## FINAL DEVELOPMENT PLANS FOR

# MID-CONTINENT LIBRARY LEE'S SUMMIT BRANCH

150 SOUTH WEST OLDHAM PKWY NE 1/4 OF SECTION 1, TOWNSHIP 47 NORTH, RANGE 32 WEST LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

## **UTILITY COMPANIES AND GOVERNING AGENCIES:**

## CITY OF LEE'S SUMMIT. PUBLIC WORKS:

ENGINEERING 220 SE GREEN LEE'S SUMMIT, MO 64063 816.969.1800

CITY OF LEE'S SUMMIT, CITY HALL:

220 SE GREEN LEE'S SUMMIT, MO 64063 816.969.1000

CITY OF LEE'S SUMMIT, FIRE CHIEF:

207 SE DOUGLAS LEE'S SUMMIT, MO 64063 816.969.7407

CITY OF LEE'S SUMMIT, POLICE CHIEF: 10 NE TUDOR

LEE'S SUMMIT, MO 64086 816.969.1700

WATER UTILITIES:

1200 SE HAMBLEN ROAD LEE'S SUMMIT, MO 64081 816.969.1900

**BUILDING INSPECTIONS** 

220 SE GREEN LEE'S SUMMIT, MO 64063 816.969.1200

## OWNER & DEVELOPER

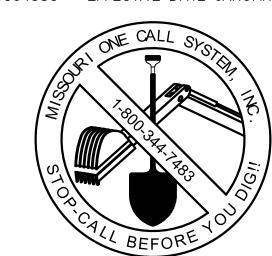
MID CONTINENT PUBLIC LIBRARY DISTRICT NO 3 15616 E US HWY 24 INDEPENDENCE MO 64050-2057

## ENGINEER

TERRY PARSONS OLSSON 7301 W. 133RD STREET SUITE 200 OVERLAND PARK, KS 66213 PHONE: 913.381.1170 EMAIL: tparsons@olsson.com

ACCORDING TO MDNR STATE OIL & GAS COUNSEL THERE ARE NO OIL AND GAS WELLS LOCATED WITHIN OR ADJACENT TO THE PROPERTY.

THE ENTIRE PROPERTY IS DESIGNATED "ZONE X - AREA OF MINIMAL FLOOD HAZARD" AS DEFINED BY FEMA PANEL 29095C0438G - EFFECTIVE DATE JANUARY 20, 2017



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.

## POWER COMPANY:

8700 EAST FRONT STREET KANSAS CITY., MO 64120 816.471.5275

GAS COMPANY: SPIRE GAS

3025 S.E CLOVER ST LEES SUMMIT, MO 64082 816.756.5252

## **TELEPHONE:**

DARRIN SHEPARD 816.275.3825 ds616h@att.com

CABLE/FIBER: SPECTUM 877.772.2253

GOOGLE FIBER 877.454.6959



## **BENCHMARKS**

OA Bench Mark #1: ELEVATION=973.75' (NAVD'88) SET PUNCH MARK IN CHISELED "-" CUT ON THE TOP EAST SIDE OF A CONCRETE BASE FOR A LIGHT POLE, FIRST LIGHT POLE EAST OF THE ENTRANCE TO GENESIS GYM. 205'± WNW OF THE NW CORNER OF THE MID-CONTINENT PUBLIC LIBRARY, 340' ENE OF THE SOUTH CORNER OF GOODYEAR TIRE STORE.

OA Bench Mark #2: ELEVATION=952.38' (NAVD'88) SET CHISELED "X" CUT ON TOP OF CURB ON THE NORTH SIDE OF A CONCRETE CURB ISLAND, WEST OF EQUITY BANK BUILDING. 213'± EAST OF THE EAST FACE OF THE MID-CONTINENT PUBLIC LIBRARY, 22' EAST OF THE & OF MCCLENDON DRIVE.

## **LEGAL DESCRIPTION:**

LIBRARY PROPERTY MID-CONTINENT ADD TRACT A JACKSON COUNTY, MISSOURI, CONTAINING 70,306 SQUARE FEET OR 1.6140 ACRES, MORE OR LESS.

SHOPPING CENTER PROPERTY SUMMIT SHOPPING CENTER LOT 1 JACKSON COUNTY, MISSOURI, CONTAINING 722,033 SQUARE FEET OR 16.5756 ACRES, MORE OR LESS.

C1.0	COVER SHEET
C1.1	GENERAL NOTES
C1.2	DEMOLITION PLAN
C2.0	SITE DIMENSION PLAN
C3.0	GRADING PLAN
C3.1	GRADING DETAILS
C3.2	GRADING DETAILS
C3.3	GRADING DETAILS
C3.4	GRADING DETAILS
C4.0	UTILITY PLAN
C5.0	STORM SEWER PLAN & PROFILE
C5.1	STORM SEWER PLAN & PROFILE
C5.2	STORM SEWER PLAN & PROFILE
C5.3	STORM SEWER PLAN & PROFILE
C5.4	STORM SEWER PLAN & PROFILE
C6.0	DRAINAGE PLAN
C6.1	DRAINAGE CALCULATIONS
C7.1	EROSION CONTROL PLAN
C7.2	EROSION CONTROL DETAILS
C7.3	EROSION CONTROL DETAILS
C8.0	STANDARD DETAILS
C8.1	STANDARD DETAILS
C8.2	STANDARD DETAILS
C8.3	STANDARD DETAILS
C8.4	STANDARD DETAILS
C8.5	STANDARD DETAILS

Sheet List Table

Sheet Title

ACCORDING TO MDNR STATE OIL & GAS COUNSEL THERE ARE NO OIL AND GAS WELLS LOCATED WITHIN OR ADJACENT TO THE PROPERTY.

THE ENTIRETY OF THE SITE LIES WITHIN ZONE X - AREA OF MINIMAL FLOOD HAZARD PER FEMA PANEL 290174 (CITY OF LEE'S SUMMIT, MO)



RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES 10/21/2021



SW 3rd Street Section 01, T47N, R32W

VICINITY MAP

Scale: 1" = 2000'

B18-0330 10.12.2020

Overland Park, KS 66213

TEL 913.381.1170

FAX 913.381.1174

www.olsson.com

Springfield, MO 65804

Kansas City, MO 64108

Helix Architecture + Design

Sapp Design Associates Architects, P.C. Missouri State Certificate of Authority #000607

**helix** 

Missouri State Certificate of Authority #000720

SPECIAL NOTICES

esign professional, the client recognizes that such changes and the

nanges. In addition, the client agrees to the fullest extent permitte ny damage, liability or cost (including reasonable attorney's fees a

wner of the seal shall authenticate this sheet and the specification ections pertaining to this sheet. Responsibility shall be disclaimed

ocuments or instruments relating to or intended to be used for any

150 NW EE'S SU JACK

**COVER SHEET** 

Missouri State Certificate of Authority #001592

TERRY M. PARSONS

NUMBER

PE-2018010505

Terry M Parsons, Engineer MO PE-2018010505

ovright 2019 - Sapp Design Associates, Architects, P.C.



- 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
- 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 FULFILL THE 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.
- ALL CONSTRUCTION SHALL CONFORM TO THE LATEST STANDARDS AND SPECIFICATIONS OF THE AMERICAN PUBLIC WORKS ASSOCIATION KANSAS CITY METROPOLITAN CHAPTER (APWA-KC) AND THE CITY OF LEE'S SUMMIT. MO. EXCEPT WHERE SHOWN OTHERWISE, NOTIFY ENGINEER OF DISCREPANCIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS, PAYING ALL FEES AND FOR OTHERWISE COMPLYING WITH ALL APPLICABLE REGULATIONS GOVERNING THE
- 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.
- 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 LIMIT THE REMOVAL OF TREES TO THE LIMITS OF DEMOLITION SHOWN ON THE DEMOLITION PLAN.
- 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 MANHOLES, CATCH BASINS, UTILITY VALVES AND METER PITS ARE TO BE ADJUSTED OR REBUILT TO GRADE AS REQUIRED.
- 13. 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.
- 14. 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.
- 15. 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. REFER TO THE GEOTECHNICAL REPORT PROVIDED BY CFS ENGINEERS, PROJECT NO. 20—1074 AND
- DATED JUNE 8, 202 AND ALL ADDENDUMS FOR ADDITIONAL REQUIREMENTS.
- 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. 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.
- 22. 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 GÓVERNMENT
- 23. THE CONTOUR LINES SHOWN ARE FOR MASS GRADING PURPOSES.
- 24. EXISTING CONTOURS REPRESENT MASS FINISH GRADE ELEVATIONS.
- 25. THE CONTRACTOR SHALL FINISH GRADE SLOPES AS SHOWN NO STEEPER THAN 1 FOOT VERTICAL IN 3 FEET HORIZONTAL UNLESS OTHERWISE SHOWN BY CONTOURS OR SPOT ELEVATIONS.
- 26. THE CONTRACTOR SHALL GRADE LANDSCAPED AREAS TO PROVIDE POSITIVE DRAINAGE IN THE BORROW AREA.
- 27. 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 CONTRACTORS' BID.
- 28. 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.
- 29. BY ACCEPTING AND UTILIZING ANY ELECTRONIC FILE OF ANY DRAWING, REPORT OR DATA TRANSMITTED BY OLSSON (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
- 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.
- GENERAL CONSTRUCTION NOTE REGARDING SEQUENCING OF EROSION CONTROL ALL PERIMETER SILT FENCE, EARTH DIKES, SEDIMENT BASINS, AND ROCK CONSTRUCTION ENTRANCES WILL BE INSTALLED BEFORE GRADING OPERATIONS BEGIN, EXCEPT THAT SILT FENCE WHICH IS TO BE PLACED ALONG THE BACK OF CURB FOR PROTECTION OF THE STREET. SILT FENCE AND EARTH DIKES THAT ARE PLACED BEFORE GRADING BEGINS WILL BE MAINTAINED BY THE GRADING CONTRACTOR UNTIL ALL UTILITIES ARE IN PLACE. THE SILT FENCE THAT IS PLACED ALONG THE BACK OF THE CURB OR RIGHT -OF-WAY WILL BE INSTALLED IMMEDIATELY AFTER THE CURB IS CONSTRUCTED. EROSION AND SEDIMENTATION CONTROLS ARE TEMPORARY AND MUST BE REMOVED BY THE CONTRACTOR AFTER CONSTRUCTION IS COMPLETE AND THE DISTURBED AREA IS AT LEAST 70% PERMANENTLY VEGETATED.
- 32. HANDICAP PARKING STALLS SHALL BE SIGNED WITH CITY/ADA APPROVED SIGNAGE AND CONSTRUCTED IN STRICT ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF THE APWA-KC, CITY OF LEE'S SUMMIT 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.
- 33. ALL WATER LINES SHALL BE INSTALLED PER THE LATEST STANDARDS AND SPECIFICATIONS OF THE APWA-KC AND THE CITY OF LEE'S SUMMIT, MO. ALL WATER LINES SHALL BE A MINIMUM OF 48 INCHES BELOW THE FINISHED GRADE ELEVATIONS SHOWN HEREIN.
- 34. ALL WATER LINES SHALL BE INSTALLED PER CITY STANDARDS. ALL WATER LINES SHALL BE A MINIMUM OF 48 INCHES BELOW THE FINISHED GRADE ELEVATIONS SHOWN HEREIN.
- 35. ALL EXTERIOR CONCRETE SHALL BE KCMMB-4K AND HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI, SHALL MEET KCMMB STANDARDS AND SPECIFICATIONS, AND SHALL BE AIR ENTRAINED. FLYASH IS NOT A SUITABLE REPLACEMENT FOR PORTLAND CEMENT.
- 36. ALL ON-SITE WIRING AND CABLES SHALL BE PLACED UNDERGROUND.
- 37. CONCRETE PAVEMENT JOINTS SHALL BE CONSTRUCTED AS FOLLOWS (REFER TO HARDSCAPE PLANS FOR SPECIFIC TREATMENT OF THESE AREAS):
- A. CONTROL JOINTS SPACED AT INTERVALS NOT GREATER THAN 12 FEET AND TOOLED TO 1/3 THE SLAB THICKNESS. B. CONSTRUCTION JOINTS AT THE END OF EACH POUR AND WHEN PAVING OPERATIONS ARE SUSPENDED FOR 30 MINUTES OR MORE.
- C. ISOLATION JOINTS PLACED WHERE THE PAVEMENT ABUTS THE BUILDING, DRAINAGE STRUCTURES AND OTHER FIXED STRUCTURES, CONSTRUCTED WITH A 1/2" NONEXTRUDING FILLER,
- CLOSED-CELL FOLSSONM RUBBER OR A BITUMEN-TREATED FIBER-BOLSSONRD, AND WITH A THICKENED EDGE, INCREASED BY 20 PERCENT, TAPERED TO THE REGULAR THICKNESS IN 5 FEET. D. ALL EXPANSION JOINTS SHALL BE FILLED AND SEALED WITH A PLASTIC JOINT SEALANT MATERIAL.
- 35. 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. 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 THEIR INTERACTIONS.
- 37. EXISTING TOPSOIL SHALL BE STRIPPED TO A POINT WHERE ALL VEGETATION IS REMOVED. REFER TO THE GEOTECHNICAL REPORT PROVIDED BY OLSSON DATED 01/09/2019 AND ALL ADDENDUMS.
- 38. SITE PREPARATION, GRADING AND EXCAVATION PROCEDURES SHALL CONFORM TO THE RECOMMENDATIONS AS OUTLINED IN THE GEOTECHNICAL REPORT PREPARED BY OLSSON DATED 01/09/2019 AND ALL ADDENDUMS.
- 39. ALL SIGNS MUST COMPLY WITH THE SIGN REQUIREMENTS AS OUTLINED IN THE SIGN SECTION OF THE UDO OR AS APPROVED ON THESE PLANS, SIGNS WILL BE REVIEWED AND PERMITTED UNDER SEPARATE APPLICATION.

## **GENERAL UTILITY NOTES**

- 39. THE SIZE AND LOCATION OF SERVICES SHALL BE VERIFIED WITH THE ARCHITECTURAL AND MEP PLANS PRIOR TO CONSTRUCTION. IF DISCREPANCIES EXIST, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
- 40. IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING SLEEVING UNDER PAVING AREAS WHERE NECESSARY
- 41. INSTALL ALL PIPE LENGTHS, BENDS AND FITTINGS NECESSARY FOR UTILITY CONNECTIONS.
- 42. CONTRACTOR SHALL VERIFY ALL CROSSING ELEVATIONS AND LOCATIONS, SIZES, AND ELEVATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION OF STORM LINES AND ALL UTILITY SERVICE CONNECTIONS. ANY CONFLICTS SHALL BE MADE KNOWN TO THE ENGINEER AND RESOLVED PRIOR TO CONSTRUCTION.
- 43. CONTRACTOR TO VERIFY FIRE SERVICE SIZE WITH SPRINKLER DESIGNER/CONTRACTOR PRIOR TO CONSTRUCTION AND INSTALLATION OF METER/BACKFLOW PREVENTER AND SERVICES. NOTIFY ENGINEER OF ALTERATIONS.
- 44. CONTRACTOR RESPONSIBLE FOR PAYING ALL TAP AND CONNECTION FEES AND SHALL CONTRACT AND PAY FOR ANY REQUIRED SUB CONTRACTORS BY UTILITY COMPANIES.
- 45. REFERENCE MEP PLANS FOR BUILDING CONNECTIONS.
- 46. CONTRACTOR TO REPAIR ALL AREA DAMAGED BY CONSTRUCTION TO EXISTING CONDITIONS OR BETTER
- 47. BACK FLOW PREVENTION TO BE PROVIDED INSIDE BUILDING. SEE MEP AND ARCHITECTURAL PLANS FOR DETAILS.
- 48. LOCATION FOR POWER SHOWN IS APPROXIMATE AND SUBJECT TO CHANGE. CONTRACTOR TO VERIFY FINAL LOCATION AND DESIGN WITH UTILITY COMPANY PRIOR TO CONSTRUCTION.
- 49. CONTRACTOR TO COORDINATE LIGHT POLE LOCATIONS WITH OWNER, STORM SEWER INSTALLATION AND UTILITY COMPANIES PRIOR TO INSTALLATION TO AVOID CONFLICTS. NOTIFY ENGINEER AND ARCHITECT OF ANY CONFLICTS PRIOR TO INSTALLATION.
- 50. WATER METER CANNOT BE INSTALLED IN THE BUILDING
- 51. CONTRACTOR SHALL COORDINATE CABLE/FIBER OPTIC CONDUIT AND SERVICE INSTALLATION WITH UTILITY COMPANY.
- 52. ALL TAPS AND CONNECTIONS FOR FIRE AND DOMESTIC WATER SERVICES ARE TO BE IN ACCORDANCE WITH THE CITY OF LEE' SUMMIT. MO. STANDARDS AND SPECIFICATIONS.
- 53. CONTRACTOR TO COORDINATE POWER ROUTING TO MONUMENT SIGNS NOT SHOWN ON PLANS.
- 54. ALL ROOF DRAIN AND DOWNSPOUT HEADER PIPES SHALL BE 12" HDPE PIPE AND INSTALLED AT 1.00% MINIMUM SLOPE UNLESS OTHERWISE NOTED WITHIN THIS PLAN. ALL BENDS AND FITTINGS NEEDED TO BUILD ROUTING AS SHOWN SHALL BE INCLUDED IN BID.
- 55. CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY FITTINGS TO COMPLETE ROOF DRAIN AND DOWNSPOUT CONNECTIONS TO BUILDINGS. ALL ROOF DRAIN AND DOWNSPOUT CONNECTIONS / FITTINGS, INCLUDING BUT NOT LIMITED TO BENDS AND TEES. SHALL BE MADE OF HDPE PIPE UNLESS OTHERWISE NOTED WITHIN THIS PLAN

## 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 PRIOR TO INSTALLING PAVEMENT MARKINGS.
- 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.

**RELEASE FOR** 

CONSTRUCTION **AS NOTED ON PLANS REVIEW** 

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

ACCORDING TO MDNR STATE OIL & GAS COUNSEL THERE ARE NO OIL AND GAS WELLS LOCATED WITHIN OR ADJACENT TO THE PROPERTY.

THE ENTIRE PROPERTY IS DESIGNATED "ZONE X — AREA OF MINIMAL FLOOD HAZARD" AS DEFINED BY FEMA PANEL 29095C0438G -EFFECTIVE DATE JANUARY 20, 2017



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Sapp Design Associates Architects P.C. Missouri State Certificate of Authority #000607

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Missouri State Certificate of Authority #000720 SPECIAL NOTICES

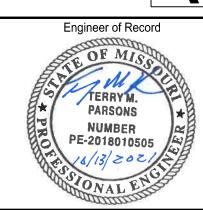
nanges to any plans, specifications or other construction esign professional, the client recognizes that such changes and the ults thereof are not the responsibility of the design profession herefore, the client agrees to release the design professional from hanges. In addition, the client agrees to the fullest extent permitte law, to indemnify and hold the design professional harmless from ny damage, liability or cost (including reasonable attorney's fees a

sts of defense) arising from such changes. gal equivalent of his signature whenever & wherever used, and the ctions pertaining to this sheet. Responsibility shall be disclaimed r all other plans, specifications, estimates, reports or other ocuments or instruments relating to or intended to be used for any rt or parts of the architectural project.

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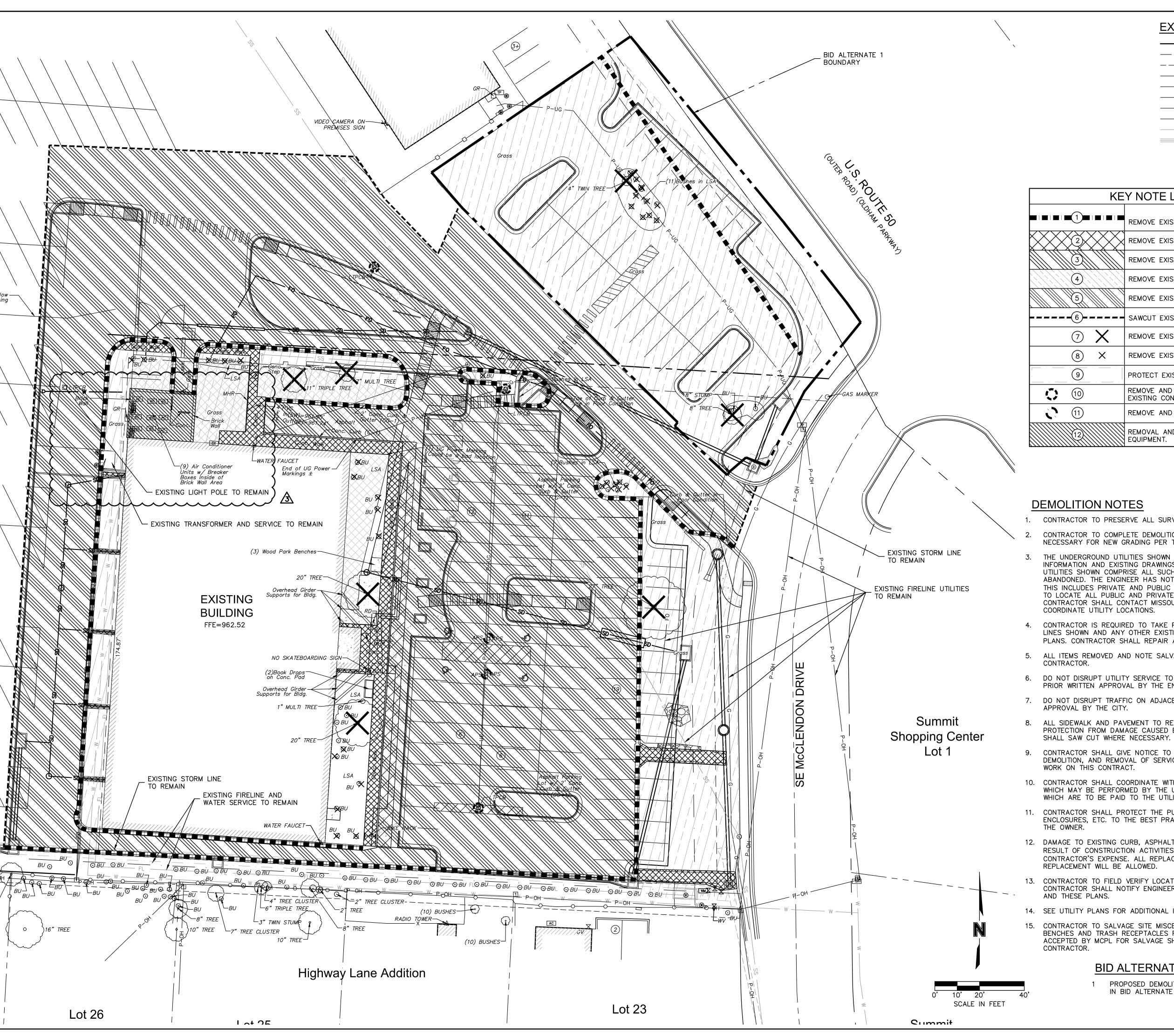
Terry M Parsons, Engineer MO PE-2018010505

'301 West 133rd Street, Suite 200 Overland Park, KS 66213 TEL 913.381.1170 FAX 913 381 1174 www.olsson.com

Missouri State Certificate of Authority #001592 evision No. |Description |Date

B18-0330 10.12.2020

**GENERAL NOTES** 



# **EXISTING CONDITIONS LEGEND**

---- EASEMENT LINES OVERHEAD ELECTRIC ----- UNDERGROUND ELECTRIC — UNDERGROUND TELEPHONE ----- UNDERGROUND FIBER OPTIC WATER LINE

STORM SEWER LINE

# OF EXISTING SPACES

**KEY NOTE LEGEND** REMOVE EXISTING CURB AND GUTTER REMOVE EXISTING CONCRETE REMOVE EXISTING ASPHALT REMOVE EXISTING LANDSCAPING REMOVE EXISTING SIDEWALK SAWCUT EXISTING PAVEMENT REMOVE EXISTING TREES REMOVE EXISTING SHRUBS PROTECT EXISTING STORM SEWER PIPE & STRUCTURE REMOVE AND SALVAGE EXISTING LIGHT POLES. CAP EXISTING CONNECTIONS. REMOVE AND SALVAGE EXISTING SIGNS

> CONSTRUCTION AS NOTED ON PLANS REVIEW **DEVELOPMENT SERVICES** LEE'S SUMMIT, MISSOURI

## **DEMOLITION NOTES**

- CONTRACTOR TO PRESERVE ALL SURVEY CONTROL.
- CONTRACTOR TO COMPLETE DEMOLITION PER THE INTENT OF THESE PLANS AND THAT

REMOVAL AND EQUIPMENT PAD AND SALVAGE

- 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 LOCATE ALL PUBLIC AND PRIVATE UTILITIES AND RELOCATE AS NECESSARY. CONTRACTOR SHALL CONTACT MISSOURI ONE CALL 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. CONTRACTOR SHALL REPAIR ALL UTILITIES DAMAGED AT CONTRACTOR'S EXPENSE.
- 5. ALL ITEMS REMOVED AND NOTE SALVAGED SHALL BE LEGALLY DISPOSED OFF SITE BY THE
- 6. DO NOT DISRUPT UTILITY SERVICE TO ADJACENT BUSINESSES OR RESIDENCES WITHOUT PRIOR WRITTEN APPROVAL BY THE ENGINEER OR OWNER.
- 7. DO NOT DISRUPT TRAFFIC ON ADJACENT PUBLIC STREETS WITHOUT PRIOR WRITTEN
- 8. ALL SIDEWALK AND PAVEMENT TO REMAIN SHALL BE PROTECTED IN PLACE INCLUDING PROTECTION FROM DAMAGE CAUSED BY REMOVAL OF ABUTTING PAVEMENT. CONTRACTOR
- 9. 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.
- 10. 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.
- 11. CONTRACTOR SHALL PROTECT THE PUBLIC AT ALL TIME WITH FENCING, BARRICADES, ENCLOSURES, ETC. TO THE BEST PRACTICES AND AS APPROVED BY THE ENGINEER AND
- 12. DAMAGE TO EXISTING CURB, ASPHALT, CONCRETE PAVING OR STORM STRUCTURES AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE REPLACED AND/OR REPAIRED AT CONTRACTOR'S EXPENSE. ALL REPLACEMENT SHALL BE JOINT TO JOINT. NO PARTIAL REPLACEMENT WILL BE ALLOWED.
- 13. CONTRACTOR TO FIELD VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES BETWEEN FIELD CONDITIONS
- 14. SEE UTILITY PLANS FOR ADDITIONAL INFORMATION.
- 15. CONTRACTOR TO SALVAGE SITE MISCELLANEOUS SITE ITEMS SUCH AS EQUIPMENT, , SIGNS, BENCHES AND TRASH RECEPTACLES FOR USE BY MCPL IN FUTURE CONDITIONS. ITEMS NOT ACCEPTED BY MCPL FOR SALVAGE SHALL BE PROPERLY DISPOSED OF BY THE

## **BID ALTERNATE**

PROPOSED DEMOLITION WITHIN THIS BOUNDARY SHALL BE INCLUDED IN BID ALTERNATE 1.

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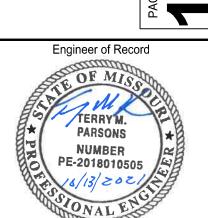
SPECIAL NOTICES

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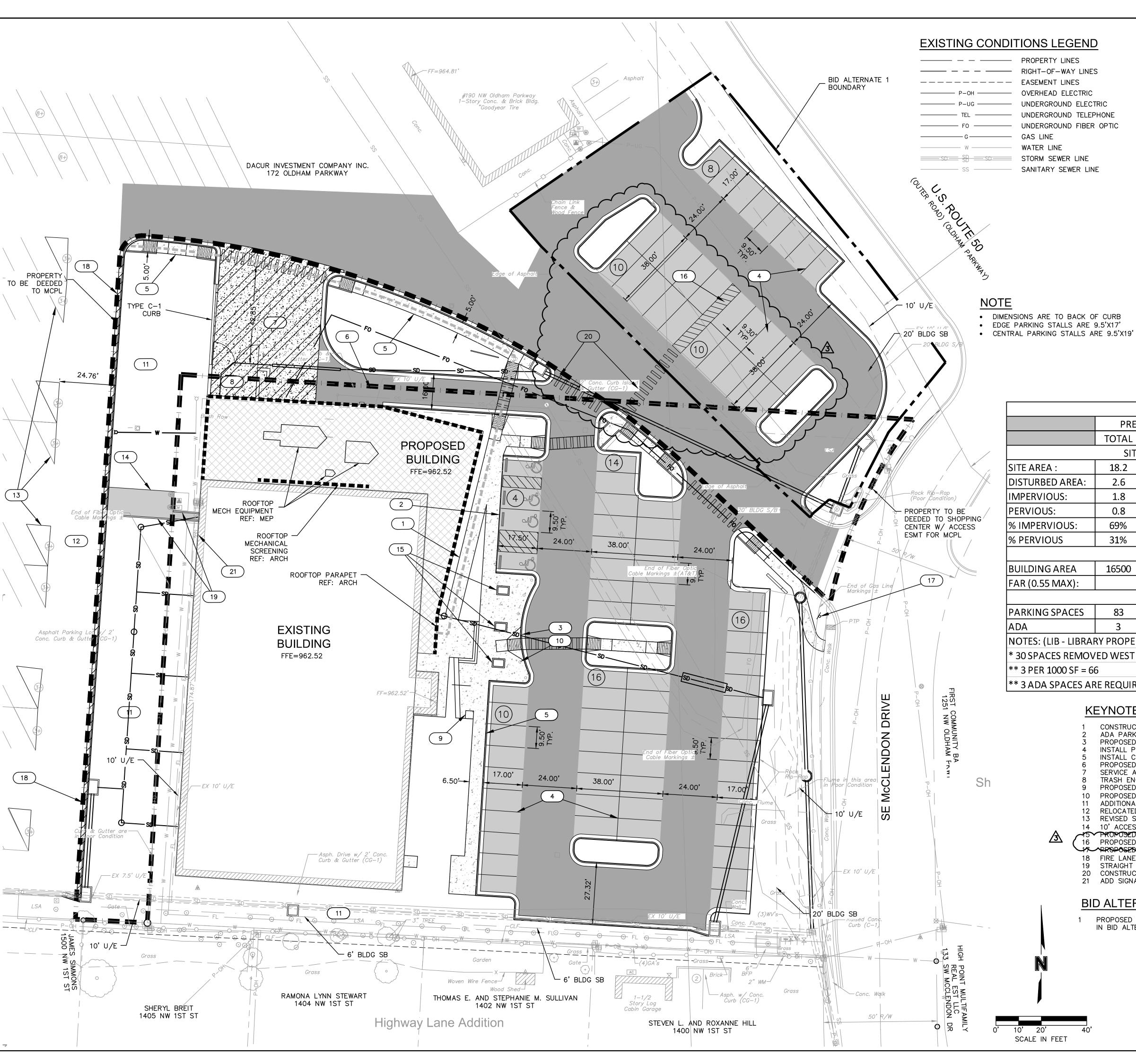
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08.30.21

**DEMOLITION PLAN** 



## PROPOSED CONDITIONS LEGEND

PROPOSED UNDERGROUND ELECTRIC

PROPOSED FIBER OPTIC - W ---- PROPOSED WATER LINE PROPOSED FIRE PROTECTION LINE SD PROPOSED STORM SEWER LINE PROPOSED TURF DRAIN LINE

PROPOSED SANITARY SEWER SERVICE — — PROPOSED AGGREGATE PATH

TYPE CG-1 CONCRETE CURB &

PROPOSED CONCRETE PAVEMENT (SIDEWALK)

PROPOSED PCC (PORTLAND CEMENTPAVEMENT)

PROPOSED HEAVY DUTY ASPHALT PAVEMENT

PROPOSED LIGHT DUTY ASPHALT PAVEMENT

ADA PATH - SIDEWALKS NOT DELINEATED AS ADA PATHS MAY NOT BE ADA COMPLIANT.

