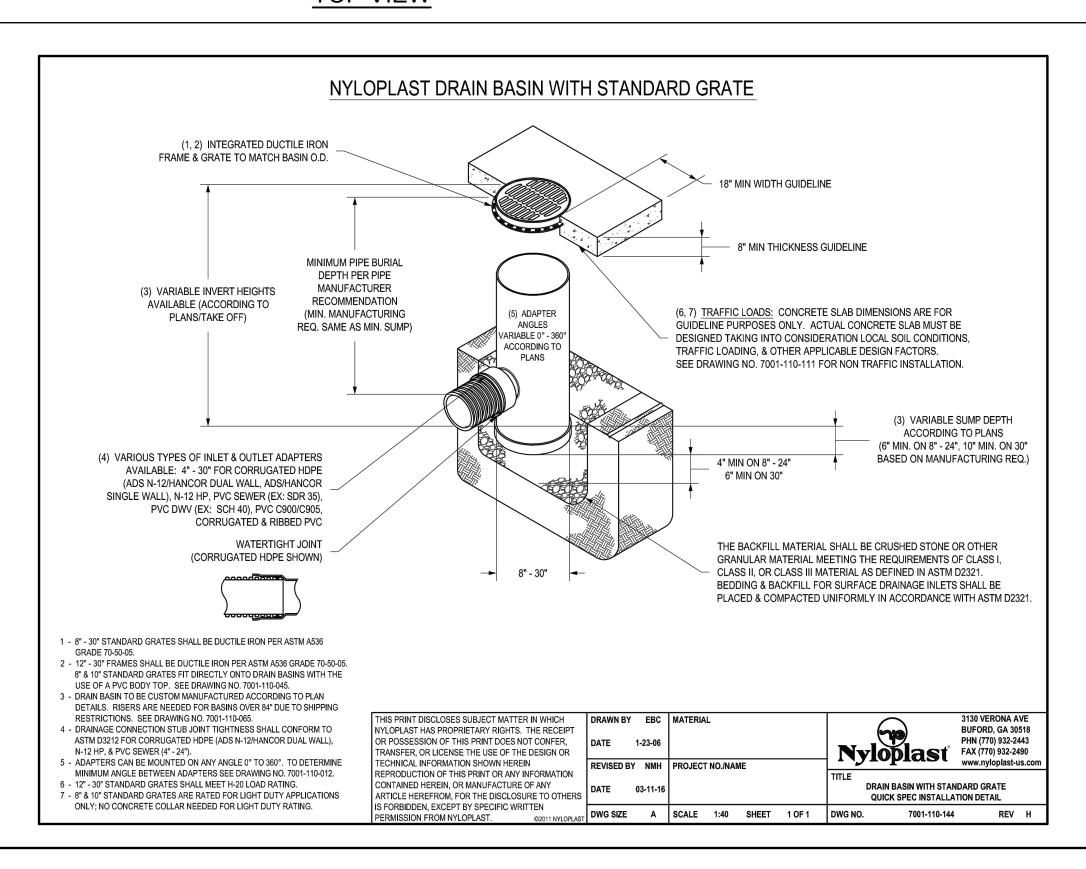
14. ANY QUESTIONS REGARDING DIMENSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO



PLAN OF GRATE INLET TYPE 2



TOP VIEW



LEGEND

TABLE OF FILL DEPTHS BELOW PIPE

IN SOIL

TABLE OF TRENCH WIDTHS

MINIMUM TRENCH

WIDTH (INCHES)

44

49

54

58

73

83

92

102

109

27" & SMALLER

66" & LARGER

PIPE SIZE

(INCHES)

24

27

30

33

42

60

30"TO 66"

"A" MIN. IN

12"

MINIMUM SIDE

WALL CLEARANCE

6 1/2

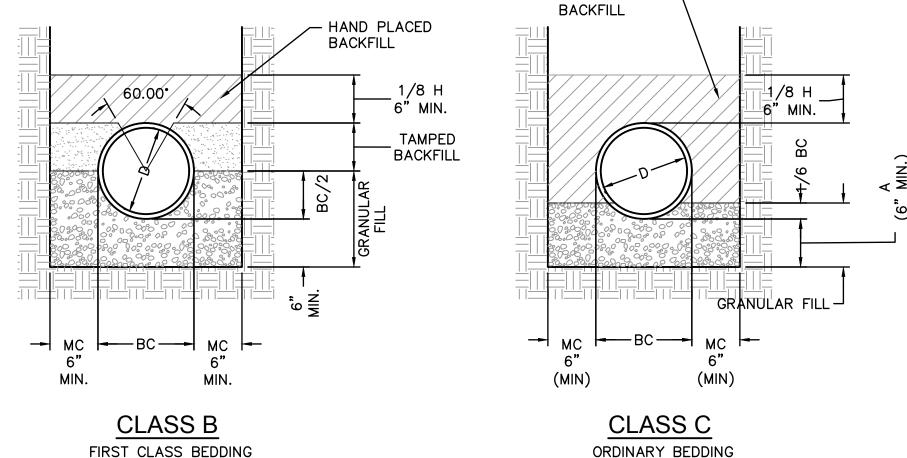
8 1/2

12 1/2

13 1/2

(INCHES)

- BC = OUTSIDE DIAMETER OF PIPE
- H = BACKFILL COVER ABOVE TOP OF PIPE
- D = NOMINAL PIPE DIAMETER
- A = FILL BELOW PIPE (SEE TABLE)
- MC = MINIMUM SIDEWALL CLEARANCE (SEE TABLE)

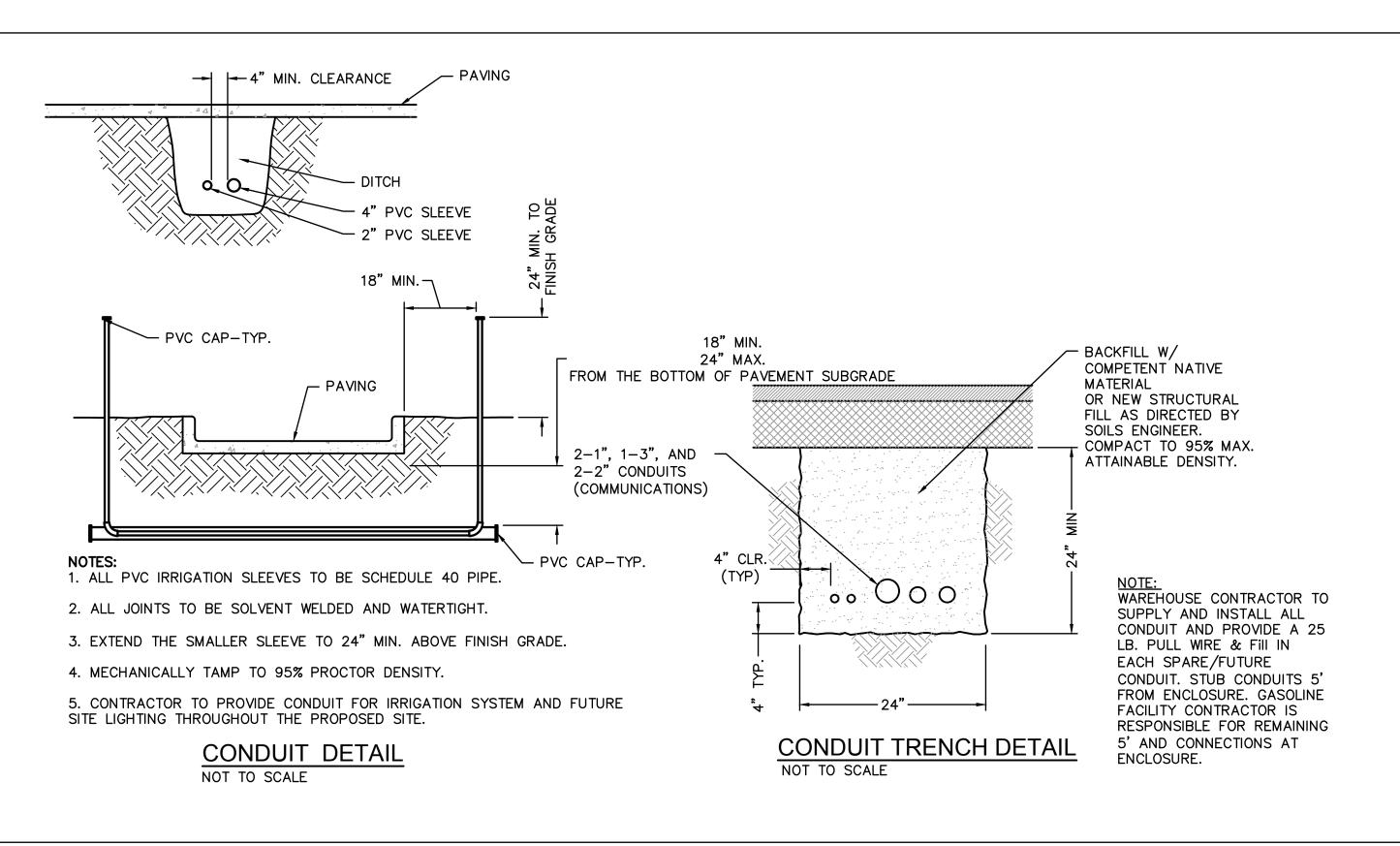


HAND PLACED -

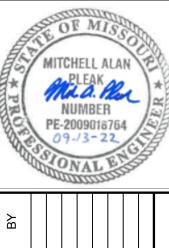
BEDDING NOTES

- 1. GRANULAR FILL TO BE CRUSHED STONE OR PEA GRAVEL WITH NOT LESS THAN 95% PASSING 1/2" SIEVE AND NOT LESS THAN 95% TO BE RETAINED ON A #4 SIEVE, TO BE PLACED IN NOT MORE THEN 6" LAYERS AND COMPACTED BY SLICING WITH A SHOVEL.
- 2. TAMPED BACKFILL SHALL BE FINELY DIVIDED JOB EXCAVATED MATERIAL FREE FROM DEBRIS, ORGANIC MATERIAL AND STONES, COMPACTED TO 95% MAXIMUM DENSITY AS DETERMINED BY AASHTO STANDARD METHOD T-99. GRANULAR FILL MAY BE SUBSTITUTED FOR ALL OR PART OF TAMPED BACKFILL.
- 3. HAND PLACED BACKFILL SHALL BE FINELY DIVIDED MATERIAL FREE FROM DEBRIS AND

