

PROJECT	Brickline Greenway North Connector – Phase 3	ADDENDUM NUMBER	01
PROJECT NO.	14654 (GRG 308s)	DATE	9/1/2026
PROJECT LOCATION	St Louis, Missouri		
CLIENT	Great Rivers Greenway		
PREPARED BY	Hannah Higgins, SmithGroup		

NAME	COMPANY
Developer's Representative – Lonny Boring	Great Rivers Greenway
Construction Manager – Steven Truemper	ABNA
Project Manager - Hannah Higgins	SmithGroup
Construction PM – Ellen Schmidt	SmithGroup
BIDDERS	

This Addendum is issued pursuant to the Instructions to Bidders and/or Conditions of the Contract. This Addendum serves to clarify, revise, and supersede information in the Project Manual, Drawings, and previously issued Addenda. Portions of the Addendum affecting the Contract Documents will be incorporated into the Contract by enumeration of the Addendum in the Owner/Contractor Agreement. The Bidder shall acknowledge receipt of this Addendum in the appropriate space on the Bid Form.

ADDENDUM #01

Proposed changes include the following updates and the related pay item, bid tab, and JSP adjustments required:

- Updated sidewalk/landscape layout north of Lindell Ave.
- Updated Electrical sheets.
- Updated Soil, Landscape, and Irrigation sheets
- Updated Trail signage sheets

PART 1 - NEW DOCUMENTS ISSUED WITH THIS DOCUMENT

1.1 NEW PROJECT MANUAL DOCUMENTS AND SPECIFICATIONS – N/A

1.2 NEW DRAWING SHEETS – N/A

PART 2 - REVISED DOCUMENTS ISSUED WITH THIS DOCUMENT

2.1 REVISED PROJECT MANUAL DOCUMENTS AND SPECIFICATIONS

A. NOTICE TO CONTRACTORS – Section 3 Period of Performance updated to include potential extension of Final Completion Date to allow for seasonal landscaping to occur after Substantial Completion.

B. BID FORM

1. Updated to reflect adjusted quantities and new pay items identified in this document. Adjustments have been highlighted in red.

- 2. One (1) pay item has been added (#173).
- C. JSP-19 INSTALL LIGHTING EQUIPMENT has been updated to include additional information on the power supply, panelboard, and enclosure receptacle.
- D. JSP-20 ELECTRICAL POWER SUPPLY has been updated to include timeclock and additional basis of payment detail for plaza lighting.
- E. JSP-41 CONCRETE PAVING has been updated to include fiber reinforcement detail.
- F. JSP-43 UNIT PAVING has been updated to include additional paver types 6, 7, and 8.
- G. FORM 4: CONTRACT – Added Note 7 and Additional Certification form: Certification of Primary Participant Regarding Responsibility Matters (FAR 52.209-5)”.

REVISED DRAWING SHEETS

- A. G2-001 SUMMARY OF QUANTITIES - Updated to reflect adjusted quantities and new pay items identified in this document.
- B. CS5-101 LAYOUT AND MATERIALS PLAN – SPRING – AREA 1: Sidewalk limits updated between Lindell and Westminster.
- C. CS5-401 LAYOUT AND MATERIALS PLAN ENLARGEMENTS: Sidewalk limits updated between Lindell and Westminster.
- D. CS5-505 SITE DETAILS: Triangle Plaza Paver Enlargement Details updated.
- E. E1-101 ELECTRICAL PLAN – SPRING – AREA 1: Adjusted AHH-2 location to reflect new Code Blue station location. Revised conduit routing to route to new AHH-2 location and feed new Code Blue station.
- F. E1-103 ELECTRICAL PLAN – SPRING – AREA 3: Added (3) receptacles to existing festoon light poles and added conduit routing to them. Added new Ameren substation location and new keynote. Revised Ameren conduit to route from new substation to PB-WASH meter. Added conduit from existing Substation #127 to LHH-6 and from LHH-6 to new handhole LHH-7 across Washington Ave. Added conduit from LHH-7 to SB2 to power lights on existing Substation #127 circuit.
- G. E1-501 CITY LIGHTING SPECIFICATION: Updated lighting fixture schedule to include poles with charging station receptacles. Updated PB-WASH panel schedule to include charging station pole receptacles.
- H. L1-101 SOILS PLAN - SPRING - AREA 1: Updated planting soil extents
- I. L2-101 LANDSCAPE PLAN - SPRING - AREA 1: Updated plant schedule quantities to correct count discrepancies and to accommodate reduction in pavement and expansion of planting beds.

- J. L2-102 LANDSCAPE PLAN - SPRING - AREA 2: Updated plant schedule quantities to correct count discrepancies (no changes to the plan)
- K. L2-103 LANDSCAPE PLAN - SPRING - AREA 3: Updated plant schedule quantities to correct count discrepancies (no changes to the plan)
- L. L2-501 LANDSCAPE DETAILS: Updated plant schedule quantities, including the following additions:
 - 1. amci (4)
 - 2. caja (9)
 - 3. calh (9)
 - 4. coco(14)
 - 5. lisp (14)
 - 6. narc (20)
 - 7. ruhu (14)
 - 8. sphe (18)
 - 9. sywb (9)
- M. L3-101: IRRIGATION PLAN – SPRING – AREA 1: Updated layout to match landscape bed changes.
- N. L4-101 TRAIL SIGNAGE AND FURNISHINGS PLAN - SPRING - AREA 1: Relocated Code Blue Station

NOTICE TO CONTRACTORS

Bids may be submitted electronically until 2:00 P.M. prevailing Central time, September 24, 2026, via the Bid Express website at bidexpress.com. Sealed bids, addressed to Great Rivers Greenway, 3745 Foundry Way, Suite 253 St. Louis, Missouri 63110 for the proposed work will be received by Great Rivers Greenway until 2:00 P.M. (prevailing local time) on September 24, 2026, at the office of Great Rivers Greenway, and at that time will be publicly opened. Bids should be delivered to: Great Rivers Greenway, 3745 Foundry Way, Suite 253 St. Louis, Missouri 63110.

(1) PROPOSED WORK: Construction of the Brickline Greenway North Connector segment along the west side of Spring from Washington Ave to Lindell Blvd in St. Louis, Missouri. The proposed work, hereinafter called the work, includes (but is not limited to): earthwork, removals, grading, paving, utility adjustments, street reconfiguration, traffic control, signals, street and pedestrian lighting, greenway trail and new sidewalk, curbs, unit pavers, trees, landscaping, irrigation, trail and wayfinding signage, and site furniture. The work consists of furnishing all material, labor, tools, equipment, and supervision necessary for the construction of the items noted above in accordance with all the requirements of these specifications, and the drawings made a part thereof. Existing site amenities damaged during construction shall be replaced at no cost to the owner.

(2) COMPLIANCE WITH CONTRACT PROVISIONS: The bidder, having examined and being familiar with the local conditions affecting the work, and with the contract, contract documents, including the current version of the Missouri Highways and Transportation Commission's "Missouri Standard Specifications for Highway Construction," and "Missouri Standard Plans for Highway Construction" (if applicable), their revisions, and the request for bid, including appendices, the special provisions and plans, hereby proposes to furnish all labor, materials, equipment, services, etc., required for the performance and completion of the work. All references are to the Missouri Standard Specifications for Highway Construction 2026, as revised, unless otherwise noted.

The following documents are available on the Missouri Department of Transportation web page at www.modot.mo.gov under "Business with MoDOT" "Standards and Specifications". The effective version shall be determined by the letting date of the project.

General Provisions & Supplemental Specifications
Supplemental Revisions to Missouri Standard Plans
For Highway Construction (if applicable)

These supplemental bidding documents contain all current revisions to the bound printed versions and have important legal consequences. It shall be conclusively presumed that they are in the bidder's possession, and they have been reviewed and used by the bidder in the preparation of any bid submitted on this project.

Please note that within the above-listed documents, the term "Commission" shall be replaced with the term, "Great Rivers Greenway", and the term "Engineer" is a reference to the Engineer of Record from "Great Rivers Greenway District" for all Missouri Highway and Transportation Commission's Standard Specifications.

The contracting authority for this contract is Great Rivers Greenway District.

(3) PERIOD OF PERFORMANCE: If the bid is accepted, the bidder agrees that work shall be diligently prosecuted at such rate and in such manner as, in the judgment of the engineer, is necessary for the completion of the work within the time specified as follows in accordance with Sec 108:

Calendar Days: 390 of calendar days

Completion Date: December 31, 2027 (approximately)

The contract time for Substantial Completion shall be 390 calendar days from Notice to Proceed. Substantial Completion shall include all improvements, except for perennial and tree plantings. The contract may also include up to an additional 168 calendar-day period for Final Completion, to be completed no later than May 30, 2028, contingent upon Developer approval. This period of time may be used to complete seasonal landscaping, including perennial and tree plantings, and final punchlist items. Work associated with Substantial Completion of the project may not be deferred beyond the original 390 calendar-day period.

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(4) **LIQUIDATED DAMAGES:** The bidder agrees that, should the bidder fail to complete the work in the time specified or such additional time as may be allowed by the engineer under the contract, the amount of liquidated damages to be recovered in accordance with Sec 108 shall be as follows: Liquidated damages per day \$ 2,425.00

(5) **BID GUARANTY:** The bidder shall submit a Bid Guaranty meeting the requirements of Section 102 of the Missouri Standard Specifications for Highway Construction (if applicable). Each bid shall be accompanied by a certified check or bank draft on a responsible solvent bank or a satisfactory Bid Bond executed by the bidder and surety company and payable to the Great Rivers Greenway District, in the amount of not less than five percent (5%) of the base bid plus the greatest of the Alternate Bids. If the bidder fails to enter into a contract with the District on the terms stated in his bid, or fails to furnish a Performance Bond as required by the Contract Documents, the amount of the Bid Bond shall be forfeited to the District as liquidated damages, not as a penalty. The District will have the right to retain the Bid Bond of Bidders to whom an award is being considered until either (a) the District-Contractor Agreement has been executed or the Performance Bond has been furnished, (b) the specified time has elapsed so that bids may be withdrawn, or (c) all bids have been rejected. The Bid Bond of all Bidders to whom an award is not being considered shall be returned promptly after the bid opening.