ACCESSIBLE RAMP

\_\_\_\_\_

PROPOSED PARKING COUNT

CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

		SITE	DATA			
	PRE	CONSTRUC	TION	POST	CONSTRUC	CTION
	TOTAL	LIB	TOTAL	LIB	SC	
	SITE	AREA (AC)	) - ZONING	CP-2		
SITE AREA :	18.2	1.6	16.6	18.2	1.7	16.5
DISTURBED AREA:	2.6	1.6	0.9	2.6	1.7	0.9
IMPERVIOUS:	1.8	1.2	0.5	1.7	1.2	0.5
PERVIOUS:	0.8	0.4	0.4	0.9	0.5	0.4
% IMPERVIOUS:	69%	76%	58%	66%	72%	56%
% PERVIOUS	31%	24%	42%	34%	28%	44%
		RUII DING	ARFA (SF)			

		BUILDING	AREA (SF)			
BUILDING AREA	16500	16500	0	22600	22600	0
FAR (0.55 MAX):		23%			31%	
		PAR	KING			
PARKING SPACES	83	53	30*	96	68**	28
				_	# 114 114 114	_

NOTES: (LIB - LIBRARY PROPERTY, SC - SHOPPING CENTER PROPERTY)

\* 30 SPACES REMOVED WEST OF EXISTING LIBRARY, 28 SPACES WILL BE

\*\* 3 ADA SPACES ARE REQUIRED PER CITY TABLE

## **KEYNOTES:**

CONSTRUCT ADA ACCESSIBLE RAMP ADA PARKING STALL LAYOUT

PROPOSED DROP OFF ZONE INSTALL PAVEMENT STRIPING - TYPICAL. INSTALL CONCRETE SIDEWALK PROPOSED DRIVE THRU WINDOW AND LANE

SERVICE AREA TRASH ENCLOSURE PROPOSED BOOK DROP-OFF PROPOSED BOLLARD (TYPICAL)

ADDITIONAL GREEN SPACE RELOCATED DRIVE LANE 13 REVISED STRIPING IN EXISTING LOT 14 10' ACCESS ASPHALT LANE FOR TRANSFORMER

45 PROPOSED PLANTERS 16 PROPOSED STRIPED ISLAND 17 PROPOSED STOP SIGN

18 FIRE LANE (RED CURB) - SEE FIRE SIGNAGE AND MARKING NOTE

19 STRAIGHT BACK CURB FOR FLUME FOR SPRINKLER DRAIN 20 CONSTRUCT SPEED TABLE AT PEDESTRIAN CROSSING PER DETAIL ON C8.1

21 ADD SIGNAGE TO EXISTING FDC - SEE FIRE SIGNAGE AND MARKING NOTE

## **BID ALTERNATE**

PROPOSED IMPROVEMENTS WITHIN THIS BOUNDARY SHALL BE INCLUDED IN BID ALTERNATE 1.

> FIRE SIGNAGE AND MARKING NOTE: Where required by the fire code official, approved signs or other approved notices or markings that include the words NO PARKING—FIRE LANE shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. The means by which fire lanes are designated shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

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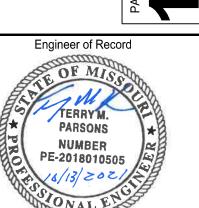
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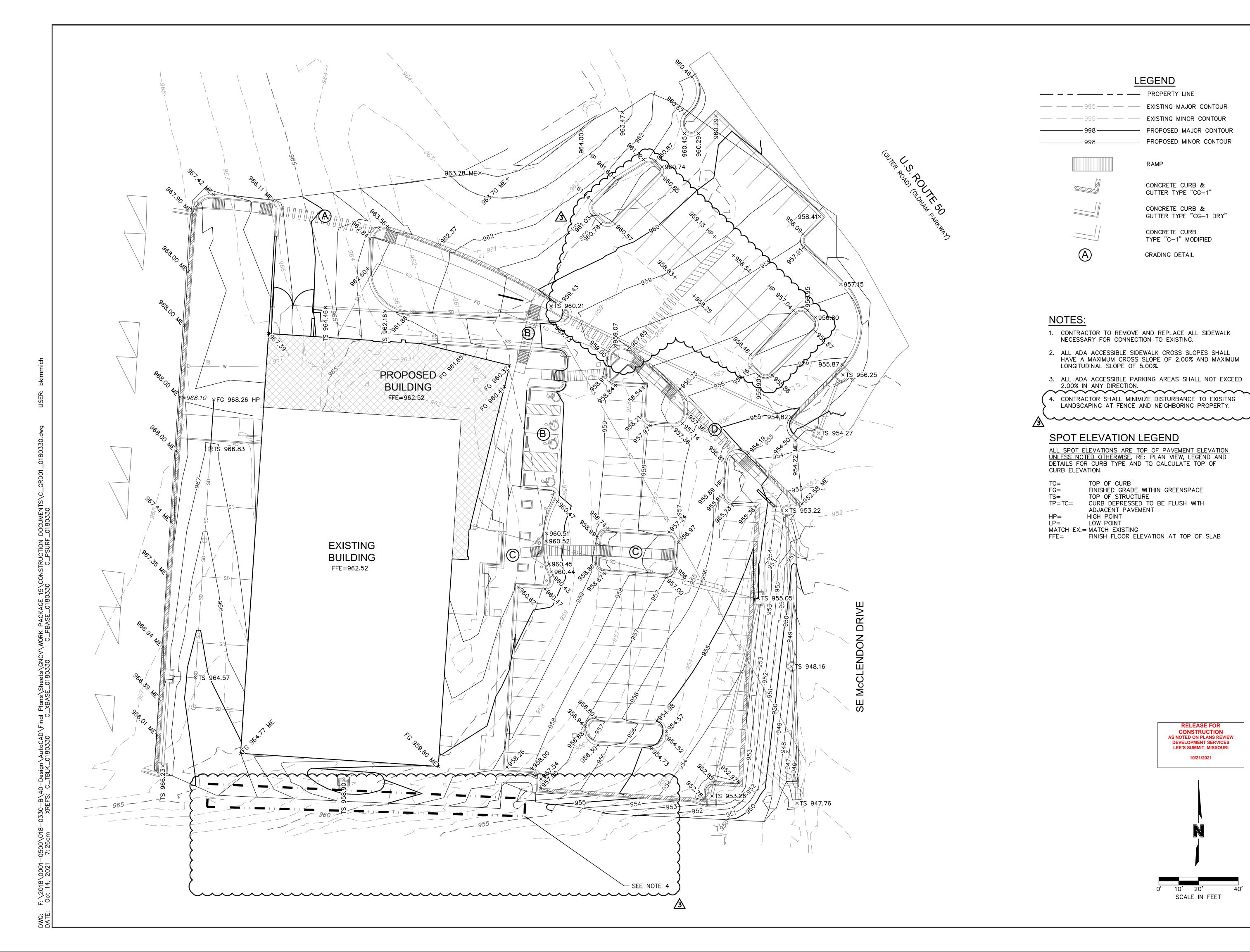


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Overland Park, KS 66213 TEL 913.381.1170 FAX 913.381.1174 www.olsson.com

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Springfield, MO 65804 417.877.9600

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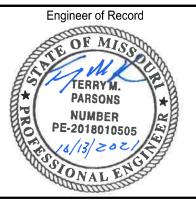
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Terry M Parsons, Engineer MO PE-2018010505

7301 West 133rd Street, Suite 200 Overland Park, KS 66213 TEL 913.381.1170

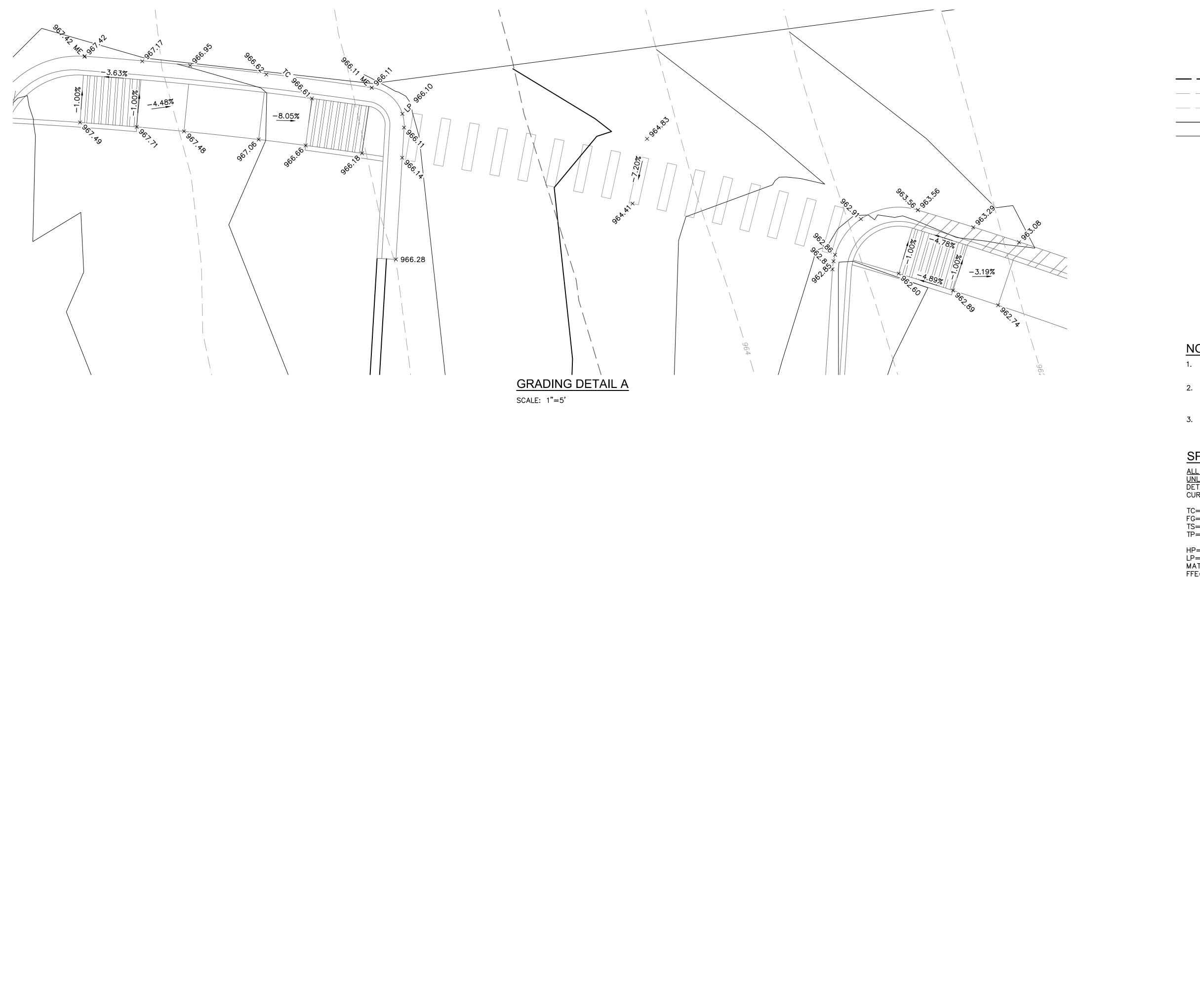
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B18-0330 10.12.2020

**GRADING PLAN** 

byright 2019 - Sapp Design Associates, Architects, P.C.



## **LEGEND**

--- PROPERTY LINE -995--- EXISTING MAJOR CONTOUR EXISTING MINOR CONTOUR PROPOSED MAJOR CONTOUR PROPOSED MINOR CONTOUR RAMP CONCRETE CURB &

GUTTER TYPE "CG-1" CONCRETE CURB & GUTTER TYPE "CG-1 DRY"

CONCRETE CURB TYPE "C-1" MODIFIED

## NOTES:

- 1. CONTRACTOR TO REMOVE AND REPLACE ALL SIDEWALK NECESSARY FOR CONNECTION TO EXISTING.
- 2. ALL ADA ACCESSIBLE SIDEWALK CROSS SLOPES SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.00% AND MAXIMUM LONGITUDINAL SLOPE OF 5.00%.
- 3. ALL ADA ACCESSIBLE PARKING AREAS SHALL NOT EXCEED 2.00% IN ANY DIRECTION.

## SPOT ELEVATION LEGEND

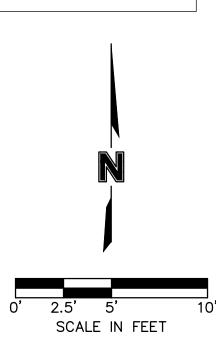
ALL SPOT ELEVATIONS ARE TOP OF PAVEMENT ELEVATION UNLESS NOTED OTHERWISE. RE: PLAN VIEW, LEGEND AND DETAILS FOR CURB TYPE AND TO CALCULATE TOP OF CURB ELEVATION.

TOP OF CURB FG= FINISHED GRADE WITHIN GREENSPACE TOP OF STRUCTURE CURB DEPRESSED TO BE FLUSH WITH

ADJACENT PAVEMENT HP= HIGH POINT LOW POINT

MATCH EX.= MATCH EXISTING FINISH FLOOR ELEVATION AT TOP OF SLAB

> RELEASE FOR CONSTRUCTION
> AS NOTED ON PLANS REVIEW
> DEVELOPMENT SERVICES
> LEE'S SUMMIT, MISSOURI



Sapp Design Associates Architects, P.C.
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1629 Walnut Kansas City, MO 64108

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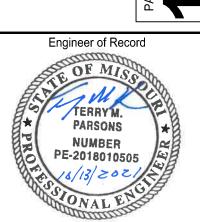
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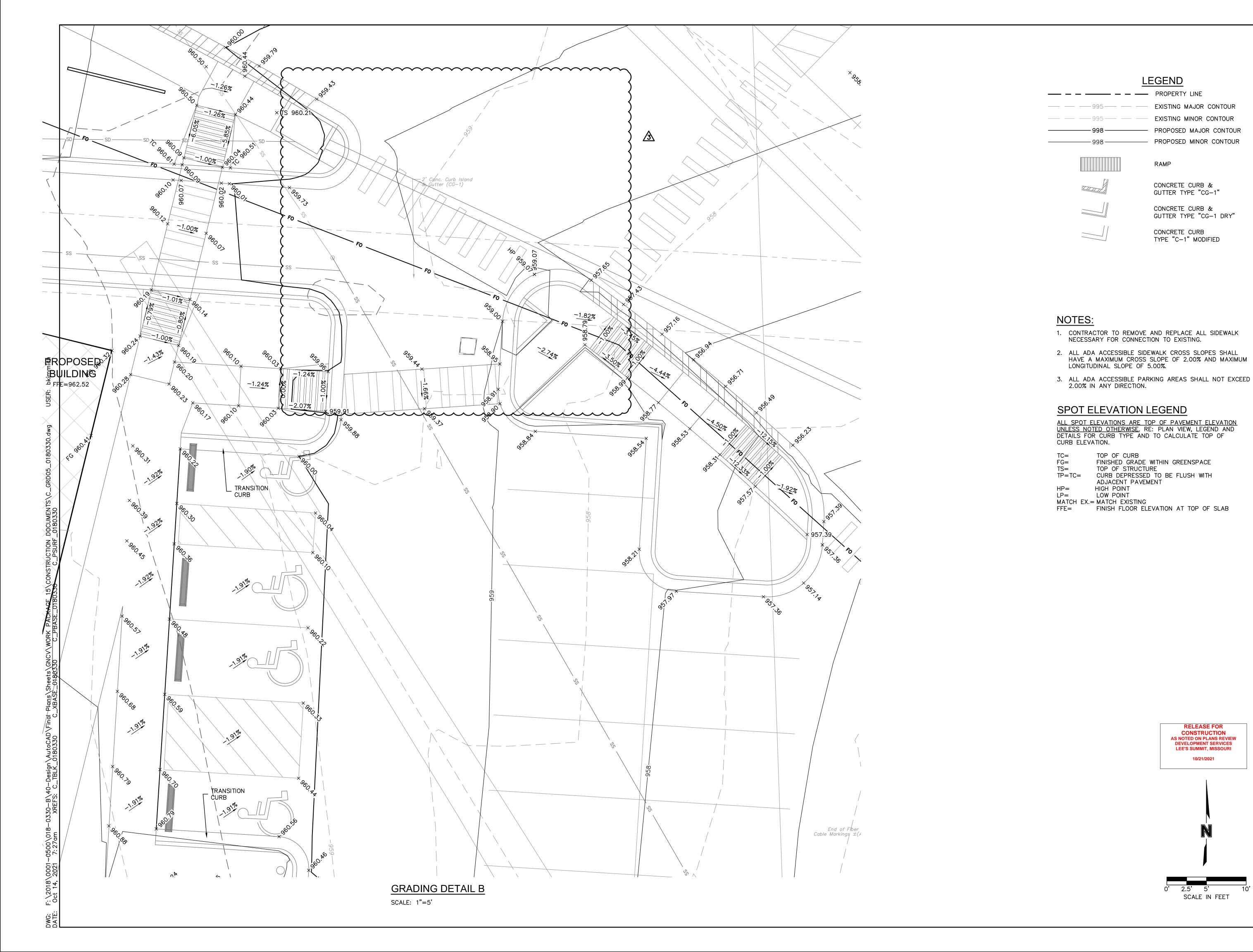
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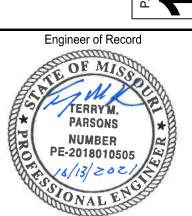
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**GRADING DETAILS** 

**LEGEND** 

PROPERTY LINE 995 — — EXISTING MAJOR CONTOUR EXISTING MINOR CONTOUR PROPOSED MAJOR CONTOUR PROPOSED MINOR CONTOUR

CONCRETE CURB & GUTTER TYPE "CG-1"

RAMP

CONCRETE CURB TYPE "C-1" MODIFIED

CONCRETE CURB & GUTTER TYPE "CG-1 DRY"

NOTES:

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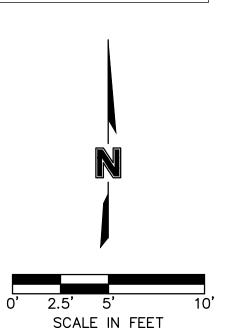
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TOP OF CURB FINISHED GRADE WITHIN GREENSPACE FG= TOP OF STRUCTURE CURB DEPRESSED TO BE FLUSH WITH ADJACENT PAVEMENT

HIGH POINT

MATCH EX.= MATCH EXISTING FINISH FLOOR ELEVATION AT TOP OF SLAB

> **RELEASE FOR** CONSTRUCTION
> AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI



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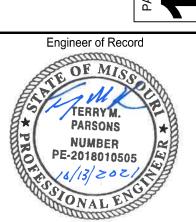
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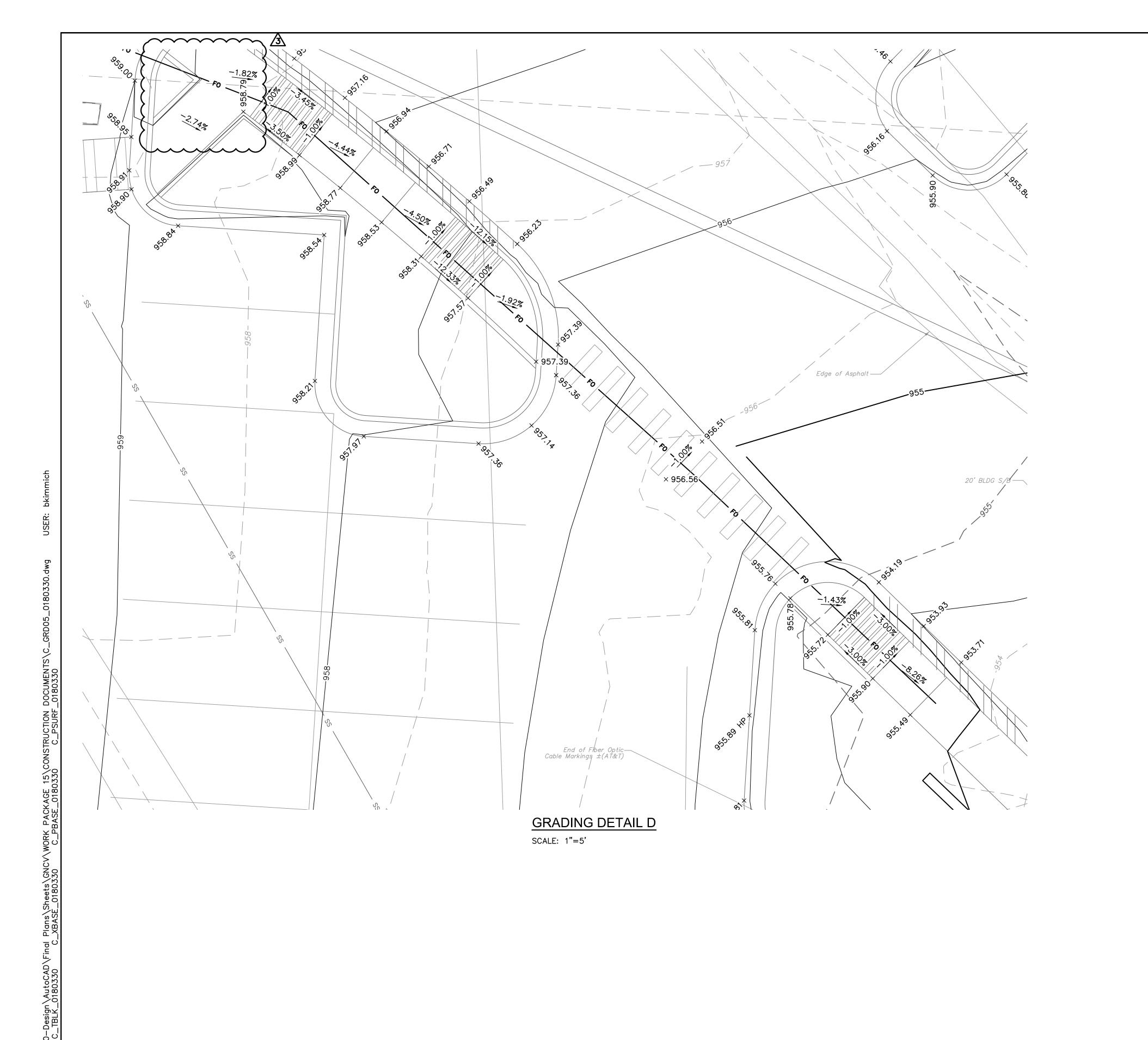
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## **LEGEND**

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TYPE "C-1" MODIFIED

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HIGH POINT

MATCH EX.= MATCH EXISTING FINISH FLOOR ELEVATION AT TOP OF SLAB





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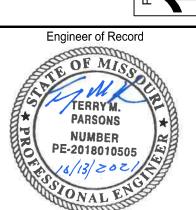
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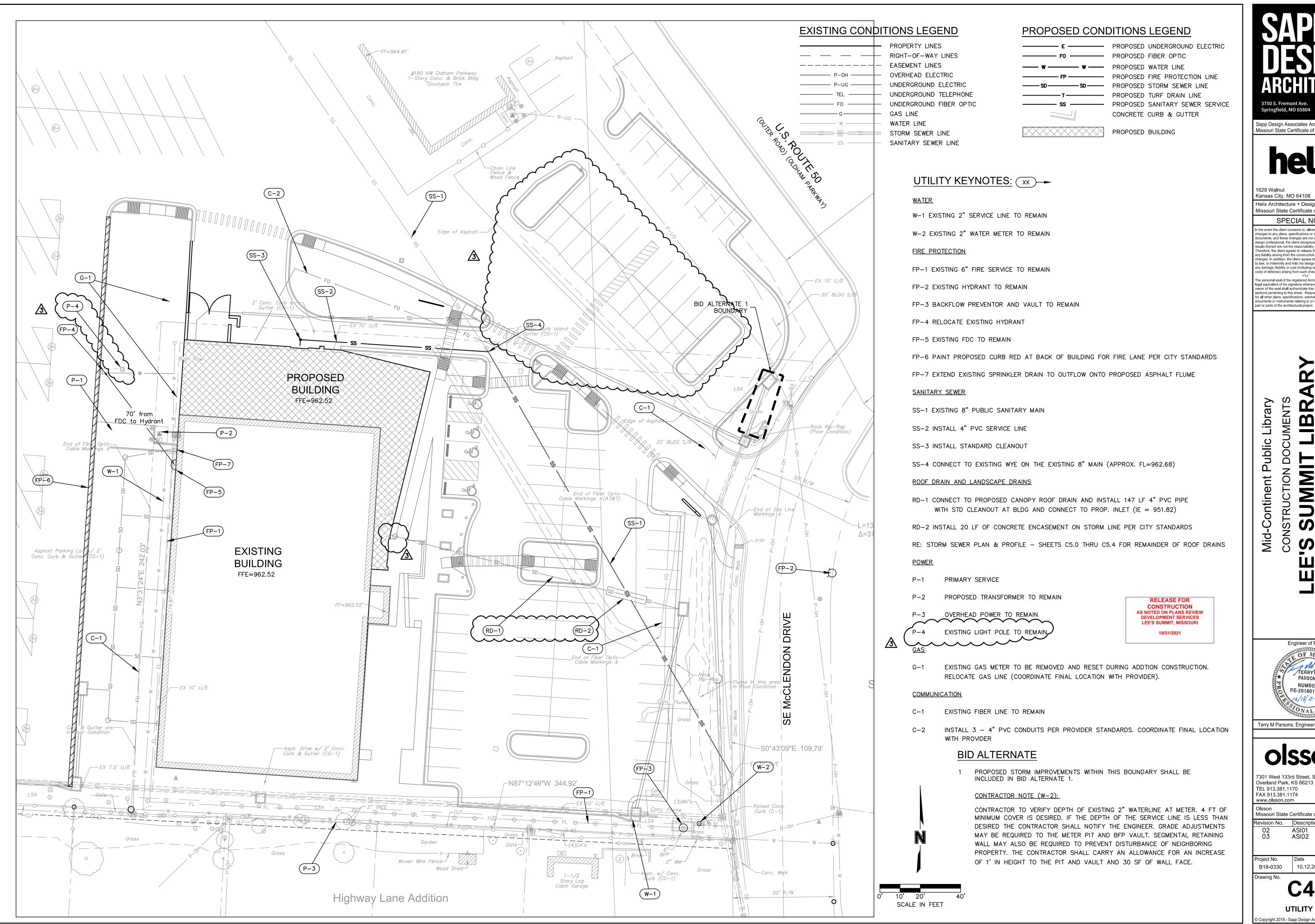
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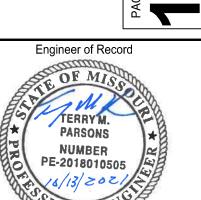
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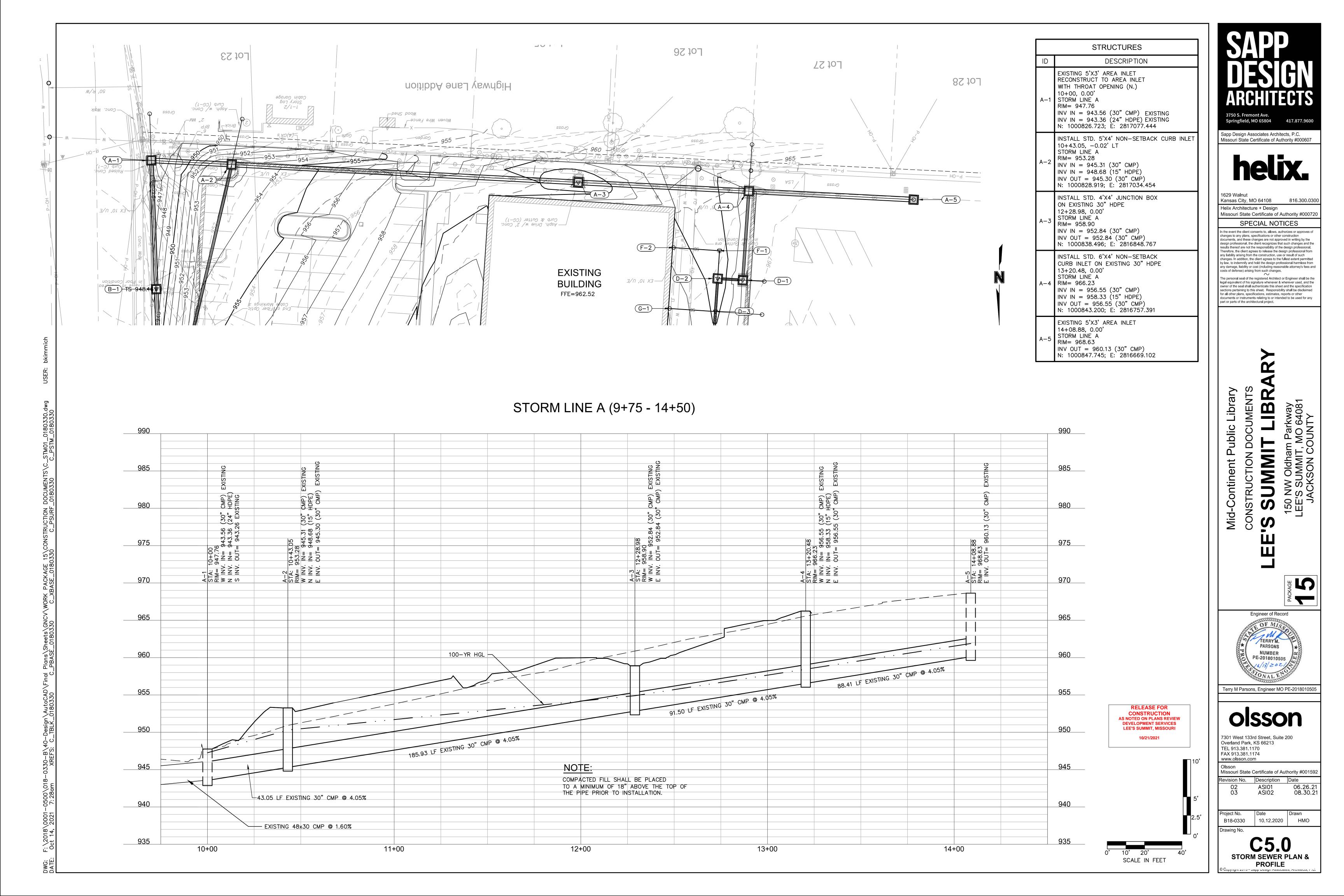
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**UTILITY PLAN** byright 2019 - Sapp Design Associates, Architects, P.C.