STORM SEWER TRENCH DETAIL





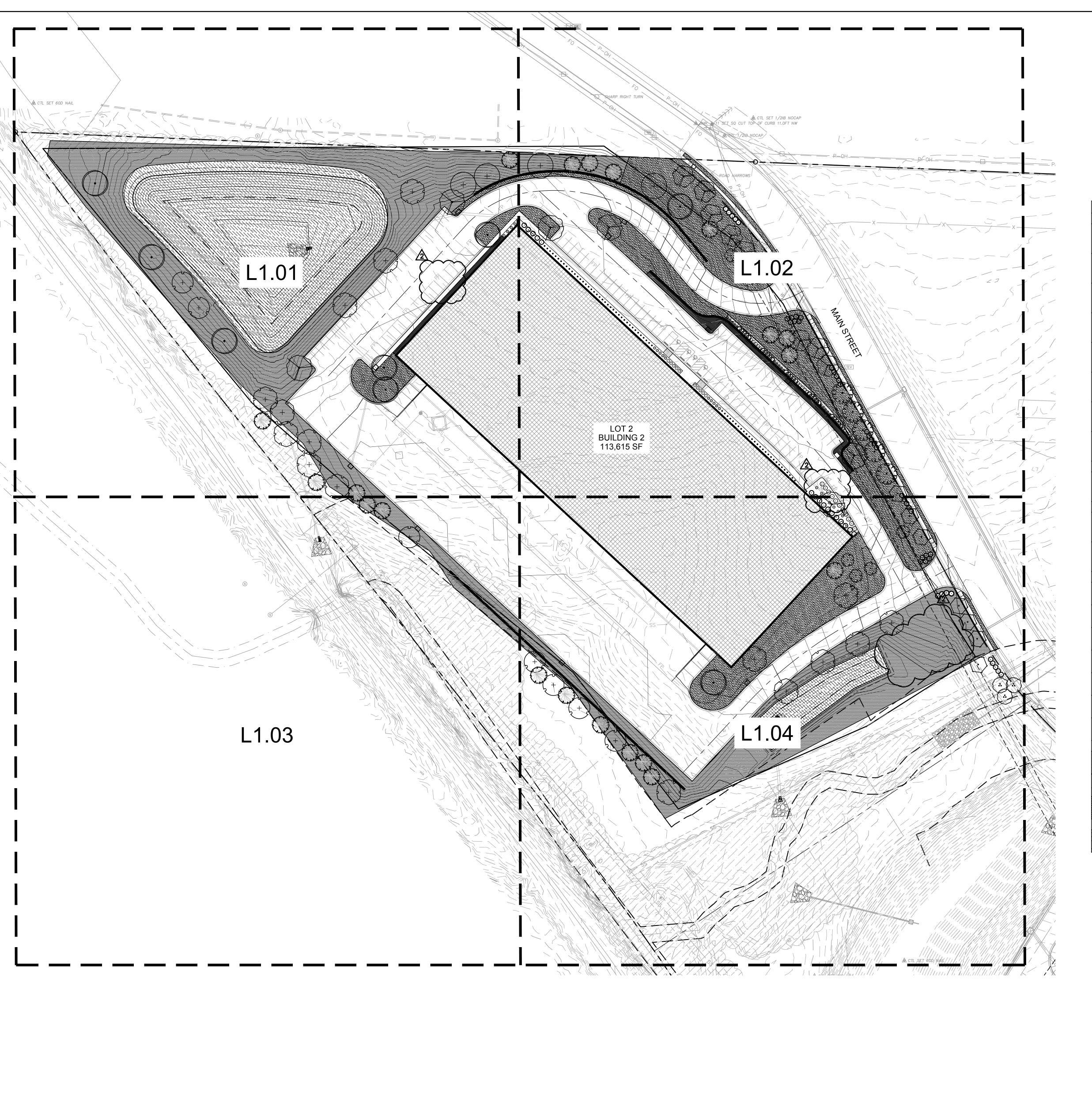


EVISIONS DESCRIPTION	ВУ	
TY COMMENTS		
TY COMMENTS		
IY COMMENTS		and)
		m
		,,,
REVISIONS		

06-29-2022 07-26-2022 09-13-2022

checked by: approved by: QA/QC by: project no.: drawing no_DTL01_B2104157.dwg

SHEET



LANDSCAPE CALCULATIONS - LOT 2

OPEN YARD AREAS

1 TREE AND 2 SHRUBS PER 5,000 SF OF TOTAL LOT AREA EXCLUDING BUILDING FOOTPRINT AREA AND TRACTS.

315,719 SF /5,000 SF
63.15 TREES REQUIRED
63 TREES PROVIDED

**SEE PLAN FOR EXISTING TREE MASSES TO REMAIN
126.31 SHRUBS REQUIRED
126 SHRUBS PROVIDED

DECIDUOUS TREES	BOTANICAL / COMMON NAME	SIZE	CALIPER		QTY
+	EUCOMMIA ULMOIDES HARDY RUBBER TREE	B & B	3"		7
	GLEDITSIA TRIACANTHOS INERMIS 'SHADEMASTER' SHADEMASTER LOCUST	B & B	3"		6
+ + +	PLATANUS X ACERIFOLIA 'EXCLAMATION' TM EXCLAMATION LONDON PLANE TREE	В & В	3"		16
	QUERCUS BICOLOR SWAMP WHITE OAK	B & B	3"		8
+	QUERCUS MACROCARPA BURR OAK	B & B	3"		4
	TILIA AMERICANA 'BOULEVARD' BOULEVARD LINDEN	B & B	3"		9
Ema	ULMUS PROPINQUA 'EMERALD SUNSHINE' EMERALD SUNSHINE ELM	В & В	3"		5
$\overline{}$	ZELKOVA SERRATA 'MUSASHINO' SAWLEAF ZELKOVA	B & B	3"		7
EVERGREEN TREES	BOTANICAL / COMMON NAME	SIZE	CALIPER		QTY
	PICEA ABIES NORWAY SPRUCE	B&B, 8' HT.			20
ORNAMENTAL TREES	BOTANICAL / COMMON NAME	SIZE	CALIPER		QTY
••	CERCIS CANADENSIS EASTERN REDBUD	B & B	3"		3
	MALUS X 'PRAIRIFIRE' PRAIRIFIRE CRABAPPLE	B & B	3"		5
SHRUBS	BOTANICAL / COMMON NAME	SIZE			
\odot	BUXUS X 'GREEN VELVET' BOXWOOD	5 GAL			10
{ 0 }	CHASMANTHIUM LATIFOLIUM NORTHERN SEA OATS	1 GAL			68
\odot	CORNUS STOLONIFERA 'FARROW' TM ARCTIC FIRE RED TWIG DOGWOOD	5 GAL			21
	DIERVILLA RIVULARIS 'KODIAK ORANGE' KODIAK ORANGE BUSH-HONEYSUCKLE	5 GAL			15
ANUVULLIAN ON THE PROPERTY OF	JUNIPERUS CHINENSIS 'SEA GREEN' SEA GREEN JUNIPER	5 GAL			92
\odot	JUNIPERUS SABINA 'BUFFALO' BUFFALO JUNIPER	5 GAL			11
\odot	VIBURNUM NUDUM 'WINTERTHUR' WINTERTHUR VIBURNUM	5 GAL			15
GROUND COVERS	BOTANICAL / COMMON NAME	CONT		SPACING	
North Control of State (Control of Control o	FESTUCA TURF TYPE TALL FESCUE BLEND	SEED			79,385
	FESTUCA TURF TYPE TALL FESCUE BLEND	SOD			52,655
	RIVER ROCK SEE DETAILS FOR INFORMATION	SF			2,963
NATIVE VEGETATION	BOTANICAL / COMMON NAME	CONT		SPACING	
	PANICUM VIRGATUM	SEED			56,706

approved by: SR
QA/QC by: MK
project no.: B21-04157
drawing Oo_LSC01 B2104157.dwg
date: 03.11.2022

Ш-

S

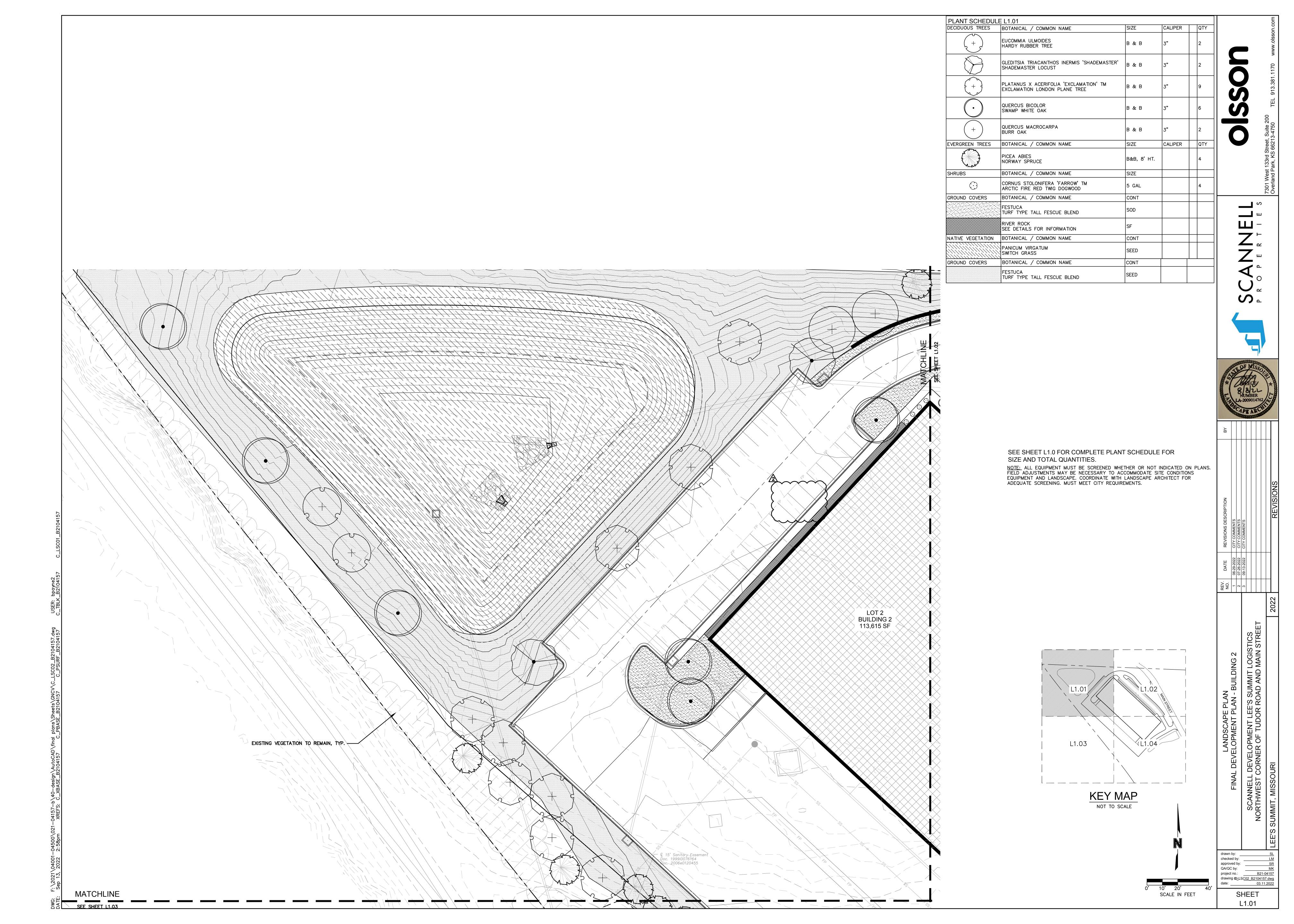
SHEET

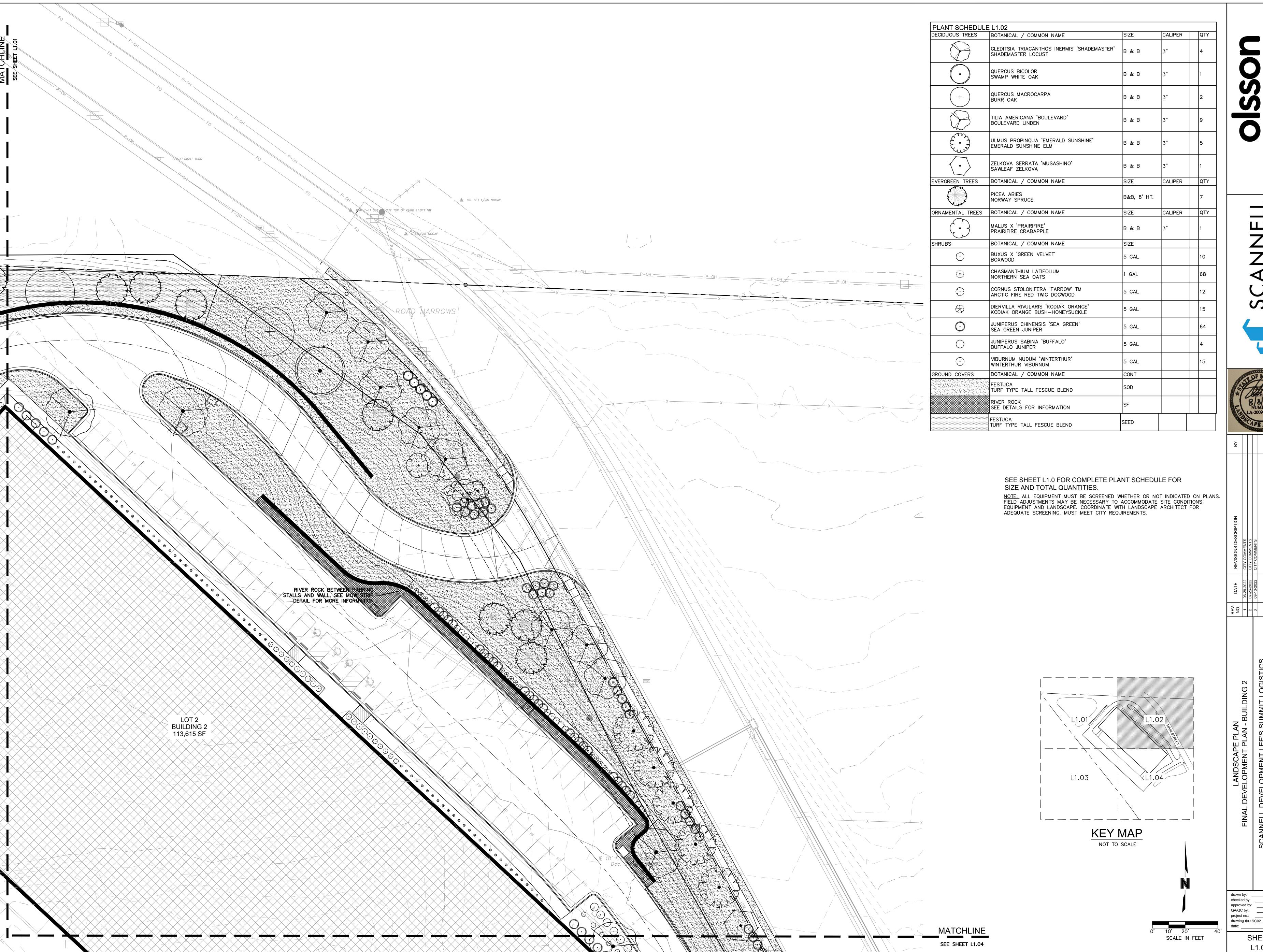
STREET FRONTAGE REQUIREMENT

MAIN STREET (SOUTH SIDE) 708 LF

1 TREE / 30' OF STREET FRONTAGE
23.6 TREES REQUIRED
23 TREES PROVIDED
1 SHRUB PER 20' OF STREET FRONTAGE
35.4 SHRUBS REQUIRED
41 SHRUBS PROVIDED