A sample project bid bond form is included in the bid book. The bidder shall mark the box below to identify the type of Bid Guaranty.

- ☐ Paper Bid Bond
- ☐ Cashier's Check

(6) **CERTIFICATIONS FOR FEDERAL JOBS:** By signing and submitting this bid, the bidder makes the certifications appearing in Sec. 102.18.1 (regarding affirmative action and equal opportunity), Sec. 102.18.2 (regarding disbarment, eligibility, indictments, convictions, or civil judgments), Sec. 102.18.3 (regarding anti-collusion), and Sec. 102.18.4 (regarding lobbying activities). Any necessary documentation is to accompany the bid submission, as required by these sections. As provided in Sec. 108.13, the contracting authority may terminate the contract for acts of misconduct, which includes but is not limited to fraud, dishonesty, and material misrepresentation or omission of fact within the bid submission.

(7) **ANTIDISCRIMINATION:** The Contracting Authority hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, businesses owned and controlled by socially and economically disadvantaged individuals will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, religion, creed, sex, age, ancestry, or national origin in consideration for an award.

(8) **FEDERAL AND STATE INSPECTION:** The Federal Government is participating in the cost of construction of this project. All applicable Federal laws, and the regulations made pursuant to such laws, shall be observed by the contractor, and the work will be subject to the inspection of the appropriate State or Federal Agency in the same manner as provided in Sec 105.10 of the Missouri Standard Specifications for Highway Construction with all revisions applicable to this bid and contract.

(9) **PREVAILING WAGE (FEDERAL AND STATE):** This contract requires payment of the prevailing hourly rate of wages for each craft or type of work required to execute the contract as determined by the Missouri Department of Labor and Industrial Relations, and requires adherence to a schedule of minimum wages as determined by the United States Department of Labor. For work performed anywhere on this project, the contractor and the contractor's subcontractors shall pay the higher of these two applicable wage rates. The applicable state wage rates for this contract are detailed in "Annual Wage Order No. 32", that is attached to this bidding document. The applicable federal wage rates for this contract are the effective Davis-Bacon federal wage rates posted the tenth day before the bid opening date and are attached herein.

These supplemental bidding documents have important legal consequences. It shall be conclusively
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presumed that they are in the bidder's possession, and they have been reviewed and used by the bidder in the preparation of any bid submitted on this project.

(10) WORKER ELIGIBILITY REQUIREMENTS: Execution of the construction contract for this project is dependent upon the awarded bidder providing an Affidavit of Compliance AND E-Verify Memorandum-of-Understanding (MOU) between the bidder and Department of Homeland Security to the Contracting Authority as required by section 285.530 RSMo. The cover page and signature page of the E-Verify MOU and the Affidavit must be submitted prior to award of this contract.

A sample Affidavit of Compliance can be found at the Missouri Attorney General's website at the following link:

[affidavit_of_compliance-1.pdf \(mo.gov\)](#)

All bidders must also be enrolled in the E-Verify Program, and include their MOU prior to contract execution. Bidders who are not enrolled will need to go to the following website link and select "Enroll in the Program" to get started. After completing the program, they will receive their E-Verify MOU with Department of Homeland Security. This document will need to be printed out and kept on file so that a copy can be attached to the Affidavit of Compliance.

http://www.dhs.gov/files/programs/qc_1185221678150.shtm

This requirement also applies to subcontractors and contract labor, but this contract only requires submittal of the verification documents for the prime contractor. It is the prime contractor's responsibility to verify the worker eligibility of their subcontractors in order to protect their own company from liability as required by section 285.530 RSMo.

(11) OSHA TEN HOUR TRAINING REQUIREMENTS: Missouri Law, 292.675 RSMO, requires any awarded contractor and its subcontractor(s) to provide a ten-hour Occupational Safety and Health Administration (OSHA) Construction Safety Program (or a similar program approved by the Missouri Department of Labor and Industrial Relations as a qualified substitute) for their on-site employees (laborers, workmen, drivers, equipment operators, and craftsmen) who have not previously completed such a program and are directly engaged in actual construction of the improvement (or working at a nearby or adjacent facility used for construction of the improvement). The awarded contractor and its subcontractor(s) shall require all such employees to complete this ten-hour program, pursuant to 292.675 RSMO, unless they hold documentation on their prior completion of said program. Penalties, for Non-Compliance include contractor forfeiture to the Contracting Authority in the amount of \$2,500, plus \$100 per contractor and subcontractor employee for each calendar day such employee is employed beyond the elapsed time period for required program completion under 292.675 RSMO.

(12) BUY AMERICA REQUIREMENTS: Construction contracts shall assure compliance with Section 165 of the Surface Transportation Assistance Act of 1982, Section 337 of the Surface Transportation and Uniform Relocation Assistance Act of 1987, 23 CFR 635.410, and the Bipartisan Infrastructure Law (2021) Build America, Buy America Act Publication L. No. 117-58 regarding Buy America provisions on the procurement of foreign products and materials. On all contracts involving Federal-aid, all products of iron, steel, or a coating of steel which are incorporated into the work must have been manufactured in the United States. Construction materials consisting primarily of non-ferrous metals, plastic and polymer-based products, glass, lumber, or drywall also require Buy America certification. Cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives are excluded from this requirement. In addition, manufactured products are currently exempted under the 1983 waiver from FHWA. The Contracting Authority may allow minimal amounts of these materials from foreign sources, provided the cost does not exceed 0.1 percent of the contract sum or \$2,500, whichever is greater. The Contractor certifies that these materials are of domestic origin. Additional information regarding the "Buy America" requirements can be found at:

<https://www.fhwa.dot.gov/construction/cgit/buyam.cfm>

(13) ADDENDUM ACKNOWLEDGEMENT: The undersigned states that all addenda (if applicable) have been received, acknowledged and incorporated into their bid, prior to submittal. For paper bids, staple addenda to the bid in the appropriate part of the bid.

(14) SIGNATURE AND IDENTITY OF BIDDER: The undersigned states that the following provided information is correct and that (if not signing with the intention to bind themselves to become the responsible and sole bidder) they are the agent of, and they are signing and executing this, as the bid of

_____,
which is the correct LEGAL NAME as stated on the contractor questionnaire.

a) The organization submitting this bid is a(n) (1) individual bidder, (2) partnership, (3) joint venturer (whether individuals or corporations, and whether doing business under a fictitious name), or (4) corporation. Indicate by marking the appropriate box below.

☐ sole individual

☐ partnership

☐ joint venture

☐ corporation, incorporated under laws of state of _____.

b) If the bidder is doing business under a fictitious name, indicate below by filling in the fictitious name

Executed by bidder this _____ day of _____ 20____.

THE BIDDER CERTIFIES THAT THE BIDDER AND ITS OFFICIALS, AGENTS, AND EMPLOYEES HAVE NEITHER DIRECTLY NOR INDIRECTLY ENTERED INTO ANY AGREEMENT, PARTICIPATED IN ANY COLLUSION, OR OTHERWISE TAKEN ANY ACTION IN RESTRAINT OF FREE COMPETITIVE BIDDING IN CONNECTION WITH THIS BID, AND THAT THE BIDDER INTENDS TO PERFORM THE WORK WITH ITS OWN BONAFIDE EMPLOYEES AND SUBCONTRACTORS, AND DID NOT BID FOR THE BENEFIT OF ANOTHER CONTRACTOR.

THE BIDDER ACKNOWLEDGES THAT THIS IS AN UNSWORN DECLARATION, EXECUTED UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE UNITED STATES AND/OR FALSE DECLARATION UNDER THE LAWS OF MISSOURI, AND ANY OTHER APPLICABLE STATE OR FEDERAL LAWS. THE FAILURE TO PROVIDE THIS CERTIFICATION IN THIS BID MAY MAKE THIS BID NON-RESPONSIVE, AND CAUSE IT TO BE REJECTED.

THE BIDDER CERTIFIES THAT THE BIDDER'S COMPANY KNOWINGLY EMPLOYS ONLY INDIVIDUALS WHO ARE AUTHORIZED TO WORK IN THE UNITED STATES IN ACCORDANCE WITH APPLICABLE FEDERAL AND STATE LAWS AND ALL PROVISIONS OF MISSOURI EXECUTIVE ORDER NO. 07-13 FOR CONTRACTS WITH THE CONTRACTING AUTHORITY.

☐ Check this box ONLY if the bidder REFUSES to make any or all of these certifications. The bidder may provide an explanation for the refusal(s) with this submittal.

Signature of Bidder's Owner, Officer, Partner or Authorized Agent

Please print or type name and title of person signing here

Attest:

Secretary of Corporation if Bidder is a Corporation

Affix Corporate Seal (If Bidder is a Corporation)

NOTE: If bidder is doing business under a fictitious name, the bid shall be executed in the legal name of the individual, partners, joint ventures, or corporation, and registration of fictitious name filed with the secretary of state, as required by sections 417.200 to 417.230 RSMo. If the bidder is a corporation not organized under the laws of Missouri, it shall procure a certificate of authority to do business in Missouri, as required by section 351.572 et seq RSMo. A certified copy of such registration of fictitious name or certificate of authority to do business in Missouri shall be filed with the Missouri Highways and Transportation Commission, as required by the standard specifications.

(15) **TRAINEES:** By submitting this bid, the bidder certifies that the bidder is familiar with the Training Provision in the Missouri Highways and Transportation Commission's "General Provisions and Supplement Specifications" which are available on the Missouri Department of Transportation web page at www.modot.mo.gov under "Business with MoDOT" "Standards and Specifications". The number of trainee hours provided under this contract will be Q slots at 1000 hours/slot or Q hours.

(16) **SUBCONTRACTOR DISCLOSURE:** Requirements contained within Sec 102.7.8 of the Missouri Standard Specification for Highway Construction shall be waived for this contract.