STORM LINE B (9+75 - 12+50)

100-YR HGL

69.01 LF 24" HDPE @ 1.00%

- EXISTING 48×30 CMP @ 1.60%

78.68 LF 24" HDPE @ 4.59%

COMPACTED FILL SHALL BE PLACED TO A MINIM 18" ABOVE THE TOP OF

THE PIPE PRIOR TO INSTALLATION.

NOTE:

11+00

	STRUCTURES
ID	DESCRIPTION
A-1	EXISTING 5'X3' AREA INLET RECONSTRUCT TO AREA INLET WITH THROAT OPENING (N.) 10+00, 0.00' STORM LINE A RIM= 947.76 INV IN = 943.56 (30" CMP) INV IN = 943.36 (24" HDPE) N: 1000826.723; E: 2817077.444
B-1	INSTALL STD. 4'X4' GRATE INLET 10+69.01, 0.00' STORM LINE B RIM= 948.16 INV IN = 944.70 (24" HDPE) INV OUT = 944.05 (24" HDPE) N: 1000895.688; E: 2817074.834
B-2	INSTALL STD. 4'X4' JUNCTION BOX 11+47.69, 0.00' STORM LINE B RIM= 953.22 INV IN = 948.61 (24" CMP) INV OUT = 948.31 (24" HDPE) N: 1000974.321; E: 2817072.115
B-3	INSTALL STD. 4'X4' GRATE INLET 11+89.96, 0.00' STORM LINE B RIM= 954.27 INV IN = 950.47 (15" HDPE) INV IN = 950.27 (15" HDPE) INV OUT = 949.97 (24" CMP) N: 1001013.366; E: 2817088.293
B-4	INSTALL STD. 6'X4' NON-SETBACK CURB INLET 12+21.79, 0.00' STORM LINE B RIM= 956.25 INV OUT = 951.15 (15" HDPE) N: 1001042.746; E: 2817100.544

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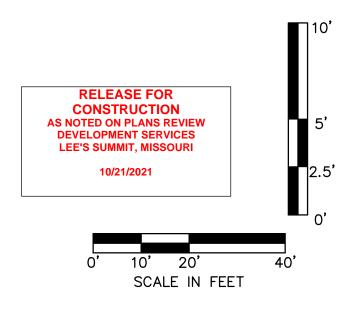
12+50

─31.83 LF 15" HDPE @ 2.76%

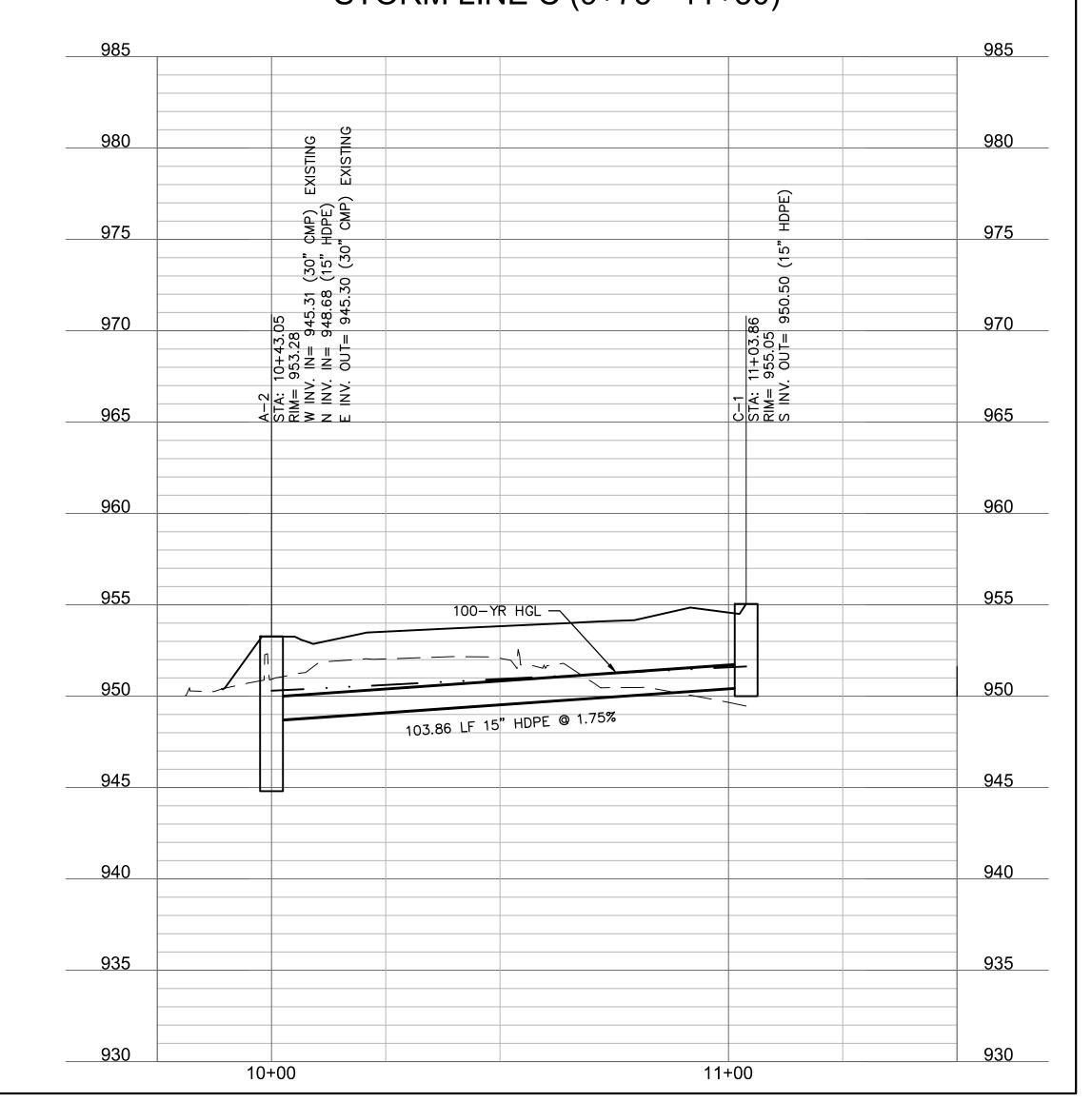
-42.26 LF EXISTING 24" CMP @ 3.22%

12+00

ID
A-2
C-1



# STORM LINE C (9+75 - 11+50)





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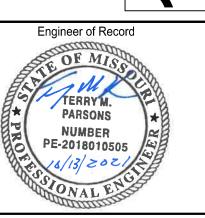
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n the event the client consents to, allows, authorizes or approves o In the event the client consents to, allows, authorizes or approves of changes to any plans, specifications or other construction documents, and these changes are not approved in writing by the design professional, the client recognizes that such changes and the results thereof are not the responsibility of the design professional. Therefore, the client agrees to release the design professional from any liability arising from the construction, use or result of such changes. In addition, the client agrees to the fullest extent permitted by law, to indemnify and hold the design professional harmless from any damage, liability or cost (including reasonable attorney's fees and costs of defense) arising from such changes.

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SUMMIT



Terry M Parsons, Engineer MO PE-2018010505



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Missouri State Certificate of Authority #001592 06.26.21 08.30.21 ASI01 ASI02

10.12.2020 B18-0330

STORM SEWER PLAN & **PROFILE** 

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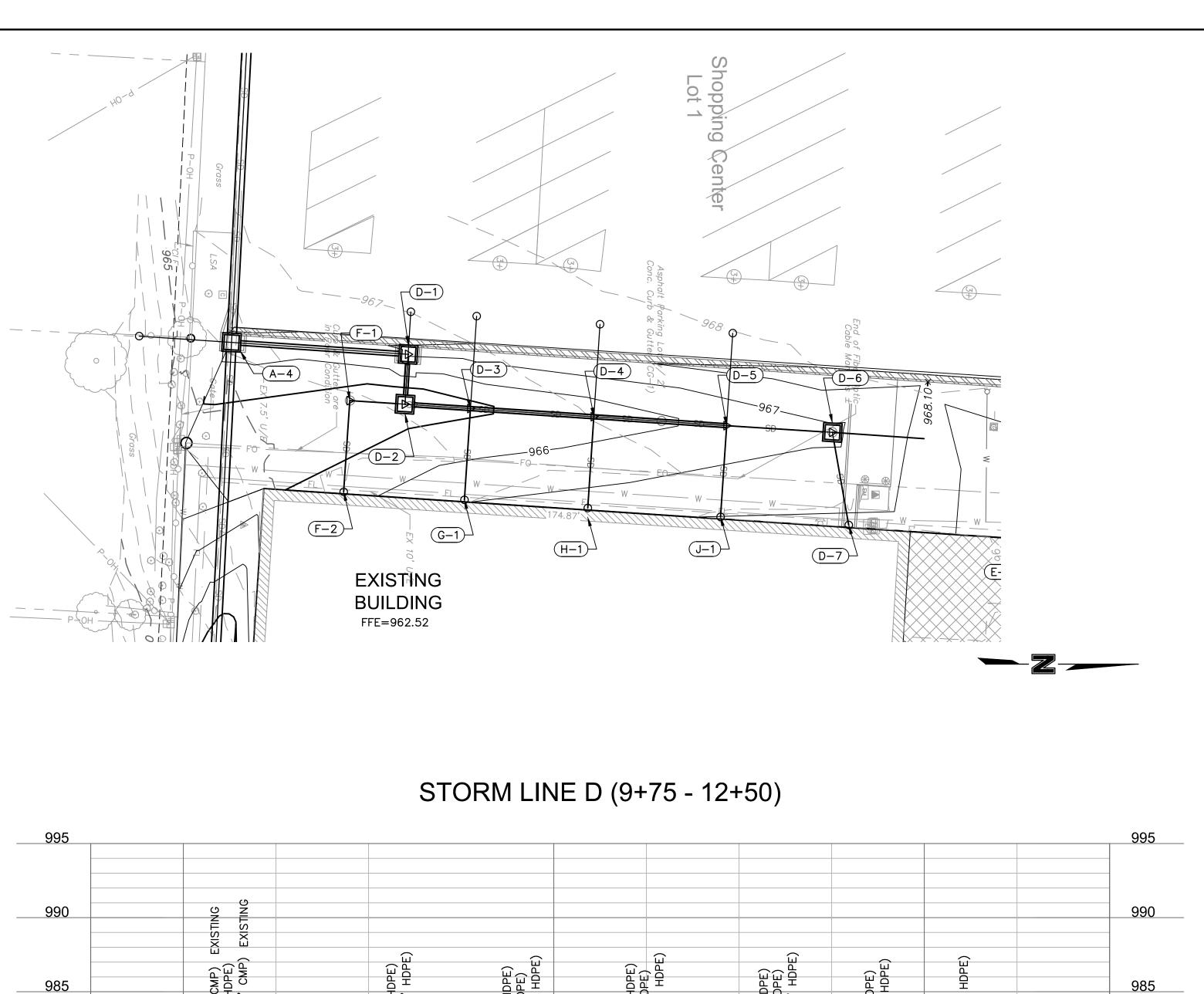
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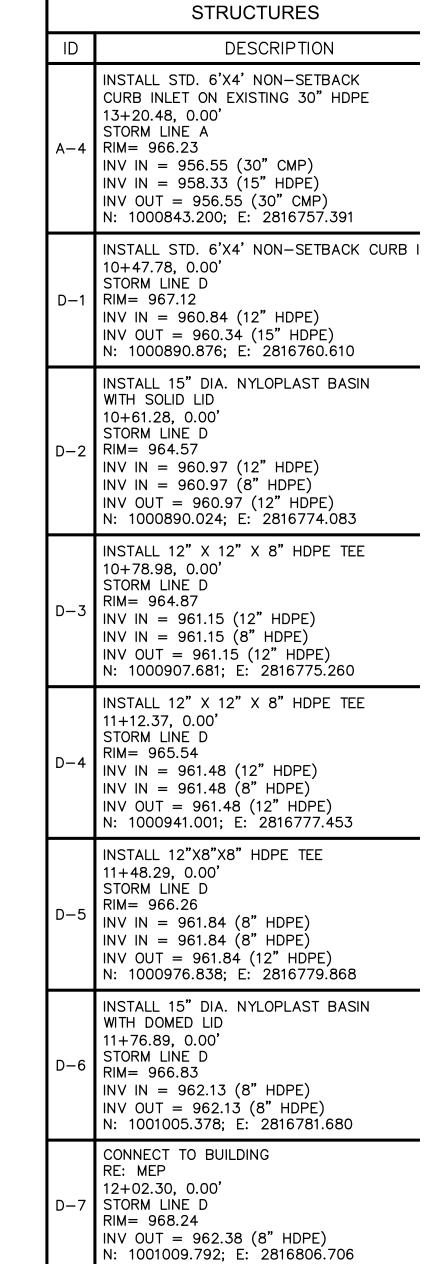
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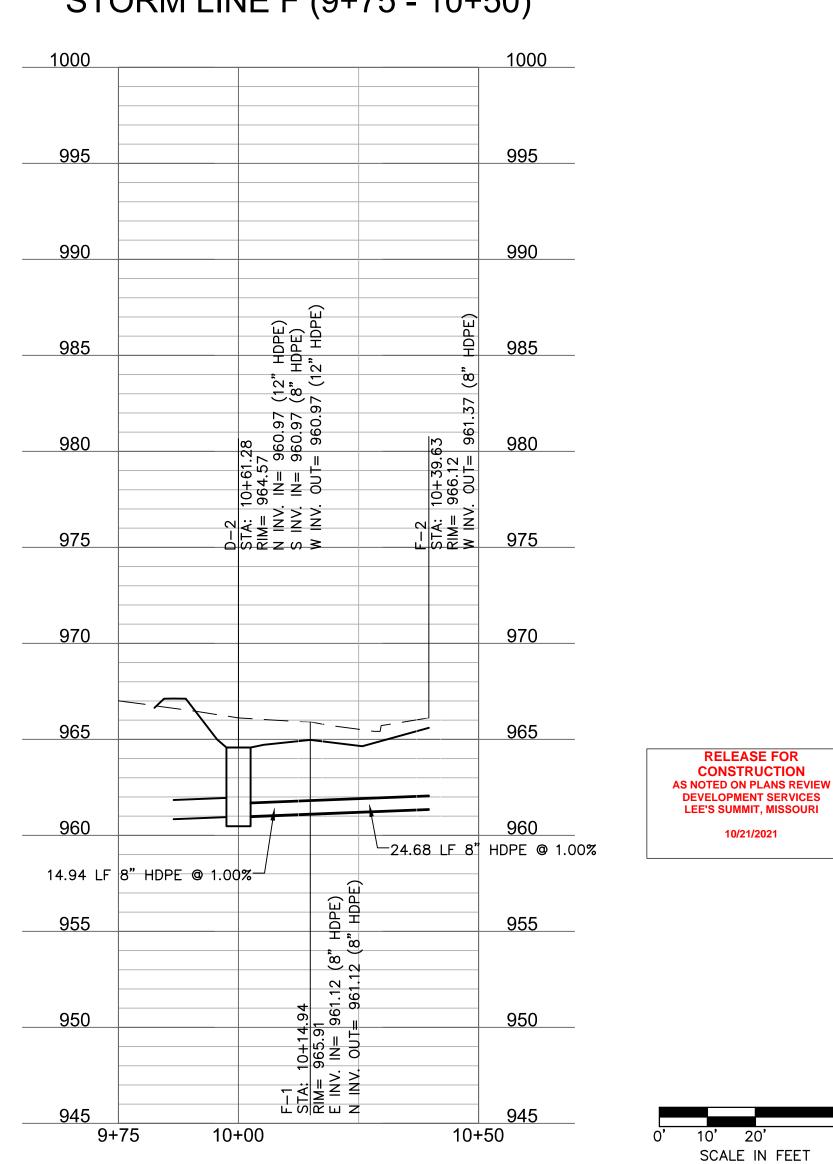
10+00





STRUCTURES						
ID	DESCRIPTION					
D-2	INSTALL 15" DIA. NYLOPLAST BASIN WITH SOLID LID 10+61.28, 0.00' STORM LINE D RIM= 964.57 INV IN = 960.97 (12" HDPE) INV IN = 960.97 (8" HDPE) INV OUT = 960.97 (12" HDPE) N: 1000890.024; E: 2816774.083					
F-1	INSTALL 8" HDPE 90 DEGREE BEND 10+14.94, 0.00' STORM LINE F RIM= 965.91 INV IN = 961.12 (8" HDPE) INV OUT = 961.12 (8" HDPE) N: 1000875.112; E: 2816773.101					
F-2	CONNECT TO ROOF DRAIN. RE: MEP 10+39.63, 0.00' STORM LINE F RIM= 966.12 INV OUT = 961.37 (8" HDPE) N: 1000873.472; E: 2816797.728					

# STORM LINE F (9+75 - 10+50)





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hanges to any plans, specifications or other construction design professional, the client recognizes that such changes and the esults thereof are not the responsibility of the design professional. Therefore, the client agrees to release the design professional from any liability arising from the construction, use or result of such changes. In addition, the client agrees to the fullest extent permitted any damage, liability or cost (including reasonable attorney's fees an osts of defense) arising from such changes.  $\sim$ 

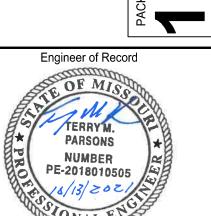
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Terry M Parsons, Engineer MO PE-2018010505



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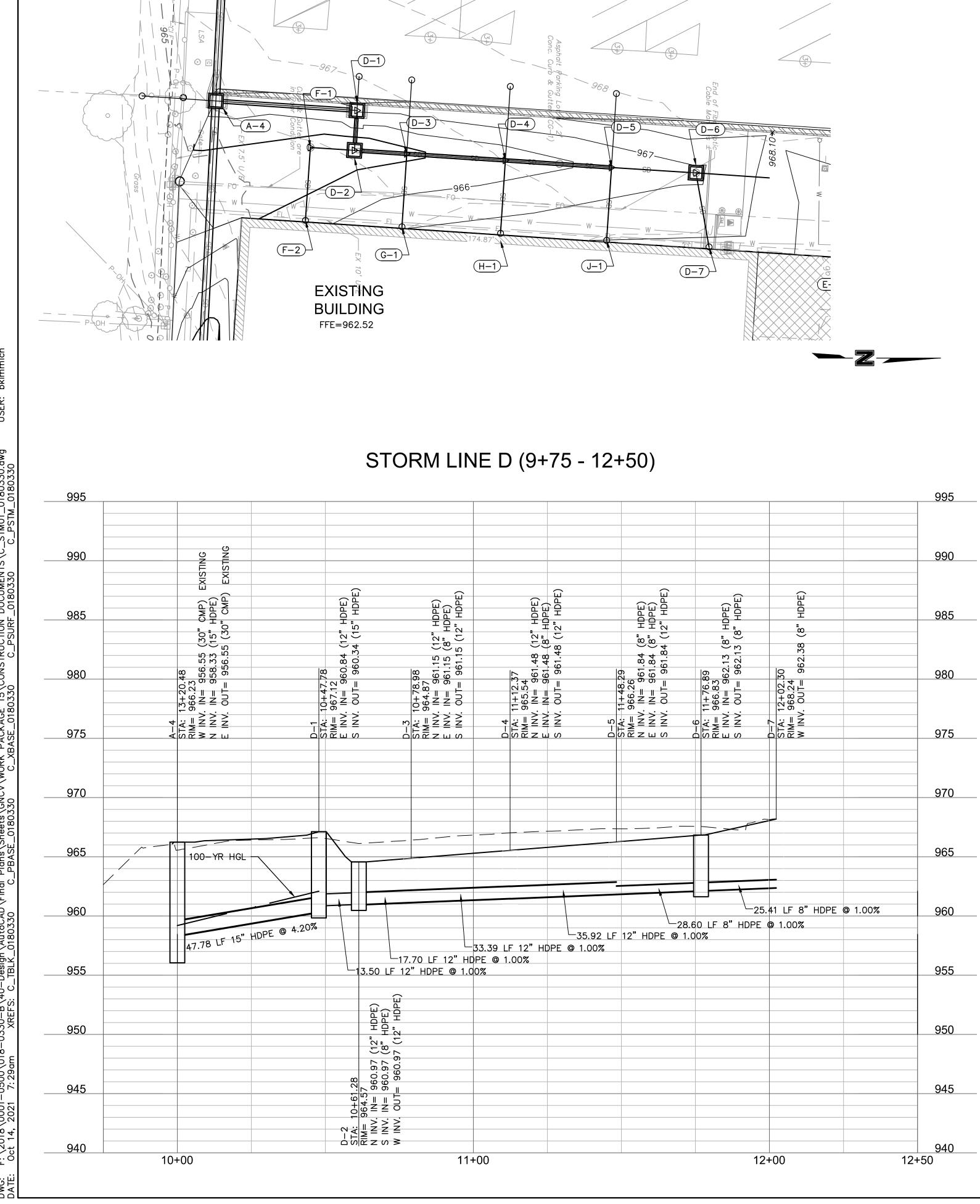
FAX 913.381.1174 www.olsson.com

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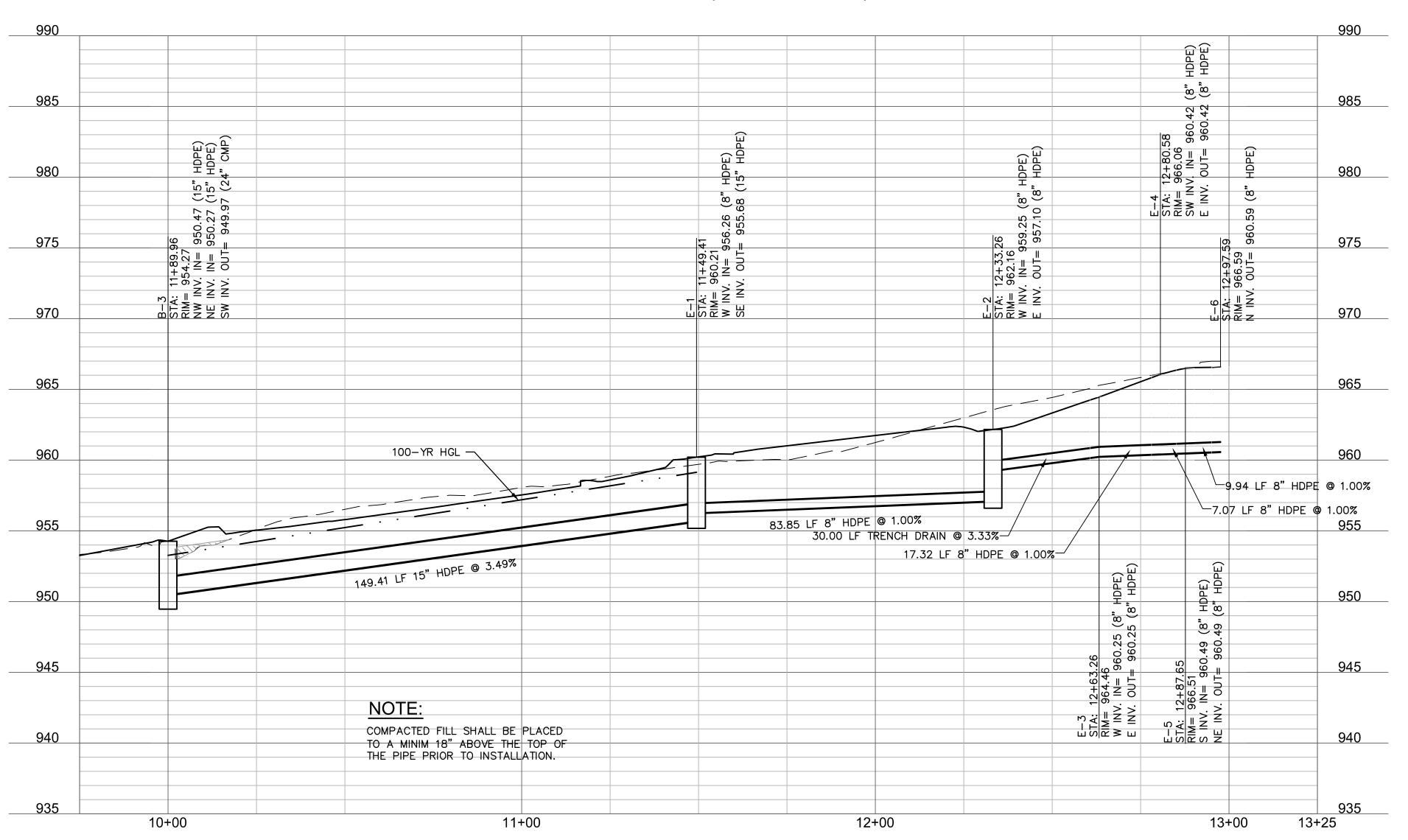
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STORM SEWER PLAN & **PROFILE** 



# STORM LINE E (9+75 - 13+25)



	STRUCTURES
ID	DESCRIPTION
B-3	INSTALL STD. 4'X4' GRATE INLET 11+89.96, 0.00' STORM LINE B RIM= 954.27 INV IN = 950.47 (15" HDPE) INV IN = 950.27 (15" HDPE) INV OUT = 949.97 (24" CMP) N: 1001013.366; E: 2817088.293
E-1	INSTALL STD. 6'X4' NON-SETBACK CURB INLET 11+49.41, 0.00' STORM LINE E RIM= 960.21 INV IN = 956.26 (8" HDPE) INV OUT = 955.68 (15" HDPE) N: 1001077.512; E: 2816953.349
E-2	INSTALL ACO FG200 FLOWDRAIN TRENCH DRAIN WITH F660 CLASS E IRON SLOTTED GRATE 12+33.26, 0.00' STORM LINE E RIM= 962.16 INV IN = 959.25 (8" HDPE) INV OUT = 957.10 (8" HDPE) N: 1001074.822; E: 2816869.545
E-3	END TRENCH DRAIN 12+63.26, 0.00' STORM LINE E RIM= 964.46 INV IN = 960.25 (8" HDPE) INV OUT = 960.25 (8" HDPE) N: 1001076.726; E: 2816839.605
E-4	INSTALL 45 DEGREE BEND 12+80.58, 0.00' STORM LINE E RIM= 966.06 INV IN = 960.42 (8" HDPE) INV OUT = 960.42 (8" HDPE) N: 1001077.825; E: 2816822.323
E-5	INSTALL 45 DEGREE BEND 12+87.65, 0.00' STORM LINE E RIM= 966.51 INV IN = 960.49 (8" HDPE) INV OUT = 960.49 (8" HDPE) N: 1001073.153; E: 2816817.015
E-6	CONNECT TO ROOF DRAIN RE: MEP 12+97.59, 0.00' STORM LINE E RIM= 966.59 INV OUT = 960.59 (8" HDPE) N: 1001063.232; E: 2816816.384