PLANT SCHEDULE DECIDUOUS TREES	BOTANICAL / COMMON NAME	SIZE	CALIPER		QTY
+	EUCOMMIA ULMOIDES HARDY RUBBER TREE	B & B	3"		7
	GLEDITSIA TRIACANTHOS INERMIS 'SHADEMASTER' SHADEMASTER LOCUST	B & B	3"		6
+	PLATANUS X ACERIFOLIA 'EXCLAMATION' TM EXCLAMATION LONDON PLANE TREE	B & B	3"		16
\bigcirc	QUERCUS BICOLOR SWAMP WHITE OAK	B & B	3"		8
+	QUERCUS MACROCARPA BURR OAK	B & B	3"		4
	TILIA AMERICANA 'BOULEVARD' BOULEVARD LINDEN	B & B	3"		9
Erry Erry	ULMUS PROPINQUA 'EMERALD SUNSHINE' EMERALD SUNSHINE ELM	B & B	3"		5
•	ZELKOVA SERRATA 'MUSASHINO' SAWLEAF ZELKOVA	B & B	3"		7
EVERGREEN TREES	BOTANICAL / COMMON NAME	SIZE	CALIPER		QTY
	PICEA ABIES NORWAY SPRUCE	B&B, 8' HT.			20
ORNAMENTAL TREES	BOTANICAL / COMMON NAME	SIZE	CALIPER		QTY
•	CERCIS CANADENSIS EASTERN REDBUD	B & B	3"		3
	MALUS X 'PRAIRIFIRE' PRAIRIFIRE CRABAPPLE	B & B	3"		5
SHRUBS	BOTANICAL / COMMON NAME	SIZE			
\odot	BUXUS X 'GREEN VELVET' BOXWOOD	5 GAL			10
₹ ŏ }	CHASMANTHIUM LATIFOLIUM NORTHERN SEA OATS	1 GAL			68
\odot	CORNUS STOLONIFERA 'FARROW' TM ARCTIC FIRE RED TWIG DOGWOOD	5 GAL			21
₩	DIERVILLA RIVULARIS 'KODIAK ORANGE' KODIAK ORANGE BUSH-HONEYSUCKLE	5 GAL			15
AND CONTRACTOR OF THE PROPERTY	JUNIPERUS CHINENSIS 'SEA GREEN' SEA GREEN JUNIPER	5 GAL			92
\odot	JUNIPERUS SABINA 'BUFFALO' BUFFALO JUNIPER	5 GAL			11
\odot	VIBURNUM NUDUM 'WINTERTHUR' WINTERTHUR VIBURNUM	5 GAL			15
GROUND COVERS	BOTANICAL / COMMON NAME	CONT		SPACING	
	FESTUCA TURF TYPE TALL FESCUE BLEND	SEED			79,385 SF
	FESTUCA	COD			50 655 CE

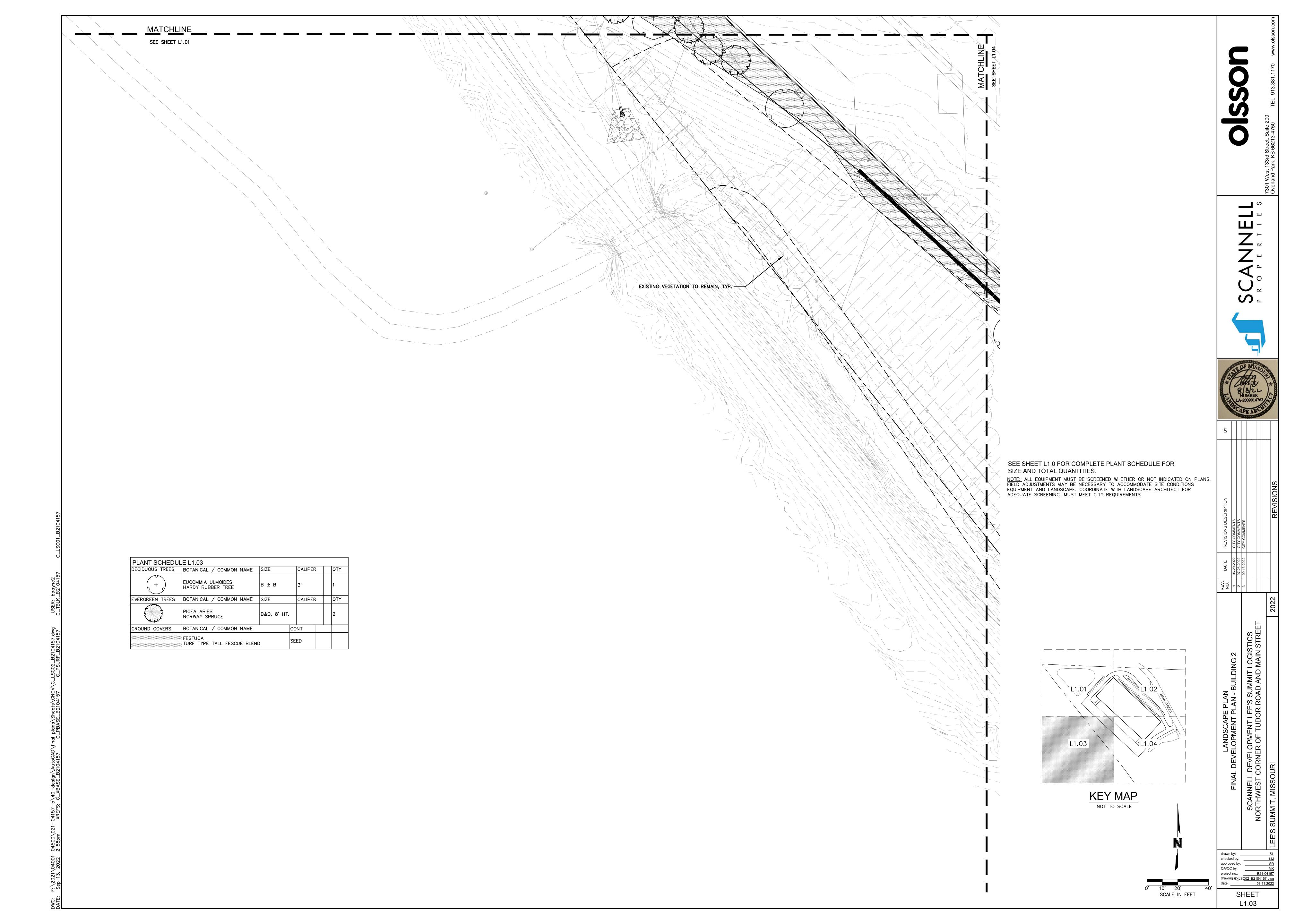


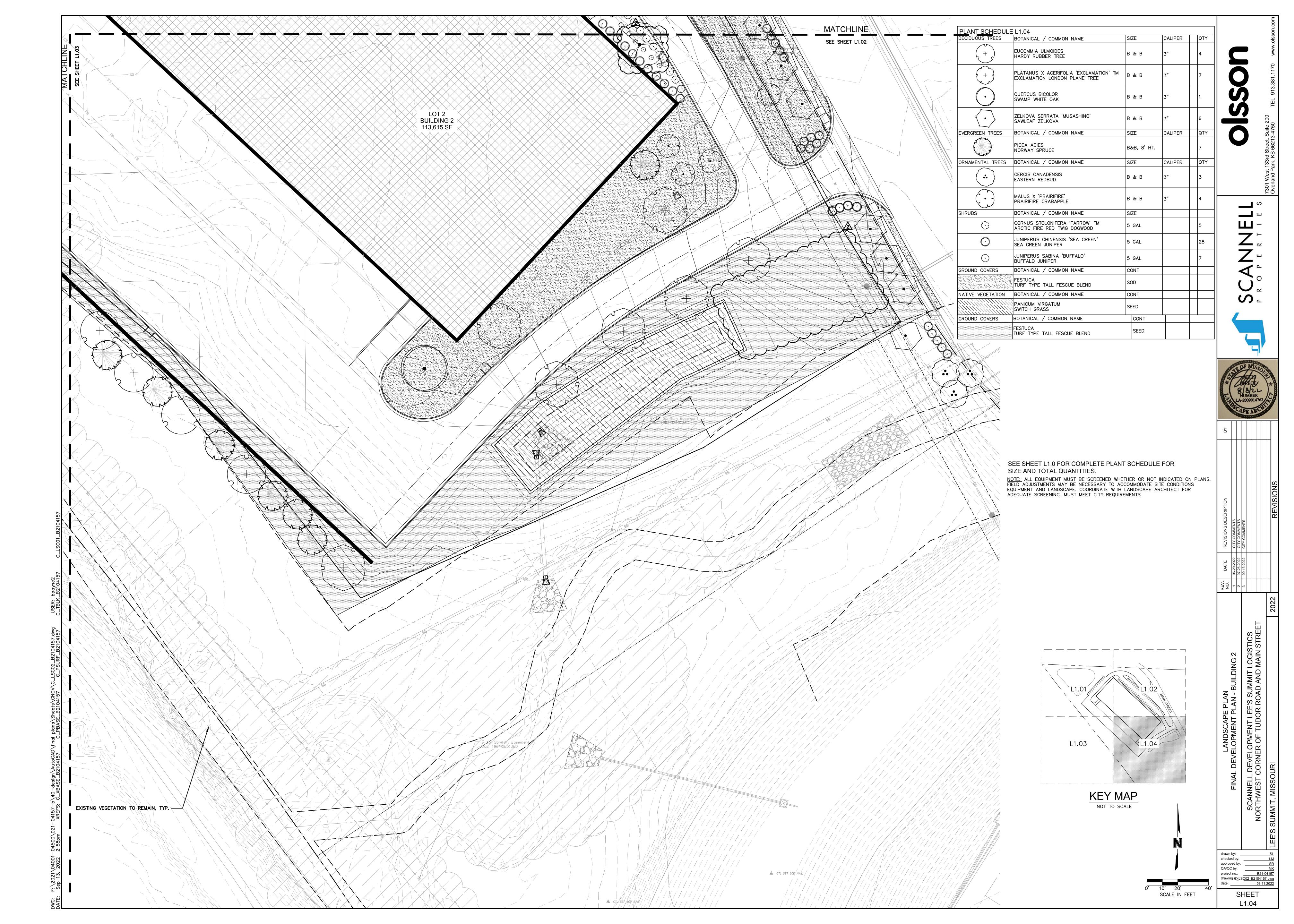


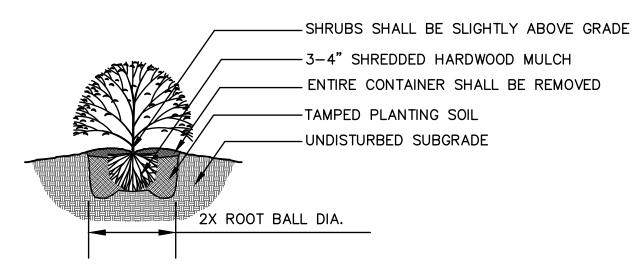


QA/QC by: MK
project no.: B21-04157
drawing Op.LSC02 B2104157.dwg
date: 03.11.2022