(17) **PROJECT AWARD:** This project will be awarded to the lowest, responsive, responsible bidder.

(18) **MATERIALS INSPECTIONS:** All technicians who perform, or are required by the FHWA to witness, such sampling and testing shall be deemed as qualified by virtue of successfully completing the requirements of EPG 106.18 Technician Certification Program, for that specific technical area.

(19) **PRIME CONTRACTOR REQUIREMENTS:** The limitation in Sec 108.1.1 of the Missouri Standard Specifications for Highway Construction that "the contractor's organization shall perform work amounting to not less than 40 percent of the total contract cost" is waived for this contract. Instead, the less restrictive terms of the Federal Highway Administration's rule at Title 23 Code of Federal Regulations (CFR) § 635.116(a) shall apply, so that the contractor must perform project work with its own organization equal to and not less than 30 percent of the total original contract price. All other provisions in Sec 108.1.1 et seq. of the Missouri Standard Specifications for Highway Construction shall remain in full force and effect, and shall continue to govern the contractor and its subcontractors, in accordance with the provisions of Title 23 CFR § 635.116.

(20) **SALES AND USE TAX EXEMPTION:** GREAT RIVERS GREENWAY, a tax exempt entity, will furnish a Missouri Project Exemption Certificate as described in Section 144.062 RSMo to the awarded contractor who in turn may use the certificate to purchase materials for a specific project performed for the tax exempt entity. Only the materials and supplies incorporated or consumed during the construction of the project are exempt. The certificate will be issued to the contractor for a specific project for a defined period of time.

(21) (a) **ACCEPTANCE OF PROVISION FOR PRICE ADJUSTMENT FOR FUEL:** Bidders have the option to accept the provision for Price Adjustment for Fuel in accordance with Sec. 109.14 . The bidder must mark the box below for those items of work in which they choose to accept the provision. No price adjustments will be made, due to fuel price changes, for bidders who do not accept this provision.

☐ Excavation Production	☐ Asphalt Production	☐ Asphalt Hauling
☐ Concrete Paving Production	☐ Concrete Paving Hauling	☐ Aggregate Base Hauling

(b) **ACCEPTANCE FOR PROVISION FOR ASPHALT CEMENT PRICE INDEX, SEAL COAT PRICE INDEX, UNDERSEAL PRICE INDEX OR UBAWS MEMBRANE PRICE INDEX:** Bidders have the option to accept the provision for Asphalt Cement Price Index, Seal Coat Price Index, Underseal Price Index and/or UBAWS Membrane Price Index in accordance with the General Provisions. The bidder must mark each box below if they choose to accept the provision. The Asphalt Cement Provision applies only to projects that have a quantity of asphalt wet ton mix pay items or converted square yard quantity over 1,000 tons, the Seal Coat Provision applies only to projects that have a quantity that exceeds 50,000 square yards, the Underseal Provision applies only to any projects that have a quantity that exceeds 10,000 gallons, and the UBAWS Membrane provision applies only to projects that have a quantity that exceeds 5,000 square yards. The above quantity limits apply to an individual project or any number of projects in the contract combination.

☐ Asphalt Cement	☐ Seal Coat	☐ Underseal	☐ UBAWS Membrane
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BID FORM: BRICKLINE GREENWAY - NORTH CONNECTOR PHASE 03

SPRING AVENUE FROM WASHINGTON AVENUE TO LINDELL BOULEVARD

TAP-5401(721) / TIP 7273-26 / HUF CPF B-23-CP-MO-0886 GRG #:308s SmithGroup #14654.000

ITEM #	SPEC	STANDARD SPEC PAY ITEM	ITEM DESCRIPTION	UNIT	QTY	UNIT COST	ITEM COST
ROADWAY ITEMS							
1.1	MoDOT	6181000	MOBILIZATION	LS	1		
1.2	n/a	n/a	PERMITS (ALLOWANCE)	ALLOW	1	\$10,000	\$10,000
1.3	n/a	n/a	UNSUITABLE SOILS AND UNFORESEEN CONDITIONS (ALLOWANCE)	ALLOW	1	\$75,000	\$75,000
2	JSP	JSP-21	INSTALLATION OF TRAFFIC CONTROL	LS	1		
3	MoDOT	6161098A	CHANGEABLE MESSAGE SIGN W/O COMM INTERFACE, CONTRACTOR FURNISHED/RETAINED	EA	4		
4	JSP	JSP-05	SEDIMENT AND EROSION CONTROL	LS	1		
5	JSP	6274000, JSP-09	CONTRACTOR FURNISHED SURVEYING AND STAKING	LS	1		
6	JSP	JSP-39	DISPOSAL OF CONTAMINATED SOIL	CY	750		
7	MoDOT	104.1	REMOVALS - FIXED OBJECTS (SIGNS, MAILBOXES)	EA	44		
8	MoDOT	202	CONCRETE CURB REMOVAL	LF	1,194		
9	JSP	JSP-17	GRANITE CURB REMOVAL AND STORAGE	LF	250		
10	MoDOT	202	PAVEMENT REMOVAL - CONCRETE	SF	12,715		
11	MoDOT	202	PAVEMENT REMOVAL - ASPHALT, FULL DEPTH	SF	45,965		
12	JSP	JSP-06	MANHOLE/VALVES ADJUST TO GRADE	LS	1		
13	JSP	JSP-07	STORM SEWER WORK -REMOVE INLET	EA	5		
14	JSP	JSP-18	REMOVAL OF EXISTING LIGHTING EQUIPMENT	EA	15		
15	JSP	JSP-31	REMOVAL OF EXISTING SIGNAL EQUIPMENT	EA	7		
16	JSP	JSP-24	TRAFFIC SIGNAL MAINTENANCE AND PROGRAMMING	LS	1		
17	JSP	JSP-08	REMOVE AND REPLACE FIRE HYDRANT	EA	3		
18	JSP	JSP-16	UTILITIES - 6" WATER PIPE	LF	620		
19	JSP	JSP-16	UTILITIES - 3/8" WATER PIPE	LF	42		
20	JSP	JSP-16	UTILITIES - 3/4" WATER PIPE	LF	20		
21	JSP	JSP-16	UTILITIES - 1/2" WATER PIPE	LF	20		
22	JSP	JSP-16	UTILITIES - WATER TAP AND METER	EA	1		
23	JSP	JSP-07	STORM SEWER WORK - NEW CURB/GRATE INLETS	EA	5		
24	JSP	JSP-07	STORM SEWER WORK - NEW MANHOLE	EA	1		
25	JSP	JSP-07	STORM SEWER WORK - 12-STORM SEWER PIPE	LF	215		
26	STL / JSP	JSP-07	STORM SEWER WORK - PLANTER UNDERDRAIN	LF	145		
27	STL / JSP	JSP-07	SANITARY SEWER WORK - 6" SANITARY SEWER PIPE	LF	15		
28	JSP	JSP-16	UTILITIES - DRINKING FOUNTAIN INSTALL	EA	1		
29	MoDOT	207	EARTHWORK - MACHINE GRADING	SF	59,677		
30	JSP	JSP-17	GRANITE CURB, SALVAGED	LF	24		
31	JSP	JSP-40	CONCRETE CURB	LF	1,589		
32	JSP	JSP-41	MOUNTABLE CONCRETE CURB	LF	14		
33	MoDOT / STL	401, 321216	SURFACE - ASPHALT PAVEMENT PATCHING (BP-1 MIX)	SF	14,160		
34	JSP	JSP-41	HEAVY DUTY CONCRETE PAVEMENT (RAISED CROSSWALKS/DRIVEWAYS)	SF	1,319		
						SUBTOTAL:	
SIGNING, STRIPING, SIGNALS, AND LIGHTING ITEMS							