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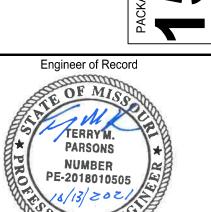
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Mid-Continent Public



Terry M Parsons, Engineer MO PE-2018010505

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10.12.2020 B18-0330

STORM SEWER PLAN & **PROFILE** 

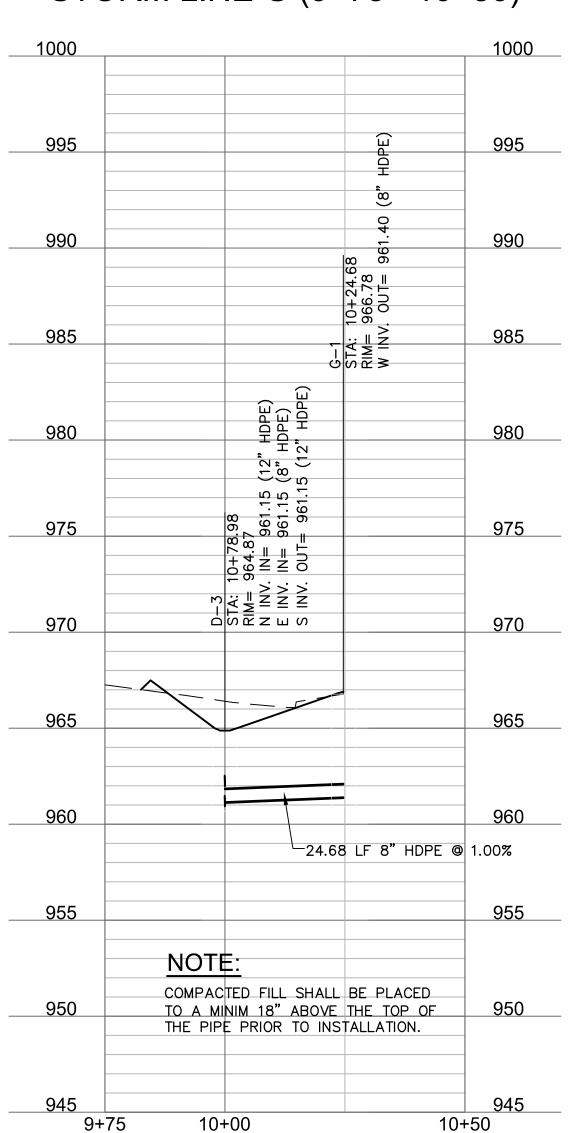
**RELEASE FOR** CONSTRUCTION **AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES** LEE'S SUMMIT, MISSOURI 10/21/2021

0' 10' 20' SCALE IN FEET

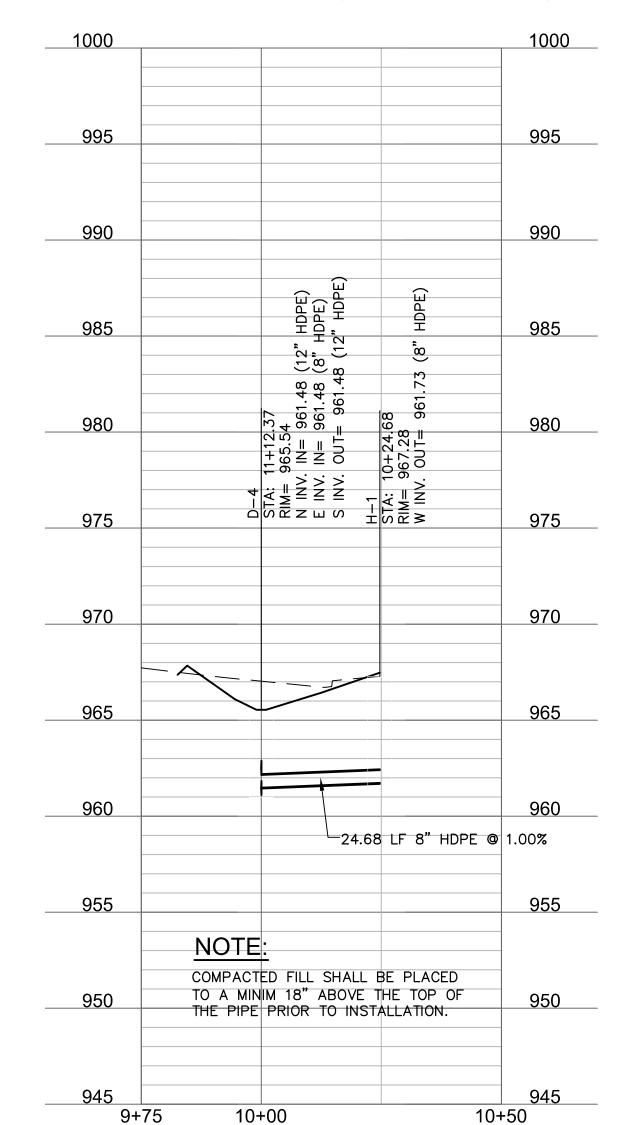
	STRUCTURES
ID	DESCRIPTION
D-4	INSTALL 12" X 12" X 8" HDPE TEE 11+12.37, 0.00' STORM LINE D RIM= 965.54 INV IN = 961.48 (12" HDPE) INV IN = 961.48 (8" HDPE) INV OUT = 961.48 (12" HDPE) N: 1000941.001; E: 2816777.453
H-1	CONNECT TO ROOF DRAIN. RE: MEP 10+24.68, 0.00' STORM LINE H RIM= 967.28 INV OUT = 961.73 (8" HDPE) N: 1000939.361; E: 2816802.080

	STRUCTURES
ID	DESCRIPTION
D-5	INSTALL 12"X8"X8" HDPE TEE 11+48.29, 0.00' STORM LINE D RIM= 966.26 INV IN = 961.84 (8" HDPE) INV IN = 961.84 (8" HDPE) INV OUT = 961.84 (12" HDPE) N: 1000976.838; E: 2816779.868
J-1	CONNECT TO ROOF DRAIN. RE: MEP 10+24.68, 0.00' STORM LINE J RIM= 967.86 INV OUT = 962.09 (8" HDPE) N: 1000975.198; E: 2816804.495

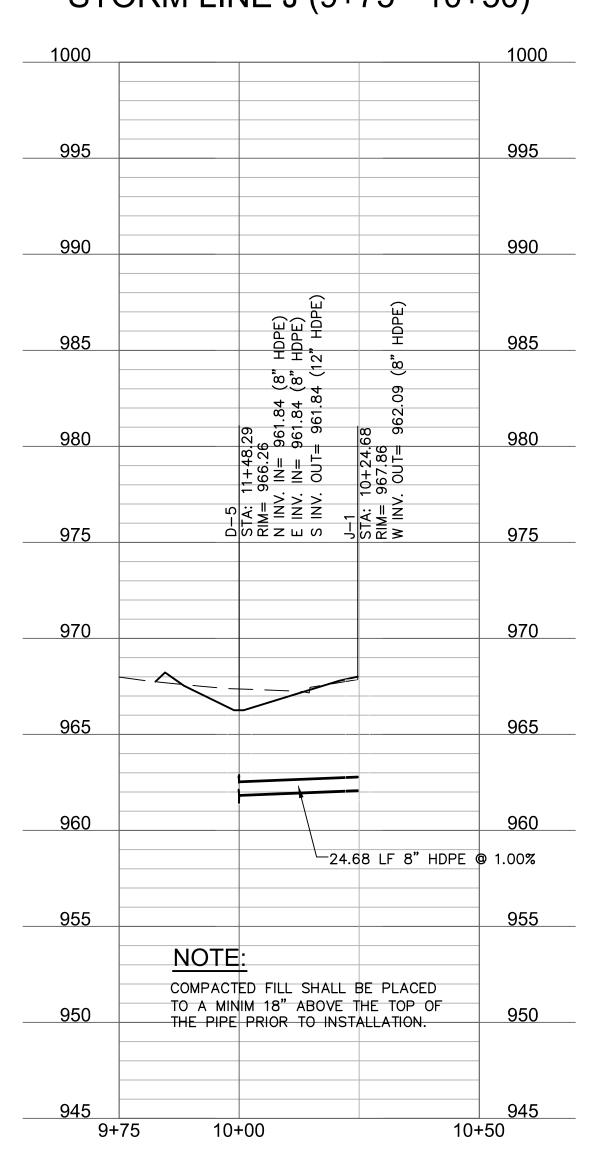
# STORM LINE G (9+75 - 10+50)

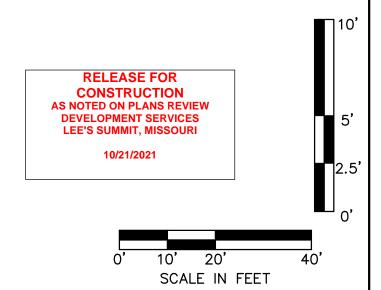


## STORM LINE H (9+75 - 10+50)



## STORM LINE J (9+75 - 10+50)





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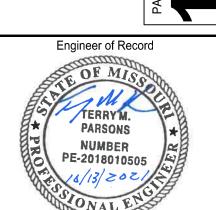
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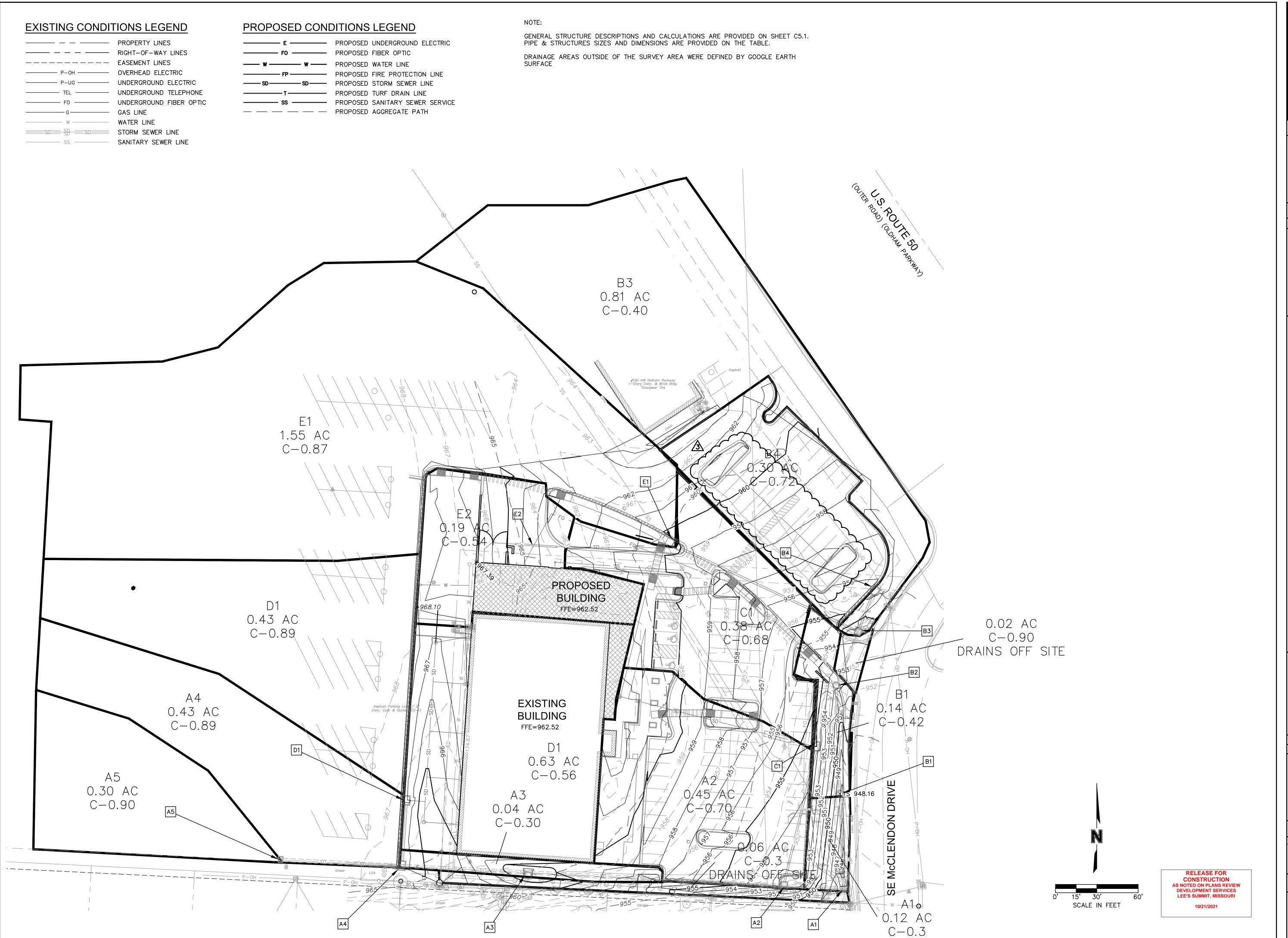