SHEET L1.02

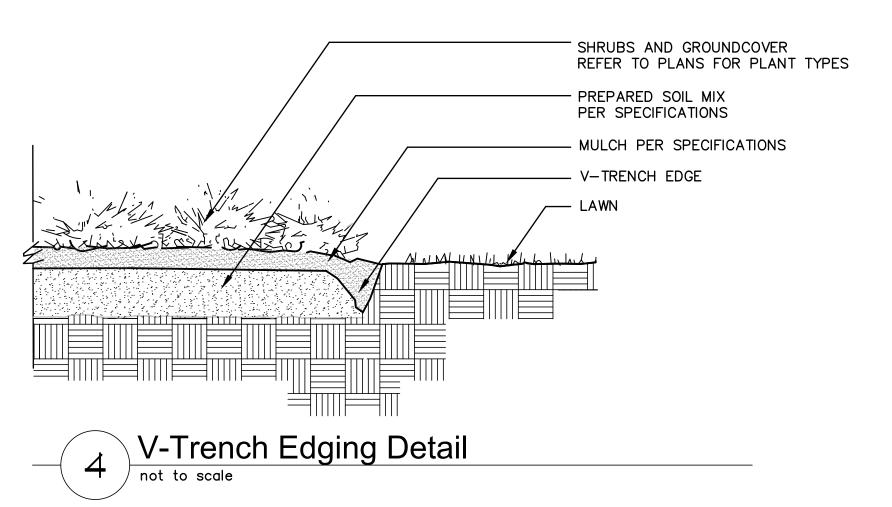


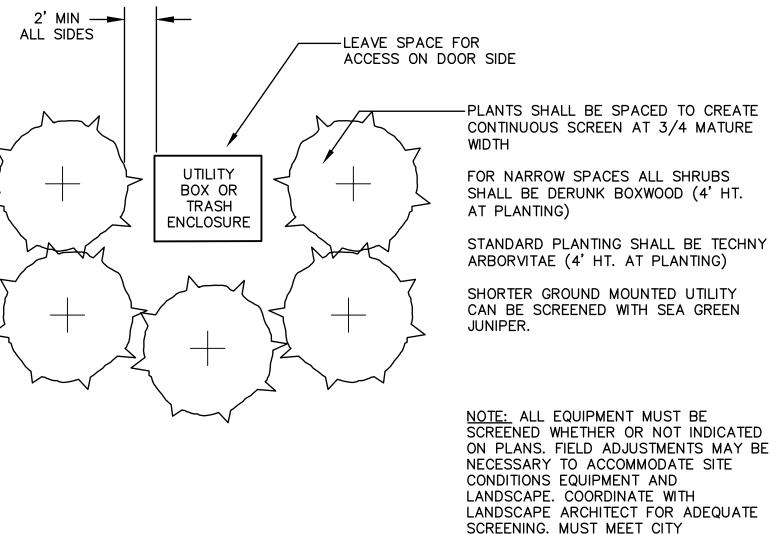




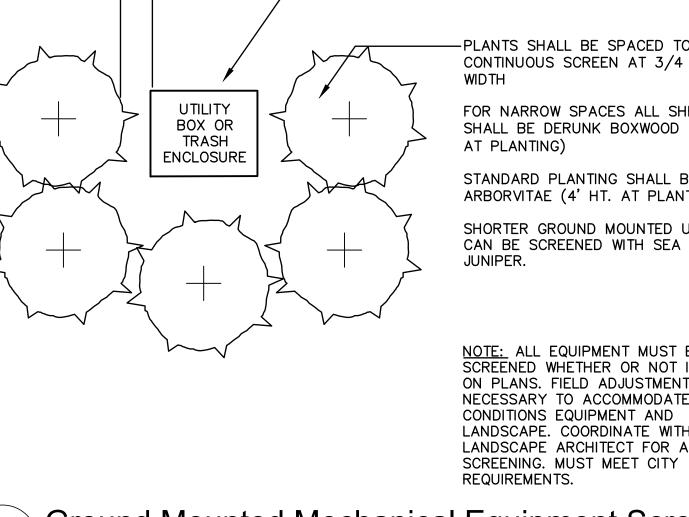
- MINIMUM ROOT SPREAD TO BE IN ACCORDANCE WITH ANLA STANDARDS PRUNE DAMAGED LIMBS OR ROOTS AFTER INSTALLATION
- 3. MAKE SURE ROOTS DO NOT DRY OUT DURING INSTALLATION 4. SOAK GENEROUSLY TO COMPACT AND SETTLE

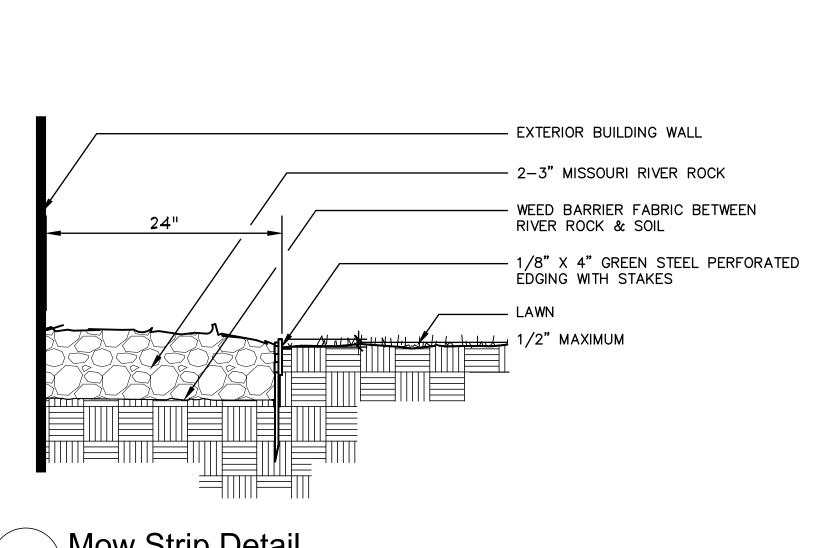






Ground Mounted Mechanical Equipment Screening Detail





PLANTING NOTES

- ALL WORK SHALL BE COORDINATED WITH THE WORK OF OTHER TRADES.
- LOCATE AND FLAG ALL UNDERGROUND UTILITIES PRIOR TO ANY CONSTRUCTION. CONTRACTOR SHALL PROTECT EXISTING OVERHEAD AND UNDERGROUND UTILITIES. ANY DAMAGE TO SUCH SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE
- PLANTS AND OTHER MATERIALS ARE QUANTIFIED AND SUMMARIZED FOR THE CONVENIENCE OF THE CITY AND LOCAL GOVERNING BODIES. CONFIRM AND INSTALL SUFFICIENT QUANTITIES TO COMPLETE THE WORK AS DRAWN.
 - 4. PLAN IS SUBJECT TO CHANGES BASED ON PLANT SIZE AND MATERIAL AVAILABILITY. ALL CHANGES OR SUBSTITUTIONS MUST BE APPROVED BY THE CITY OF LEE'S SUMMIT, MO AND THE LANDSCAPE ARCHITECT.
- ALL PLANT MATERIAL SHALL BE NURSERY GROWN TO MEET MINIMUM SIZE AS SPECIFIED IN THE AMERICAN STANDARD FOR NURSERY STOCK ESTABLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION (ANLA). THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL NOT MEETING SPECIFICATIONS.
- ALL TREES SHALL BE CALIPERED AND ANY UNDERSIZED TREES SHALL BE REJECTED. SPECIFIED CALIPER MEASUREMENT FOR TREES SHALL BE MEASURED AT 12" ABOVE THE
- PLANTING OF TREES, SHRUBS, SODDED AND SEEDED TURFGRASS SHALL BE COMMENCED DURING EITHER THE SPRING (MARCH 15-JUNE 15) OR FALL (SEPTEMBER 1 - OCTOBER 15) PLANTING SEASON AND WITH WATER AVAILABLE FOR IRRIGATION PURPOSES.
- CONTRACTOR SHALL STAKE OR MARK ALL PLANT MATERIAL LOCATIONS PRIOR TO INSTALLATION. CONTRACTOR SHALL HAVE THE LANDSCAPE ARCHITECT APPROVE ALL STAKING PRIOR TO INSTALLATION. FIELD ADJUSTMENTS MAY BE NECESSARY BASED UPON FIELD CONDITIONS (I.E. ROOT BALL AND DROP INLET CONFLICT). ALL ADJUSTMENTS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT.
- THE LANDSCAPE CONTRACTOR SHALL REMOVE ALL CONSTRUCTION DEBRIS AND MATERIALS INJURIOUS TO PLANT GROWTH FROM PLANTING PITS AND BEDS PRIOR TO BACKFILLING WITH
- 10. A PRE-EMERGENT HERBICIDE SHALL BE APPLIED TO ALL SHRUB BEDS PRIOR TO THE INSTALLATION OF ANY PLANT MATERIAL.
- 11. BACKFILL ALL PLANTING BEDS TO A MINIMUM 12-INCH DEPTH WITH PLANTING SOIL MIX. PLANTING SOIL MIX SHALL CONSIST OF ONE (1) PART PERLITE, ONE (1) PART PEAT MOSS, AND TWO (2) PARTS CLEAN LOAM TOPSOIL. THOROUGHLY MIX PLANTING SOIL COMPONENTS PRIOR TO PLACEMENT.
- 12. ALL LANDSCAPE PLANTING AREAS, EXCLUDING TURF AREAS SHALL BE MULCHED WITH A MINIMUM OF 3-4" SHREDDED HARDWOOD MULCH UNLESS OTHERWISE NOTED ON PLANS.
- 13. V-TRENCH LANDSCAPE EDGING IS TO BE USED ON ALL LANDSCAPE BEDS ABUTTING SODDED AREAS.
- 14. ALL LANDSCAPE AREAS SHALL BE IRRIGATED WITH A HIGH-EFFICIENCY, AUTOMATIC IRRIGATION SYSTEM ACHIEVING 100% EVEN COVERAGE OF ALL LANDSCAPE AREAS. IRRIGATION SYSTEM SHALL BE DESIGN-BUILD TO MEET ALL CITY REQUIREMENTS.
- 15. LANDSCAPE CONTRACTOR IS TO BE RESPONSIBLE FOR WATERING ALL PLANT MATERIALS UNTIL THE TIME THE PERMANENT IRRIGATION SYSTEM IS FULLY FUNCTIONAL AND ACCEPTANCE OF THE PROJECT HAS TAKEN PLACE. ANY MATERIAL WHICH DIES, OR DEFOLIATES (PRIOR TO ACCEPTANCE OF THE WORK) WILL BE PROMPTLY REMOVED AND REPLACED.
- 16. THE CONTRACTOR WILL COMPLETELY GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR BEGINNING AT THE DATE OF ACCEPTANCE. CONTRACTOR WILL MAKE ALL REPLACEMENTS PROMPTLY (AS PER DIRECTION OF OWNER).

SODDING NOTES

- ALL DISTURBED AREAS SHALL BE SODDED WITH TURF-TYPE TALL FESCUE SOD WITH A MINIMUM OF 3 CULTIVARS.
- 2. ALL LAWN AREAS SHALL RECEIVE A MINIMUM 6-INCH DEPTH OF TOPSOIL COMPACTED TO 85% MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT.
- 3. THE ENTIRE SURFACE TO BE SODDED SHALL BE REASONABLY SMOOTH AND FREE FROM STONES, ROOTS, OR OTHER DEBRIS.
- 4. SOD SHALL BE MACHINE STRIPPED AT A UNIFORM SOIL THICKNESS OF APPROXIMATELY ONE INCH (PLUS OR MINUS 1/4-INCH). THE MEASUREMENT FOR THICKNESS SHALL EXCLUDE TOP GROWTH AND THATCH, AND SHALL BE DETERMINED AT THE TIME OF CUTTING IN THE FIELD. PRECAUTIONS SHALL BE TAKEN TO PREVENT DRYING AND HEATING. SOD DAMAGED BY HEAT AND DRY CONDITIONS, AND SOD CUT MORE THAN 18 HOURS BEFORE BEING INCORPORATED INTO THE WORK SHALL NOT BE USED.
- HANDLING OF SOD SHALL BE DONE IN A MANNER THAT WILL PREVENT TEARING, BREAKING, DRYING AND OTHER DAMAGE. PROTECT EXPOSED ROOTS FROM DEHYDRATION. DO NOT DELIVER MORE SOD THAN CAN BE LAID WITHIN 24 HOURS.
- MOISTEN PREPARED SURFACE IMMEDIATELY PRIOR TO LAYING SOD. WATER THOROUGHLY AND ALLOW SURFACE TO DRY BEFORE INSTALLING SOD. FERTILIZE, HARROW OR RAKE FERTILIZER IN THE TOP 1-1/2-INCHES OF TOPSOIL, AT A UNIFORM RATE OF ONE POUND OF NITROGEN PER 1000 S.F.
- 7. SOD SHALL BE CAREFULLY PLACED IN THE DIRECTION PARALLEL WITH THE SLOPE OF THE AREA TO BE SODDED. SOD STRIPS SHALL BE BUTTED TOGETHER BUT NOT OVERLAPPED WITH THE SEAMS STAGGERED ON EACH ROW.
- 8. FERTILIZER SHALL BE 20-10-5 COMMERCIAL FERTILIZER OF THE GRADE, TYPE, AND FORM SPECIFIED AND SHALL COMPLY WITH THE RULES OF THE STATE OF MISSOURI DEPT. OF AGRICULTURE. FERTILIZER SHALL BE IDENTIFIED ACCORDING TO THE PERCENT N, P, K, IN
- 9. ALL SOD ON SLOPES GREATER THAN 5:1 AND WITHIN DETENTION AREAS SHALL BE STAKED.
- 10. SATURATE SOD WITH FINE WATER SPRAY WITHIN TWO HOURS OF PLANTING. DURING FIRST WEEK AFTER PLANTING, WATER DAILY OR MORE FREQUENTLY AS NECESSARY TO MAINTAIN MOIST SOIL TO A MINIMUM DEPTH OF FOUR INCHES BELOW SOD.
- 11. CONTRACTOR SHALL PROVIDE FULL MAINTENANCE FOR SODDED TURF GRASS FOR A PERIOD OF 30 DAYS AFTER THE DATE OF FINAL ACCEPTANCE. AT THE END OF THE MAINTENANCE PERIOD, A HEALTHY, WELL-ROOTED, EVEN-COLORED, VIABLE TURF MUST BE ESTABLISHED. THE TURF GRASS SHALL BE FREE OF WEEDS, OPEN JOINTS, BARE AREAS, AND SURFACE IRREGULARITIES.