ITEM #	SPEC	STANDARD SPEC PAY ITEM	ITEM DESCRIPTION	UNIT	QTY	UNIT COST	ITEM COST
35	JSP	JSP-19	LIGHTING - STREET LIGHT POLE (GRP), PIPE ARM, DUAL LUMINAIRES (SB1, SB2), DIRECT BURY FOUNDATION	EA	11		
36	JSP	JSP-19	LIGHTING - STREET LIGHT (SB2) PIPE ARM, LUMINAIRE ON SIGNAL POLE (SP)	EA	4		
37	JSP	JSP-29	LIGHTING - CONDUIT, 2 IN., TRENCH WITH TRACER WIRE (LTG)	LF	2,301		
38	JSP	JSP-29	POWER - CONDUIT, 2 IN., TRENCH WITH TRACER WIRE (PWR)	LF	1,103		
39	JSP	JSP-29	LIGHTING - CONDUIT, 2 IN., PUSHED WITH TRACER WIRE (LTG)	LF	231		
40	JSP	JSP-29	POWER - CONDUIT, 2 IN., PUSHED WITH TRACER WIRE (PWR)	LF	91		
41	JSP	JSP-29	LIGHTING - CONDUIT, 2 IN., TRENCH WITH TRACER WIRE (LV)	LF	13		
42	MoDOT	9028208	LIGHTING - CABLE, 8 AWG 1 CONDUCTOR (LTG)	LF	7,596		
43	MoDOT	9028208	POWER - CABLE, 8 AWG 1 CONDUCTOR (PWR)	LF	3,582		
44	MoDOT	9017006	LIGHTING - CABLE, 6 AWG 1 CONDUCTOR (PWR)	LF	220		
45	MoDOT	9028220	LIGHTING - CABLE, 12 AWG 1 CONDUCTOR (24V PWR)	LF	78		
46	STL / JSP	9028810, JSP-30	LIGHTING - HANDHOLES - PULL BOX, PREFORMED CLASS 1 (LTG)	EA	7		
47	MoDOT	9028811, JSP-30	POWER - HANDHOLES - PULL BOX, PREFORMED CLASS 2 (PWR)	EA	7		
48	JSP	JSP-20	ELECTRICAL POWER SUPPLY - LIGHTING/POWER PANELBOARD AND PAD MOUNTED ENCLOSURE, CONCRETE FOOTING FOUNDATION	EA	1		
49	JSP	JSP-20	ELECTRICAL POWER SUPPLY - ENCLOSURE RECEPTACLE	EA	1		
50	JSP	JSP-20	ELECTRICAL POWER SUPPLY - NEMA 3R HEAVY DUTY DISCONNECT SWITCH	EA	1		
51	MoDOT	9020213	SIGNAL HEAD, TYPE 3S	EA	15		
52	MoDOT	9020513	SIGNAL HEAD, TYPE 3B	EA	15		
53	MoDOT	9020515	SIGNAL HEAD, TYPE 5B	EA	1		
54	MoDOT	9020811	SIGNAL HEAD, TYPE 1S, PEDESTRIAN	EA	20		
55	MoDOT	9020833	SH-FLAT SHEET - SIGNAL SIGN	SF	143		
56	MoDOT	9020834	SIGNAL SIGN, MOUNTING HARDWARE	EA	19		
57	MoDOT	9022651	LUMINAIRE LED-A, 120 VOLT COMPATIBLE	EA	10		
58	MoDOT	9022704	POST, SIGNAL 4 FT.	EA	6		
59	MoDOT	9022708	POST, SIGNAL 8 FT.	EA	3		
60	MoDOT	9022715	POST, SIGNAL 15 FT.	EA	2		
61	MoDOT	9023120	POST, TYPE CL, 20 FT. ARM	EA	3		
62	MoDOT	9023125	POST, TYPE CL, 25 FT. ARM	EA	1		
63	MoDOT	9023130	POST, TYPE CL, 30 FT. ARM	EA	2		
64	MoDOT	9023135	POST, TYPE CL, 35 FT. ARM	EA	1		
65	MoDOT	9023140	POST, TYPE CL, 40 FT. ARM	EA	1		
65.1	MoDOT	9023450	POST, TYPE BL, LONGEST ARM 55 FT.	EA	1		
66	MoDOT	9024283	CONTROLLER ASSEMBLY HOUSING, NEMA TS2 CONTROLLER	EA	3		
67	JSP	JSP-33	APS UNIT W/ SIGN	EA	22		
68	MoDOT	9025200	CONDUIT, 2 IN., TRENCH WITH TRACER WIRE	LF	150		
69	MoDOT	9025300	CONDUIT, 3 IN., TRENCH WITH TRACER WIRE	LF	405		
70	MoDOT	9027300	CONDUIT, 3 IN., PUSHED WITH TRACER WIRE	LF	390		
71	MoDOT	9028100	CABLE, 10 AWG 1 CONDUCTOR, POLE AND BRACKET	LF	950		
72	MoDOT	9028208	CABLE, 8 AWG 1 CONDUCTOR, POWER	LF	160		
73	MoDOT	9028302	CABLE, 12 AWG 2 CONDUCTOR	LF	1,540		

ITEM #	SPEC	STANDARD SPEC PAY ITEM	ITEM DESCRIPTION	UNIT	QTY	UNIT COST	ITEM COST
74	MoDOT	9028308	CABLE, 16 AWG 2 CONDUCTOR	LF	2,830		
75	MoDOT	9028310	CABLE, 16 AWG 5 CONDUCTOR	LF	3,020		
76	MoDOT	9028311	CABLE, 16 AWG 7 CONDUCTOR	LF	5,050		
77	MoDOT	9028621	POWER SUPPLY ASSEMBLY, TYPE-2, 240/120 VOLT SERVICE, LIGHTING AND SIGNALS	EA	2		
78	MoDOT	9028811	PULLBOX, PREFORMED, CLASS 2	EA	8		
79	MoDOT	9028812	PULLBOX, PREFORMED, CLASS 3	EA	2		
80	MoDOT	9029100	BASE, CONCRETE	CY	28		
81.1	JSP	JSP-25	CCTV CAMERA (SINGLE CAMERA), INSTALLED	EA	2		
81.2	JSP	JSP-25	CCTV CAMERA (DUAL CAMERA), INSTALLED	EA	1		
82	JSP	JSP-35	VEHICLE DETECTION SYSTEM	EA	3		
83	JSP	JSP-31	REMOVE EXISTING MAST ARM ASSEMBLY & POLE	EA	5		
84	JSP	JSP-31	REMOVE EXISTING SIGNAL POST	EA	6		
85	JSP	JSP-31	REMOVE EXISTING SIGNAL HEAD	EA	18		
86	JSP	JSP-31	REMOVE EXISTING PEDESTRIAN HEAD	EA	6		
87	JSP	JSP-31	REMOVE EXISTING APS UNIT W/ SIGN	EA	7		
88	JSP	JSP-31	REMOVE EXISTING PULLBOX	EA	4		
89	JSP	JSP-31	REMOVE EXISTING MAST ARM MOUNTED SIGN	EA	4		
90	JSP	JSP-31	REMOVE EXISTING POST MOUNTED SIGN	EA	4		
91	JSP	JSP-31	REMOVE EXISTING SIGNAL CABINET	EA	2		
92	JSP	JSP-31	REMOVE EXISTING CONCRETE FOUNDATION	EA	14		
93	JSP	JSP-29	CONDUIT, 2 IN., TRENCH (FIBER OPTIC)	LF	2,200		
94	JSP	JSP-29	CONDUIT, 2 IN., PUSHED (FIBER OPTIC)	LF	550		
95	JSP	JSP-30	PULLBOX, PREFORMED, CLASS 2	EA	5		
96	JSP	JSP-30	PULLBOX, PREFORMED, CLASS 5	EA	3		
97	JSP	JSP-36	FIBER OPTIC CABLE, 48-STRAND SINGLE MODE / 24-STRAND MULTI MODE	LF	6,200		
98	JSP	JSP-36	RACK MOUNTED INTERCONNECT CENTER	EA	2		
99	JSP	JSP-26	HARDENED ETHERNET SWITCH - LAYER 2	EA	3		
100.1	JSP	JSP-36	FUSION SPLICE, SINGLE MODE	EA	72		
100.2	JSP	JSP-36	FUSION SPLICE, MULTI MODE	EA	66		
100.3	JSP	JSP-36	FIBER OPTIC PIGTAIL, SINGLE MODE	EA	60		
100.4	JSP	JSP-36	FIBER OPTIC PIGTAIL, MULTI MODE	EA	60		
100.5	JSP	JSP-36	FIBER OPTIC JUMPER, SINGLE MODE	EA	16		
101	MoDOT	9035004A	REG SIGNAGE - FLAT SHEET SIGN	SF	50		
102	MoDOT	9031250A	REG SIGNAGE - U-CHANNEL POST, 3LB	LF	147		
103	MoDOT	6206000C, JSP-37	4 IN. WHITE/YELLOW STANDARD WATERBORNE PAVEMENT MARKING PAINT, TYPE P BEADS	LF	2,537		
104	MoDOT	6200015, JSP-37	PREFORMED THERMOPLASTIC PAVEMENT MARKING, 24 IN. WHITE (STOP BARS, CROSSWALKS)	LF	848		
105	MoDOT	6209903A, JSP-37	PREFORMED THERMOPLASTIC PAVEMENT MARKING, SPEED HUMP ARROWS	EA	4		
106	MoDOT	6209903A, JSP-37	PREFORMED THERMOPLASTIC PAVEMENT MARKING, TURN ARROWS	EA	6		
						SUBTOTAL:	
BICYCLE AND PEDESTRIAN ITEMS							

ITEM #	SPEC	STANDARD SPEC PAY ITEM	ITEM DESCRIPTION	UNIT	QTY	UNIT COST	ITEM COST
107	JSP	JSP-40	PLANTER CURB (CONCRETE)	LF	115		
108	JSP	JSP-40	CONCRETE BAND AT TREE GRATE	LF	72		
109	JSP	JSP-41	CONCRETE PAVEMENT (SIDEWALKS)	SF	12,661		
110	JSP	JSP-41	CONCRETE PAVEMENT (SHARED USE PATH)	SF	8,936		
111	JSP	JSP-41	HEAVY DUTY CONCRETE PAVEMENT (SHARED USE PATH)	SF	390		
112	JSP	JSP-43	UNIT PAVING ON CONCRETE	SF	6,386		
113	JSP	JSP-43	UNIT PAVING ON CONCRETE (BRICKLINE CENTERLINE)	SF	1,058		
114	JSP	JSP-43	PERMEABLE GRID PAVER	SF	81		
115	JSP	JSP-43	METAL PAVER EDGE RESTRAINT	LF	532		
116	JSP	JSP-44	DETECTABLE WARNING	SF	365		
117	JSP	JSP-49	SITE FURNISHINGS - TREE GRATE AND FRAME, 5X5	EA	3		
118	JSP	JSP-49	SITE FURNISHINGS - BOLLARDS, FIXED	EA	11		
119	JSP	JSP-49	SITE FURNISHINGS - BOLLARDS, REMOVABLE	EA	9		
						SUBTOTAL:	
LANDSCAPING ITEMS							
120	MoDOT	202	REMOVALS - TREES (SMALL)	EA	3		
121	JSP	JSP-50	LANDSCAPE - STRUCTURAL SOIL	CY	941		
122	JSP	JSP-51	LANDSCAPE - PLANTING SOIL	CY	766		
123	JSP	JSP-54	LANDSCAPE - TURFGRASS SEEDING	SF	657		
124	JSP	JSP-55	PLANT - BULB	EA	1,269		
125	JSP	JSP-55	PLANT - PERENNIAL, 2X5 DEEP CELL PLUG	EA	284		
126	JSP	JSP-55	PLANT - PERENNIAL, 4" (1 QUART) CONTAINER	EA	3,819		
127	JSP	JSP-55	PLANT - PERENNIAL, #1 (1 GALLON) CONTAINER	EA	1,166		
128	JSP	JSP-55	PLANT - SHRUB, #3 (3 GALLON) TO #10 (10 GALLON)	EA	338		
129	JSP	JSP-55	PLANT - TREE, ORNAMENTAL (2.5" CALIPER OR #25 TO #65 GALLON)	EA	7		
130	JSP	JSP-55	PLANT - TREE, SHADE (3" CALIPER OR #45 TO #95/100 GALLON)	EA	15		
131	JSP	JSP-55	PLANT - TREE, SHADE (3.5" CALIPER OR #65 TO #95/100 GALLON)	EA	20		
132	JSP	JSP-55	MULCH	CY	76		
133	JSP	JSP-55	LANDSCAPE PROTECTION BARRIER	LF	2,987		
134	JSP	JSP-55	TREE STABILIZATION	EA	42		
						SUBTOTAL:	
NON-FEDERAL PARTICIPATING ITEMS							
135	JSP	JSP-19	LIGHTING - PLAZA FESTOON STRING LIGHTS AND REMOTE POWER SUPPLIES (F1)	LF	395		
136	JSP	JSP-19	LIGHTING - PLAZA FESTOON STRING LIGHTS SUPPORTING POLES, MOUNTING BRACKET AND DIRECT BURY FOUNDATION (FP1)	EA	17		
137	JSP	JSP-19	LIGHTING - PLAZA FESTOON LIGHTING CONTROL ENCLOSURES, DIMMING SWITCHES, TIMECLOCK CONTROLS, MOUNTING AND MOUNTING BRACKETS	EA	1		
138	JSP	JSP-15	WIFI INSTALLATION	ALLOW	1	\$50,000.00	\$50,000.00
139	JSP	JSP-15	WIFI - LIGHTPOLE PREPARATION	EA	2		
140	JSP	JSP-15	SIGNALS - CABLE, CAT6 (WIFI)	LF	260		
141	JSP	JSP-43	GRANITE DONOR PLAQUES	EA	6		
142	JSP	JSP-49	SITE FURNISHINGS - BACKLESS BENCH, 4'	EA	1		
143	JSP	JSP-49	SITE FURNISHINGS - TABLE AND CHAIRS, TRIANGLE PLAZA	EA	5		