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**PROFILE** 

STORM SEWER PLAN &





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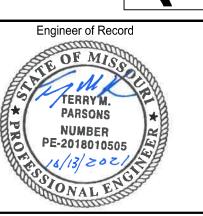
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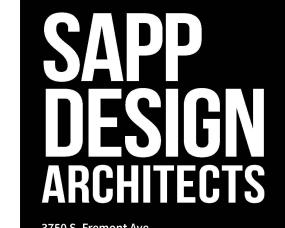
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A5	A4	0.30	0.73	0.90 0.75	0.90 0.75	5.0 5.0	1	7.35 7.35	1.98 4.02	EXISTING STRUCTURE EXISTING 30" CMP	88.00	4.05	30 4	4.83 4	.91	9.13	8.71	0.68	968.63	960.13	956.55	958.30	EXISTING STRUCTURE TO REMIAN
A4	Λ 2	0.43	1.10	0.89	0.89	5.0	-	7.35	2.81	6X4 CURB INLET OF EX. PIPE	00.00	4.05	30 4	4.83 4	04	0.12	10.10	0.70	967.36	050.55	952.84	954.64	CONSTRU CT BOX OVER EXISTING PIPE
A3	A3	0.04	1.16	0.78	0.78 0.30	5.0 5.0	-	7.35 7.35	6.65 0.09	EXISTING 30" CMP  4X4 AREA INLET OF EX. PIPE	92.00	4.05	30 2	4.03 4	.91	9.13	10.10	0.70	960.88	956.55	952.64	954.64	CONSTRU CT BOX OVER EXISTING PIPE
	A2		1.58	0.75	0.75	5.0	-	7.35	8.71	EXISTING 30" CMP	182.00	4.05	30 4	4.83 4	.91	9.13	10.93	0.72		952.84	945.23	947.88	
A2	A1	0.45	4.72	0.70	0.70 0.70	5.0 5.0	-	7.35 7.35	2.32 24.28	6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP	47.00	4.05	30 4	4.83 4	.91	9.13	14.63	1.06	952.68	945.23	943.58	946.52	CONSTRU CT BOX OVER EXISTING PIPE
A1	7(1	0.12	1.72	0.30	0.30	5.0	-	7.35	0.26	5x5 AREA INLET OVER EX. PIPE	17.00	1.00		1.00		0.10	11.00	1.00	947.76	0 10.20	0.10.00	0.10.02	RECONSTRUCT AREA INLET
	A0		4.84	0.67	0.67	5.0	_	7.35	23.83	EXISTING 36" EQ CMP PIPE	118.00	1.60	36 4	9.99 7	.07	7.07	10.27	0.82		943.58	941.69	945.55	
B4		0.30		0.72	0.72	5.0	_	7.35	1.59	6x4 CURB INLET									955.15				
2.	В3	0.00	0.30	0.72	0.72	5.0	-	7.35	1.59	15 in. HDPE	32.00	2.76	15 1	0.76 1	.23	8.77	6.27	0.72	000.10	951.15	950.27	951.36	
В3	B3	0.81	1 1 1	0.40	0.40	5.0	-	7.35	2.38 3.43	RECONS EX AREA INLET	42.00	3.22	24	0.70 3	.14	12.96	7.86	0.69	954.27	949.97	948.61	950.29	RECONSTRUCT AREA INLET
B2	ەں	0.00	1.11	0.42	0.42 0.30	5.0 5.0	-	7.35 7.35	0.00	24 in. HDPE JUNCTION BOX	42.00	3.22	24 4	0.10 3	. 17	12.30	00.1	0.08	952.61	্র <del>ন</del> ত.তা	<del>34</del> 0.01	300.28	CONSTRU CT BOX OVER EXISTING PIPE
	B1		2.55	0.67	0.67	5.0	-	7.35	12.56	24 in. HDPE	79.00	3.32	24 4	1.33 3	.14	13.16	11.52	0.99		948.31	945.70	947.51	
B1	A1	0.14	2.69	0.42	0.42 0.67	5.0 5.0	-	7.35 7.35	0.43 13.25	5x5 AREA INLET 24 in. HDPE	69.00	1.90	24 3	1.27 3	.14	9.95	9.52	1.02	948.50	945.20	943.88	946.57	
								1.33			33.30	1.00		,		2.00	J.JL	1.02		3 13.20	3 13.33	3 13.57	
C1	A2	0.38	0.38	0.68 0.68	0.68 0.68	5.0 5.0	-	7.35 7.35	1.90 1.90	6x4 CURB INLET 15 in. HDPE	103.00	1.76	15	3.59 1	.23	7.00	5.62	0.75	954.82	950.50	948.68	948.01	
D1		0.43		0.89	0.89	5.0	_	7.35	2.81	6x4 CURB INLET									967.36				
	A4		0.43	0.71	0.71	5.0	-	7.35	2.24	15 in. HDPE	48.00	1.76	15	3.59 1	.23	7.00	5.90	0.78		962.50	962.02	958.30	
E2		0.19		0.52	0.52	5.0	_	7.35	0.73	TRENCH DRAIN									961.75				
L <b>2</b>	E1	0.13	0.19	0.33	0.33	5.0	-	7.35	0.46	15 in. HDPE	82.00	4.10	12	7.23 0	.79	9.21	5.20	0.68	301.70	959.95	956.68	956.67	
E1		1.25	4.44	0.87	0.87	5.0	-	7.35	7.99	6x4 CURB INLET	1.40.00	0.40	10	0.00	77	44.40	10.01	4.00	960.23	055.00	050.47	054.00	
	B3		1.44	0.83	0.83	5.0	-	7.35	8.78	18 in. HDPE	148.00	3.49	18 1	9.68 1	.77	11.13	10.81	1.33		955.68	950.47	951.36	
STORM SEW	ER PIPE AN	D STRUCTU	JRE TABLE	Ξ																			
TTLE: LEES	SUMMIT LIBF		JRE TABLE	<u> </u>																			
TTLE: LEES OB #: B18-0	SUMMIT LIBF 30	RARY			/FNT																		
ITLE: LEES OB #: B18-0	SUMMIT LIBF 30 <b>ONDITION</b>	RARY		ORM EV		ALCUL	.ATIONS	3			PI	PE DESIG	SN SN										
TLE: LEES OB #: B18-0 DESIGN C	SUMMIT LIBF 30 <b>ONDITION</b>	S: 100 Y DIRECT AREA	EAR STOTAL AREA	ORM EV RUI		Тс	FLOW TIME	INTENSITY (IN/HR)	DESIGN Q (CFS)	DESCRIPTION	PIPE LENGTH	PIPE SLOPE	PIPE Q DIA (	FULL   AF	KEA	V FULL (F/S)	DESIGN V (F/S)	Hw/D	MH TOP ELEVATION	UPSTREAM FLOWLINE	DOWNSTREAM FLOWLINE	DOWNSTREAM WATER	Comments
ITLE: LEES OB #: B18-0: DESIGN C STRUC	SUMMIT LIBE 30 DNDITION FURES TO	S: 100 Y DIRECT	TOTAL AREA (ACRES)	C 0.90	KC (K=1.25)	Tc (MIN) 5.0	FLOW	INTENSITY (IN/HR)	(CFS) 3.10	EXISTING STRUCTURE	PIPE LENGTH (L.F.)	PIPE SLOPE (%)	PIPE DIA (IN)	CFS) (SC	REA (.FT.)	(F/S)	V (F/S)	ПW/D	MH TOP ELEVATION 968.63	FLOWLINE	FLOWLINE	WATER ELEVATION	Comments  EXISTING STRUCTURE TO REMIAN
OB #: B18-03 DESIGN C STRUC FROM A5	SUMMIT LIBE 30 ONDITION FURES	S: 100 Y  DIRECT AREA (ACRES)	EAR STOTAL AREA	C 0.90 0.75	KC (K=1.25)	Tc (MIN) 5.0 5.0	FLOW TIME	INTENSITY (IN/HR) 10.32 10.32	(CFS)	EXISTING STRUCTURE EXISTING 30" CMP	PIPE LENGTH	PIPE SLOPE	PIPE DIA (IN)	CFS) (SC	REA   '		DESIGN V (F/S) 10.28	Hw/D	ELEVATION 968.63	UPSTREAM FLOWLINE 960.13	DOWNSTREAM FLOWLINE 956.55	WATER	EXISTING STRUCTURE TO REMIAN
OB #: B18-0: DESIGN C STRUC FROM A5	SUMMIT LIBE 30 DNDITION FURES TO	S: 100 Y  DIRECT AREA (ACRES) 0.30  0.43	TOTAL AREA (ACRES)	C 0.90 0.75 0.89 0.78	KC (K=1.25) 1.00 0.94 1.11 0.98	Tc (MIN) 5.0 5.0 5.0 5.0	FLOW TIME	INTENSITY (IN/HR) 10.32 10.32 10.32 10.32	(CFS) 3.10 7.06 4.94 11.67	EXISTING STRUCTURE  EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE  EXISTING 30" CMP	PIPE LENGTH (L.F.)	PIPE SLOPE (%)	PIPE DIA (IN)	AI (SC)	REA (.FT.)	(F/S)	V (F/S)	ПW/D	968.63 967.36	FLOWLINE	FLOWLINE	WATER ELEVATION	EXISTING STRUCTURE TO REMIAN  CONSTRU CT BOX OVER EXISTING PIPE
OB #: B18-03 DESIGN C STRUC FROM A5	SUMMIT LIBE 30 DNDITION FURES TO A4 A3	S: 100 Y DIRECT AREA (ACRES) 0.30	TOTAL AREA (ACRES) 0.73	C 0.90 0.75 0.89 0.78 0.30	NOFF C KC (K=1.25) 1.00 0.94 1.11 0.98 0.38	Tc (MIN) 5.0 5.0 5.0 5.0 5.0	FLOW TIME	INTENSITY (IN/HR) 10.32 10.32 10.32 10.32 10.32	(CFS) 3.10 7.06 4.94 11.67 0.15	EXISTING STRUCTURE EXISTING 30" CMP 6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP 4X4 AREA INLET OF EX. PIPE	PIPE LENGTH (L.F.) 81.00	PIPE SLOPE (%) 4.05	PIPE DIA (IN)	4.83 4	.91 .91	9.13 9.13	10.28 11.90	0.70 0.76	ELEVATION 968.63	960.13 956.55	956.55 952.84	WATER ELEVATION 958.45 954.90	EXISTING STRUCTURE TO REMIAN
TITLE: LEES OB #: B18-03 DESIGN C STRUC FROM A5	OMMIT LIBE 30 DNDITION FURES TO	S: 100 Y  DIRECT AREA (ACRES) 0.30  0.43	TOTAL AREA (ACRES)	C 0.90 0.75 0.89 0.78	KC (K=1.25) 1.00 0.94 1.11 0.98	Tc (MIN) 5.0 5.0 5.0 5.0	FLOW TIME	INTENSITY (IN/HR) 10.32 10.32 10.32 10.32	(CFS) 3.10 7.06 4.94 11.67	EXISTING STRUCTURE  EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE  EXISTING 30" CMP	PIPE LENGTH (L.F.) 81.00	PIPE SLOPE (%) 4.05	PIPE DIA (IN)	4.83 4	.91 .91	9.13	10.28 11.90	0.70	968.63 967.36	FLOWLINE 960.13	956.55	WATER ELEVATION 958.45	EXISTING STRUCTURE TO REMIAN  CONSTRU CT BOX OVER EXISTING PIPE
DESIGN C STRUC FROM A5 A4 A3 A2	SUMMIT LIBE 30 DNDITION FURES TO A4 A3	RARY  S: 100 Y  DIRECT AREA (ACRES) 0.30  0.43  0.04  0.45	TOTAL AREA (ACRES) 0.73	C 0.90 0.75 0.89 0.75 0.70 0.70 0.70	NOFF C KC (K=1.25) 1.00 0.94 1.11 0.98 0.38 0.94 0.88 0.88	Tc (MIN) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	FLOW TIME	INTENSITY (IN/HR) 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32	(CFS)  3.10  7.06  4.94  11.67  0.15  15.29  4.06  42.62	EXISTING STRUCTURE EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP  4X4 AREA INLET OF EX. PIPE EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP	PIPE LENGTH (L.F.) 81.00	PIPE SLOPE (%) 4.05	PIPE DIA (IN) (IN) (IN) (IN) (IN) (IN) (IN) (IN)	4.83 4 4.83 4	.91 .91	9.13 9.13	10.28 11.90	0.70 0.76	968.63 967.36 960.88 952.68	960.13 956.55	956.55 952.84	WATER ELEVATION 958.45 954.90	EXISTING STRUCTURE TO REMIAN  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE
OB #: B18-03 DESIGN C STRUC FROM A5 A4 A3	DNDITION TURES  TO  A4  A3  A2  A1	RARY  S: 100 Y  DIRECT AREA (ACRES) 0.30  0.43	TOTAL AREA (ACRES) 0.73 1.16 1.58 4.72	C 0.90 0.75 0.89 0.78 0.30 0.75 0.70 0.70 0.30	KC (K=1.25) 1.00 0.94 1.11 0.98 0.38 0.94 0.88 0.88 0.38	Tc (MIN) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	FLOW TIME	INTENSITY (IN/HR) 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32	(CFS)  3.10  7.06  4.94  11.67  0.15  15.29  4.06  42.62  0.46	EXISTING STRUCTURE  EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE  EXISTING 30" CMP  4X4 AREA INLET OF EX. PIPE  EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE  EXISTING 30" CMP  5x5 AREA INLET OVER EX. PIPE	PIPE LENGTH (L.F.) 81.00 92.00 202.00	PIPE SLOPE (%) 4.05 4.05 4.05	PIPE DIA (IN) (IN) 30 4	4.83 4 4.83 4 4.83 4	.91 .91 .91	9.13 9.13 9.13 9.13	10.28 11.90 12.85 16.95	0.70 0.76 0.82	968.63 967.36 960.88	960.13 956.55 952.84 945.23	956.55 952.84 945.23 943.58	WATER ELEVATION 958.45 954.90 949.91 946.70	EXISTING STRUCTURE TO REMIAN  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE
TILE: LEES OB #: B18-03 DESIGN C STRUC FROM A5 A4 A3 A2	DNDITION TURES  TO  A4  A3  A2	RARY  S: 100 Y  DIRECT AREA (ACRES) 0.30  0.43  0.04  0.45  0.12	TOTAL AREA (ACRES) 0.73 1.16	C 0.90 0.75 0.89 0.75 0.70 0.70 0.70	NOFF C KC (K=1.25) 1.00 0.94 1.11 0.98 0.38 0.94 0.88 0.88	Tc (MIN) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	FLOW TIME	INTENSITY (IN/HR) 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32	(CFS)  3.10  7.06  4.94  11.67  0.15  15.29  4.06  42.62	EXISTING STRUCTURE EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP  4X4 AREA INLET OF EX. PIPE EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP	PIPE LENGTH (L.F.) 81.00 92.00	PIPE SLOPE (%) 4.05 4.05	PIPE DIA (IN) (IN) 30 4	4.83 4 4.83 4 4.83 4	.91 .91	9.13 9.13	10.28 11.90 12.85	0.70 0.76 0.82	968.63 967.36 960.88 952.68	960.13 956.55 952.84	956.55 952.84 945.23	WATER ELEVATION 958.45 954.90 949.91	EXISTING STRUCTURE TO REMIAN  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE
TILE: LEES OB #: B18-03 DESIGN C STRUC FROM A5 A4 A3 A2	DNDITION TURES  TO  A4  A3  A2  A1	RARY  S: 100 Y  DIRECT AREA (ACRES) 0.30  0.43  0.04  0.45	TOTAL AREA (ACRES) 0.73 1.16 1.58 4.72 4.84	C 0.90 0.75 0.89 0.78 0.70 0.70 0.70 0.67 0.72	KC (K=1.25) 1.00 0.94 1.11 0.98 0.38 0.94 0.88 0.38 0.88	Tc (MIN) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	FLOW TIME	INTENSITY (IN/HR)  10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32	(CFS)  3.10 7.06 4.94 11.67 0.15 15.29 4.06 42.62 0.46 41.83	EXISTING STRUCTURE  EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE  EXISTING 30" CMP  4X4 AREA INLET OF EX. PIPE  EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE  EXISTING 30" CMP  5x5 AREA INLET OVER EX. PIPE  EXISTING 36" EQ CMP PIPE  6x4 CURB INLET	PIPE LENGTH (L.F.) 81.00 92.00 202.00 27.00	PIPE SLOPE (%) 4.05 4.05 4.05 1.60	30 4 30 4 36 4 36 4	4.83 4 4.83 4 4.83 4 9.99 7	.91 .91 .91 .91	9.13 9.13 9.13 7.07	10.28 11.90 12.85 16.95	0.70 0.76 0.82 1.87	968.63 967.36 960.88 952.68	960.13 956.55 952.84 945.23 943.58	956.55 952.84 945.23 943.58 941.69	WATER ELEVATION 958.45 954.90 949.91 946.70	EXISTING STRUCTURE TO REMIAN  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE
TILE: LEES OB #: B18-03 DESIGN C STRUC FROM A5 A4 A3 A2 A1	DNDITION TURES  TO  A4  A3  A2  A1	RARY  S: 100 Y  DIRECT AREA (ACRES) 0.30  0.43  0.04  0.45  0.12	TOTAL AREA (ACRES) 0.73 1.16 1.58 4.72	C 0.90 0.75 0.89 0.75 0.70 0.70 0.30 0.67	KC (K=1.25) 1.00 0.94 1.11 0.98 0.38 0.94 0.88 0.88 0.38	Tc (MIN) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	FLOW TIME	INTENSITY (IN/HR)  10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32	(CFS)  3.10  7.06  4.94  11.67  0.15  15.29  4.06  42.62  0.46  41.83	EXISTING STRUCTURE EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP  4X4 AREA INLET OF EX. PIPE EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP  5x5 AREA INLET OVER EX. PIPE EXISTING 36" EQ CMP PIPE  6x4 CURB INLET  15 in. HDPE	PIPE LENGTH (L.F.) 81.00 92.00 202.00	PIPE SLOPE (%) 4.05 4.05 4.05	30 4 30 4 36 4 36 4	4.83 4 4.83 4 4.83 4 9.99 7	.91 .91 .91	9.13 9.13 9.13 9.13	10.28 11.90 12.85 16.95	0.70 0.76 0.82	968.63 967.36 960.88 952.68	960.13 956.55 952.84 945.23	956.55 952.84 945.23 943.58	WATER ELEVATION 958.45 954.90 949.91 946.70	EXISTING STRUCTURE TO REMIAN  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  RECONSTRUCT AREA INLET
TILE: LEES OB #: B18-0 DESIGN C STRUC FROM A5 A4 A3 A2 A1 B4 B3	DNDITION TURES  TO  A4  A3  A2  A1	RARY  S: 100 Y  DIRECT AREA (ACRES) 0.30  0.43  0.04  0.45  0.12  0.30  0.81	TOTAL AREA (ACRES) 0.73 1.16 1.58 4.72 4.84	C 0.90 0.75 0.89 0.78 0.70 0.70 0.70 0.70 0.70 0.70 0.72 0.72	KC (K=1.25) 1.00 0.94 1.11 0.98 0.38 0.94 0.88 0.88 0.38 0.84	Tc (MIN) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	FLOW TIME	INTENSITY (IN/HR)  10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32	(CFS)  3.10 7.06 4.94 11.67 0.15 15.29 4.06 42.62 0.46 41.83  2.79 2.79 4.18 6.01	EXISTING STRUCTURE  EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE  EXISTING 30" CMP  4X4 AREA INLET OF EX. PIPE  EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE  EXISTING 30" CMP  5x5 AREA INLET OVER EX. PIPE  EXISTING 36" EQ CMP PIPE  6x4 CURB INLET  15 in. HDPE  RECONS EX. AREA INLET  24 in. HDPE	PIPE LENGTH (L.F.) 81.00 92.00 202.00 27.00	PIPE SLOPE (%) 4.05 4.05 4.05 1.60	PIPE DIA (IN)  30  30  30  30  4  30  4  30  4  15	4.83 4 4.83 4 4.83 4 9.99 7	.91 .91 .91 .91 .91	9.13 9.13 9.13 7.07	10.28 11.90 12.85 16.95	0.70 0.76 0.82 1.87	968.63 967.36 960.88 952.68 947.76 955.15	960.13 956.55 952.84 945.23 943.58	956.55 952.84 945.23 943.58 941.69	WATER ELEVATION 958.45 954.90 949.91 946.70	EXISTING STRUCTURE TO REMIAN  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  RECONSTRUCT AREA INLET  RECONSTRUCT AREA INLET
FROM  A3  A2  A1  B4	TO  A4  A3  A2  A1  A0  B3  B3	S: 100 Y  DIRECT AREA (ACRES) 0.30  0.43  0.04  0.45  0.12	TOTAL AREA (ACRES)  0.73  1.16  1.58  4.72  4.84  0.30  1.11	C 0.90 0.75 0.89 0.75 0.70 0.70 0.70 0.70 0.70 0.70 0.72 0.72	KC (K=1.25) 1.00 0.94 1.11 0.98 0.38 0.94 0.88 0.88 0.88 0.38 0.50 0.50	Tc (MIN) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	FLOW TIME	INTENSITY (IN/HR)  10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32	(CFS)  3.10  7.06  4.94  11.67  0.15  15.29  4.06  42.62  0.46  41.83  2.79  2.79  4.18  6.01  0.00	EXISTING STRUCTURE EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP  4X4 AREA INLET OF EX. PIPE EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP  5x5 AREA INLET OVER EX. PIPE EXISTING 36" EQ CMP PIPE  6x4 CURB INLET  15 in. HDPE RECONS EX. AREA INLET  24 in. HDPE JUNCTION BOX	PIPE LENGTH (L.F.) 81.00 92.00 202.00 27.00 118.00 55.00	PIPE SLOPE (%) 4.05 4.05 4.05 1.60	30 4 30 4 36 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	4.83 4 4.83 4 4.83 4 9.99 7 0.76 1	.91 .91 .91 .07	9.13 9.13 9.13 9.13 7.07 8.77 12.96	10.28 11.90 12.85 16.95 11.91 7.35	0.70 0.76 0.82 1.87 1.14 0.83	968.63 967.36 960.88 952.68 947.76	960.13 956.55 952.84 945.23 943.58 951.15	956.55 952.84 945.23 943.58 941.69 950.27	WATER ELEVATION  958.45  954.90  949.91  946.70  946.54  952.98  951.61	EXISTING STRUCTURE TO REMIAN  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  RECONSTRUCT AREA INLET
FROM  A3  A2  A1  B4  B3	TO  A4  A3  A2  A1  A0  B3	RARY  S: 100 Y  DIRECT AREA (ACRES) 0.30  0.43  0.04  0.45  0.12  0.30  0.81	TOTAL AREA (ACRES)  0.73  1.16  1.58  4.72  4.84  0.30	C 0.90 0.75 0.89 0.78 0.70 0.70 0.70 0.70 0.70 0.70 0.72 0.72	KC (K=1.25) 1.00 0.94 1.11 0.98 0.38 0.94 0.88 0.88 0.38 0.84	Tc (MIN) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	FLOW TIME	INTENSITY (IN/HR)  10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32 10.32	(CFS)  3.10 7.06 4.94 11.67 0.15 15.29 4.06 42.62 0.46 41.83  2.79 2.79 4.18 6.01	EXISTING STRUCTURE  EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE  EXISTING 30" CMP  4X4 AREA INLET OF EX. PIPE  EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE  EXISTING 30" CMP  5x5 AREA INLET OVER EX. PIPE  EXISTING 36" EQ CMP PIPE  6x4 CURB INLET  15 in. HDPE  RECONS EX. AREA INLET  24 in. HDPE	PIPE LENGTH (L.F.) 81.00 92.00 202.00 118.00	PIPE SLOPE (%) 4.05 4.05 4.05 1.60	30 4 30 4 36 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	4.83 4 4.83 4 4.83 4 9.99 7 0.76 1	.91 .91 .91 .07	9.13 9.13 9.13 9.13 7.07	10.28 11.90 12.85 16.95 11.91	0.70 0.76 0.82 1.87 1.14	968.63 967.36 960.88 952.68 947.76 955.15	960.13 956.55 952.84 945.23 943.58	956.55 952.84 945.23 943.58 941.69	WATER ELEVATION 958.45 954.90 949.91 946.70 946.54	EXISTING STRUCTURE TO REMIAN  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  RECONSTRUCT AREA INLET  RECONSTRUCT AREA INLET
TILE: LEES OB #: B18-03 DESIGN C STRUC FROM A5 A4 A3 A2 A1 B4 B3 B2	TO  A4  A3  A2  A1  A0  B3  B3	RARY  S: 100 Y  DIRECT AREA (ACRES) 0.30  0.43  0.04  0.45  0.12  0.30  0.81  0.00	TOTAL AREA (ACRES)  0.73  1.16  1.58  4.72  4.84  0.30  1.11	C 0.90 0.75 0.89 0.75 0.70 0.70 0.30 0.67  0.72 0.40 0.42 0.30 0.67	KC (K=1.25) 1.00 0.94 1.11 0.98 0.38 0.94 0.88 0.88 0.88 0.38 0.50 0.50 0.50 0.53 0.38 0.84	Tc (MIN) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	FLOW TIME	INTENSITY (IN/HR)  10.32	(CFS)  3.10  7.06  4.94  11.67  0.15  15.29  4.06  42.62  0.46  41.83  2.79  2.79  4.18  6.01  0.00  22.04	EXISTING STRUCTURE EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP  4X4 AREA INLET OF EX. PIPE EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP  5x5 AREA INLET OVER EX. PIPE EXISTING 36" EQ CMP PIPE  6x4 CURB INLET  15 in. HDPE RECONS EX. AREA INLET  24 in. HDPE  JUNCTION BOX 24 in. HDPE	PIPE LENGTH (L.F.) 81.00 92.00 202.00 27.00 118.00 55.00	PIPE SLOPE (%) 4.05 4.05 4.05 1.60	PIPE DIA (IN)  30  30  30  30  4  30  4  31  32  33  34  35  36  4  24  24  24  24	AIRS 4 4.83 4 4.83 4 4.83 4 9.99 7 0.76 1 0.70 3	.91 .91 .91 .07	9.13 9.13 9.13 9.13 7.07 8.77 12.96	10.28 11.90 12.85 16.95 11.91 7.35	0.70 0.76 0.82 1.87 1.14 0.83	968.63 967.36 960.88 952.68 947.76 955.15 954.27	960.13 956.55 952.84 945.23 943.58 951.15	956.55 952.84 945.23 943.58 941.69 950.27	WATER ELEVATION  958.45  954.90  949.91  946.70  946.54  952.98  951.61	EXISTING STRUCTURE TO REMIAN  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  RECONSTRUCT AREA INLET  RECONSTRUCT AREA INLET
FROM  A5  A4  A3  A2  A1  B4  B3  B2  B1	TO  A4  A3  A2  A1  A0  B3  B3  B1	RARY  S: 100 Y  DIRECT AREA (ACRES) 0.30  0.43  0.04  0.45  0.12  0.30  0.81  0.00  0.14	TOTAL AREA (ACRES)  0.73  1.16  1.58  4.72  4.84  0.30  1.11  2.55	C 0.90 0.75 0.89 0.70 0.70 0.70 0.70 0.70 0.70 0.72 0.72	NOFF C KC (K=1.25) 1.00 0.94 1.11 0.98 0.38 0.94 0.88 0.38 0.84 0.90 0.50 0.50 0.53 0.84 0.53 0.84	Tc (MIN) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	FLOW TIME	INTENSITY (IN/HR)  10.32	(CFS)  3.10  7.06  4.94  11.67  0.15  15.29  4.06  42.62  0.46  41.83  2.79  2.79  4.18  6.01  0.00  22.04  0.76  23.25	EXISTING STRUCTURE EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP  4X4 AREA INLET OF EX. PIPE EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP  5x5 AREA INLET OVER EX. PIPE EXISTING 36" EQ CMP PIPE  6x4 CURB INLET  15 in. HDPE RECONS EX. AREA INLET  24 in. HDPE  JUNCTION BOX 24 in. HDPE CURB INLET  24 in. HDPE	PIPE LENGTH (L.F.)  81.00  92.00  202.00  118.00  110.00  55.00	PIPE SLOPE (%) 4.05 4.05 4.05 1.60 2.76 3.22	PIPE DIA (IN)  30  30  30  30  4  30  4  31  32  33  34  35  36  4  24  24  24  24	AIRS 4 4.83 4 4.83 4 4.83 4 9.99 7 0.76 1 0.70 3	.91 .91 .91 .07 .23	9.13 9.13 9.13 9.13 7.07 8.77 12.96	10.28 11.90 12.85 16.95 11.91 7.35 9.27	0.70 0.76 0.82 1.87 1.14 0.83 0.74 1.65	968.63 967.36 960.88 952.68 947.76 955.15 954.27 952.61	960.13 956.55 952.84 945.23 943.58 951.15 949.97	956.55 952.84 945.23 943.58 941.69 950.27 948.61 945.70	WATER ELEVATION  958.45  954.90  949.91  946.70  946.54  952.98  951.61  947.26	EXISTING STRUCTURE TO REMIAN  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  RECONSTRUCT AREA INLET  RECONSTRUCT AREA INLET
TLE: LEES OB #: B18-03 DESIGN C STRUC FROM A5 A4 A3 A2 A1 B4 B3 B2	TO  A4  A3  A2  A1  A0  B3  B3  B1	RARY  S: 100 Y  DIRECT AREA (ACRES) 0.30  0.43  0.04  0.45  0.12  0.30  0.81  0.00	TOTAL AREA (ACRES)  0.73  1.16  1.58  4.72  4.84  0.30  1.11  2.55	C 0.90 0.75 0.89 0.76 0.70 0.70 0.70 0.70 0.70 0.70 0.72 0.72	KC (K=1.25) 1.00 0.94 1.11 0.98 0.38 0.94 0.88 0.88 0.88 0.38 0.53 0.84	Tc (MIN) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	FLOW TIME	INTENSITY (IN/HR)  10.32	(CFS)  3.10  7.06  4.94  11.67  0.15  15.29  4.06  42.62  0.46  41.83  2.79  2.79  4.18  6.01  0.00  22.04  0.76	EXISTING STRUCTURE  EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE  EXISTING 30" CMP  4X4 AREA INLET OF EX. PIPE  EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE  EXISTING 30" CMP  5x5 AREA INLET OVER EX. PIPE  EXISTING 36" EQ CMP PIPE  6x4 CURB INLET  15 in. HDPE  RECONS EX. AREA INLET  24 in. HDPE  JUNCTION BOX  24 in. HDPE  CURB INLET	PIPE LENGTH (L.F.)  81.00  92.00  202.00  118.00  110.00  55.00	PIPE SLOPE (%) 4.05 4.05 4.05 1.60 2.76 3.22	PIPE DIA (IN)  30  30  30  30  4  30  4  30  4  24  24  24  24  36	4.83 4 4.83 4 4.83 4 9.99 7 0.76 1 0.70 3 1.33 3	.91 .91 .91 .07 .23	9.13 9.13 9.13 9.13 7.07 8.77 12.96	10.28 11.90 12.85 16.95 11.91 7.35 9.27	0.70 0.76 0.82 1.87 1.14 0.83 0.74 1.65	968.63 967.36 960.88 952.68 947.76 955.15 954.27	960.13 956.55 952.84 945.23 943.58 951.15 949.97	956.55 952.84 945.23 943.58 941.69 950.27 948.61 945.70	WATER ELEVATION  958.45  954.90  949.91  946.70  946.54  952.98  951.61  947.26	EXISTING STRUCTURE TO REMIAN  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  RECONSTRUCT AREA INLET  RECONSTRUCT AREA INLET
TLE: LEES DB #: B18-02 DESIGN C STRUC FROM A5 A4 A3 A2 A1 B4 B3 B2 B1 C1	TO  A4  A3  A2  A1  A0  B3  B1  A1	RARY  S: 100 Y  DIRECT AREA (ACRES) 0.30  0.43  0.04  0.45  0.12  0.30  0.81  0.00  0.14	TOTAL AREA (ACRES)  0.73  1.16  1.58  4.72  4.84  0.30  1.11  2.55  2.69	C 0.90 0.75 0.89 0.70 0.70 0.70 0.70 0.70 0.72 0.72 0.72	KC (K=1.25)  1.00 0.94 1.11 0.98 0.38 0.94 0.88 0.38 0.84 0.90 0.50 0.50 0.53 0.38 0.84 0.53 0.84 0.53 0.84	Tc (MIN) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	FLOW TIME	INTENSITY (IN/HR)  10.32	(CFS)  3.10  7.06  4.94  11.67  0.15  15.29  4.06  42.62  0.46  41.83  2.79  2.79  2.79  4.18  6.01  0.00  22.04  0.76  23.25  3.33  3.33	EXISTING STRUCTURE EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP  4X4 AREA INLET OF EX. PIPE EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP  5x5 AREA INLET OVER EX. PIPE EXISTING 36" EQ CMP PIPE  6x4 CURB INLET  15 in. HDPE RECONS EX. AREA INLET 24 in. HDPE JUNCTION BOX 24 in. HDPE CURB INLET 24 in. HDPE  6x4 CURB INLET  24 in. HDPE  6x4 CURB INLET  15 in. HDPE	PIPE LENGTH (L.F.)  81.00  92.00  27.00  118.00  110.00  55.00  67.00	PIPE SLOPE (%) 4.05 4.05 4.05 1.60 2.76 3.22 3.32	PIPE DIA (IN)  30  30  30  30  4  30  4  30  4  24  24  24  24  36	4.83 4 4.83 4 4.83 4 9.99 7 0.76 1 0.70 3 1.33 3	.91 .91 .91 .91 .07	9.13  9.13  9.13  9.13  7.07  8.77  12.96  13.16  9.95	10.28 11.90 12.85 16.95 11.91 7.35 9.27 13.34	0.70 0.76 0.82 1.87 1.14 0.83 0.74 1.65	968.63 967.36 960.88 952.68 947.76 955.15 954.27 952.61 948.50	960.13 956.55 952.84 945.23 943.58 951.15 949.97 948.31 945.20	956.55  952.84  945.23  943.58  941.69  950.27  948.61  945.70  943.88	WATER ELEVATION  958.45  954.90  949.91  946.70  946.54  952.98  951.61  947.26  947.76	EXISTING STRUCTURE TO REMIAN  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  RECONSTRUCT AREA INLET  RECONSTRUCT AREA INLET
TLE: LEES OB #: B18-02 DESIGN C STRUC FROM A5 A4 A3 A2 A1 B4 B3 B2 B1	TO  A4  A3  A2  A1  A0  B3  B1  A1  A2	RARY  S: 100 Y  DIRECT AREA (ACRES) 0.30  0.43  0.04  0.45  0.12  0.30  0.81  0.00  0.14	TOTAL AREA (ACRES)  0.73  1.16  1.58  4.72  4.84  0.30  1.11  2.55  2.69  0.38	C 0.90 0.75 0.89 0.70 0.70 0.70 0.70 0.70 0.72 0.72 0.40 0.42 0.30 0.67 0.42 0.67 0.68 0.68 0.68	KC (K=1.25) 1.00 0.94 1.11 0.98 0.38 0.94 0.88 0.88 0.88 0.84 0.90 0.50 0.53 0.38 0.84 0.53 0.84 0.53 0.84 0.53 0.84 1.00	Tc (MIN) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	FLOW TIME	INTENSITY (IN/HR)  10.32	(CFS)  3.10  7.06  4.94  11.67  0.15  15.29  4.06  42.62  0.46  41.83  2.79  2.79  4.18  6.01  0.00  22.04  0.76  23.25  3.33  3.33  4.44	EXISTING STRUCTURE EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP  4X4 AREA INLET OF EX. PIPE EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP  5x5 AREA INLET OVER EX. PIPE EXISTING 36" EQ CMP PIPE  6x4 CURB INLET  15 in. HDPE RECONS EX. AREA INLET  24 in. HDPE JUNCTION BOX 24 in. HDPE CURB INLET  24 in. HDPE  6x4 CURB INLET  24 in. HDPE  6x4 CURB INLET  15 in. HDPE	PIPE LENGTH (L.F.)  81.00  92.00  202.00  27.00  118.00  55.00  67.00  69.00	PIPE SLOPE (%) 4.05 4.05 4.05 1.60 2.76 3.22 3.32 1.90	PIPE DIA (IN)  30  30  30  30  30  4  30  4  30  4  24  24  24  24  36	4.83 4 4.83 4 4.83 4 4.83 4 9.99 7 0.76 1 0.70 3 1.33 3 1.27 3	.91 .91	9.13  9.13  9.13  9.13  7.07  8.77  12.96  13.16  9.95	10.28 11.90 12.85 16.95 11.91 7.35 9.27 13.34 10.88	0.70 0.76 0.82 1.87 1.14 0.83 0.74 1.65 1.76	968.63 967.36 960.88 952.68 947.76 955.15 954.27 952.61	960.13 956.55 952.84 945.23 943.58 951.15 949.97 948.31 945.20	956.55 952.84 945.23 943.58 941.69 950.27 948.61 945.70 943.88	WATER ELEVATION  958.45  954.90  949.91  946.70  946.54  952.98  951.61  947.26  947.76	EXISTING STRUCTURE TO REMIAN  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  RECONSTRUCT AREA INLET  RECONSTRUCT AREA INLET
TILE: LEES OB #: B18-02 OESIGN C STRUC FROM A5 A4 A3 A2 A1 B4 B3 B2 B1 C1	TO  A4  A3  A2  A1  A0  B3  B1  A1	RARY  S: 100 Y  DIRECT AREA (ACRES) 0.30  0.43  0.04  0.45  0.12  0.30  0.81  0.00  0.14	TOTAL AREA (ACRES)  0.73  1.16  1.58  4.72  4.84  0.30  1.11  2.55  2.69	C 0.90 0.75 0.89 0.70 0.70 0.70 0.70 0.70 0.72 0.72 0.72	KC (K=1.25)  1.00 0.94 1.11 0.98 0.38 0.94 0.88 0.38 0.84 0.90 0.50 0.50 0.53 0.38 0.84 0.53 0.84 0.53 0.84	Tc (MIN) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	FLOW TIME	INTENSITY (IN/HR)  10.32	(CFS)  3.10  7.06  4.94  11.67  0.15  15.29  4.06  42.62  0.46  41.83  2.79  2.79  2.79  4.18  6.01  0.00  22.04  0.76  23.25  3.33  3.33	EXISTING STRUCTURE EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP  4X4 AREA INLET OF EX. PIPE EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP  5x5 AREA INLET OVER EX. PIPE EXISTING 36" EQ CMP PIPE  6x4 CURB INLET  15 in. HDPE RECONS EX. AREA INLET 24 in. HDPE JUNCTION BOX 24 in. HDPE CURB INLET 24 in. HDPE  6x4 CURB INLET  24 in. HDPE  6x4 CURB INLET  15 in. HDPE	PIPE LENGTH (L.F.)  81.00  92.00  27.00  118.00  110.00  55.00  67.00	PIPE SLOPE (%) 4.05 4.05 4.05 1.60 2.76 3.22 3.32	PIPE DIA (IN)  30  30  30  30  30  4  30  4  30  4  24  24  24  24  36	4.83 4 4.83 4 4.83 4 4.83 4 9.99 7 0.76 1 0.70 3 1.33 3 1.27 3	.91 .91 .91 .91 .07	9.13  9.13  9.13  9.13  7.07  8.77  12.96  13.16  9.95	10.28 11.90 12.85 16.95 11.91 7.35 9.27 13.34	0.70 0.76 0.82 1.87 1.14 0.83 0.74 1.65	968.63 967.36 960.88 952.68 947.76 955.15 954.27 952.61 948.50	960.13 956.55 952.84 945.23 943.58 951.15 949.97 948.31 945.20	956.55  952.84  945.23  943.58  941.69  950.27  948.61  945.70  943.88	WATER ELEVATION  958.45  954.90  949.91  946.70  946.54  952.98  951.61  947.26  947.76	EXISTING STRUCTURE TO REMIAN  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  RECONSTRUCT AREA INLET  RECONSTRUCT AREA INLET
TILE: LEES OB #: B18-02 DESIGN C STRUC FROM A5 A4 A3 A2 A1 B4 B3 B2 B1 C1	DNDITION TURES  TO  A4  A3  A2  A1  A0  B3  B1  A1  A2  A4	RARY  S: 100 Y  DIRECT AREA (ACRES) 0.30  0.43  0.04  0.45  0.12  0.30  0.81  0.00  0.14	TOTAL AREA (ACRES)  0.73  1.16  1.58  4.72  4.84  0.30  1.11  2.55  2.69  0.38	C 0.90 0.75 0.89 0.70 0.70 0.70 0.70 0.70 0.72 0.72 0.40 0.42 0.30 0.67 0.42 0.67 0.42 0.67 0.68 0.68 0.68	KC (K=1.25) 1.00 0.94 1.11 0.98 0.38 0.94 0.88 0.38 0.84 0.90 0.50 0.53 0.38 0.84 0.53 0.84 0.53 0.84 0.53 0.84 0.53 0.84 0.65	Tc (MIN) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	FLOW TIME	INTENSITY (IN/HR)  10.32	(CFS)  3.10  7.06  4.94  11.67  0.15  15.29  4.06  42.62  0.46  41.83  2.79  2.79  4.18  6.01  0.00  22.04  0.76  23.25  3.33  3.33  3.33  4.44  3.94	EXISTING STRUCTURE EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP  4X4 AREA INLET OF EX. PIPE EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP  5x5 AREA INLET OVER EX. PIPE EXISTING 36" EQ CMP PIPE  6x4 CURB INLET  15 in. HDPE RECONS EX. AREA INLET  24 in. HDPE JUNCTION BOX 24 in. HDPE CURB INLET  24 in. HDPE  6x4 CURB INLET  15 in. HDPE	PIPE LENGTH (L.F.)  81.00  92.00  202.00  27.00  118.00  55.00  67.00  69.00  47.00	PIPE SLOPE (%)  4.05  4.05  4.05  1.60  2.76  3.22  3.32  1.90  1.76	PIPE DIA (IN)  30  30  30  30  30  4  30  4  30  4  24  24  24  24  36	AFOLL (SC	.91 .91	9.13  9.13  9.13  9.13  7.07  8.77  12.96  13.16  9.95  7.00	10.28 11.90 12.85 16.95 11.91 7.35 9.27 13.34 10.88	0.70 0.76 0.82 1.87 1.14 0.83 0.74 1.65 1.76	968.63 967.36 960.88 952.68 947.76 955.15 954.27 952.61 948.50	960.13 956.55 952.84 945.23 943.58 951.15 949.97 948.31 945.20 950.50	956.55 952.84 945.23 943.58 941.69 950.27 948.61 945.70 943.88 948.68	WATER ELEVATION  958.45  954.90  949.91  946.70  946.54  952.98  951.61  947.26  947.76  950.03	EXISTING STRUCTURE TO REMIAN  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  RECONSTRUCT AREA INLET  RECONSTRUCT AREA INLET
TILE: LEES OB #: B18-03 DESIGN C STRUC FROM A5 A4 A3 A2 A1 B4 B3 B2 B1 C1 D1	TO  A4  A3  A2  A1  A0  B3  B1  A1  A2	S: 100 Y  DIRECT AREA (ACRES) 0.30  0.43  0.45  0.12  0.30  0.81  0.00  0.14  0.38  0.43	TOTAL AREA (ACRES)  0.73  1.16  1.58  4.72  4.84  0.30  1.11  2.55  2.69  0.38	C 0.90 0.75 0.89 0.70 0.70 0.70 0.70 0.70 0.72 0.72 0.72	NOFF C  KC (K=1.25)  1.00 0.94 1.11 0.98 0.38 0.94 0.88 0.38 0.84 0.90 0.50 0.50 0.53 0.38 0.84 0.53 0.84 0.53 0.84 0.53 0.84 0.53 0.84 0.65 0.85 0.85	Tc (MIN) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	FLOW TIME	INTENSITY (IN/HR)  10.32	(CFS)  3.10  7.06  4.94  11.67  0.15  15.29  4.06  42.62  0.46  41.83  2.79  2.79  2.79  4.18  6.01  0.00  22.04  0.76  23.25  3.33  3.33  3.33  4.44  3.94  1.27  0.81	EXISTING STRUCTURE EXISTING 30" CMP 6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP 4X4 AREA INLET OF EX. PIPE EXISTING 30" CMP 6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP 5x5 AREA INLET OVER EX. PIPE EXISTING 36" EQ CMP PIPE  6x4 CURB INLET 15 in. HDPE RECONS EX. AREA INLET 24 in. HDPE JUNCTION BOX 24 in. HDPE CURB INLET 24 in. HDPE 6x4 CURB INLET 15 in. HDPE 6x4 CURB INLET 15 in. HDPE  6x4 CURB INLET 15 in. HDPE  TRENCH DRAIN 12 in. HDPE	PIPE LENGTH (L.F.)  81.00  92.00  202.00  27.00  118.00  55.00  67.00  69.00	PIPE SLOPE (%) 4.05 4.05 4.05 1.60 2.76 3.22 3.32 1.90	PIPE DIA (IN)  30  30  30  30  30  4  30  4  30  4  24  24  24  24  36	AFOLL (SC	.91 .91	9.13  9.13  9.13  9.13  7.07  8.77  12.96  13.16  9.95	10.28 11.90 12.85 16.95 11.91 7.35 9.27 13.34 10.88	0.70 0.76 0.82 1.87 1.14 0.83 0.74 1.65 1.76	968.63 967.36 960.88 952.68 947.76 955.15 954.27 952.61 948.50 954.82	960.13 956.55 952.84 945.23 943.58 951.15 949.97 948.31 945.20	956.55 952.84 945.23 943.58 941.69 950.27 948.61 945.70 943.88	WATER ELEVATION  958.45  954.90  949.91  946.70  946.54  952.98  951.61  947.26  947.76	EXISTING STRUCTURE TO REMIAN  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  RECONSTRUCT AREA INLET  RECONSTRUCT AREA INLET
TTLE: LEES OB #: B18-03 DESIGN C STRUC FROM A5 A4 A3 A2 A1 B4 B3 B2 B1 C1 D1	DNDITION TURES  TO  A4  A3  A2  A1  A0  B3  B1  A1  A2  A4	RARY  S: 100 Y  DIRECT AREA (ACRES) 0.30  0.43  0.04  0.45  0.12  0.30  0.81  0.00  0.14  0.38	TOTAL AREA (ACRES)  0.73  1.16  1.58  4.72  4.84  0.30  1.11  2.55  2.69  0.38	C 0.90 0.75 0.89 0.70 0.70 0.70 0.70 0.70 0.72 0.72 0.40 0.42 0.30 0.67 0.42 0.67 0.42 0.67 0.68 0.68 0.68	KC (K=1.25) 1.00 0.94 1.11 0.98 0.38 0.94 0.88 0.38 0.84 0.90 0.50 0.53 0.38 0.84 0.53 0.84 0.53 0.84 0.53 0.84 0.53 0.84 0.65	Tc (MIN) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	FLOW TIME	INTENSITY (IN/HR)  10.32	(CFS)  3.10  7.06  4.94  11.67  0.15  15.29  4.06  42.62  0.46  41.83  2.79  2.79  4.18  6.01  0.00  22.04  0.76  23.25  3.33  3.33  3.33  4.44  3.94	EXISTING STRUCTURE EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP  4X4 AREA INLET OF EX. PIPE EXISTING 30" CMP  6X4 CURB INLET OF EX. PIPE EXISTING 30" CMP  5x5 AREA INLET OVER EX. PIPE EXISTING 36" EQ CMP PIPE  6x4 CURB INLET  15 in. HDPE RECONS EX. AREA INLET  24 in. HDPE JUNCTION BOX 24 in. HDPE CURB INLET  24 in. HDPE  6x4 CURB INLET  15 in. HDPE	PIPE LENGTH (L.F.)  81.00  92.00  202.00  27.00  118.00  55.00  67.00  69.00  47.00	PIPE SLOPE (%)  4.05  4.05  4.05  1.60  2.76  3.22  3.32  1.90  1.76	PIPE DIA (IN)  30 4  30 4  30 4  30 4  30 4  30 4  30 4  30 4  30 4  31 5  15 1  15 1  15 1  15 1	AIROLL AIROLL (SC)  4.83	REA (1.FT.)	9.13  9.13  9.13  9.13  7.07  8.77  12.96  13.16  9.95  7.00	10.28 11.90 12.85 16.95 11.91 7.35 9.27 13.34 10.88	0.70 0.76 0.82 1.87 1.14 0.83 0.74 1.65 1.76	968.63 967.36 960.88 952.68 947.76 955.15 954.27 952.61 948.50 954.82	960.13 956.55 952.84 945.23 943.58 951.15 949.97 948.31 945.20 950.50	956.55 952.84 945.23 943.58 941.69 950.27 948.61 945.70 943.88 948.68	WATER ELEVATION  958.45  954.90  949.91  946.70  946.54  952.98  951.61  947.26  947.76  950.03	EXISTING STRUCTURE TO REMIAN  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  CONSTRU CT BOX OVER EXISTING PIPE  RECONSTRUCT AREA INLET

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI



Sapp Design Associates Architects, P.C. Missouri State Certificate of Authority #000607

Springfield, MO 65804 417.877.9600

1629 Walnut Kansas City, MO 64108

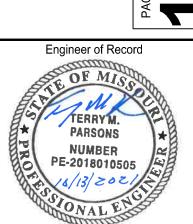
816.300.0300 Helix Architecture + Design
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SPECIAL NOTICES In the event the client consents to, allows, authorizes or approves of changes to any plans, specifications or other construction documents, and these changes are not approved in writing by the design professional, the client recognizes that such changes and the results thereof are not the responsibility of the design professional. Therefore, the client agrees to release the design professional from any liability arising from the construction, use or result of such changes. In addition, the client agrees to the fullest extent permitted by law, to indemnify and hold the design professional harmless from any damage, liability or cost (including reasonable attorney's fees and costs of defense) arising from such changes.