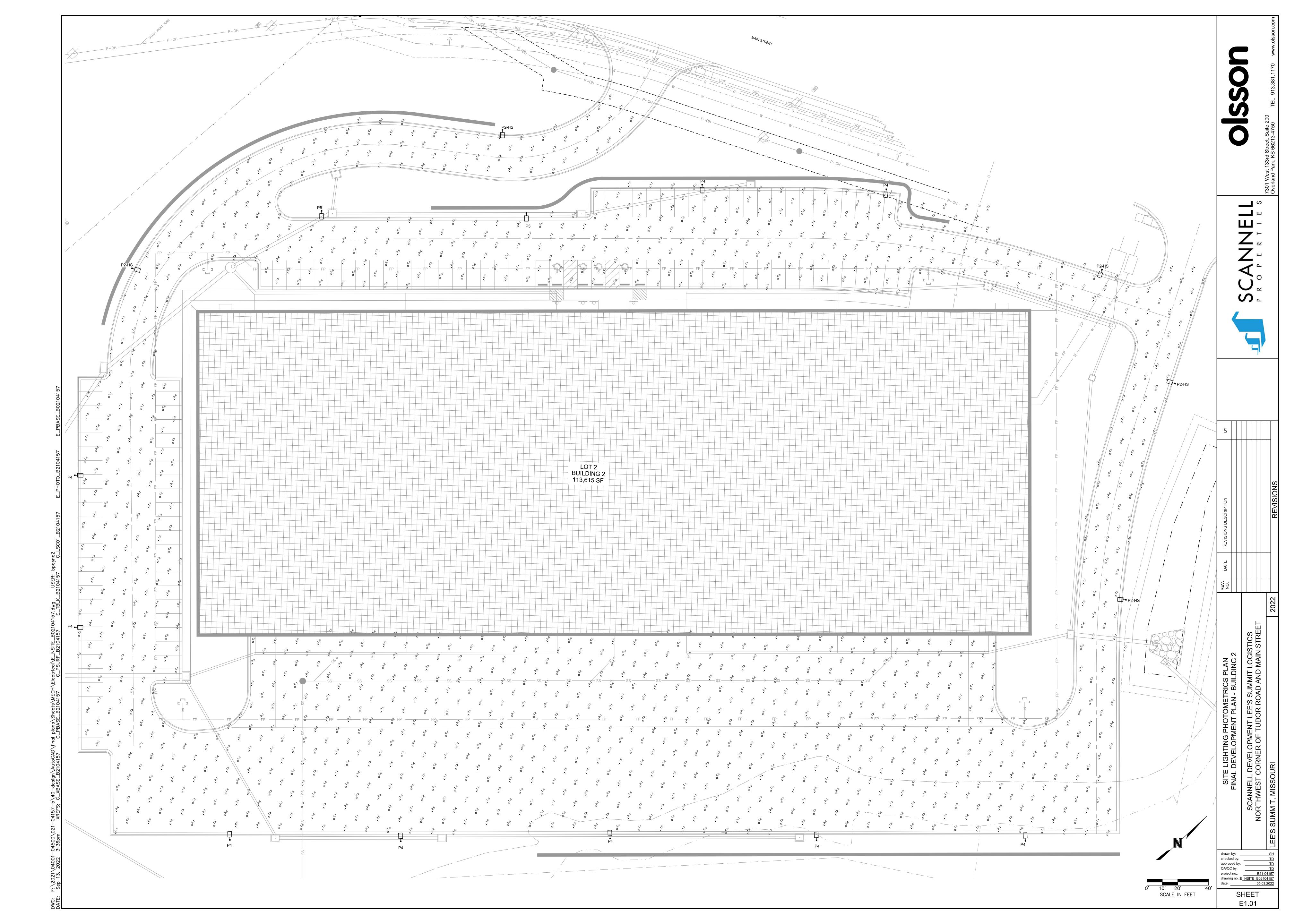


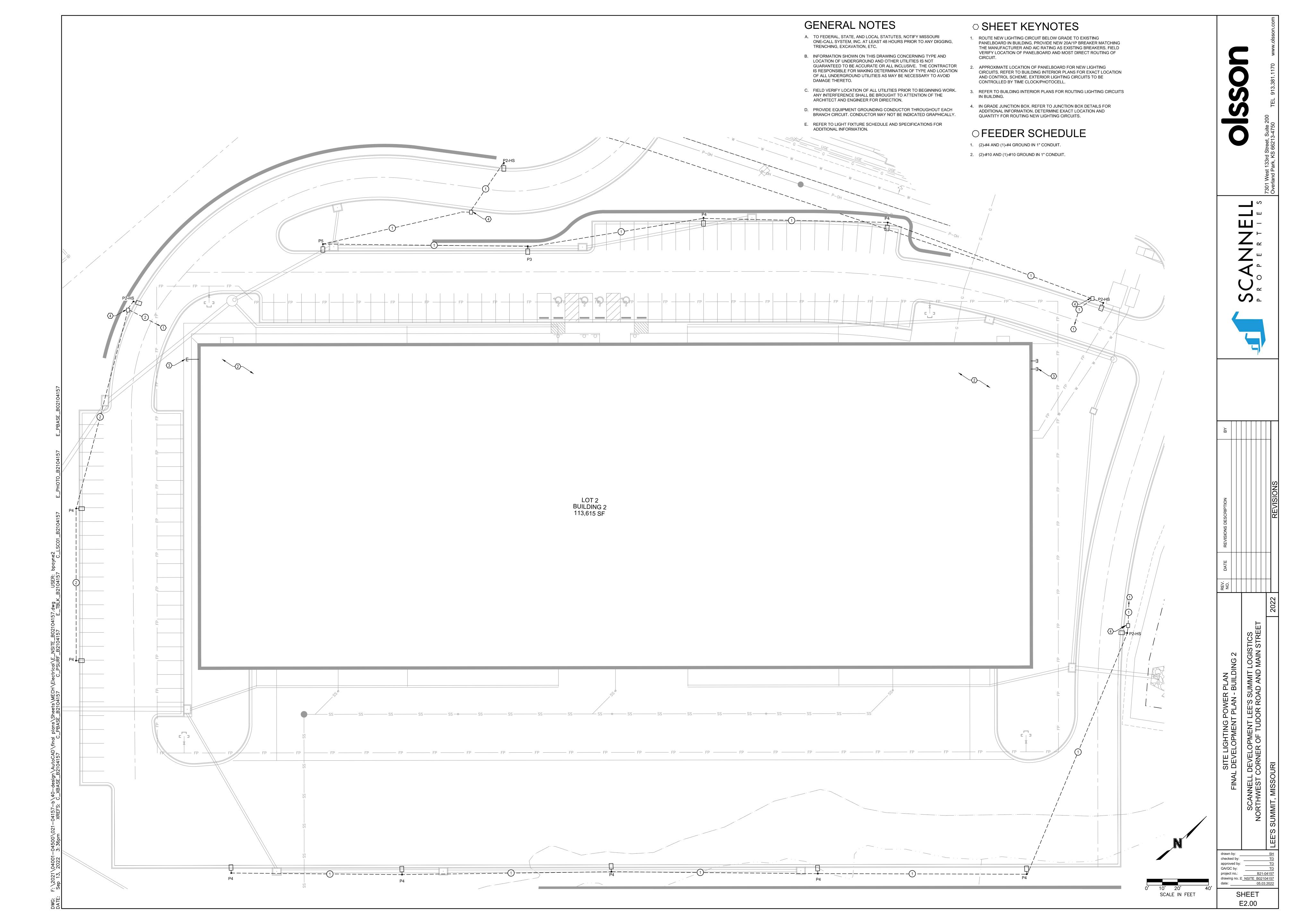


06-29-2022 07-26-2022 09-13-2022

drawing <u>©_LSC01_B2104157.dwg</u>

SHEET





P2-HS

·	I					
Statistics		1	1			
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
PROPERTY LINE	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
PARKING	Ж	1.4 fc	4.0 fc	0.3 fc	13.3:1	4.7:1

Lithonia Lighting

MVOLT HS

Ordering Inf	ormation	,	EXAMPI	LE: DSX1 LED P7 40K T3	M MV	OLT SPA	NLTAIR2 PIRHN DDBXD	
DSX1 LED								
Series	LEDs	Color temperature	Distribution		Volta	ge	Mounting	
DSX1 LED	Forward optics P1 P4 1 P7 1 P2 P5 1 P8 P3 P6 1 P9 1 Rotated optics P10 2 P12 2 P11 2 P13 1,2	30K 3000 K 40K 4000 K 50K 5000 K	T3S Type III short T3M Type III mediu	mRCCO Right corner cuto	XVO (277 120 9 208 9 4240	OLT V-480V) 6 9 9 9 9 9	WBA Wall bracket SPUMBA Square pole of RPUMBA Round pole of Shipped separately	nounting 10 3 universal mounting adaptor 11 universal mounting adaptor 9 n mounting bracket adaptor
PIRHN Ne PER Fiv PER5 PER7 DMG (fo		n/ambient sensor 14 (controls ordered y (controls ordered ed outside fixture	PIR mounting bit officials, PIRH mounting bit officials, PIR1FC3\(\text{Mounting}\) PIR1FC3\(\text{Mounting}\) PIRH1FC3\(\text{Mounting}\) 15-30' mounting he 1fc 20,21	motion/ambient sensor, 8 height, ambient sensor er 2flotion/ambient sensor, 1 height, ambient sensor er 2flotion/ambient sensor er 8,1motion/ambient sensor, 8,1motion/ambient sensor en 19,1motion/ambient sensor en 19,1m	nabled 5-30' nabled -15' nabled	HS Ho SF Sir DF Do L90 Let R90 Rig HA 50°C BAA Bu Shipped BS Bir	tions linstalled use-side shield 23 ngle fuse (120, 277, 347V) 9 uble fuse (208, 240, 480V) 9 ft rotated optics 2 th rotated optics 2 cambient operations 1 y America(n) Act Compliant separately d spikes 24 ternal glare shield	Finish (required) DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronz DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

The modern styling of the D-Series is striking

statement even as it blends seamlessly with its

environment. The D-Series distills the benefits

performance, high efficacy, long-life luminaire. The outstanding photometric performance

results in sites with excellent uniformity, greater pole spacing and lower power density. It is

ideal for replacing up to 750W metal halide in

pedestrian and area lighting applications with

typical energy savings of 65% and expected

service life of over 100,000 hours.