ITEM #	SPEC	STANDARD SPEC PAY ITEM	ITEM DESCRIPTION	UNIT	QTY	UNIT COST	ITEM COST
144	JSP	JSP-49	SITE FURNISHINGS - WASTE RECEPTACLES (TRASH)	EA	3		
145	JSP	JSP-49	SITE FURNISHINGS - WASTE RECEPTACLES (RECYCLING)	EA	3		
146	JSP	JSP-49	SITE FURNISHINGS - BIKE REPAIR STATION	EA	1		
147	JSP	JSP-49	SITE FURNISHINGS - BIKE RACKS	EA	5		
148	JSP	JSP-49	SITE FURNISHINGS - PET WASTE STATION	EA	1		
149	JSP	JSP-49	SITE FURNISHINGS - DRINKING FOUNTAIN	EA	1		
150	JSP	JSP-49	SECURITY - CODE BLUE STATION	EA	2		
151	JSP	JSP-58	TRAIL COUNTER	EA	1		
152	JSP	JSP-57	TRAIL SIGNAGE - BL-Kx1e	EA	1		
153	JSP	JSP-57	TRAIL SIGNAGE - BL-Rx1	EA	1		
154	JSP	JSP-57	TRAIL SIGNAGE - BL-Rx1e	EA	2		
155	JSP	JSP-57	TRAIL SIGNAGE - BL-Gx10	EA	1		
156	JSP	JSP-57	TRAIL SIGNAGE - BL-IN4	EA	1		
157	JSP	JSP-57	TRAIL SIGNAGE - BL-IN1	EA	1		
158	JSP	JSP-45	LANDSCAPE - DRY STREAM BED STONE	CY	3		
159	JSP	JSP-45	LANDSCAPE - STONE SEATING. LEDGE ROCK OUTCROPPING	TN	14		
160	JSP	JSP-45	LANDSCAPE - STONE BASE FOR LOG SEATING	TN	2		
161	JSP	JSP-45	LANDSCAPE - STONE STEPPERS	TN	9		
162	JSP	JSP-45	LANDSCAPE - AGGREGATE BASE FOR STONE	CY	11		
163	JSP	JSP-45	LANDSCAPE - GEOTEXTILE FILTER FABRIC	SY	6		
164	JSP	JSP-59	LANDSCAPE - LOG SEATING INC GROUT AND MOUNTING HARDWARE	LF	27		
165	JSP	JSP-56	LANDSCAPE - IRRIGATION SLEEVES	LF	640		
166	JSP	JSP-56	LANDSCAPE - IRRIGATION MAINLINE	LF	940		
167	JSP	JSP-56	LANDSCAPE - IRRIGATION DRIP TUBING	LF	11,300		
168	JSP	JSP-56	LANDSCAPE - IRRIGATION WIRE CONDUIT	LF	400		
169	JSP	JSP-56	LANDSCAPE - IRRIGATION LATERAL PIPE	LF	2,550		
170	JSP	JSP-56	LANDSCAPE - IRRIGATION BUBBLER ASSEMBLIES	EA	46		
171	JSP	JSP-56	LANDSCAPE - IRRIGATION ZONE CONTROL VALVES	EA	4		
172	JSP	JSP-56	LANDSCAPE - IRRIGATION DRIP CONTROL ZONE ASSEMBLIES	EA	7		
173	JSP	JSP-19	LIGHTING - FESTOON POLE GFCI RECEPTACLES	EA	3		
						SUBTOTAL:	
ROADWAY SUBTOTAL:							
SIGNING, STRIPING, SIGNALS, AND LIGHTING SUBTOTAL:							
BICYCLE AND PEDESTRIAN SUBTOTAL:							
LANDSCAPING SUBTOTAL:							
FEDERAL TOTAL:							
NON-FEDERAL PARTICIPATING SUBTOTAL:							
TOTAL:							

JSP-19 INSTALL LIGHTING EQUIPMENT

1.0 DESCRIPTION

Where indicated in the plans, the Contractor shall install new pedestrian-scale and roadway lighting equipment.

2.0 CONSTRUCTION REQUIREMENTS

- 2.1** New pedestrian and roadway lighting poles, bracket arms, acorn luminaires, and other miscellaneous hardware shall be provided per the details including in the plans. The required acorn luminaire model is shown in the details and shall be 4000K in light temperature. Shop drawings for all proposed lighting shall be provided to the Engineer for approval prior to procurement.
- 2.2** New roadway and pedestrian lighting poles (and for areas where mounted onto signal poles) shall include a GE Evolve cobra head luminaire, model ERL1 07B540, 4000K color temperature. When attached to a signal pole or roadway pole for road lighting, fixture head shall be attached to a 6'-0" wide arm mount.
- 2.3** New festoon string light suspended LED fixtures with stainless steel cable support, spaced 24" on-center along strand. Bulbs to be frosted, acrylic, and dimmable. System provided with manufacturer provided 0-10V dimming drivers in remote wet location Nema 3R rated enclosure. (2) 24VDC, 96W 0-10V drivers provided in total. (1) for each of the (2) lighting zones. Festoon Lights are Tivoli Litesphere 2.0. Festoon Poles are 5" diameter, 14' straight round steel pole with black finish and concrete footing. Pole by Valmont, type DS340. Additional enclosure provided by manufacturer to house (2) 0-10V dimmers in wet location boxes installed within enclosure. Enclosure type ADNM 16"x16"x4"D Type: Lutron DVTV-WH.
- 2.4** Provide timeclock control for plaza lighting.
- 2.5** New lighting poles and lighting fixtures to be coordinated with local rep prior to purchase to ensure all selections meet the must up to date City of St. Louis standards:
 - A. Brian Brader, (314)922-3766, Brian@SimplyBrightIdeas.com
- 2.6** Construction and installation of streetlights and appurtenances are subject to regulation by the City of St. Louis Traffic and Lighting Division and the following publications.
 - A. 1996 BPS Street Lighting Design Guide, including attachment: Technical Specifications for Street Lighting, 1982.
 - B. City of Saint Louis Streetlight and Utility Pole Specification, July 22, 2019, Revision 3 and Addendum #1

3.0 INSTALLATION

- 3.1** Excavation and backfilling of material as part of the direct bury poles shall follow recommendations of the pole manufacturers. At the bottom of the excavation, 4"-6" of course gravel shall be placed as a setting pad. Required embedment of the pole shall not include this setting pad depth. Backfill material shall be cementitious earth backfill, concrete or limestone screenings pneumatically tamped in 4" lifts.

- 3.2** The Contractor shall remove, modify, and install lighting along the corridor such that, at a minimum, existing light levels are provided at the end of each workday. Staging of the lighting work will not be allowed to cause existing or proposed lighting to be unavailable for partial blocks or complete blocks at the end of a given day at any point in the project. This may require measures such as temporary electrical power (i.e. portable generators, etc.) and temporary breaker panels. All demolished or removed materials shall be removed from the project area at the completion of each workday for any opened roadways or sidewalks.
- 3.3** For instances where adjacent sidewalk, roadway, or ramp pavement is removed and replaced, the Contractor shall adjust any existing lighting pullboxes to grade. This work may also entail stabilizing existing light poles during pavement construction. Any existing pullboxes or poles damaged during adjustment, stabilization, or construction of lighting elements shall be replaced at the Contractor's expense.
- 3.4** New or adjusted lighting pullboxes shall be made flush with the adjacent sidewalk pavement. Grinding of pullbox tops or edges is not an acceptable method for meeting this requirement.
- 3.5** Conduits shall be run from the identified substations along or near Spring Avenue as shown on the plans. Power shall be delivered to the light poles approximately as shown on the plans, unless an alternate path is proposed by the Contractor and approved by the Engineer. The Contractor shall attach an additional approved NEMA 4X cabinet to open wall space in the existing substation vaults. The new panel shall not be located directly below either grate opening over the vault. Necessary contactors, circuit breakers, and miscellaneous wire and hardware are included in the unit bid price for Substation Cabinet & Panel. Proposed concrete anchor materials and methods shall be submitted prior to procurement, and approved by the Engineer. Rigid conduit shall be installed from the new cabinet to a point near the existing transformer. Connection to existing transformers shall be coordinated with the City's lighting electricians at least one week prior to proposed connection date. The Contractor shall provide all supervision, labor, materials, equipment, machinery, and any and all other items necessary to make a complete and fully operational system.
- 3.6** Work and materials shall conform to the rules of the National Board of Fire Underwriters' Code and the Regulations of the State Fire Marshal. Nothing in these specifications shall be construed to permit work not conforming to the most stringent of applicable codes. The currently adopted version of the National Electric Code (NEC), is the local electric code, and the electrical requirements as established by the State and Local Fire Marshal, and rules and regulations of the power company serving the project, are hereby made part of this specification. Should any changes be necessary in the drawings or specifications to make the work comply with these requirements, the Contractor shall notify the Engineer.
- 3.7** The entire electrical system and all electrical equipment shall be grounded in strict accordance with the City's currently adopted edition of the National Electrical Code. After installing grounding system but before permanent electrical circuits have been energized, test for compliance with requirements. Inspect physical and mechanical condition. Verify tightness of accessible, bolted, electrical connections with a calibrated torque wrench according to manufacturer's written instructions. Test completed grounding system at each location where a maximum ground resistance level is specified, at service disconnect enclosure grounding terminal, and at individual ground rods and as directed by the Engineer. Make tests at ground rods before any conductors are connected. Measure ground resistance no fewer than two full days after last trace of precipitation and without soil being moistened by any means other than natural drainage or seepage and without chemical treatment or other artificial means of reducing natural ground resistance. Perform tests by fall-of-potential method according to IEEE 81. If resistance to ground exceeds specified values, notify the Engineer promptly and include recommendations to reduce ground resistance.