The personal seal of the registered Architect or Engineer shall be the legal equivalent of his signature whenever & wherever used, and the owner of the seal shall authenticate this sheet and the specification sections pertaining to this sheet. Responsibility shall be disclaimed for all other plans, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural project.

Mid-Continent Public Library CONSTRUCTION DOCUMENTS

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JACKSON COUNTY



Terry M Parsons, Engineer MO PE-2018010505



7301 West 133rd Street, Suite 200 Overland Park, KS 66213 TEL 913.381.1170 FAX 913.381.1174 www.olsson.com

Missouri State Certificate of Authority #001592

Revision No. Description Date

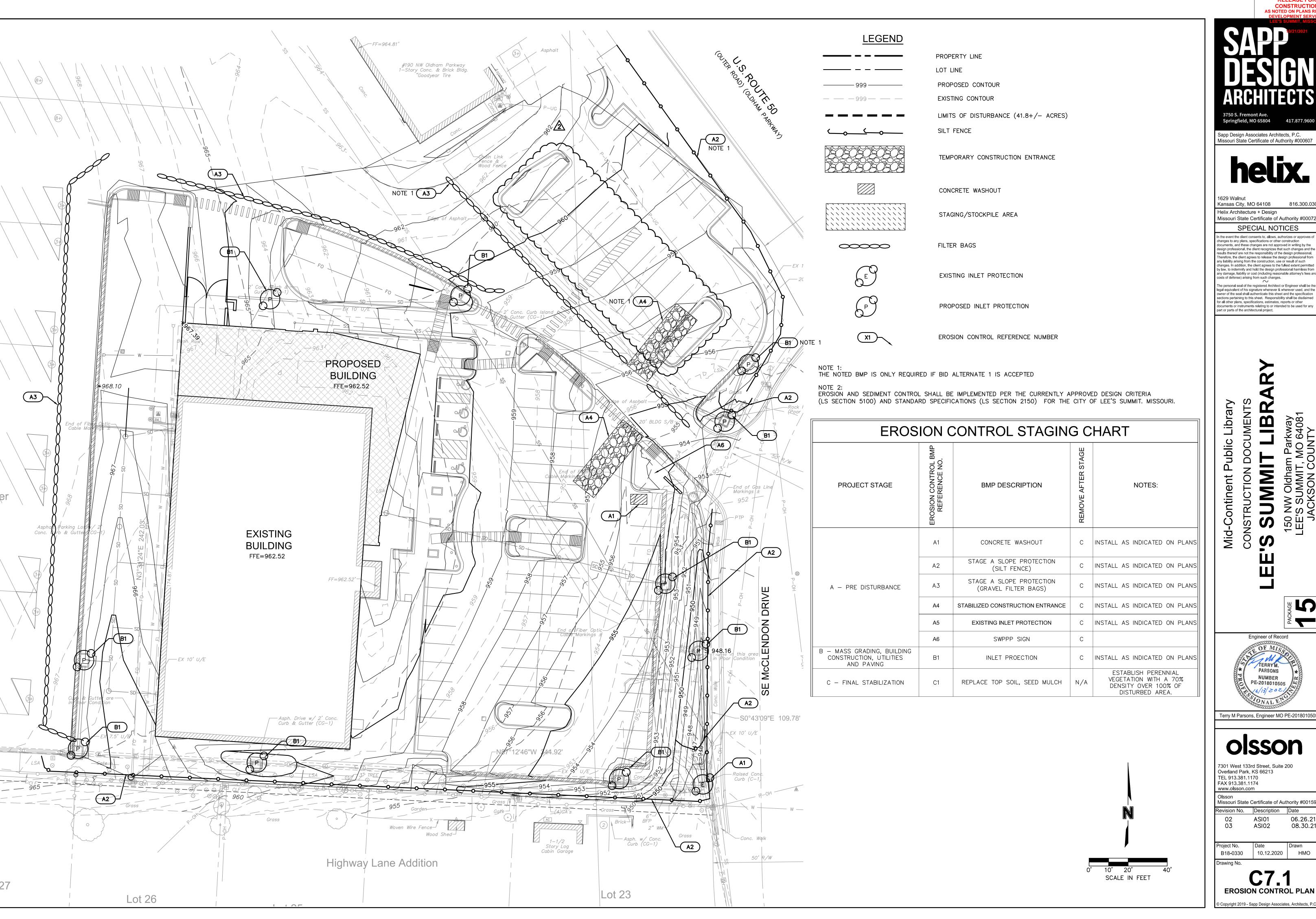
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DRAINAGE

Opyright 2015 Aupp Georgin Associates, Nanitects, P.C.



CONSTRUCTION
AS NOTED ON PLANS REVIEW

Sapp Design Associates Architects, P.C.
Missouri State Certificate of Authority #000607

Kansas City, MO 64108

Helix Architecture + Design Missouri State Certificate of Authority #000720

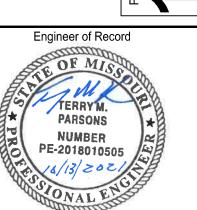
SPECIAL NOTICES n the event the client consents to, allows, authorizes or approves changes to any plans, specifications or other construction documents, and these changes are not approved in writing by the

design professional, the client recognizes that such changes and the results thereof are not the responsibility of the design professional. Therefore, the client agrees to release the design professional from any liability arising from the construction, use or result of such changes. In addition, the client agrees to the fullest extent permitted changes. In addition, the client agrees to the fullest extent permitted by law, to indemnify and hold the design professional harmless from any damage, liability or cost (including reasonable attorney's fees and costs of defense) arising from such changes.

The personal seal of the registered Architect or Engineer shall be the legal equivalent of his signature whenever & wherever used, and the owner of the seal shall authenticate this sheet and the specification sections per

for all other plans, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural project.

IBR.



Terry M Parsons, Engineer MO PE-2018010505



7301 West 133rd Street, Suite 200 Overland Park, KS 66213 TEL 913.381.1170

FAX 913.381.1174 www.olsson.com Missouri State Certificate of Authority #001592

06.26.21 ASI02 08.30.21

B18-0330 10.12.2020

**EROSION CONTROL PLAN** pyright 2019 - Sapp Design Associates, Architects, P.C. 4' (MINIMUM)

- 1. THE SWPPP INFORMATION SIGN MUST BE LOCATED NEAR THE ENTRANCE OF SITE, SUCH THAT IT IS ACCESSIBLE AND VIEWABLE BY THE GENERAL PUBLIC, BUT NOT OBSTRUCTING VIEW AS TO CAUSE A
- 2. ALL POSTED DOCUMENTS REQUIRED BY THE DEPARTMENT OF NATURAL RESOURCES MUST BE MAINTAINED IN A CLEARLY READABLE CONDITION AT ALL TIMES THROUGHOUT CONSTRUCTION AND UNTIL THE NOTICE-OF-TERMINATION (NOT) IS FILED FOR THE PERMIT.
- 3. CONTRACTOR SHALL POST OTHER STORMWATER AND/OR EROSION CONTROL RELATED PERMITS ON THE SIGN AS REQUIRED BY THE GOVERNING AGENCY.
- 4. SIGN SHALL BE LOCATED OUTSIDE PUBLIC RIGHT-OF-WAY AND EASEMENTS UNLESS APPROVED BY THE
- 5. CONTRACTOR IS RESPONSIBLE FOR ENSURING STABILITY OF THE SWPPP INFORMATION SIGN.

**SWPPP INFORMATION SIGN** 

**RELEASE FOR** CONSTRUCTION
AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI



Sapp Design Associates Architects, P.C.
Missouri State Certificate of Authority #000607



1629 Walnut

Kansas City, MO 64108

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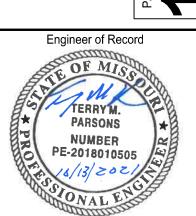
The personal seal of the registered Architect or Engineer shall be the legal equivalent of his signature whenever & wherever used, and the owner of the seal shall authenticate this sheet and the specification sections per

for all other plans, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural project.

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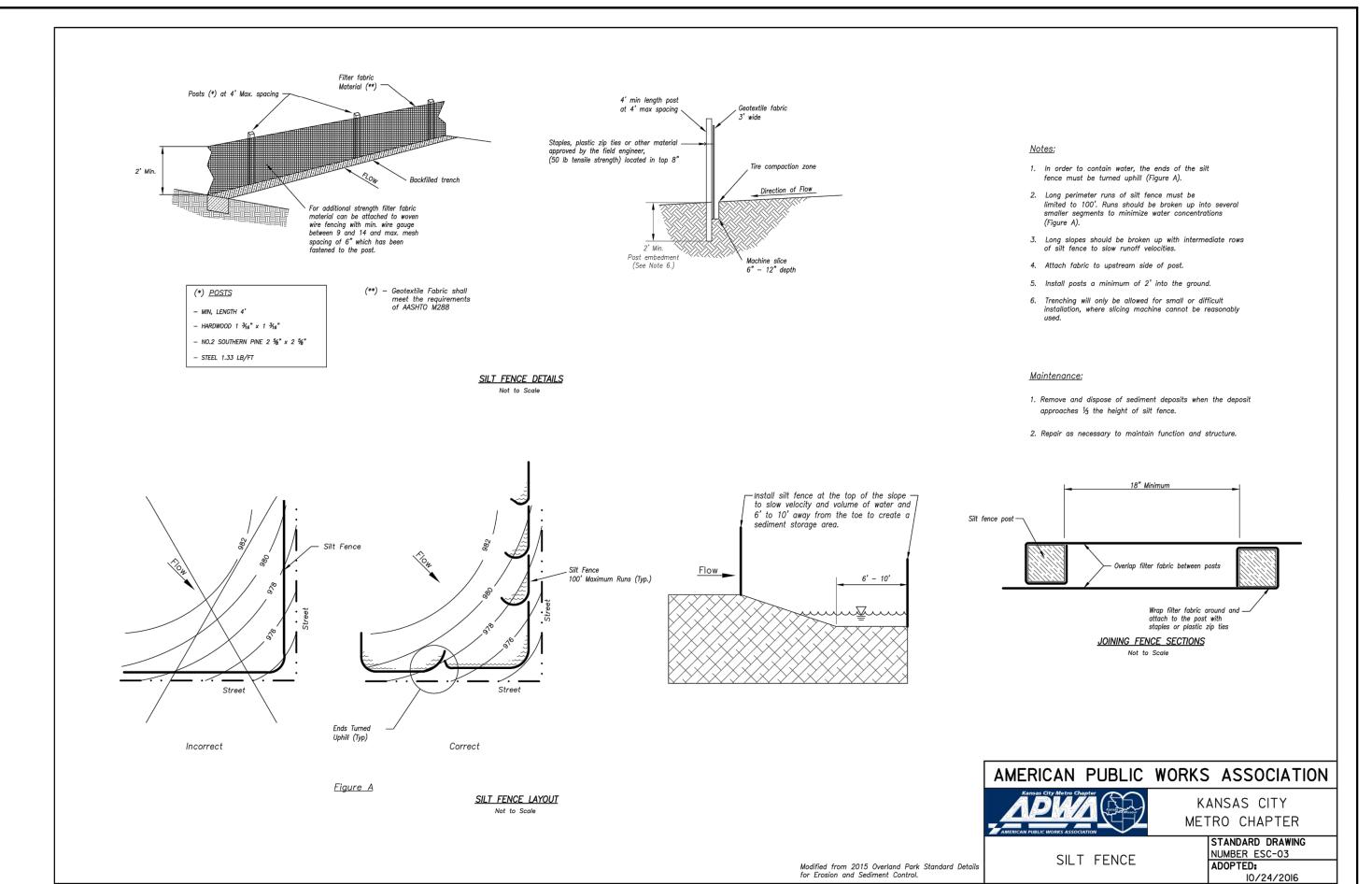
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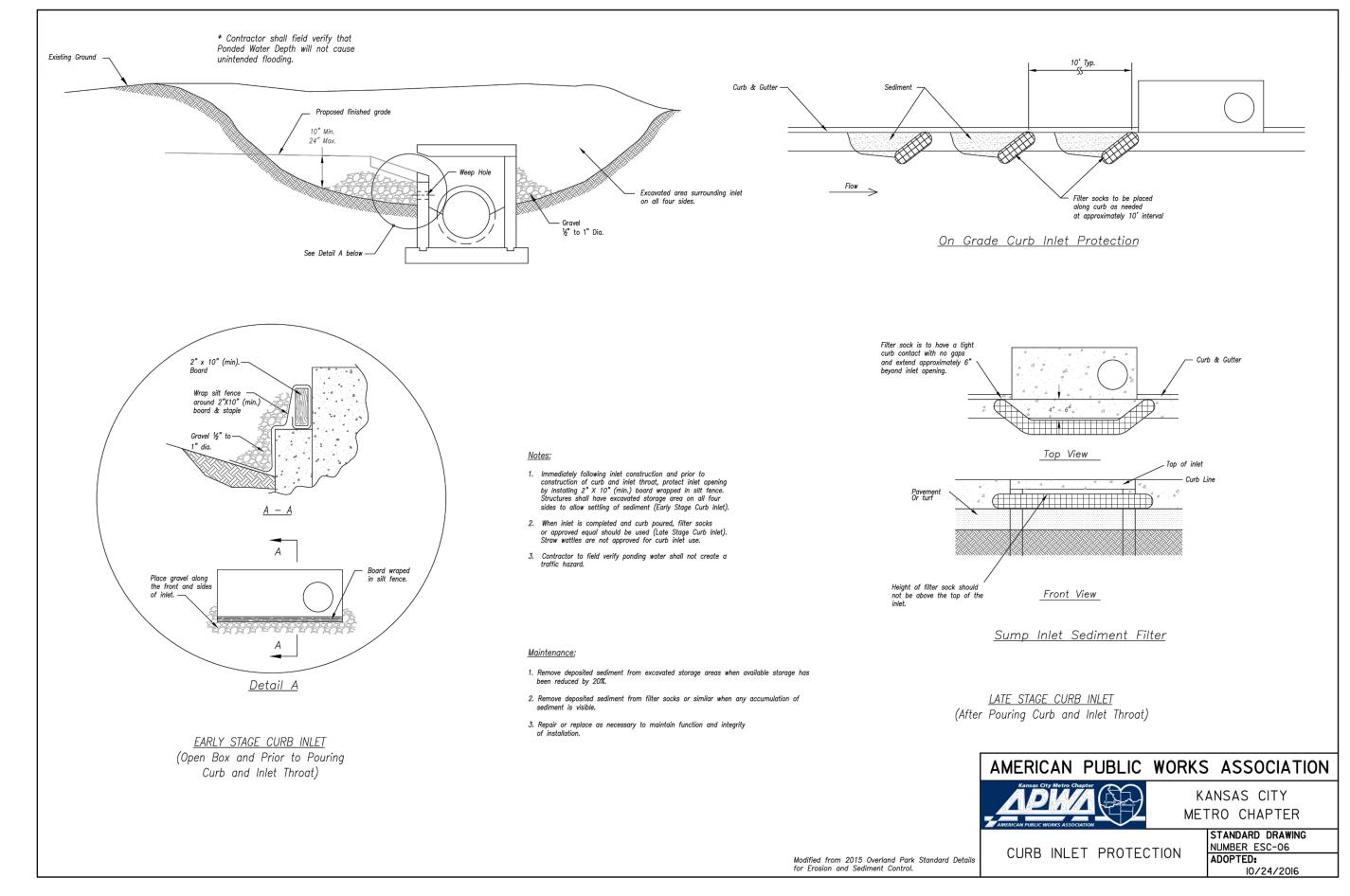
Revision No. Description Date

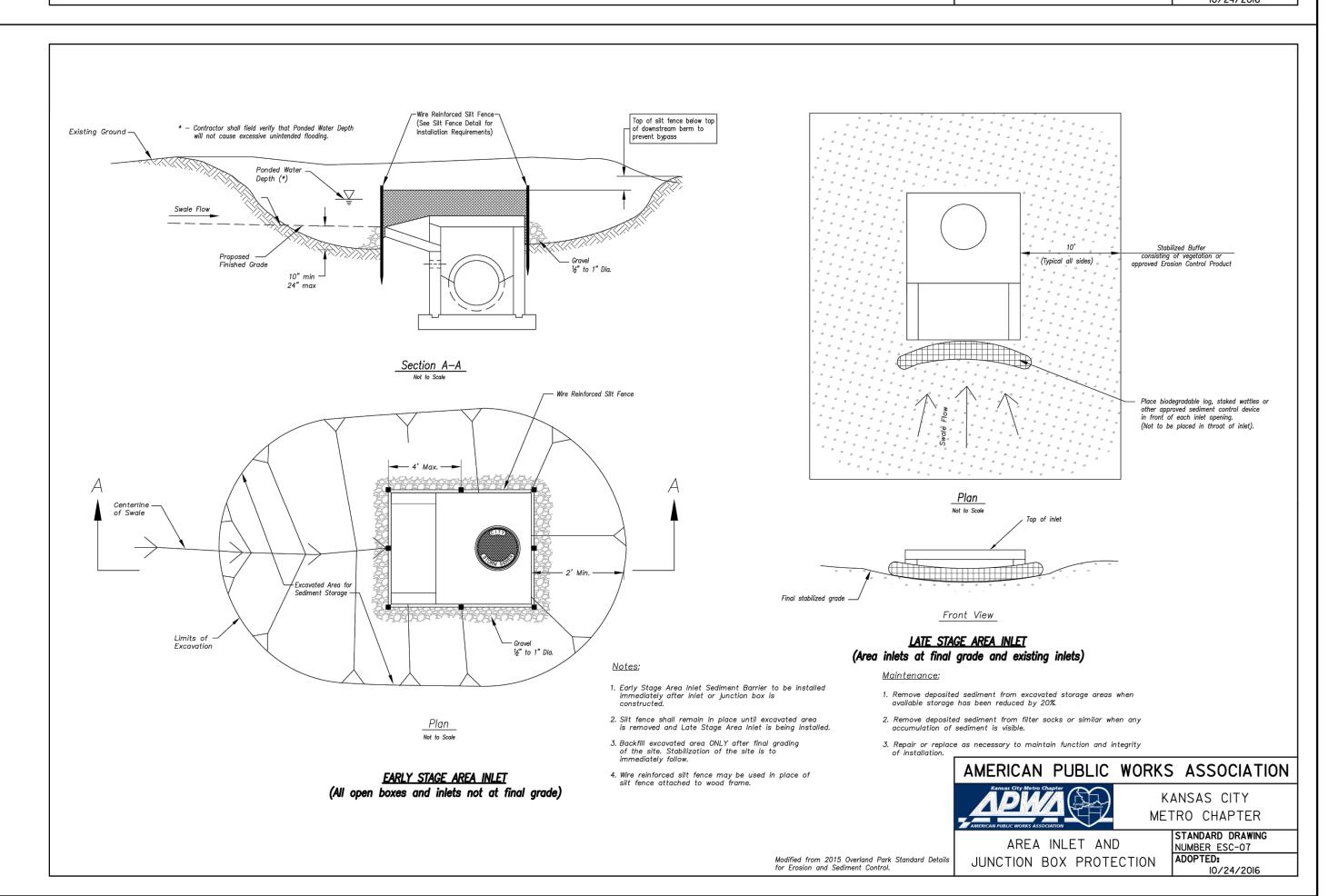
02 ASI01 06.26.21

B18-0330 10.12.2020

**EROSION CONTROL DETAILS** 











Springfield, MO 65804

417.877.9600

1629 Walnut Kansas City, MO 64108 816.300.0300

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SPECIAL NOTICES

n the event the client consents to, allows, authorizes or approves o hanges to any plans, specifications or other construction cuments, and these changes are not approved in writing by the design professional, the client recognizes that such changes and the sults thereof are not the responsibility of the design professional. Therefore, the client agrees to release the design professional from any liability arising from the construction, use or result of such changes. In addition, the client agrees to the fullest extent permitted y law, to indemnify and hold the design professional harmless from any damage, liability or cost (including reasonable attorney's fees and osts of defense) arising from such changes.

The personal seal of the registered Architect or Engineer shall be the legal equivalent of his signature whenever & wherever used, and the wner of the seal shall authenticate this sheet and the specification ections pertaining to this sheet. Responsibility shall be disclaimed or all other plans, specifications, estimates, reports or other ocuments or instruments relating to or intended to be used for any

art or parts of the architectural project.

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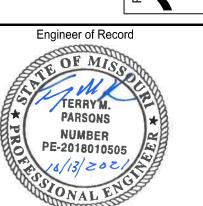
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Terry M Parsons, Engineer MO PE-2018010505

7301 West 133rd Street, Suite 200 Overland Park, KS 66213 TEL 913.381.1170 FAX 913.381.1174

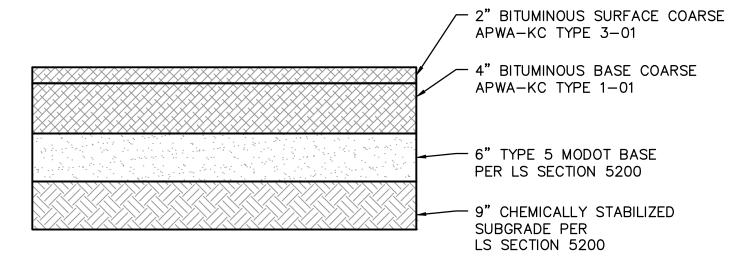
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evision No. Description Date ASI01 06.26.21

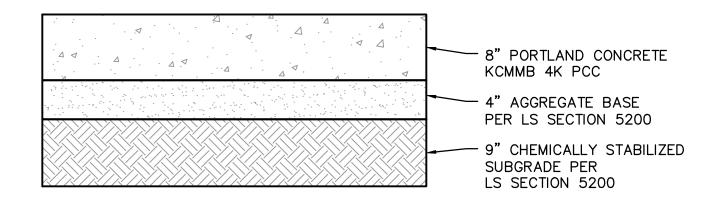
10.12.2020 B18-0330

> **EROSION CONTROL DETAILS**

## ASPHALT PAVEMENT (LIGHT TRAFFIC) WITH AGGREGATE BASE SECTION NOT TO SCALE

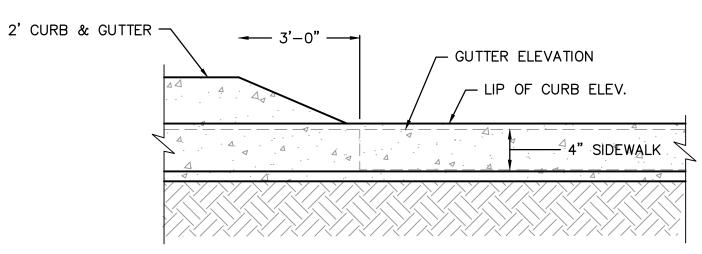


ASPHALT PAVEMENT (HEAVY TRAFFIC) WITH AGGREGATE BASE SECTION NOT TO SCALE

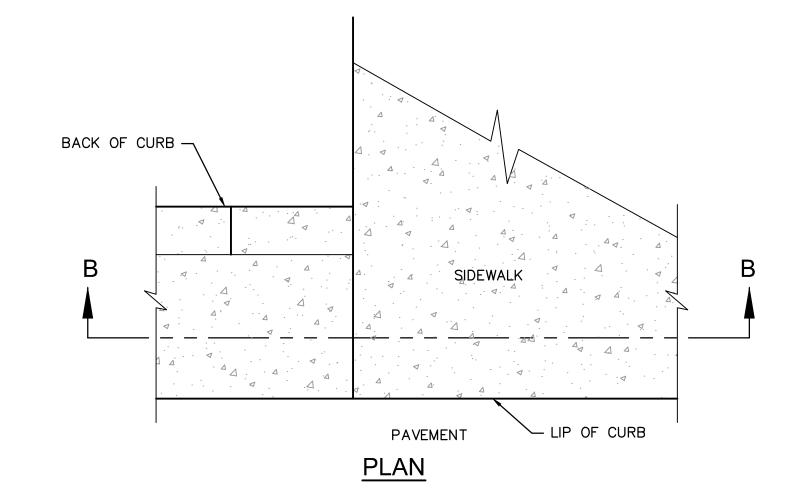


PORTLAND CEMENT CONCRETE (PCC) DRIVE PAVEMENT SECTION NOT TO SCALE

### 2' TRANSITION FROM TOP OF CURB TO SIDEWALK ELEVATION



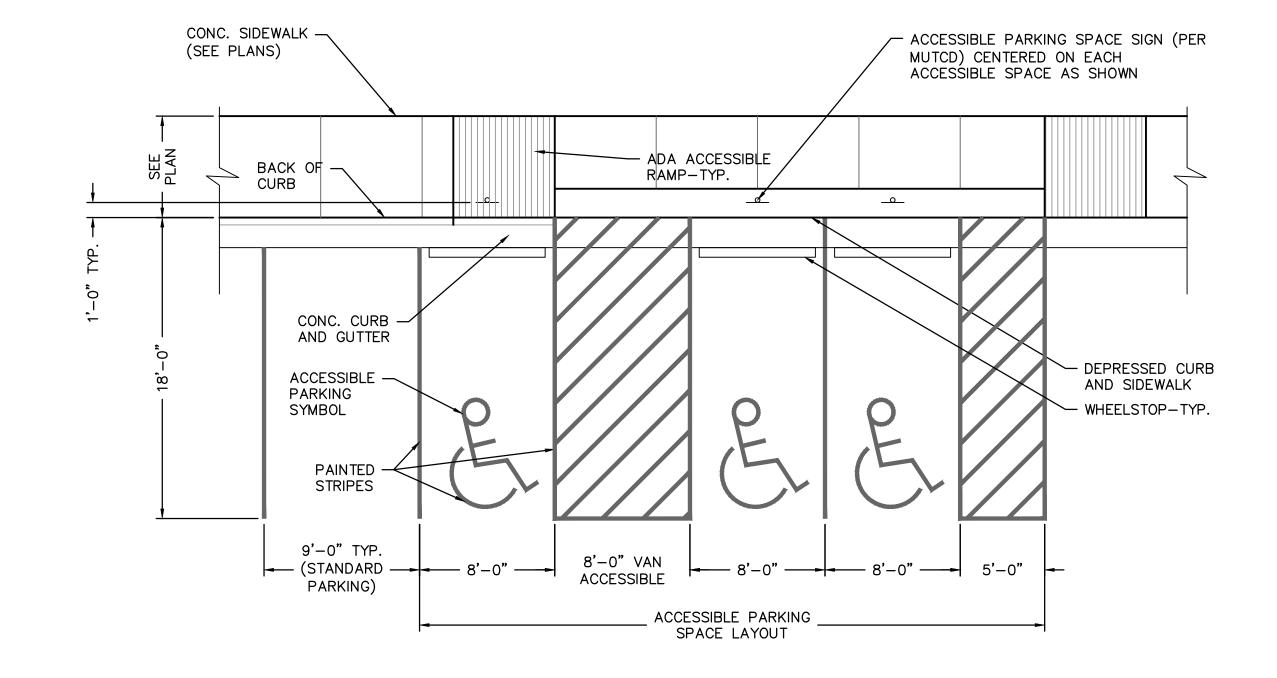
## **SECTION B-B**

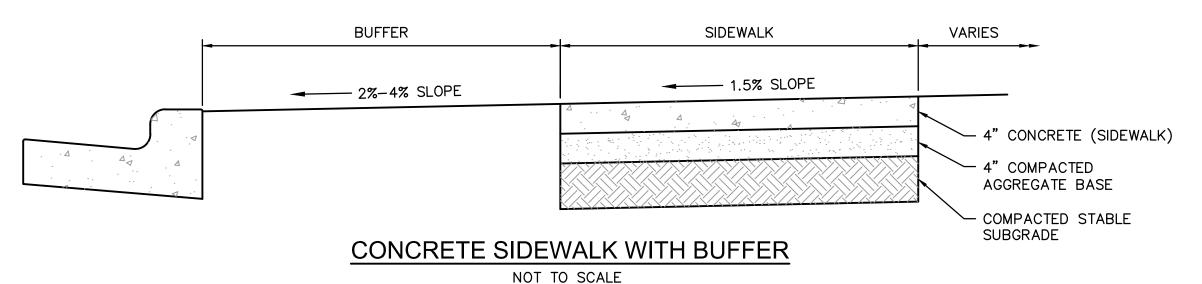


**CURB TRANSITION DETAIL** NOT TO SCALE

## NOTE

ACCESSIBLE PARKING SYMBOL AND SIGNAGE SHALL COMPLY WITH THE APPLICABLE RECOMMENDATIONS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).