of the latest in LED technology into a high

yet unobtrusive - making a bold, progressive

Buy American

ું હજુજુના<u>"</u> ઉગલ્ડે

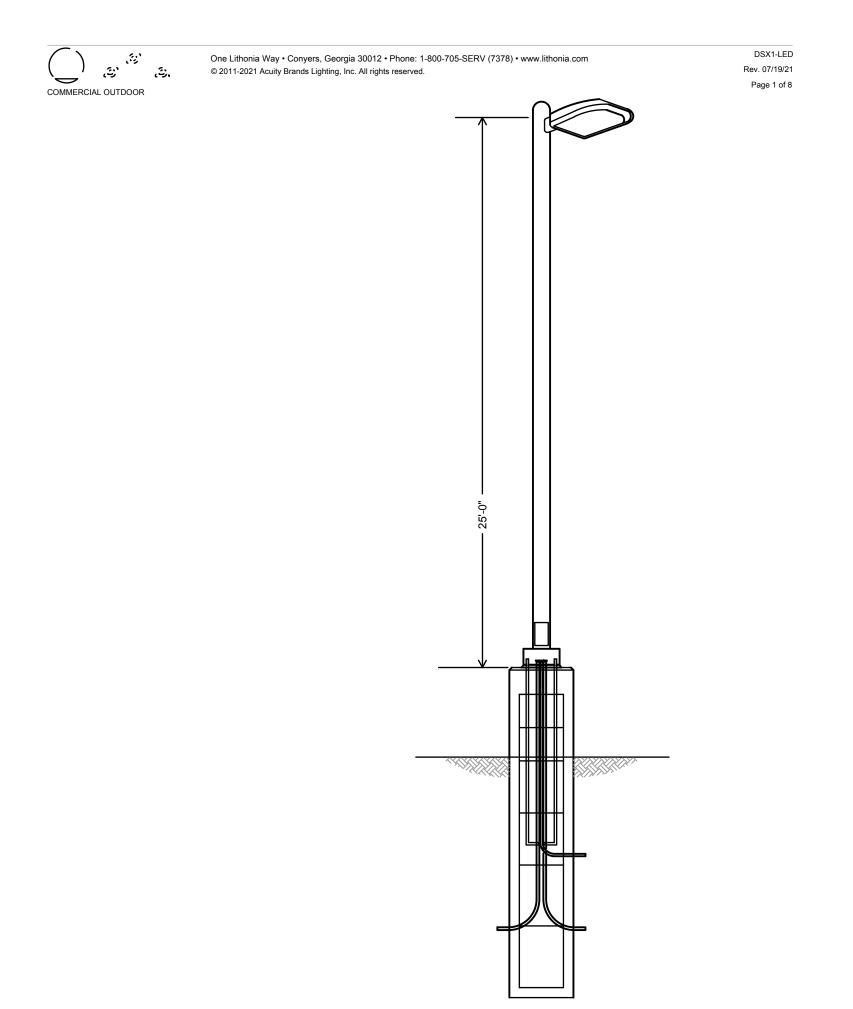
Specifications

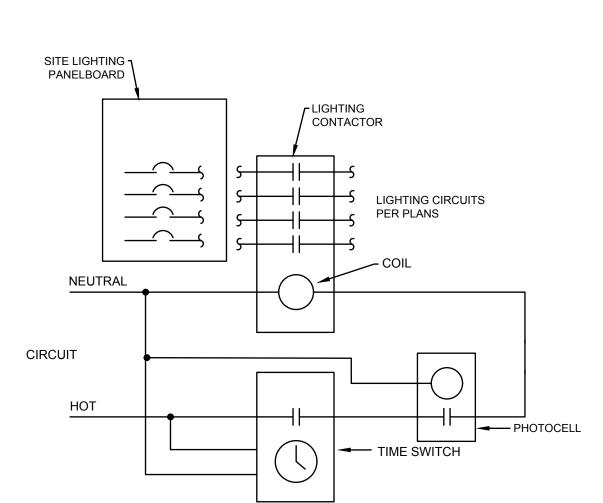
EPA:

Height H1:

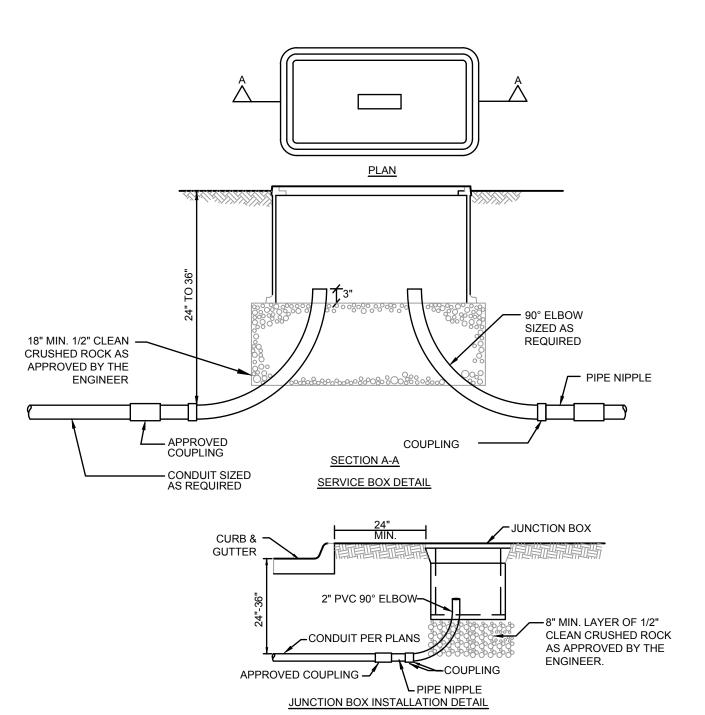
Height H2:

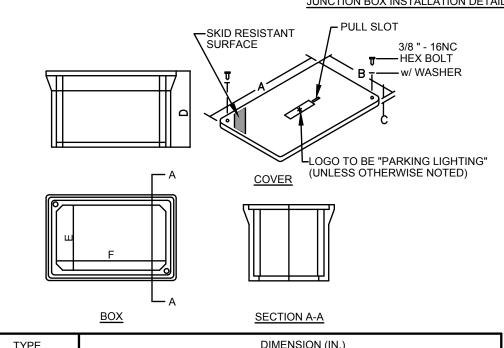
Weight (max):





SITE LIGHTING CONTROL SCHEMATIC





DIMENSION (IN.) II-JUNCTION *NOTE: THE TYPE II SERVICE BOX SHALL HAVE A TWO-PIECE OVERLAPPING

1. TYPE I JUNCTION BOXES SHALL BE RATED FOR NO LESS THAN 15,000 lbs. VERTICAL TEST LOAD AND NO LESS THAN 8000 lbs. COVER LOAD OVER A 10"x10" AREA. 2. TYPE II JUNCTION BOXES SHALL BE RATED FOR NO LESS THAN 22,500 lbs. VERTICAL TEST LOAD AND NO LESS THAN 8000 lbs. COVER LOAD OVER A 10"X10" AREA. 3. TYPE I SERVICE BOXES SHALL BE RATED FOR NO LESS THAN 22,500 lbs. VERTICAL TEST LOAD AND NO LESS THAN 8000 lbs. COVER LOAD OVER A 10"x10" AREA. MATERIAL TO BE AN AGGREGATE CONSISTING OF SAND AND GRAVEL BOUND TOGETHER WITH A POLYMER AND REINFORCED WITH CONTINUOUS WOVEN GLASS STRANDS. IT SHALL HAVE THE FOLLOWING PROPERTIES. COMPRESSIVE STRENGTH-11,000 psi ASTM C-109

TENSILE STRENGTH-1,700 psi ASTM C-496

FLEXURAL STRENGTH-7,500 psi ASTM D-79O 5

5. ATTACH 1c #10 THHN/THWN STRANDED COPPER SYSTEM GROUND TO 1/2" x 8'-0" GROUND ROD IN SERVICE BOX. MULTIPLE #10 GROUND CABLES INTRODUCED AT GROUNDING LUG IN POLE SIGNAL POLES SHALL BE TERMINATED AT GROUND ROD WITH AN ADDITIONAL OR TRANSFORMER BASE

FIBERGLASS REINFORCED POLYMER CONCRETE JUNCTION BOX DETAILS

LIGHTING FIXTURE SCHEDULE Wattage 207 COLOR TEMP / VOLTAGE / SYMBOL TYPE DESCRIPTION MANUFACTURER AND MODEL LAMPS LUMENS LOCATION BALLAST WATTAGE 102 AREA LED LIGHT FIXTURE WITH 25'-0" POLE AND 0-10V DIMMING PARKING LOT 18,424 4000K / 80 MVOLT CONCRETE BASE. DSX1-LED-P8-40K-T4M-MVOLT-SPA-DBLXD 102 POLE# SSS-25-5G-DM19AS-DBLXD AREA LED LIGHT FIXTURE WITH 25'-0" POLE AND 0-10V DIMMING PARKING LOT ITHONIA# 13,088 4000K / 80 MVOLT 102 DSX1-LED-P3-40K-T5S-MVOLT-SPA-DBLXD POLE# SSS-25-5G-DM19AS-DBLXD AREA LED LIGHT FIXTURE WITH 25'-0" POLE AND PARKING LOT .ITHONIA# 12,214 4000K / 80 0-10V DIMMING MVOLT CONCRETE BASE. DSX1-LED-P3-40K-T3M-MVOLT-SPA-DBLXD POLE# SSS-25-5G-DM19AS-DBLXD P2-HS AREA LED LIGHT FIXTURE WITH 25'-0" POLE AND 4000K / 80 0-10V DIMMING PARKING LOT 10,282 MVOLT DSX1-LED-P3-40K-T2M-HS-MVOLT-SPA-DBLXD CONCRETE BASE. POLE# SSS-25-5G-DM19AS-DBLXD

A. PROVIDE ALL COMPONENTS TO MAKE A COMPLETE ASSEMBLY. THIS WOULD INCLUDE, BUT NOT BE LIMITED TO, ARM, MOUNTING BRACKETS, POLE BASE COVER, ANCHOR BOLTS, TEMPLATE, BASE, HAND HOLE, SEPARATE CIRCUIT OUTLET,

B. PROVIDE CONCRETE BASE, PER DETAIL

Lumens

18424

13088

12214

10282

Lamps Per Lamp

DSX1 LED P3 40K T2M MVOLT with

nouseside shield

Light Loss

0.9

0.9

0.9

0.9

Factor

GENERAL NOTES

- G1. CONTRACTOR TO VERIFY LOCATIONS OF EXISTING UNDERGROUND STRUCTURES AND UTILITIES BEFORE CONSTRUCTING NEW FOUNDATIONS.
- G2. THE CONTRACTOR SHALL FOLLOW WRITTEN DIMENSIONS ONLY. DO NOT SCALE DRAWINGS.
- G3. EXCAVATE SHAFTS FOR DRILLED FOUNDATIONS TO INDICATED ELEVATIONS. REMOVE LOOSE DEBRIS, MATERIALS AND/OR MUCK TO MAKE BOTTOM SURFACES LEVEL WITHIN ACI 336.1 TOLERANCES.
- G4. CONSTRUCTION TOLERANCES: A. BOTTOM DIAMETER: MINUS ZERO, PLUS 6 INCHES, MEASURED IN ANY DIRECTION. B. MAXIMUM VARIATION FROM PLUMB: 1:40. C. MAXIMUM BOTTOM LEVEL: PLUS OR MINUS 2 INCHES.
- G5. AT NO ADDITIONAL COST, CASE PIER SHAFTS AS NECESSARY. PROTECT EXCAVATED WALLS WITH TEMPORARY WATERTIGHT STEEL CASINGS OF SUFFICIENT LENGTH TO PREVENT WATER INTRUSION, CAVE-INS, DISPLACEMENT OF SURROUNDING EARTH, INJURY TO PERSONNEL AND DAMAGE TO CONSTRUCTION OPERATIONS. MAINTAIN EXCAVATIONS IN ESSENTIALLY DRY CONDITION, USING PUMPS WHERE NECESSARY. REMOVE WATER TO A MAXIMUM DEPTH OF 6 INCHES FROM EXCAVATED SHAFT PRIOR TO
- G6. CONVEY CONCRETE FROM THE MIXER TO PLACE OF DEPOSIT BY BEST INDUSTRY METHODS THAT WILL PREVENT SEGREGATION AND LOSS OF MATERIAL. SIZE AND DESIGN THE EQUIPMENT FOR CONVEYING CONCRETE TO ENSURE UNIFORM, CONTINUOUS PLACEMENT OF CONCRETE. PLACE CONCRETE IN ACCORDANCE WITH ACI 318. PLACE CONCRETE IN A CONTINUOUS OPERATION AND WITHOUT SEGREGATION INTO DRY EXCAVATIONS WHENEVER POSSIBLE. USE ALL PRACTICABLE MEANS TO OBTAIN A DRY
- EXCAVATION BEFORE AND DURING CONCRETE PLACEMENT. G7. WHEN PULLING CASING, MAINTAIN LEVEL OF CONCRETE ABOVE BOTTOM OF CASING GREATER OR EQUAL TO LEVEL OF GROUND KEEP BOTTOM OF CASING AT LEAST 10 FEET BELOW TOP OF CONCRETE. PREVENT IN-SITU MATERIALS FROM FALLING INTO AND MIXING WITH CONCRETE. PULL CASING IN SHORT SLOW VERTICAL LIFTS (ESSENTIALLY CONTINUOUS), MAINTAINING PLUMB ALIGNMENT AND SUFFICIENT HEAD OF CONCRETE.
- G8. ALL CONCRETE SHALL BE CLASS KCMMB 4000

METAL BOLT COVER—

FINISHED

GRADE —

#4 TIES WITH 1'-3" MIN LAP

AT 12"oc ——

- G9. ALL REINFORCING SHALL BE STRUCTURAL GRADE 60 PER ASTM-A615 AND HAVE AT LEAST 3" OF CONCRETE COVER.
- G10. ANCHOR BOLTS ARE TO BE FURNISHED BY THE FOUNDATION CONTRACTOR UNLESS OTHERWISE NOTED. CONTRACTOR SHALL PLACE ALL REBAR SO AS TO NOT INTERFERE WITH ANCHOR BOLTS.
- G11. ALL ABOVE GRADE FOUNDATION SURFACES SHALL BE STEEL TROWEL FINISHED UNLESS OTHERWISE NOTED.
- G12. EACH PIER FOUNDATION SHALL BE CONSTRUCTED IN A SINGLE CONTINUOUS POUR.
- G13. NO EXCAVATION OR VIBRATION-INDUCING ACTIVITIES ARE ALLOWED WITHIN 3 PIER DIAMETERS OF A SUBJECT PIER UNTIL AT LEAST 24 HOURS HAVE ELAPSED SINCE THE TIME OF CONCRETE PLACEMENT. COVER ALL EXCAVATIONS BETWEEN OPERATIONS. REMOVE FOREIGN AND LOOSE MATERIAL FROM APPROVED EXCAVATION.
- G14. THE CONTRACTOR SHALL PROVIDE ALL MEASURES AND PRECAUTIONS NECESSARY TO PREVENT DAMAGE AND/OR SETTLEMENT OF EXISTING OR NEW CONSTRUCTION INSIDE OR OUTSIDE THE PROJECT LIMITS DURING EXCAVATION AND FOUNDATION CONSTRUCTION. ANY DAMAGE TO NEW OR EXISTING CONSTRUCTION INSIDE OR OUTSIDE OF THE PROJECT LIMITS CAUSED BY CONSTRUCTION TECHNIQUES IS THE RESPONSIBILITY OF THE CONTRACTOR.