- 3.8 Conductors shall be color-coded either by insulation at the manufacturer, or by means of conductor tape at each pullbox, pole base, or terminal block.
- 3.9 Spliced shall be compatible with conductor material and possess equivalent or better mechanical strength and insulation ratings than unspliced conductors. All splice kits shall be waterproof.
- 3.10 For each conductor entering a pullbox, light pole, or other accessible locations, at least 12 inches of slack shall be stored.
- 3.11 Install conduit sealing compound to all open conduit ends.
- 3.12 Lighting pullboxes shall have a nonskid finish, and include cover labels stating, "Street Lighting".
- 3.13 The contractor shall submit product warranty documents to the engineer prior to acceptance of the work.

4.0 BASIS OF PAYMENT

This work shall include all labor, equipment, and transportation of materials as part of pay items:

- A. STREET LIGHT POLE (GRP), PIPE ARM, DUAL LUMINAIRES (SB1, SB2), DIRECT BURY FOUNDATION, per each.
- B. STREET LIGHT (SB2) PIPE ARM, LUMINAIRE ON SIGNAL POLE (SP), per each.
- C. PLAZA FESTOON STRING LIGHTS (F1), per linear feet
- D. PLAZA FESTOON STRING LIGHTS SUPPORTING POLES, MOUNTING BRACKET AND DIRECT BURY FOUNDATION (FP1), REMOTE POWER SUPPLIES (F1); PLAZA FESTOON LIGHTING CONTROL ENCLOSURES, DIMMING SWITCHES, TIMECLOCK CONTROLS, MOUNTING AND MOUNTING BRACKETS, per each.

END JSP-19

JSP-20 ELECTRICAL POWER SUPPLY

1.0 DESCRIPTION

This item shall consist of furnishing and installing a power supply to provide 480/277 volt power for both roadway and pedestrian lighting as they all utilize the city standard fixture head and poles. Existing utility meter and substation to be installed onto new pole. New panelboard and circuits to be provided. The utility assemblies shall be pole mounted and powered by new conductors connecting to existing utility facilities feeds fed from a new city provided pole. Provide all cables and conduit necessary. Coordination with the utility company for switch- over between existing and new service will be the responsibility of the contractor. All work shall conform to Section 902, as drawn in the plans, and detailed below.

Additional power supply to provide 120/240-volt power for miscellaneous power (typical at plaza locations). New utility meter to be installed at panelboard enclosure location. New utility substation required. Coordinate with utility for final service requirements and provide all work and costs as required. New panelboard and circuits to be provided. New pad mounted NEMA 4x enclosure to house the panelboard.

2.0 CONSTRUCTION REQUIREMENTS

- 2.1** Panelboard shall be provided in pole mounted lockable NEMA 4X enclosure and shall be 480/277V with 24 available breakers.
- 2.2** Power panelboard shall be provided in pad mounted lockable NEMA 4X enclosure and shall be 120/240V with available breakers per drawings.
- 2.3** Must meet all requirements of City of St. Louis Streetlight and Utility Pole Specifications – Sealed Rev. 3 7-22-19 and Addendum #1.
- 2.4** The contractor shall submit product warranty documents to the engineer prior to acceptance of the work.

3.0 BASIS OF PAYMENT

- 3.1** This work shall be paid for at the contract unit price for “ELECTRICAL POWER SUPPLY - LIGHTING/POWER PANELBOARD AND PAD MOUNTED ENCLOSURE, CONCRETE FOOTING FOUNDATION; ELECTRICAL POWER SUPPLY - ENCLOSURE RECEPTACLE; and ELECTRICAL POWER SUPPLY - NEMA 3R HEAVY DUTY DISCONNECT SWITCH”, per each.
- 3.2** The completed work as described includes all equipment, labor and materials necessary for completed installation, including mounting hardware, strut frame, and connections.

END OF JSP-20

JSP-41 CONCRETE PAVEMENT

1.0 DESCRIPTION

- 1.1 This work shall consist of constructing concrete pavement, or a concrete base pavement. Concrete pavements shall conform to the requirements Sec 501 and Sec 502 except as modified herein. Aggregate base course shall conform to the requirements Sec 304. Section includes:
 - A. CONCRETE PAVEMENT (SIDEWALKS)
 - B. CONCRETE PAVEMENT (SHARED USE PATH)
 - C. HEAVY DUTY CONCRETE PAVEMENT (SHARED USE PATH)
 - D. HEAVY DUTY CONCRETE PAVEMENT (RAISED CROSSINGS/DRIVEWAYS)

2.0 CONSTRUCTION REQUIREMENTS

- 2.1 Concrete materials shall meet the requirements of Sec 501 and Sec 502 except as modified herein.
- 2.2 Concrete Grade 4,000 (4,000 psi at 28 days). All concrete finish types shall be the same concrete mix, contain the same coarse and fine aggregates and shall NOT have any changes in concrete admixtures.
- 2.3 Curing Compound. Curing compound shall be Type 1, clear, conforming to ASTM C-309.
- 2.4 Joint Sealant to be a 2-component, premium grade, polyurethane based elastomeric sealant in a non-sag consistency. Color to be submitted for Engineer review and approval. Joint sealant to be Sikaflex 2cNS, Sonneborn NP2 or equal as approved by the Engineer.
- 2.5 Submit the following documents to the Engineer for review and approval prior to proceeding with construction of Concrete Pavements:
 - A. Concrete mix design
 - B. Curing Method and Materials
 - C. Joint Sealant and Color Samples
 - D. Synthetic Fiber Reinforcement
- 2.6 Synthetic Fiber Reinforcement: Monofilament polypropylene fibers engineered and designed for use in concrete paving, complying with ASTM C 1116/C 1116M, Type III, [1/2 to 1-1/2 inches (13 to 38 mm)] long.

3.0 EXECUTION

- 3.1. Concrete Pavement pay items include excavating, backfilling, compacting and grading as shown on plans and details. Dispose of excess and unsuitable material at NO additional cost. Excavation and general site fill shall be included. Provide Aggregate Base, 21AA material per plans and details from off-site sources.
- 3.2. Installer Qualifications. The installer shall have a minimum of 5 years' experience in concrete pavement with the finishes and joint types indicated and successfully completed not less than 6 projects comparable in scale and complexity. Documented proof that the

proposed installer has a 5-year proven record of performance, confirmed by at least 3 local projects that the Engineer can examine.

3.3. Project Conditions. Concrete placement shall be installed within the following environmental requirements:

- A. Maintain an ambient temperature of between 50 degrees F and 90 degrees F during application and at least 48 hours after application. Do not place concrete when the temperature of the surrounding air is expected to be below 40 degrees F during placing or within 24 hours thereafter. Do not allow the temperature of plastic concrete to drop below 55 degrees F.
- B. When the mean daily temperature of the atmosphere is 80 degrees F and above, or during hot and dry weather, do not place concrete with a placing temperature which causes difficulty from loss of slump, flash set or cold joints 75 degrees F where possible and not more than 90 degrees F in any event. Where climatic conditions cause too rapid drying, make arrangements prior to placing concrete for installation of wind breaks, shading, fog spraying, water sprinkling, ponding or wet covering of a light color. Take such protective measures as quickly as concrete hardening and finishing operation allow and maintain throughout the entire curing period.

3.4. Synthetic Fiber: Uniformly disperse in concrete mixture at manufacturer's recommended rate, but not less than 1.0 lb/cu. yd. (0.60 kg/cu. M).

3.5. Slope sidewalks as shown on plans and details. Construct concrete pavements to ADA slope requirements where located as an ADA accessible path.

3.6. All exposed portions of concrete pavement shall conform to the following surface texture unless otherwise detailed on plans, without imperfections, chips, marks, and holes:

CONCRETE ITEM	REQUIRED SURFACE TEXTURE
Street Pavement	Wire Comb—Perpendicular to the direction of traffic. (Coarse broom on streets with low traffic volume)
Alley Pavement/Aprons	Medium broom—Perpendicular to direction of traffic
Driveways, Medians	Median broom—Perpendicular to direction of traffic.
Curbs, Gutters	Medium broom—Parallel to curb.
St Louis Plaza, Residential Sidewalks	Magnesium float, Exposed aggregate.
Commercial Sidewalks	Medium broom or mag float—Perpendicular to direction of traffic, exposed aggregate.
Curb Ramps	Medium broom—Perpendicular to slope of ramp.
Base Concrete	Rough, closed.