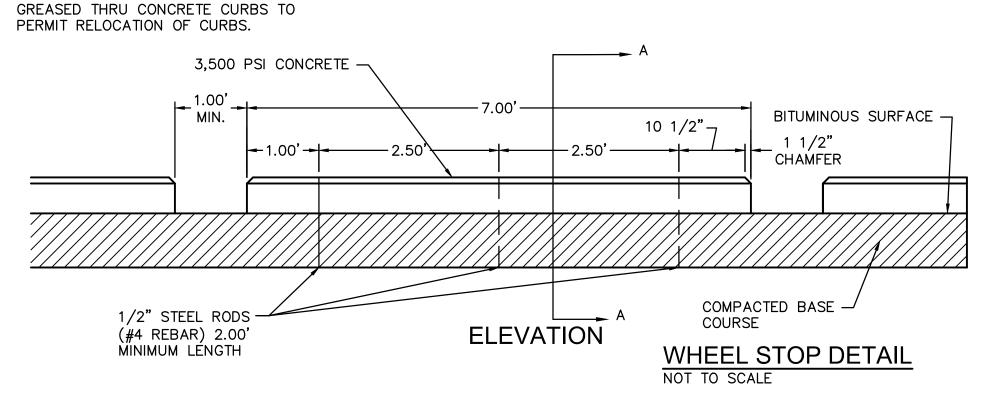
## **GENERAL NOTES:**

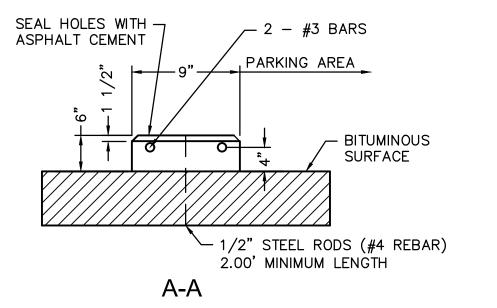
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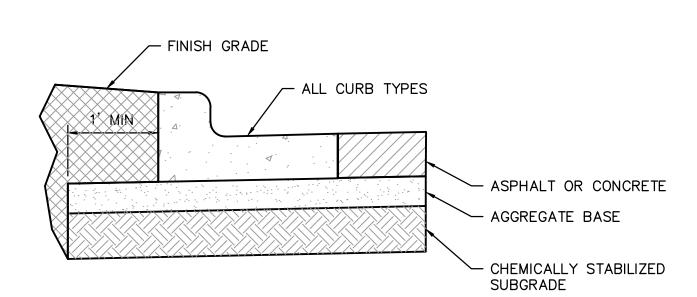
ANCHOR RODS TO BE SLEEVED OF

- 1. SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED
- DENSE GRADED AGGREGATE BASE. 1.5% CROSS SLOPE MUST BE MAINTAINED THROUGH DRIVEWAYS.
- KCMMB 4K CONCRETE MIX SHALL BE REQUIRED FOR ALL SIDEWALKS OR AS APPROVED BY THE CITY
- 4. ALL SIDEWALKS SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG) 5. AN EXPANSION JOINT SHALL BE PLACED AT A MAXIMUM OF 150 FT. CONSTRUCTION JOINTS SHALL BE
- PLACED THE SAME WIDTH OF SIDEWALK, BUT NO GREATER THAN 10 FT.
- SIDEWALK FINISHING (NO PICTURE FRAMING) AS DIRECTED BY CITY INSPECTOR.
- WHITE CURING COMPOUND MUST BE APPLIÉD UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.

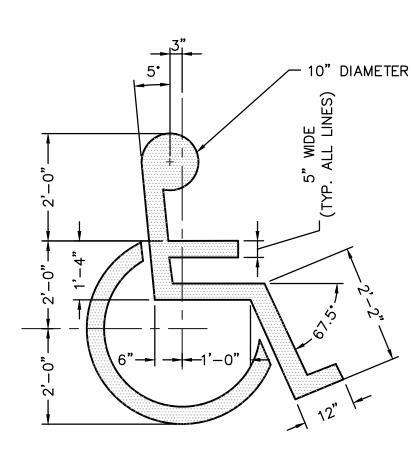
## TYPICAL ADA PARKING SPACE LAYOUT DETAIL





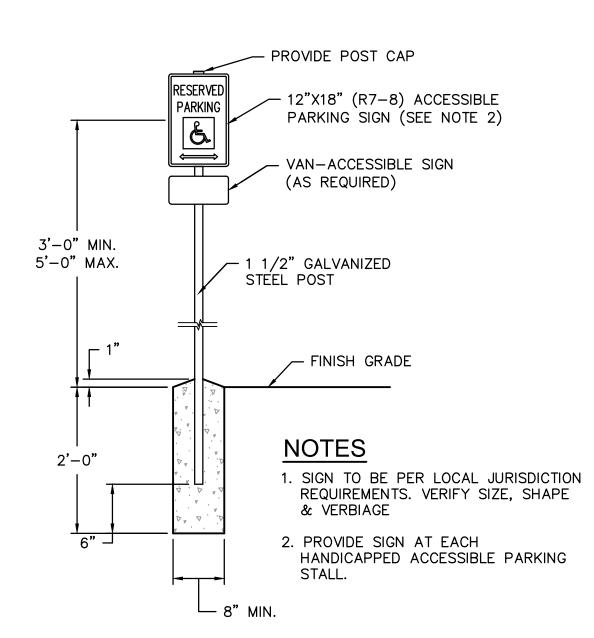


TYPICAL SUBGRADE PLACEMENT UNDER CURB NOT TO SCALE



PROVIDE PAINTED SYMBOL AT EACH DESIGNATED ACCESSIBLE PARKING STALL. CENTER SYMBOL IN EACH STALL.

## ACCESSIBLE PARKING SYMBOL NOT TO SCALE



**ACCESSIBLE PARKING** SPACE SIGNAGE NOT TO SCALE

> RELEASE FOR CONSTRUCTION **AS NOTED ON PLANS REVIEW** DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/21/2021



Sapp Design Associates Architects, P.C. Missouri State Certificate of Authority #000607

Kansas City, MO 64108 Helix Architecture + Design

Missouri State Certificate of Authority #000720 SPECIAL NOTICES

n the event the client consents to, allows, authorizes or approves of hanges to any plans, specifications or other construction ocuments, and these changes are not approved in writing by the design professional, the client recognizes that such changes and the results thereof are not the responsibility of the design professional. Therefore, the client agrees to release the design professional from any liability arising from the construction, use or result of such changes. In addition, the client agrees to the fullest extent permitted by law, to indemnify and hold the design professional harmless from any damage, liability or cost (including reasonable attorney's fees and

osts of defense) arising from such changes. The personal seal of the registered Architect or Engineer shall be the legal equivalent of his signature whenever & wherever used, and the owner of the seal shall authenticate this sheet and the specification sections per

for all other plans, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural project.

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Engineer of Record TERRY M. PARSONS NUMBER PE-2018010505

Terry M Parsons, Engineer MO PE-2018010505

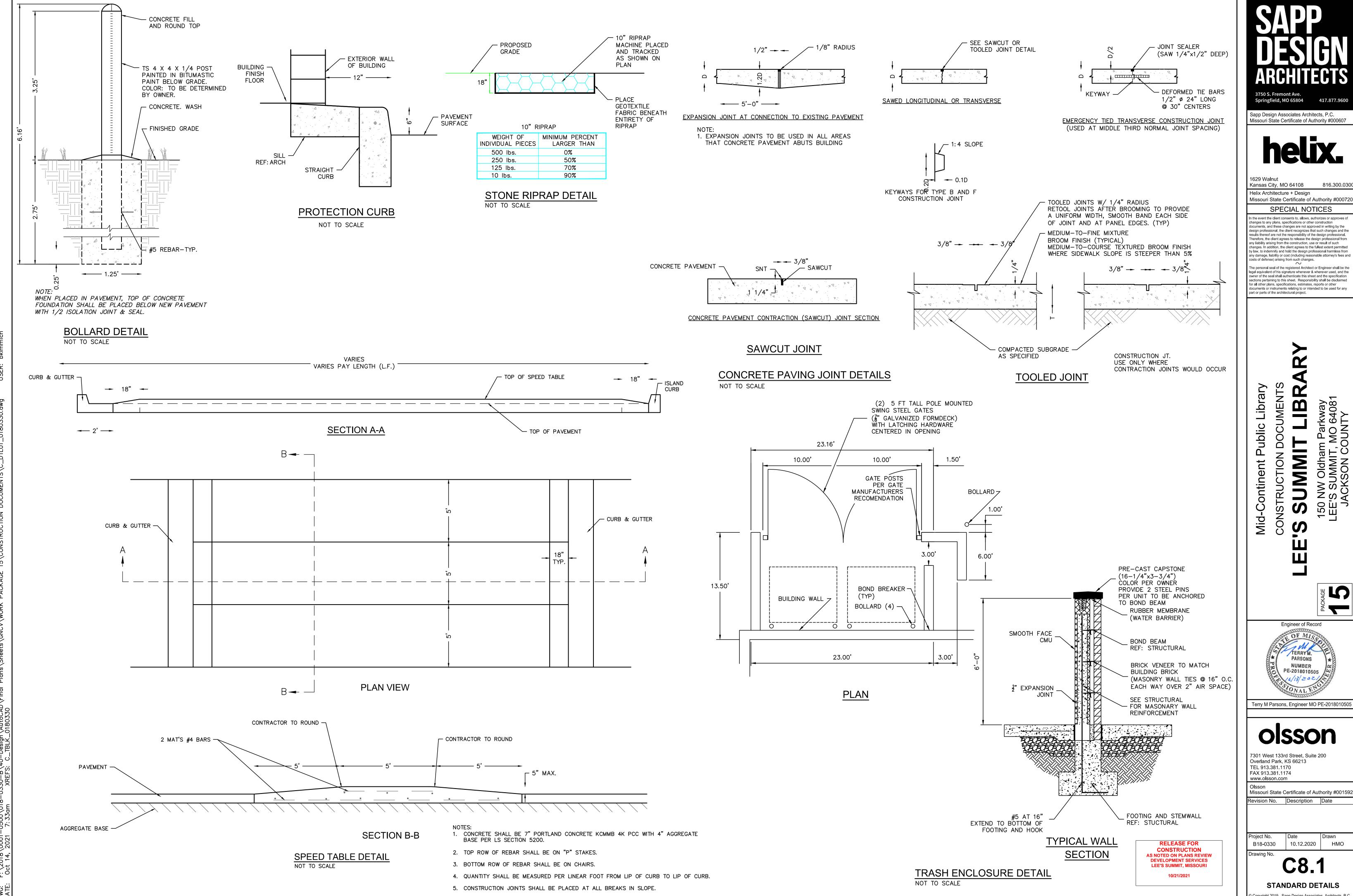
7301 West 133rd Street, Suite 200 Overland Park, KS 66213 TEL 913.381.1170 FAX 913.381.1174

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Revision No. Description Date

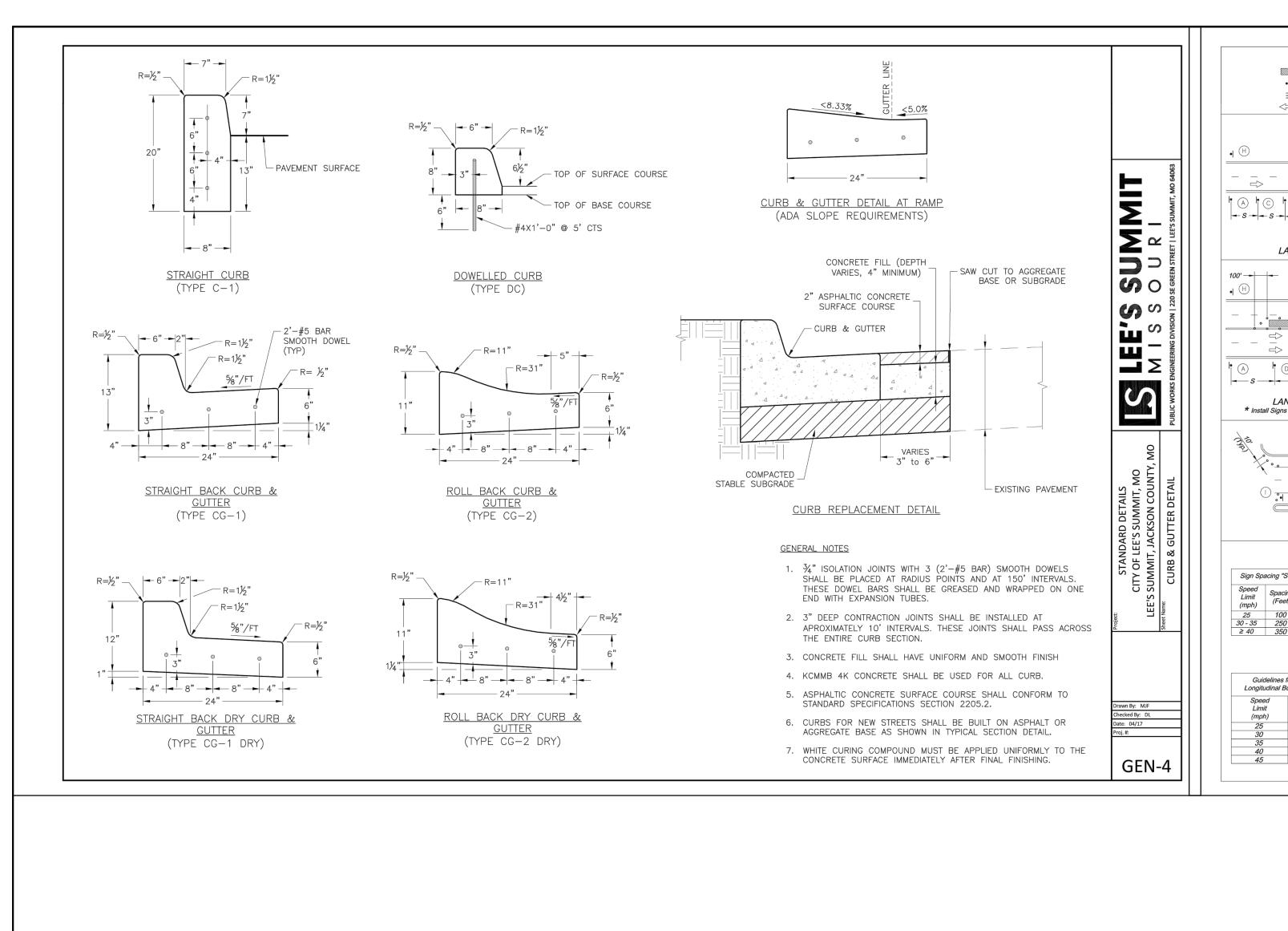
B18-0330 10.12.2020

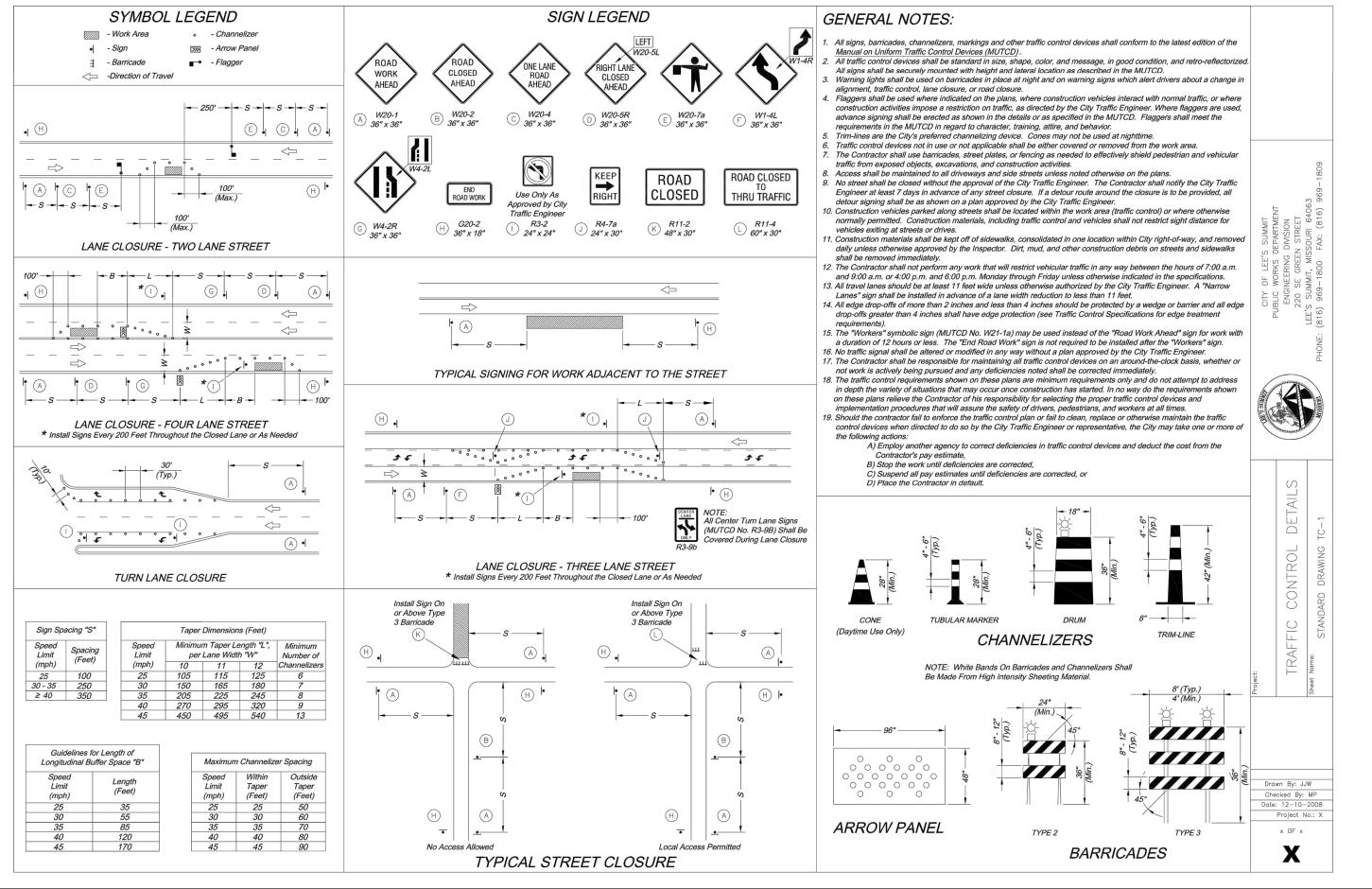
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816.300.0300

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**Public** 

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Idham Parkway AMIT, MO 64081 ON COUNTY SUMI 150 NW OIC EE'S SUMI JACKSO

**PARSONS** NUMBER PE-2018010505

Terry M Parsons, Engineer MO PE-2018010505

7301 West 133rd Street, Suite 200 Overland Park, KS 66213 TEL 913.381.1170

FAX 913.381.1174

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Engineer of Record

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RELEASE FOR

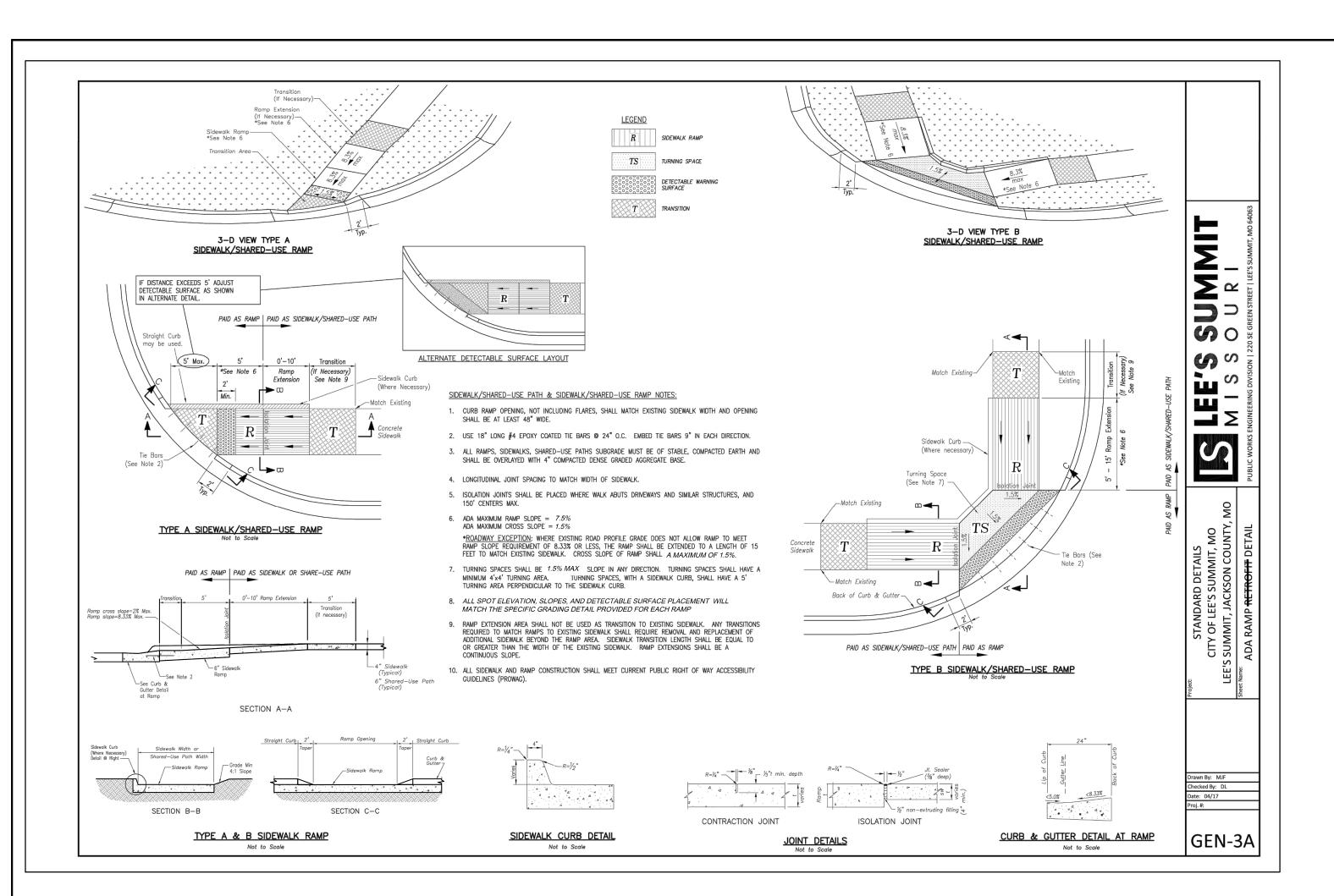
CONSTRUCTION

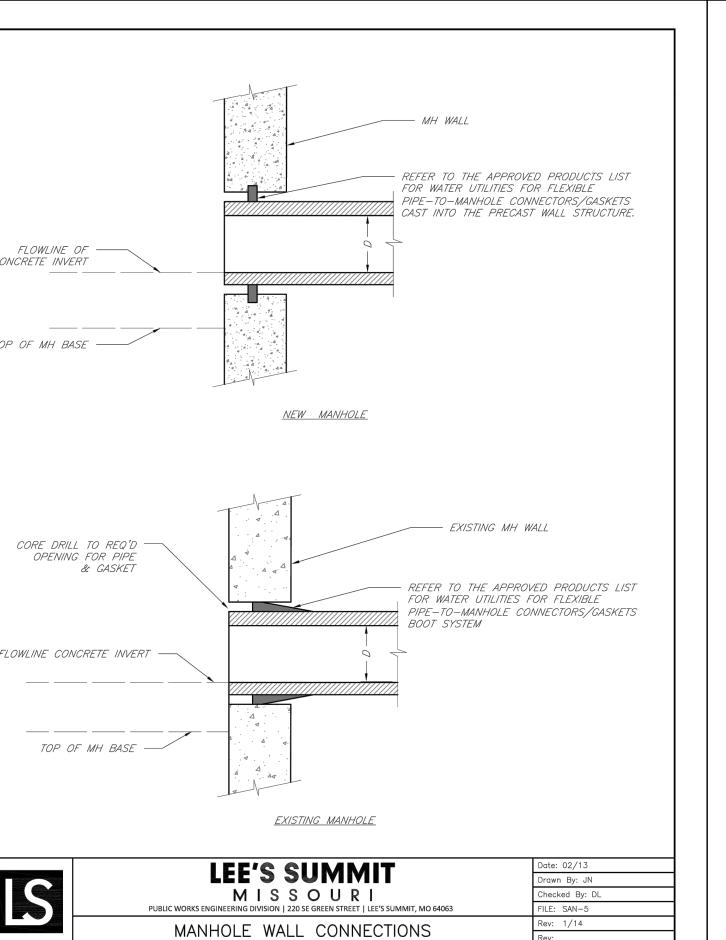
**AS NOTED ON PLANS REVIEW** DEVELOPMENT SERVICES