FOUNDATION DESIGN LIMITATIONS

- L1. THIS FOUNDATION WAS DESIGNED FOR A MINIMUM LATERAL SOIL DEFORMATION MODULUS OF 0.50 KSI
- L2. THIS FOUNDATION WAS DESIGNED FOR A MINIMUM LATERAL SOIL UNDRAINED SHEAR STRENGTH OF 0.50 KSF
- .3. THIS FOUNDATION WAS DESIGNED FOR A MAXIMUM ALLOWABLE LATERAL DEFLECTION OF 1/2 INCH OVERALL AT GRADE ELEVATION
- L4. THIS FOUNDATION WAS DESIGNED WITH AN ASSUMED DEPTH TO ROCK GREATER THAN TWENTY FEET FROM FINISHED GRADE
- L5. THIS FOUNDATION WAS DESIGNED WITH AN ASSUMED WATER TABLE LOCATED AT THE SOIL
- L6. THIS FOUNDATION WERE NOT DESIGNED TO WITHSTAND THE EFFECTS OF SCOURING.
- .7. IF CONDITIONS OTHER THAN THOSE SPECIFIED HEREIN ARE PRESENT AT THE SITE, INCLUDING NON-COHESIVE SOILS FOUND IN BORINGS, PLEASE CONTACT THE ENGINEER OF

STRUCTURAL CONCRETE

- CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF:
- ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" ACI 302 - "RECOMMENDED PRACTICE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION" ACI 304 - "ACI MANUAL OF CONCRETE INSPECTION" ACI 311 - "RECOMMENDED PRACTICE FOR MEASURING, MIXING, TRANSPORTING, AND
- PLACING CONCRETE" ACI 315 - "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT"
- ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" ACI 347 - "RECOMMENDED PRACTICE FOR CONCRETE FORMWORK"
- ALL HOOKS SHALL BE "STANDARD" PER ACI SPECIFICATIONS.

ANCHOR BOLTS. SIZE, NUMBER, AND

RECOMMENDATIONS

¹ PVC OR RIGID CONDUIT

(8) #6 BARS SPACED EVENLY

AROUND REBAR STRUCTURE

FOR FEEDER CABLE

(SIZE AS SPECIFIED)

CIRCUMFERENCE

- BEVEL EDGES

√ (3) #4 TIES WITH

1'-3" MIN LAP AT

FOUNDATIONS

3"oc FOR ALL

PLACEMENT PER MANUFACTURERS

- E1. THE CONTRACTOR MUST PROVIDE SURFACE DRAINAGE AND PUMPS TO PROTECT ALL EXCAVATION FROM FLOODING. FLOODING OF ANY EXCAVATION AFTER APPROVAL OF THE SUBGRADE WILL BE CAUSE FOR RE-PREPARATION OF THE SUBGRADE
- E2. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES TO PREVENT ANY WATER, FROST, OR ICE FROM PENETRATING ANY FOOTING OR SLAB SUBGRADE BEFORE AND AFTER PLACING OF CONCRETE AND UNTIL SUCH SUBGRADES ARE FULLY PROTECTED BY THE PERMANENT STRUCTURE.
- E3. REFER TO THE GEOTECH REPORT FOR SUBSURFACE CONDITIONS AND CONSTRUCTION CONSIDERATIONS.

LIGHT FOUNDA	TION DA	TA
MOUNTING HEIGHT	Α	В
UP TO 30'	2'-0"	6'-0"

CONCRETE CLASS "KCMMB 4000"

HEAVY HEX GALVANIZED NUTS: (AASHTO M291, GR A) FLAT WASHERS GALVANIZED: (AASHTO M293)

checked by: QA/QC by: project no.: drawing no.: E_NDET_B02104157 SHEET

CONCRETE LIGHT POLE BASE

1/2" CONDUIT FOR

GROUND ROD

5/8" x 10'-0" MIN

COPPER CLAD ONE PIECE -

GROUND CONDUCTOR-

SECTION 260000 ELECTRICAL

1. GENERAL CONDITIONS:

- A. THIS CONTRACTOR SHALL INSPECT THE SITE WHERE THIS WORK IS TO BE PERFORMED AND FULLY FAMILIARIZE HIMSELF WITH ALL CONDITIONS RELATED TO THIS PROJECT.
- B. THIS CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMANENT AND TEMPORARY PERMITS AND LICENSES AND SHALL MAKE ALL DEPOSITS AND PAY ALL FEES REQUIRED FOR THE PERFORMANCE OF WORK UNDER THIS SECTION OTHER THAN THOSE DEPOSITS OR FEES WHICH ARE FULLY REFUNDABLE TO THE OWNER.
- C. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL SYSTEMS AND COMPONENTS COVERED UNDER THIS SECTION. WHERE LOCAL CONDITIONS NECESSITATE A REARRANGEMENT, THE CONTRACTOR SHALL PREPARE, AND SUBMIT FOR APPROVAL, DRAWINGS OF THE PROPOSED REARRANGEMENT. THIS CONTRACTOR SHALL CAREFULLY INVESTIGATE THE STRUCTURAL AND FINISH CONDITIONS AFFECTING ALL OF HIS WORK AND SHALL ARRANGE SUCH WORK ACCORDINGLY, FURNISHING SUCH FITTINGS AND ACCESSORIES AS MAY BE REQUIRED TO MEET SUCH CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.
- THIS CONTRACTOR SHALL VERIFY ALL DIMENSIONS. DRAWINGS SHALL NOT BE SCALED TO DETERMINE DIMENSIONS.
- SPECIFICATIONS AND DRAWINGS ARE COMPLEMENTARY AND WHAT IS CALLED FOR IN ONE SHALL BE AS BINDING AS IF CALLED FOR BY BOTH.
- FURNISH LABOR, MATERIALS, EQUIPMENT AND SERVICES REQUIRED AS SHOWN ON THE DRAWINGS AND SPECIFIED IN DIVISION 15.
- G. ALL WORK SHALL BE COMPLETE AND SHALL BE LEFT IN OPERATING CONDITION.
- H. INCLUDE ALL PARTS AND LABOR WHICH ARE INCIDENTAL AND NECESSARY FOR A COMPLETE AND OPERABLE INSTALLATION EVEN THOUGH NOT SPECIFICALLY MENTIONED IN THE CONTRACT DOCUMENTS.
- REQUEST INSPECTIONS AS REQUIRED BY REGULATING AGENCIES AND/OR REGULATIONS. PAY ALL CHARGES FOR INSPECTIONS BY REGULATING AGENCIES OF INSTALLATIONS OF PLANS SPECIFICATIONS.
- PROVIDE THE OWNER WITH A CERTIFICATE OF FINAL INSPECTION AND APPROVAL BY ENFORCEMENT AUTHORITIES.
- K. FURNISH: TO OBTAIN, COORDINATE, SUBMIT THE NECESSARY DRAWINGS, DELIVER TO THE JOB SITE IN NEW CONDITION READY FOR INSTALLATION, UNLOAD AND UNPACK, AND GUARANTEE.
- INSTALL: TO RECEIVE AT THE JOB SITE, STORE, ASSEMBLE, ERECT, SET IN PLACE, ANCHOR, APPLY, FINISH, PROTECT, CLEAN, TEST, START-UP, AND MAKE READY FOR OWNER'S USE.
- M. PROVIDE: TO FURNISH AND INSTALL.
- PROVIDE NEW MATERIAL AND EQUIPMENT, UNLESS NOTED OTHERWISE. PROTECT EQUIPMENT AND MATERIAL FROM DAMAGE, DIRT AND THE WEATHER.
- O. THE ENGINEER RESERVES THE RIGHT TO REJECT MATERIAL OR WORKMANSHIP NOT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, BEFORE OR AFTER INSTALLATION, AT NO ADDITIONAL COST TO THE OWNER.
- REFINISH ALL ELECTRICAL EQUIPMENT DAMAGED DURING SHIPPING, INSTALLATION AND/OR PRIOR TO FINAL ACCEPTANCE TO ITS ORIGINAL CONDITION. REMOVE ALL RUST; PRIME, AND PAINT PER MANUFACTURER'S RECOMMENDATIONS FOR FINISH EQUAL TO ORIGINAL.
- PROTECT OPENINGS AND EQUIPMENT FROM OBSTRUCTION, BREAKAGE, MISUSE, DAMAGE OR BLEMISHES. PROTECT MATERIALS AND EQUIPMENT IMMEDIATELY UPON RECEIPT AT THE JOB SITE OR IMMEDIATELY AFTER THEY HAVE BEEN REMOVED FROM THEIR SHIPPING CONTAINERS. UNLESS NOTED OTHERWISE, KEEP THEM CLEAN AND UNDAMAGED UNTIL FINAL ACCEPTANCE OF THE ENTIRE PROJECT BY THE OWNER. WHEN A PORTION OF THE BUILDING IS OCCUPIED BY THE OWNER BEFORE SUBSTANTIAL COMPLETION OF THE ENTIRE PROJECT, MAKE ARRANGEMENTS TO TRANSFER RESPONSIBILITY FOR PROTECTION AND HOUSEKEEPING FOR THE OCCUPIED
- R. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO ELECTRICAL EQUIPMENT, MATERIALS OR WORK UNTIL FINAL ACCEPTANCE OF THE ENTIRE PROJECT BY THE OWNER.
- S. KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIAL OR RUBBISH, CAUSED BY HIS EMPLOYEES OR WORK, AT ALL TIMES. REMOVE RUBBISH, TOOLS, SCAFFOLDING, AND SURPLUS MATERIALS FROM AND ABOUT THE BUILDING, AND LEAVE WORK AREAS "BROOM CLEAN" OR ITS EQUIVALENT DAILY. CLEAN ELECTRICAL EQUIPMENT AND REMOVE TEMPORARY IDENTIFICATION.
- T. OPERATE EQUIPMENT AND SYSTEMS IN ALL THEIR OPERATING MODES, TO VERIFY PROPER OPERATION, PRIOR TO FINAL FIELD OBSERVATION AND OWNER INSTRUCTIONS. PREPARE A PRE-INSPECTION REPORT AND SUBMIT TO THE ENGINEER AND OWNER FOR REVIEW.
- U. TEST ALL INSTALLED ELECTRICAL EQUIPMENT AND CABLES REQUIRED BY CONSTRUCTION DOCUMENTS ACCORDING TO THE REQUIREMENTS OF THE MOST CURRENT EDITION OF THE INTERNATIONAL ELECTRICAL TESTING ASSOCIATION, INC. (NETA). IF ACCEPTABLE PERFORMANCE OF ANY TEST IS NOT ACHIEVED, MAKE THE NECESSARY CORRECTIONS AND THE TEST SHALL BE REPEATED UNTIL ACCEPTABLE PERFORMANCE IS ACHIEVED. PROVIDE WRITTEN REPORTS OF ALL TESTS, WITH FAILURES IDENTIFIED, TO ENGINEER.
- V. FULLY INSTRUCT THE OWNER'S DESIGNATED PERSONNEL IN THE OPERATION OF EACH ELECTRICAL SYSTEM AT THE TIME IT IS PUT INTO SERVICE. PROVIDE INSTRUCTION USING COMPETENT INSTRUCTORS AND FACTORY TRAINED
- W. CONTRACTOR SHALL INSTALL ALL MATERIALS AND EQUIPMENT AS PER MANUFACTURER'S WRITTEN INSTRUCTIONS AND/OR RECOMMENDATIONS.
- X. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ALL EQUIPMENT INDICATED AND/OR REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. A FORM INDICATING ALL SHOP DRAWINGS TO BE PROVIDED AS PART OF THE PROJECT SHALL BE SUBMITTED FOR REVIEW BY THE ENGINEER PRIOR TO ANY SHOP DRAWING SUBMITTAL REVIEW.
- Y. THIS SPECIFICATION SHALL INCORPORATE ALL PROJECT REQUIREMENTS AND RESPONSIBILITIES INDICATED WITHIN THE FRONT-END OF THE PROJECT

2. LAWS, REGULATIONS, ORDINANCES, STATUTES AND CODES:

A. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, THE NATIONAL FIRE PROTECTION ASSOCIATION CODES, THE NATIONAL ELECTRICAL SAFETY CODE, LOCAL BUILDING CODE, AND ALL APPLICABLE LOCAL LAWS, REGULATIONS, ORDINANCES, STATUTES AND CODES. SHOULD ANY WORK SHOWN ON THE DRAWINGS OR SPECIFIED HEREIN BE OF LOWER STANDARD, THE CONTRACTOR SHALL REFER THE POINTS IN QUESTION TO THE ENGINEER FOR APPROVAL.