- A. Provide a medium broom finish by striating float-finished concrete surface 1/16 to 1/8 inch (1.6 to 3 mm) deep with a stiff-bristled broom.
- B. Medium broom finish to be provided perpendicular to the primary direction of travel.

3.7. Concrete pavement joints shall be constructed and located as shown on plans.

3.8. Restore area disturbed beyond actual concrete pavement to pre-construction conditions or as shown on plans. No separate payment will be made for such restoration but is considered

part of this work item.

3.9. Lawn sprinkler/irrigation systems, if encountered, shall be protected by the Contractor at no extra cost. Lawn sprinkler/irrigation systems that require adjustments and/or relocations shall be provided at no additional cost.

3.10. Field Quality Control – Testing and inspecting will be carried out by Owner. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

4.0 BASIS OF PAYMENT

4.1. The completed work, as described, will be measured and paid for at the contract unit price by square foot for "CONCRETE PAVEMENT (SIDEWALKS); CONCRETE PAVEMENT (SHARED USE PATH); HEAVY DUTY CONCRETE PAVEMENT (SHARED USE PATH); and HEAVY DUTY CONCRETE PAVEMENT (RAISED CROSSWALKS/DRIVEWAYS)"

4.2. The contract unit price will be payment in full for furnishing all materials, labor and equipment necessary to construct the concrete pavement. Sawcutting, earth excavation, grading, embankment, compaction, control joints, sealed expansion joints, sealant, reinforcement, tie bars, finishing, aggregate base, and other items which may be required shall be considered included in the construction and will not be paid for separately.

4.3. Any extra costs including but not limited to additional labor, materials, and equipment incurred by the contractor due to cold weather protection requirements will not be paid for separately and are considered included in the construction and will not be paid for separately. The contractor shall include all costs required to complete the construction activities per the construction milestone dates identified and in the bidding proposal.

4.4. Removal of the existing curb, pavement, and sidewalk will be paid separately. Backfill with Aggregate Base (21 AA) will be paid separately.

END OF JSP-41

JSP-43 UNIT PAVING

1.0 DESCRIPTION

1.1 SUMMARY

- A. This work shall consist of Unit Paving on Concrete, Unit Paving on Concrete (Brick Centerline), Permeable Grid Pavers, Granite Donor Plaque, and Metal Paver Edge Restraint as detailed in the plans.
- B. Section Includes:
 - 1. Precast Concrete Pavers set on concrete underlayment and sand leveling course, provided and installed by contractor.
 - 2. Brick (Clay) Pavers set on rigid base and sand leveling course, provided and installed by contractor.
 - 3. Precast Concrete Permeable Grid Pavers set on stone base
 - 4. Granite Donor Plaques with stainless steel inlay text set on rigid base, sand setting bed, provided and installed by contractor.
 - 5. Metal Paver Edge Restraint.
- C. Related Sections include the following:
 - 1. Earthwork
 - 2. Concrete Pavement for concrete base under unit and granite pavers.

1.2 SUBMITTALS

- A. Product Data: For the following
 - 1. Precast Concrete Unit pavers
 - 2. Brick (Clay) Pavers
 - 3. Granite Plaques
 - 4. Stainless Steel Text Inlay
 - 5. Permeable Grid Pavers
 - 6. Aggregate setting bed materials
 - 7. Metal Paver Edge Restraint
- B. Samples for Verification: Full-size units of each type of unit paver indicated; in sets for each color, texture, and pattern specified, showing the full range of variations expected in these characteristics.
 - 1. Provide Samples showing the full range of colors to be expected in the completed Work.
 - 2. Include Samples of exposed edge restraints.
 - 3. Qualification Data: For firms and persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- C. Sieve Analyses: For aggregate setting-bed materials, according to ASTM C 136.

- D. Material Certificates: For unit pavers. Include statements of material properties indicating compliance with requirements, including compliance with standards. Provide for each type and size of unit.
- E. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for unit pavers, indicating compliance with requirements.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer who has completed unit paver installations similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
- B. Source Limitations: Obtain each type of unit paver, joint material, and setting material from one source with resources to provide materials and products of consistent quality in appearance and physical properties.
- C. Mockups: Before installing unit pavers, build mockups for each form and pattern of unit pavers required to verify selections made under sample Submittals and to demonstrate aesthetic effects and qualities of materials and execution. Build mockups to comply with the following requirements, using materials indicated for the completed Work, including same base construction, special features for expansion joints, and contiguous work as indicated:
 - 1. Build mockups per the size indicated below at a location as directed by the Architect.
 - a. Provide mockup (6 LF) for the Type 1 Brick and Type 2 Centerline Outline paver. Mockup to include the concrete and recess area to confirm detail.
 - b. Provide mockup (6' x 6') area for the Type 3 & Type 4 Directional Accent and Brickline Paver Field to confirm design intent.
 - c. Provide mockup (6' x 6') area for the Type 5 Transition Paver Field to confirm design intent.
 - d. Provide mockup of the Granite Donor Plaque in the Shared Use Path.
 - e. Provide mockup (6'x 6') area for the Type 6, 7, and 8 to confirm design intent, including a 3' wide mixing zone.
 - 2. Notify Landscape Architect seven days in advance of dates and times when mockups will be constructed.
 - 3. Demonstrate the proposed range of aesthetic effects and workmanship.
 - 4. Obtain Architect's approval of mockups before starting unit paver installation.
 - 5. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
 - 6. Demolish and remove mockups when directed.
 - 7. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
- D. ADA Compliance: Running and cross slopes at curb ramps, sidewalks, accessible parking spaces and access aisles as indicated on the drawings and details are maximum slopes and cannot be exceeded. The project ADA Consultant will observe and check every instance and all locations. Work in place that exceeds maximum slopes will need to be replaced at contractor's expense.
- E. Soils Considerations: All work shall be coordinated with and comply with the

recommendations set forth in the Project Geotechnical Report.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Protect unit pavers and aggregate during storage and construction against soiling or contamination from earth and other materials.
 - 1. Cover pavers with plastic or use other packaging materials that will prevent rust marks from steel strapping.
- B. Store asphalt cement and other bituminous materials in tightly closed containers.

1.5 FIELD CONDITIONS

- A. Cold-Weather Protection: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen subgrade or setting beds. Remove and replace unit paver work damaged by frost or freezing.

2.0 PRODUCT

2.1 MANUFACTURERS

- A. Source Limitations: Obtain each type of unit paver, joint material, and setting material from single source with resources to provide materials and products of consistent quality in appearance and physical properties.

2.2 CONCRETE UNIT PAVERS

- A. Precast Concrete Pavers: Solid, interlocking paving units, ASTM C 936, made from normal-weight aggregates in sizes and shapes indicated.
- B. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - 1. Wausau Tile, PO Box 1520, Wausau, WI 54402-1520 www.wausautile.com
 - 2. Unilock, 301 E. Sullivan Rd., Aurora, IL 60505 www.unilock.com
 - 3. Or approved equal.
- C. Concrete Unit Paver Types
 - 1. Precast Concrete Paver – Type 2 (Centerline Outline Paver)
 - a. Sizes: 4" x 12", 3" Depth, Micro Bevel
 - b. Color: Brickline Dark Gray/Black or H22-073 (Custom HFT-60 no white add black)
 - c. Finish: Exposed Granite Finish
 - 2. Precast Concrete Paver – Type 3 (Directional Accent Paver)
 - a. Sizes: 4" x 12", 3" Depth, Micro-Bevel
 - b. Color: Brickline White or H22-073 (Custom Hess HGL-15 W/Blue Glo)
 - c. Finish: Exposed Granite Finish
 - 3. Precast Concrete Paver – Type 4 (Brickline Paver Field/Border Blend)
 - a. Sizes: 4" x 12", 3" Depth, Micro Bevel

- b. Color: Brickline Medium Gray or HFT 35
 - c. Finish: Granite Appearance Face Mix Finish
- 4. Concrete Paver Products: Precast Concrete Paver – Type 5 (Transition Paver Field)
 - a. Sizes: 4" x 12", 3" Depth, Micro-Bevel
 - b. Color: Brickline Dark Gray or H22-072 (HRT-38 No White AG Add Black Gray)
 - c. Finish: Granite Appearance Face Mix Finish
- 5. Concrete Paver Products: Precast Concrete Paver – Type 6 (Plaza Field A)
 - a. Sizes: 4" x 12", 3" Depth, Micro-Bevel
 - b. Color: Brickline Dark Gray or H22-072 (HRT-38 No White AG Add Black Gray)
 - c. Finish: Granite Appearance Face Mix Finish
- 6. Concrete Paver Products: Precast Concrete Paver – Type 7 (Plaza Field B)
 - a. Sizes: 4" x 12", 3" Depth, Micro-Bevel
 - b. Color: Medium Gray
 - c. Finish: Granite Appearance Face Mix Finish
- 7. Concrete Paver Products: Precast Concrete Paver – Type 8 (Plaza Path)
 - a. Sizes: 4" x 12", 3" Depth, Micro-Bevel
 - b. Color: Light Gray
 - c. Finish: Granite Appearance Face Mix Finish

2.3 BRICK PAVERS

- A. Manufacturers: Subject to compliance with requirements, provide products by the following or approved equal:
 - 1. Endicott Clay Products Company – P.O. Box 17, Fairbury, Nebraska 68352, 1-402-729-5804, <http://www.endicott.com>
- B. Paving Type 1: Brick (Clay) Pavers Square Edge
 - 1. Size: 4" x 8" x 2 5/8"
 - 2. Color: Medium Ironspot #46
 - 3. Texture: Wirecut

2.4 PERMEABLE GRID PAVERS

- A. Turfstone Grid Paver
 - 1. Color: Gray/Natural
 - 2. Nominal Paver Dimensions: 16" x 24" x 3"
 - 3. Location: Refer to drawings
- B. Manufacturers: Subject to compliance with requirements, provide products following or equal:
 - 1. Belgard, 800-358-3003
 - 2. Unilock, contact: Steve Staggs at 913-534-4935