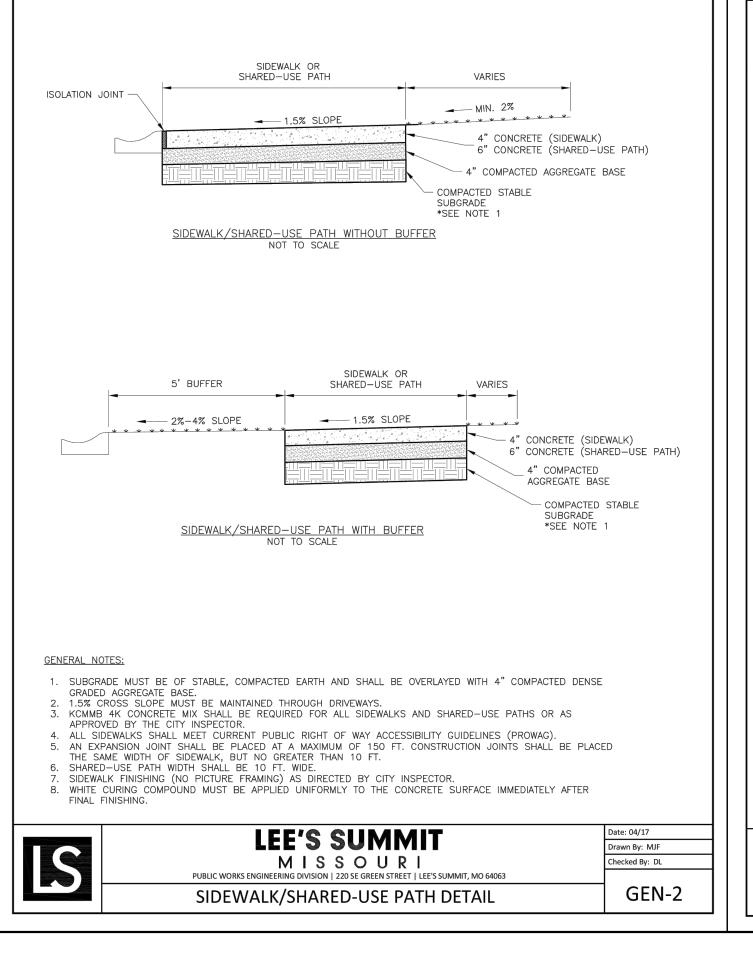
LEE'S SUMMIT, MISSOURI

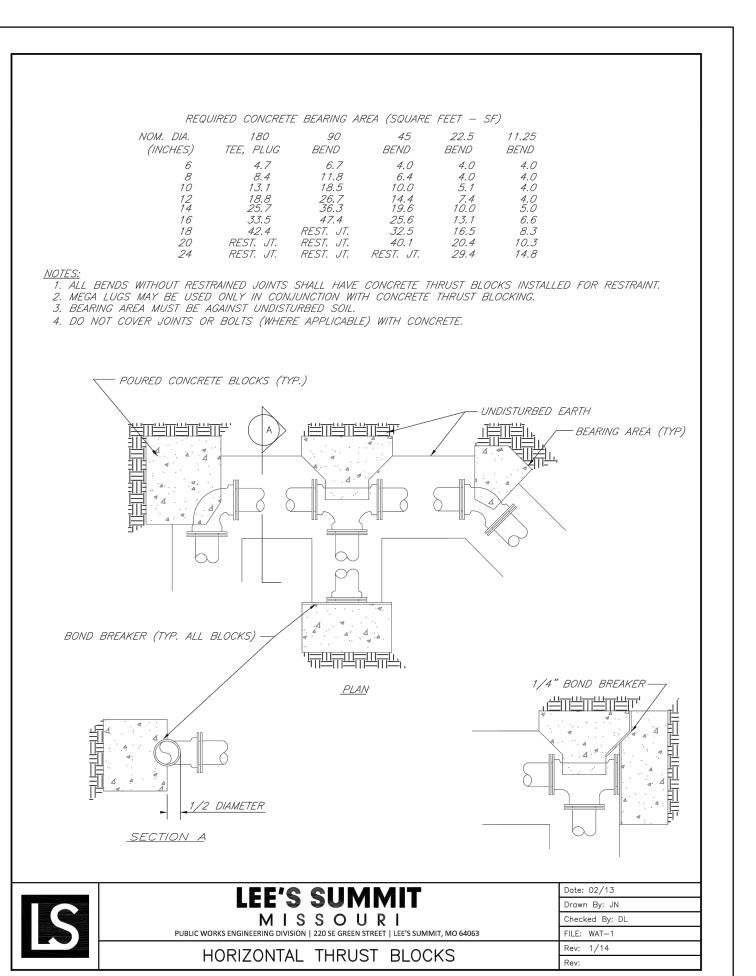
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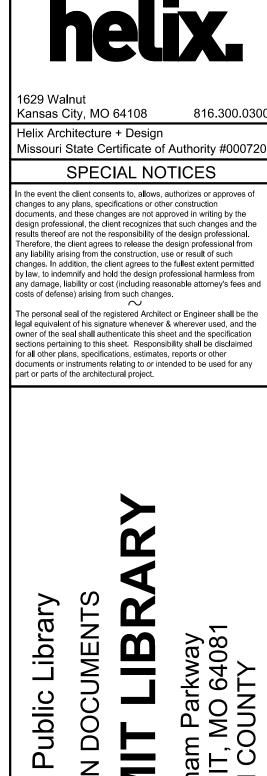
STANDARD DETAILS









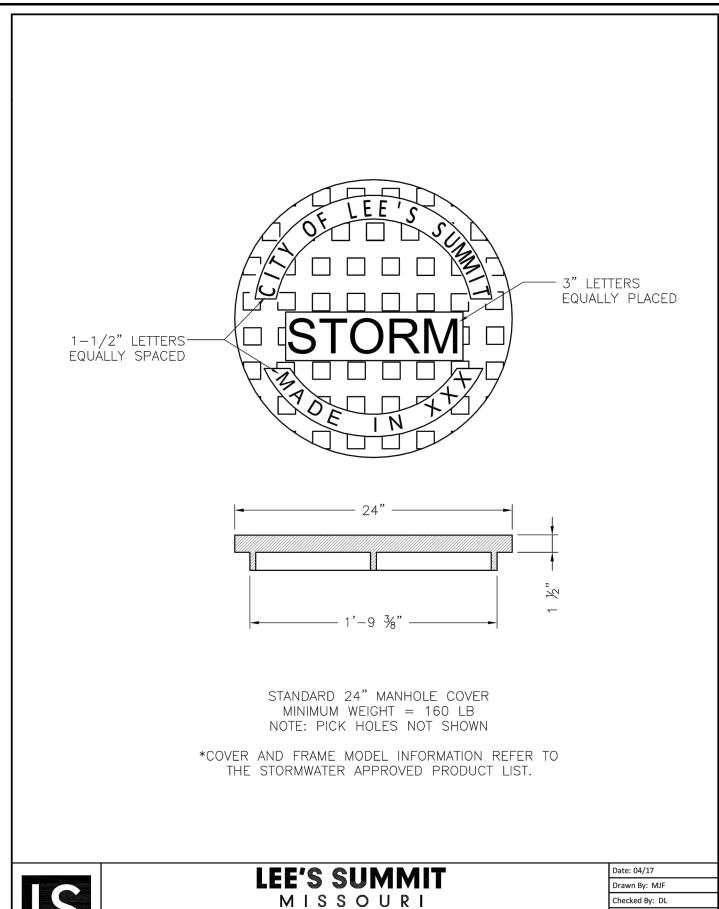


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STORM MANHOLE COVER DETAIL

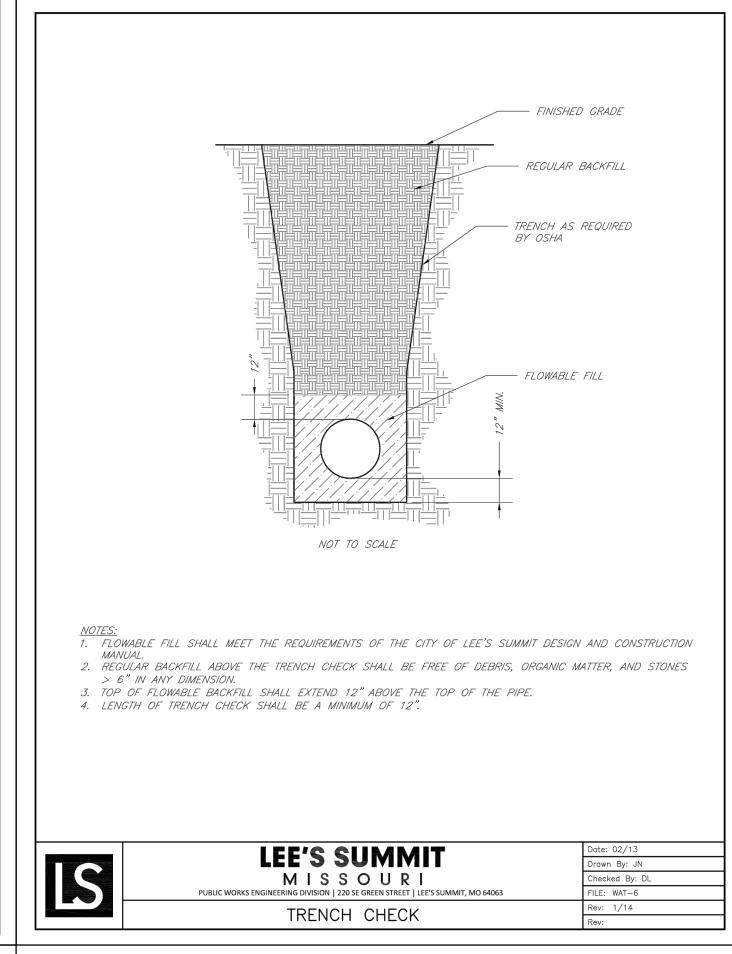
MECHANICAL JOINT (TYP.) STM-6

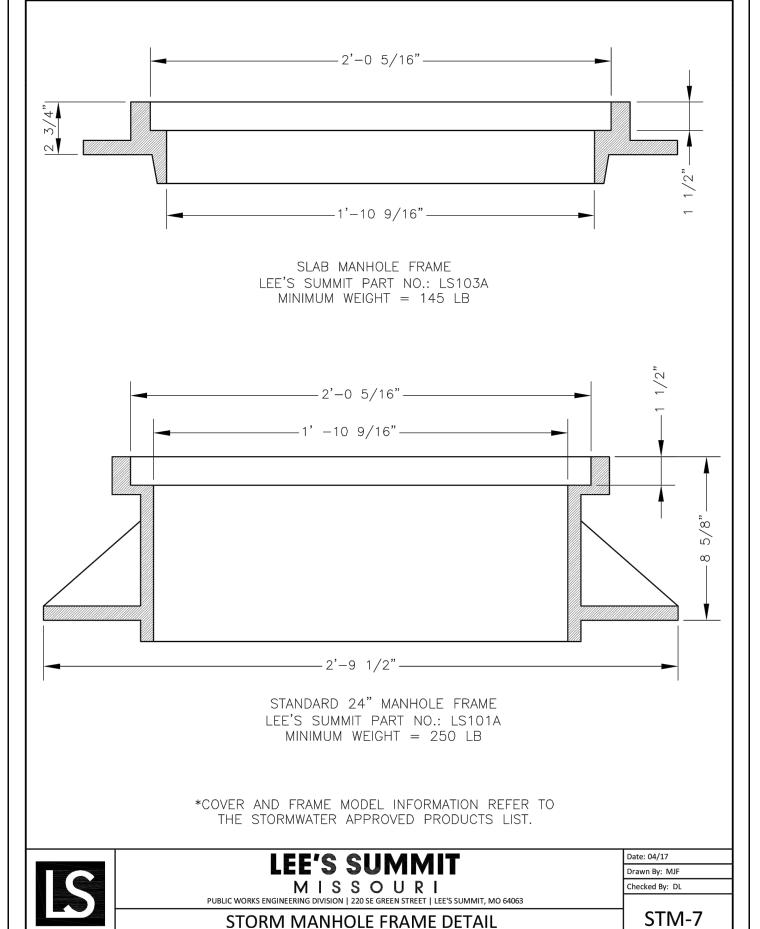
- BACK OF CURB

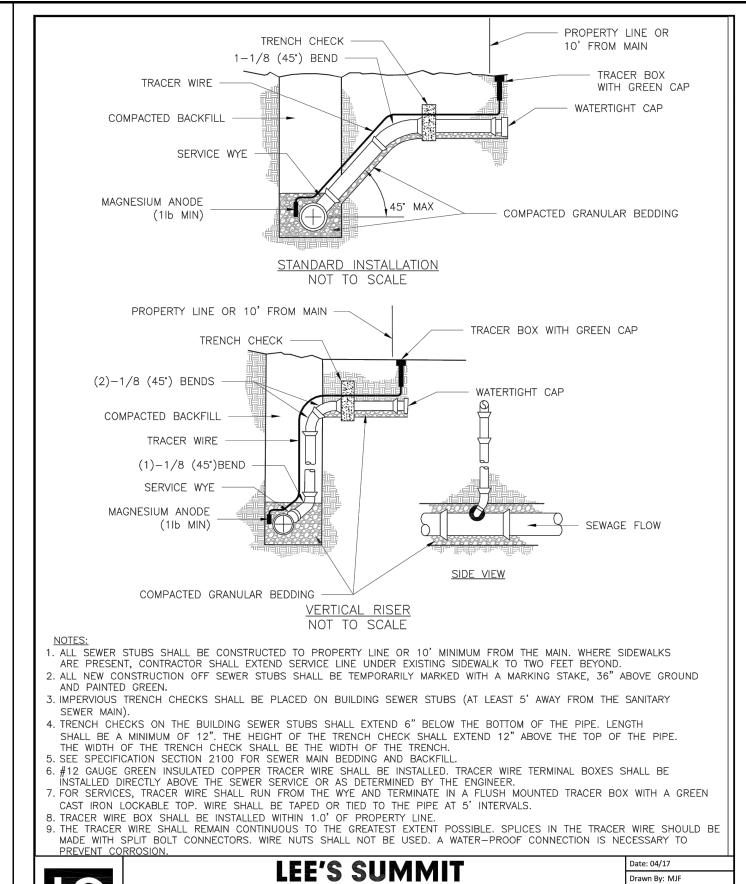
---- GROUND SURFACE

FILE: WAT-7

Rev: 1/14

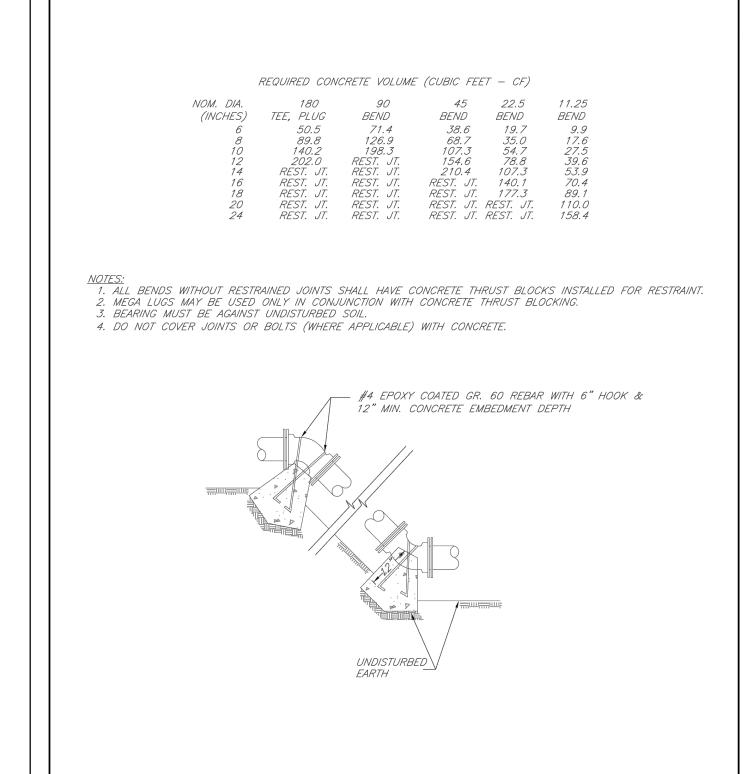


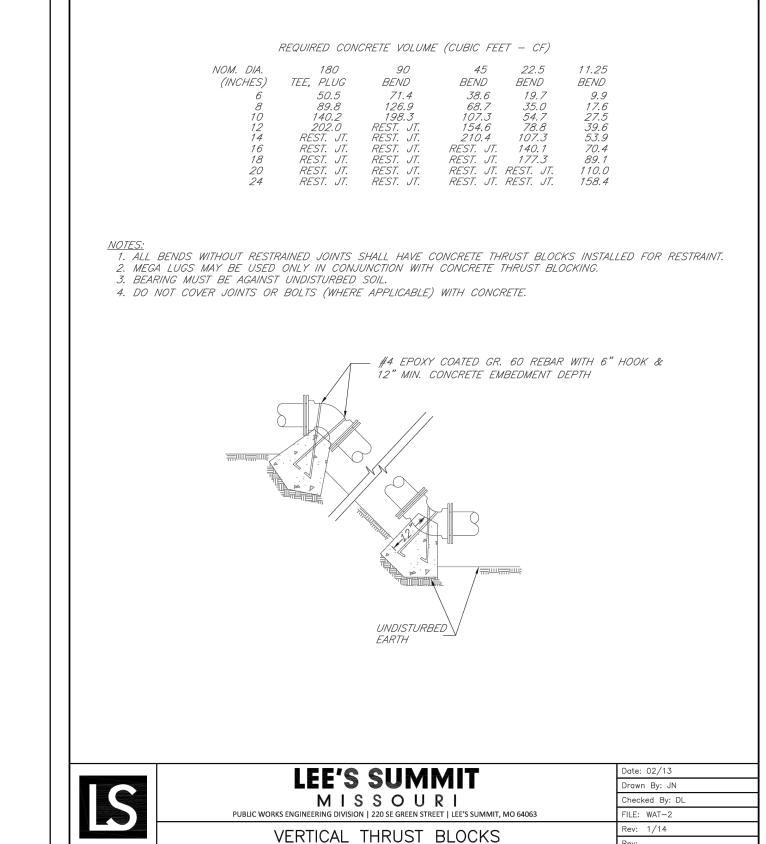




MISSOURI

**BUILDING SEWER STUB AND RISER** 









art or parts of the architectural project.

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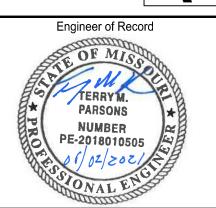
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Terry M Parsons, Engineer MO PE-2018010505

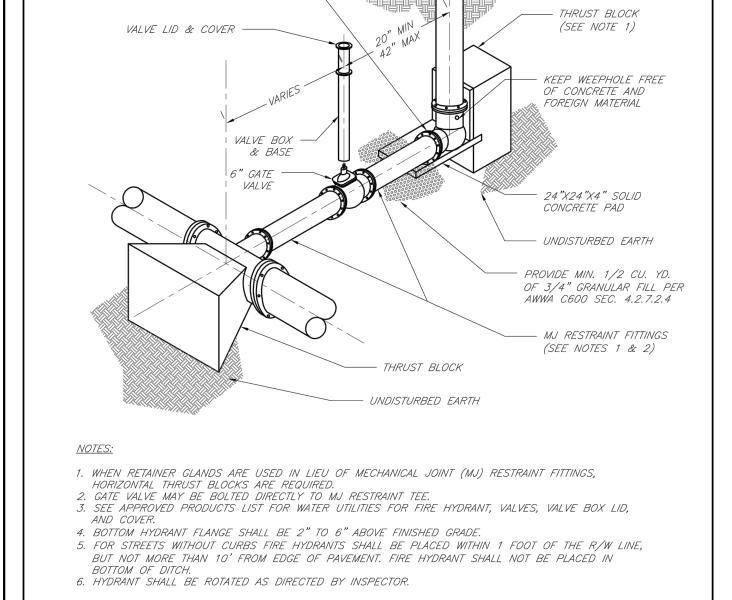
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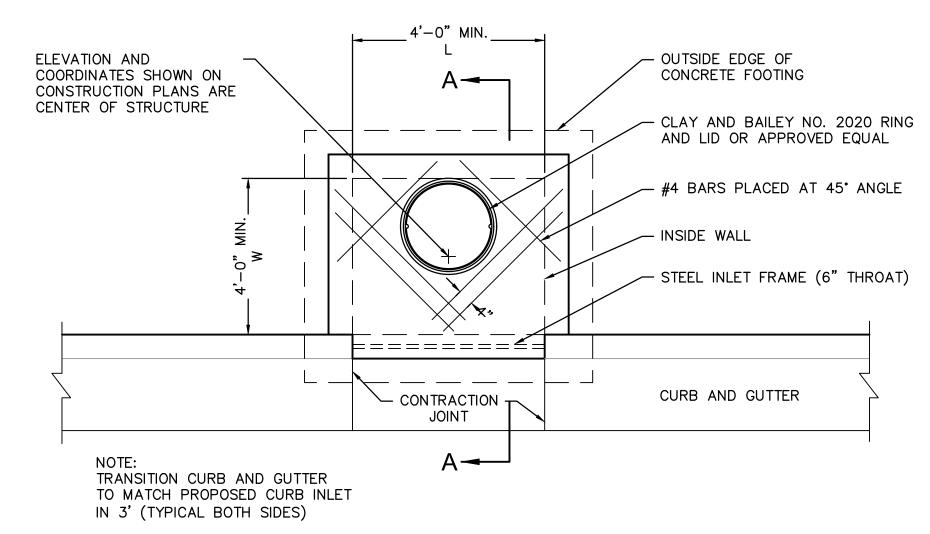


**LEE'S SUMMIT** 

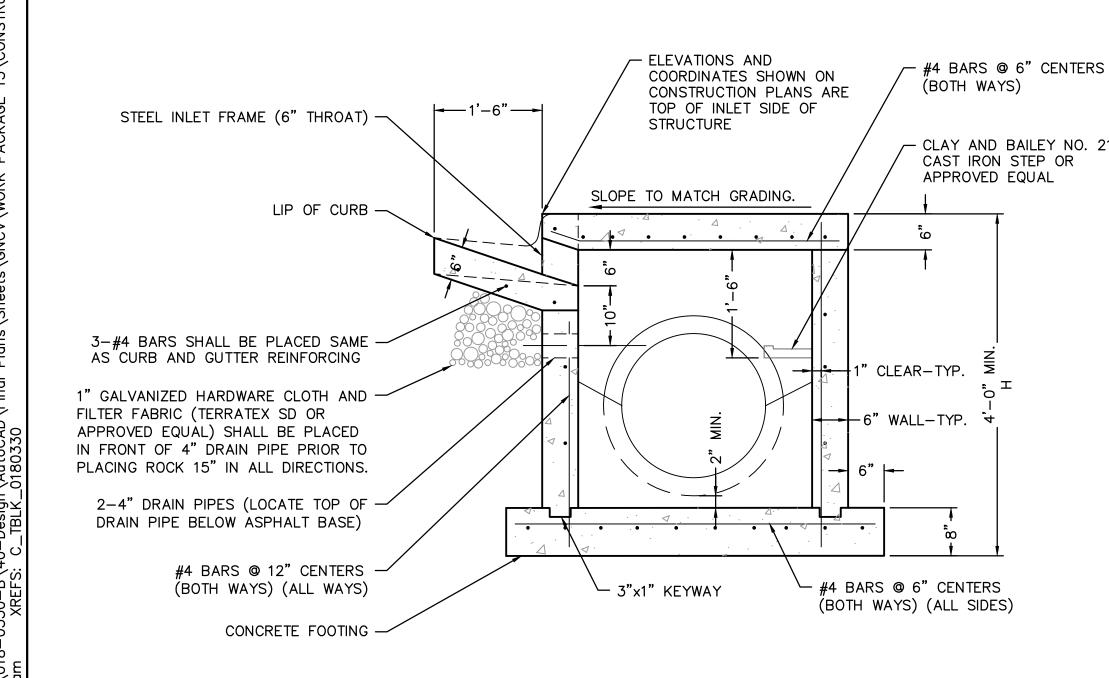
MISSOURI

HYDRANT INSTALLATION - STRAIGHT SET

# DOUBLE GRATE INLET DETAILS NOT TO SCALE



PLAN



## 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.
- CLAY AND BAILEY NO. 2102<sup>15.</sup> DO NOT SCALE THESE DRAWINGS FOR DIMENSIONS OR CLEARANCES. ANY CAST IRON STEP OR 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.

## NOTES GENERAL

- 1. ALL STORM SEWER STRUCTURES SHALL BE PRECAST. PRECAST SHOP DRAWINGS SHALL BE APPROVED BY THE DESIGN ENGINEER.
- 2. PRE-CAST SHOP DRAWINGS ARE TO BE APPROVED BY THE CITY ENGINEER FOR PUBLICLY FINANCED OR ADMINISTERED PROJECTS. PRE-CAST SHOP DRAWINGS FOR PRIVATELY FINANCED PROJECTS ARE TO BE SUBMITTED TO THE ENGINEERING SERVICES DIVISION OF THE PLANNING AND DEVELOPMENT SERVICES DEPARTMENT.
- 3. DO NOT SCALE THESE DRAWINGS FOR DIMENSIONS OR CLEARANCES. ANY QUESTIONS REGARDING DIMENSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE CITY ENGINEER PRIOR TO CONSTRUCTION.
- 4. THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION. THE CONCRETE THICKNESS AND REINFORCEMENT SHOWN IS FOR BOXES WITH ("L"+"H") AND ("W"+"H") LESS THEN OR EQUAL TO 20. FOR BOXES WITH EITHER OF THESE CALCULATIONS GREATER THAN 20, A SPECIAL DESIGN IS REQUIRED.

## CONCRETE

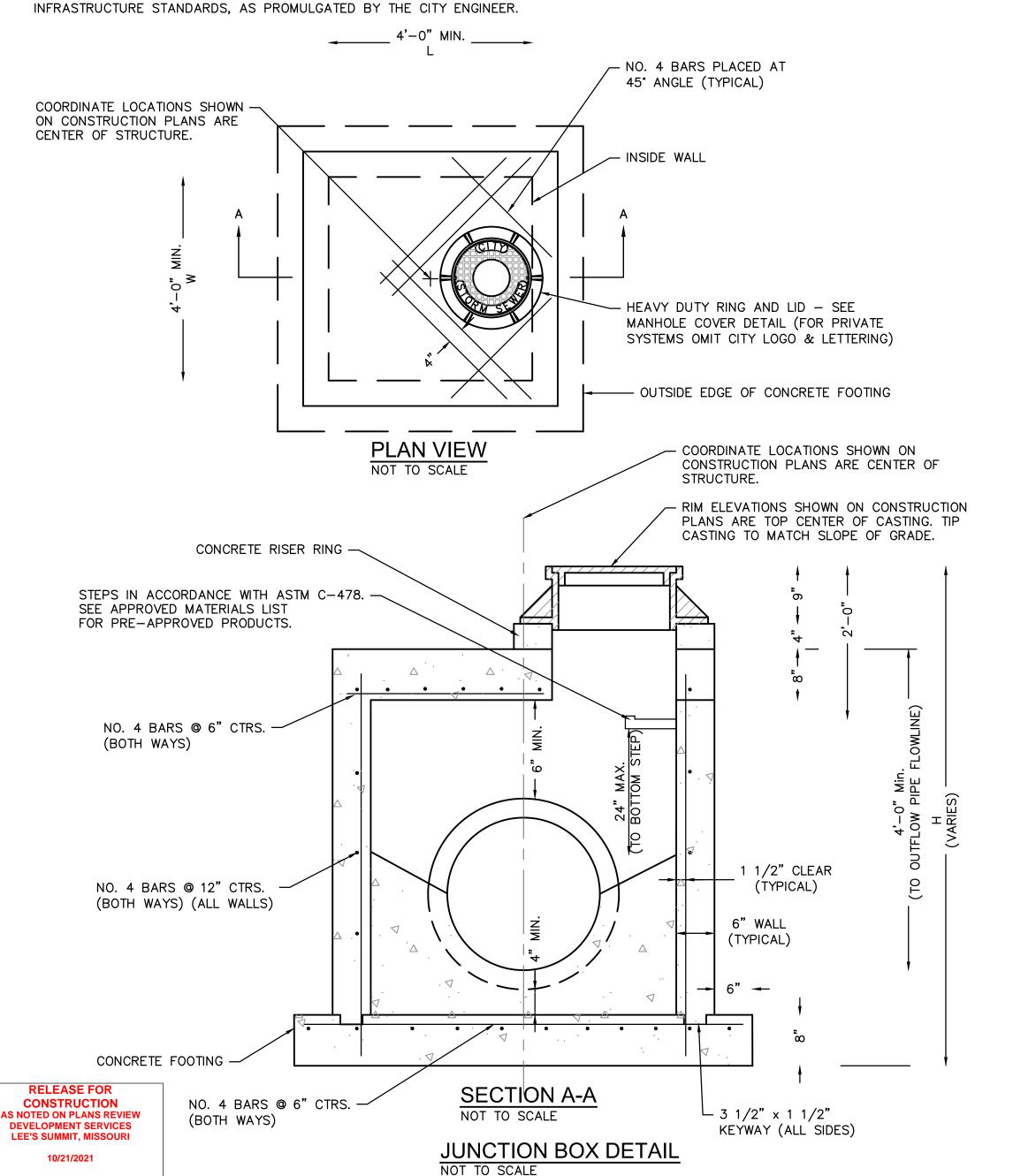
- 5. CONCRETE USED IN THIS WORK SHALL BE KCMMB4K, AS APPROVED BY THE KANSAS CITY METROPOLITAN MATERIALS BOARD, AND SHALL MEET THE REQUIREMENTS OF THE CITY MUNICIPAL CODE.
- 6. CONCRETE CONSTRUCTION SHALL MEET THE APPLICABLE REQUIREMENTS OF STANDARD SPECIFICATIONS FOR STATE ROAD AND BRIDGE CONSTRUCTION, KANSAS DEPARTMENT OF TRANSPORTATION, LATEST EDITION, EXCEPT AS MODIFIED IN THE CITY MUNICIPAL CODE.
- 7. INLET FLOORS SHALL BE SHAPED WITH NON-REINFORCED CONCRETE INVERTS TO PROVIDE SMOOTH FLOW.
- 8. BEVEL ALL EXPOSED EDGES WITH 3/4" TRIANGULAR MOLDING.

## REINFORCING STEEL

- 9. REINFORCING STEEL SHALL BE NEW BILLET, MINIMUM GRADE 60 AS PER ASTM A615, AND SHALL BE BENT COLD.
- 10. ALL DIMENSIONS RELATIVE TO REINFORCING STEEL ARE TO CENTERLINE OF BARS. 2" CLEARANCE SHALL BE PROVIDED THROUGHOUT UNLESS NOTED OTHERWISE. TOLERANCE OF +/- 1/8" SHALL BE PERMITTED.
- 11. ALL LAP SPLICES NOT SHOWN SHALL BE A MINIMUM OF 40 BAR DIAMETERS IN LENGTH.
- 12. ALL REINFORCING STEEL SHALL BE SUPPORTED ON FABRICATED STEEL BAR SUPPORTS @ 3'-0" MAXIMUM SPACING.
- 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.

## CONSTRUCTION

- 14. 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.
- 15. PIPE CONNECTIONS TO PRE-CAST STRUCTURES SHALL HAVE A MINIMUM OF 6" OF CONCRETE AROUND THE ENTIRE PIPE WITHIN 2' OF THE STRUCTURE.
- 16. MATERIAL SELECTION AND COMPACTION REQUIREMENTS FOR BACKFILL AROUND STRUCTURES SHALL BE AS SPECIFIED IN THE MANUAL OF





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helix.

1629 Walnut Kansas Citv. MO 64108

Kansas City, MO 64108 816.300.0300
Helix Architecture + Design

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PACKAGE

Engineer of Record

OF MISS

TERRY M.
PARSONS
NUMBER
PE-2018010505

Terry M Parsons, Engineer MO PE-2018010505

# olssor

7301 West 133rd Street, Suite 200 Overland Park, KS 66213 TEL 913.381.1170

FAX 913,381.1174 www.olsson.com

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