3. SCOPE OF WORK:

WORK UNDER THIS SECTION SHALL CONSIST OF FURNISHING ALL LABOR. MATERIAL AND ASSOCIATED SERVICES REQUIRED TO COMPLETELY

CONSTRUCT AND LEAVE ALL SYSTEMS OPERATIONAL AS SHOWN ON THE

DRAWINGS AND HEREIN DESCRIBED.

ALL WORK PERFORMED UNDER THIS SECTION SHALL BE DONE IN A NEAT AND WORKMANLIKE MANNER.

4. MATERIALS AND EQUIPMENT REVIEW:

- A. AS SOON AS POSSIBLE AFTER THE AWARD OF THE CONTRACT. THIS CONTRACTOR SHALL SUBMIT FOR REVIEW SHOP DRAWINGS FOR ALL EQUIPMENT TO BE FURNISHED FOR THIS PROJECT. SUBMITTALS SHALL HIGHLIGHT THE MANUFACTURER'S NAME, MODEL NUMBER, DESCRIPTIVE ENGINEERING DATA AND ALL NECESSARY INFORMATION AS TO FINISH, MATERIAL GAUGES AND ACCESSORIES.
- B. ALL PORTIONS OF THE SHOP DRAWINGS THAT ARE INTENDED TO BE REVIEWED SHALL BE HIGHLIGHTED. ANY PORTION NOT CALLED OUT SHALL BE ASSUMED TO BE EXCLUDED FROM THE JOB.

GUARANTEE:

THIS CONTRACTOR SHALL GUARANTEE COMPLETE SYSTEM OPERATION AND THAT THE APPARATUS FURNISHED AND INSTALLED WILL BE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS AND WILL GIVE SATISFACTORY SERVICE. THE CONTRACTOR AGREES TO REPLACE, WITHOUT EXPENSE TO THE OWNER, ANY PART OF THE INSTALLATION WHICH PROVES OR BECOMES DEFECTIVE WITHIN ONE YEAR AFTER THE SYSTEM IS ACCEPTED.

6. COORDINATION:

A. THIS CONTRACTOR SHALL EXAMINE ALL ARCHITECTURAL, MECHANICAL, STRUCTURAL AND OTHER DRAWINGS RELATED TO THIS PROJECT. AND IT SHALL BE HIS RESPONSIBILITY TO COORDINATE THE ELECTRICAL WORK WITH OTHER TRADES.

AS-BUILT DRAWINGS:

- A. THIS CONTRACTOR SHALL PREPARE COMPLETE AS-BUILT DRAWINGS OF ALL ELECTRICAL SYSTEMS AND TURN OVER TO THE ENGINEER REVISED ELECTRONIC CAD FILES.
- B. THIS CONTRACTOR SHALL PREPARE AND SUBMIT TO THE OWNER'S REPRESENTATIVE FIVE BOUND SETS OF MANUFACTURER'S LITERATURE FOR ALL EQUIPMENT TO BE INSTALLED ON THIS PROJECT SHOWING ALL DETAILS OF EQUIPMENT, REPLACEMENT PART DATA AND MAINTENANCE INSTRUCTIONS.

8. EXCAVATION:

- A. ALL EXCAVATION AND BACKFILL REQUIRED FOR THE INSTALLATION OF ELECTRICAL WORK SHALL BE THE COMPLETE RESPONSIBILITY OF THE CONTRACTOR.
- B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER LAYOUT AND THE ESTABLISHMENT OF ALL LINES AND LEVELS REQUIRED FOR THE EXECUTION OF THE WORK.
- C. WHEN SERVICES ARE TO BE RUN SIDE-BY- SIDE, A COMMON TRENCH MAY BE USED PROVIDING THE REQUIRED VERTICAL AND HORIZONTAL SEPARATION BETWEEN THE VARIOUS SERVICES ARE MAINTAINED AND PROVIDING THE METHODS OF BEDDING AND BACKFILL MEET THE APPROVAL OF THE ENGINEER. CONTRACTORS INVOLVED SHALL MAKE THEIR OWN AGREEMENT AS TO THE SHARING OF THE COST OF THE COMMON TRENCHING AND BACKFILL WORK.
- D. LOCATE EXISTING UNDERGROUND UTILITIES IN AREAS OF EXCAVATION WORK. SHOULD UNCHARTED, OR INCORRECTLY CHARTED, PIPING OR OTHER UTILITIES BE ENCOUNTERED DURING EXCAVATION, CONSULT UTILITY ENGINEER IMMEDIATELY FOR DIRECTIONS. COOPERATE WITH OWNER AND UTILITY COMPANIES IN KEEPING RESPECTIVE SERVICES AND FACILITIES IN OPERATION. REPAIR DAMAGED UTILITIES TO SATISFACTION OF UTILITY

9. EXTERIOR AND FOUNDATION WALLS:

A. ALL PIPING THROUGH EXTERIOR OR FOUNDATION WALLS SHALL PASS THROUGH SCHEDULE 40 GALVANIZED STEEL SLEEVES WHICH SHALL BE LARGE ENOUGH TO ALLOW FOR CAULKING MATERIAL. NO SLEEVES ARE PERMITTED THROUGH CONCRETE STRUCTURAL MEMBERS. ALL SLEEVES SHALL BE COORDINATED AND APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO INSTALLATION.

A. ALL PIPING THROUGH FLOORS SHALL BE PROVIDED WITH SCHEDULE 40 GALVANIZED STEEL PIPE SLEEVES. EXTENDING 2 INCHES ABOVE FLOOR.

11. CUTTING:

A. ALL CUTTING OF EXISTING CONCRETE FLOORS/SLABS ON GRADE IN THE INTERIOR OF THE BUILDING SHALL BE PERFORMED BY "SAW CUTTING".

12.PATCHING:

A. ON CONCRETE, PATCH THE OPENING WITH CONCRETE, FINISHED SMOOTH WITH ADJACENT SURFACES.

13.IDENTIFICATION OF SWITCHES AND APPARATUS:

A. ALL CABINETS, SAFETY SWITCHES, AND OTHER APPARATUS USED FOR OPERATION AND CONTROL OF CIRCUITS, APPLIANCES, AND EQUIPMENT UNDER THIS CONTRACT SHALL BE PROPERLY IDENTIFIED BY MEANS OF ENGRAVED PLASTIC PLATES BLACK WITH WHITE LETTERS.

14. GROUNDING:

- A. ALL FEEDERS AND BRANCH CIRCUITS SHALL CONTAIN GROUND WIRES.
- B. ALL CONDUCTORS, MOTOR FRAMES, RACEWAYS, CABINETS, ETC., THAT REQUIRE GROUNDING SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE, THOSE OF THE SERVING UTILITY AND LOCAL AUTHORITIES HAVING JURISDICTION.

15. CONDUIT:

- A. ALL ELECTRICAL POWER WIRING, INCLUDING LOW VOLTAGE WIRING, SHALL BE INSTALLED IN CONDUIT AS HEREIN SPECIFIED. NO CONDUIT OR TUBING OF LESS THAN 3/4 INCH NOMINAL SIZE SHALL BE USED.
- UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 AS MANUFACTURED BY CARLON OR APPROVED EQUAL. ALL CONDUITS SHALL BE INSTALLED WITH MINIMUM 36" INCH COVER.
- C. CONDUIT INSTALLED ABOVE GROUND EXTERIOR SHALL BE GALVANIZED RIGID STEEL AS MANUFACTURED BY THE ALLIED TUBE AND CONDUIT CORPORATION OR APPROVED EQUAL. CONDUIT SHALL BE SHERARDIZED OR HOT-DIP GALVANIZED INSIDE AND OUTSIDE INCLUDING ENDS AND THREADS AND ENAMELED OR LACQUERED INSIDE IN ADDITION TO GALVANIZING.
- D. WHEN PVC CONDUITS PENETRATE CONCRETE FLOOR CONSTRUCTION, CONTRACTOR SHALL USE RIGID STEEL ELBOWS AND EXTENSION. PVC CONDUIT/FITTINGS SHALL NOT BE PERMITTED TO BE EXPOSED ABOVE THE
- E. THIN WALL TUBING SHALL BE REPUBLIC "ELECTRUNITE E.M.T." OR APPROVED EQUAL. SHALL BE INSTALLED INDOORS.

- F. ALL FITTINGS SHALL BE OF THE COMPRESSION TYPE AND SHALL BE
- G. CONDUIT FOR INTERIOR WIRING, IN GENERAL, SHALL BE THINWALL TUBING UNLESS OTHERWISE NOTED.
- H. RACEWAYS SHALL BE CONTINUOUS FROM OUTLET TO OUTLET AND FITTING TO FITTING. A RUN OF CONDUIT BETWEEN OUTLETS OR FITTINGS SHALL NOT CONTAIN MORE THAN THE EQUIVALENT OF FOUR QUARTER-BENDS INCLUDING THOSE BENDS LOCATED IMMEDIATELY AT THE OUTLET OR FITTING. THE RADIUS OF BENDS SHALL NEVER BE SHORTER THAN THAT OF THE CORRESPONDING TRADE ELBOW. THE SYS-TEM SHALL BE COMPLETE WITH OUTLETS, DISTRIBUTION BOXES, ETC., SMOOTH INSIDE AND MECHANICALLY SECURE IN PLACE. APPROVED STRAPS, HANGERS, OR SUPPORTS SHALL BE USED TO SECURE CONDUITS IN PLACE. CONDUITS SHALL, IN GENERAL, BE SUPPORTED AT INTERVALS NOT EXCEEDING 10'-0" AND WITHIN 3'-0" OF EACH OUTLET BOX, JUNCTION BOX, CABINET OR FITTING.
- CONDUITS SHALL BE PROTECTED DURING CONSTRUCTION; PLUG AND KEEP CLEAN AND DRY. CONDUIT ENDS SHALL BE BUTTED IN CENTERS OF COUPLINGS. NO CRACKS OR FLATTENED SECTIONS WILL BE PERMITTED AT BENDS OR ELSEWHERE. ALL ENDS OF CONDUIT SHALL BE REAMED TO REMOVE ROUGH EDGES. RUNNING THREADS WILL NOT BE PERMITTED.
- CONDUITS SHALL BE CONCEALED WITHIN THE WALLS, CEILINGS, AND FLOORS WHERE POSSIBLE AND UNLESS OTHERWISE NOTED. EXPOSED CONDUIT SHALL BE RUN PARALLEL TO OR AT RIGHT ANGLES WITH THE BUILD- ING

18. WIRE AND CABLE:

- A. WIRE AND CABLE SHALL BE AMERICAN INSULATED WIRE CORP., GENERAL CABLE CORP., SENATOR WIRE AND CABLE CORP. SOUTHWIRE OR APPROVED EQUAL. OF SIZES AS SHOWN ON THE DRAWINGS OR HEREIN SPECIFIED.
- B. ALL CONDUCTORS SHALL BE COPPER.
- C. NO. 10 AWG AND SMALLER CONDUCTORS SHALL BE SOLID WITH INSULATION AND NO. 8 AWG AND LARGER CONDUCTORS SHALL BE STRANDED WITH TYPE THHN/THWN INSULATION EXCEPT THAT CONDUCTORS WITHIN 3 INCHES OF LIGHT FIXTURE BALLASTS SHALL HAVE RHH, THHN, OR EQUAL INSULATION RATED FOR 90 DEGREES C. APPLICATION.



REV. NO.	DATE	REVISIONS DESCRIPTION	
		REVISIONS	

SHEET

drawing no.: E_NDET_B02104157