3. Or approved equal

2.5 GRANITE DONOR PLAQUES

- A. Granite: Furnish granite complying with requirements of ASTM C615 and National Building Granite Quarries Association, Inc. and is engineered for the applications shown.
 1. Color: Absolute Black
 2. Location: Refer to drawings
 3. Finish: Refer to drawings
 4. Nominal Dimensions: Refer to drawings
- B. Manufacturers: Subject to compliance with requirements, provide products by the following or approved equal:
 1. Supplier: ASL Stone – 1250 Library Street, Loft 21, Detroit MI 48226, (740) 927-6628

2.6 AGGREGATE SETTING-BED MATERIALS: UNIT PAVERS SET ON CONCRETE UNDERLAYMENT

- A. Sand for Leveling Course: Sound, sharp, washed, natural sand or crushed stone complying with gradation requirements in ASTM C 33/C 33M for fine aggregate.
- B. Sand for Joints: Polymer modified fine, sharp, washed, natural sand or crushed stone with 100 percent passing No. 16 sieve and no more than 10 percent passing No. 200 sieve. Color as selected by the Landscape Architect.
 1. Manufacturers/Products:
 2. Alliance Design Products, Inc., "Super Sand Bond".
 3. Package Pavement, "Joint Lock Sand"
 4. Pave Tech, "SandLock".
- C. Filter Fabric: Woven geotextile fabric, manufactured for separation applications; made from polyolefins or polyesters, with elongation less than 50 percent; complying with AASHTO M 288 and the following, measured per test methods referenced:
 1. Survivability: Class 2, AASHTO M 288.
 2. Apparent Opening Size: No. 60 (0.250-mm) sieve, maximum; ASTM D 4751.
 3. Permittivity: 0.02 per second, minimum; ASTM D 4491.
 4. UV Stability: 50 percent after 500 hours' exposure, ASTM D 4355.

2.7 AGGREGATE MATERIALS: PERMEABLE GRID PAVERS

- A. Infill and Bedding Course: Sound stone screenings complying with ASTM D 448 for Size No. 8.
- B. Base Course: Sound stone screenings complying with ASTM D 448 for Size No. 57.
- C. Conform to manufacturer's recommendations for installation and compaction.

2.8 CONCRETE UNIT PAVER SEALER

- A. Factory apply one coat of penetrating sealer to all surfaces of precast concrete pavers.
- B. Sealer shall be non-staining, penetrating material, suitable for exterior or interior use, type which does not discolor or darken the surface.

- C. Conform to sealer manufacturer's recommendations for application of sealer.

2.9 METAL PAVER EDGE RESTRAINT

- A. Size: 2 1/4" depth x 3/16" thickness, "L" shape.
- B. Finish: Black, anodized.
- C. Manufacturer/Products: Install per manufacturer's recommendations.
 - 1. StructurEdge, Heavy Duty Aluminum Paver Edge Restraint by Permaloc Corporation, Holland, MI 49424, 1-800-356-9660, www.permaloc.com
 - 2. Aggregate L-Edge A36438M, Aluminum Paver Edge Restraint by Sure-loc, 616-392-5134, surelocedging.com
 - 3. Or approved equal.

3.0 EXECUTION

3.1 EXAMINATION

- A. Examine areas indicated to receive paving, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Vacuum clean concrete substrates to remove dirt, dust, debris, and loose particles.
- B. Remove substances, from concrete substrates, that could impair mortar bond, including curing and sealing compounds, form oil, and laitance.

3.3 INSTALLATION, GENERAL

- A. Do not use unit pavers with chips, cracks, voids, discolorations, and other defects that might be visible or cause staining in finished work.
- B. Mix pavers from several pallets or cubes, as they are placed, to produce uniform blend of colors and textures.
- C. Cut unit pavers with motor-driven masonry saw equipment to provide clean, sharp, unchipped edges. Cut units to provide pattern indicated and to fit adjoining work neatly. Use full units without cutting where possible. Hammer cutting is not acceptable.
- D. For concrete pavers, a block splitter may be used.
- E. Joint Pattern: As indicated on drawings.
- F. Tolerances: Do not exceed 1/32-inch (0.8-mm) unit-to-unit offset from flush (lippage) nor 1/8 inch in 10 feet (3 mm in 3 m) from level, or indicated slope, for finished surface of paving.
- G. Isolation Joints: Provide joint filler at locations and of widths indicated. Install joint filler before setting pavers. Make top of joint filler flush with top of pavers. Sealant materials and installation are specified in Division 2 Section "Pavement Joint Sealants."
- H. Cast iron detectable warning plate: Install per manufacturer's recommendation.

3.4 AGGREGATE SETTING-BED APPLICATIONS:

- A. Place leveling course and screed, taking care that moisture content remains constant and

density is loose and uniform until pavers are set and compacted.

- B. Treat leveling course with herbicide to inhibit growth of grass and weeds.
- C. Set pavers with a minimum joint width of 1/16 inch (1.5 mm) and a maximum of 1/8 inch (3 mm), being careful not to disturb leveling base. If pavers have spacer bars, place pavers hand tight against spacer bars. Use string lines to keep straight lines.
- D. Vibrate pavers into leveling course with a low-amplitude plate vibrator. Use vibrator with neoprene mat on face of plate or other means as needed to prevent cracking and chipping of pavers. Perform at least three passes across paving with vibrator.
- E. Compact pavers when there is sufficient surface to accommodate operation of vibrator, leaving at least 36 inches (900 mm) of uncompacted pavers adjacent to temporary edges.
- F. As work progresses to perimeter of installation, compact installed pavers that are adjacent to permanent edges unless they are within 36 inches (90 mm) of laying face.
- G. Before ending each day's work and when rain interrupts work, cover pavers that have not been compacted and cover leveling course on which pavers have not been placed with non-staining plastic sheets to protect them from rain.
- H. Spread dry sand and fill joints immediately after vibrating pavers into leveling course. Vibrate pavers and add sand until joints are completely filled, then remove excess sand. Wet sand as in accordance with manufacturer's directions.
- I. Do not allow traffic on installed pavers until sand has been vibrated into joints.
- J. Repeat joint-filling process 30 days later.

3.5 REPAIRING, POINTING, AND CLEANING

- A. Remove and replace unit pavers that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units as intended. Provide new units to match adjoining units and install in same manner as original units, with same joint treatment and with no evidence of replacement.
- B. Pointing: During tooling of joints, enlarge voids or holes and completely fill with grout. Point up joints at sealant joints to provide a neat, uniform appearance, properly prepared for sealant application.
- C. Cleaning: Remove excess grout from exposed paver surfaces; wash and scrub clean.

4.0 BASIS OF PAYMENT

- 4.1** The work under UNIT PAVING ON CONCRETE, UNIT PAVING ON CONCRETE (BRICKLINE CENTERLINE), and PERMEABLE GRID PAVER shall be paid for at the contract unit price per square foot, which will include all labor, material, filter fabric, concrete slab base, granular base, and equipment costs to complete the work as drawn and specified.
- 4.2** GRANITE DONOR PLAQUES shall be paid for at the contract unit price per each, which will include all labor, material, concrete slab base, granular base, and equipment costs to complete the work as drawn and specified.
- 4.3** METAL PAVER EDGE RESTRAINT shall be paid for at the contract unit price per linear foot, which will include all labor, materials, and equipment to complete the work as drawn and specified.

END OF JSP-43

Great Rivers Greenway

Form 4: **CONTRACT**

This Contract is made and entered into the _____ day of **[Insert Month, Year]**,
by and between the Metropolitan Park and Recreation District d/b/a
The Great Rivers Greenway District (hereinafter referred to as the “Developer”) and
_____ (hereinafter referred to as the “**Contractor**”).

The parties hereto agree as follows:

1. **Scope of Work.** The Contractor will perform such work, including all labor, equipment and material as described in **Invitation to Bid (Form GRG 1)**, attached to this Contract. All work shall be performed as described in the “Contract Documents” defined in the **GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION (Form GRG 5)** which shall be a part of this Contract.
2. **Contract Sum.** The Developer shall pay a total sum not to exceed _____ (\$_____) for the Scope of Work. The initial contract sum of \$_____ is based on the estimated quantities provided on the bid form submitted by Contractor at the unit prices contained therein, a copy of which is attached hereto as Exhibit A. The final contract sum payable hereunder shall be based on the Unit Price Pay Items and actual quantity measurements, where required.
3. **The Contract Time** for completion of the Work shall be as follows: Contractor shall achieve Substantial Completion of the Work no later than 390 consecutive calendar days after the Date of Commencement of the Work. ~~Final Completion shall take place no later than 60 days after Substantial Completion.~~ Time shall be calculated in accordance with **GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION (Form GRG 5)**.

~~Substantial Completion shall include all improvements, except for perennial and tree plantings. The contract may also include up to an additional 168 calendar-day period for Final Completion, to be completed no later than May 30, 2028, contingent upon Developer approval. This period of time may be used to complete seasonal landscaping, including perennial and tree plantings, and final punchlist items. Work associated with Substantial Completion of the project may not be deferred beyond the original 390 calendar-day period.~~

Contractor shall submit applications for payment in the amount of the value of materials and labor incorporated in the Work, as approved by the Developer and Owner, less the aggregate amount of previous payments. From each application for payment, Developer may withhold a “retained percentage” of five percent (5%) of the full amount requested. Within thirty (30) days after Substantial Completion, as determined pursuant to **GENERAL CONDITIONS OF THE CONTRACT FOR**

CONSTRUCTION (Form GRG 5). Developer shall release to Contractor ninety-eight percent (98%) of the retained percentage, less 150% of the amount necessary to complete any Punch List items and any other offsets or deductions permitted by the Contract Documents. As a condition precedent to Developer's obligation to make any payment, Contractor shall submit partial and final lien waiver (as applicable) in the forms included in the Contract Documents as **Form GRG 6 and Form GRG 7**. Further, on any changes in the work, Great Rivers Greenway District allows a maximum of 10% markup for fees on any change order.

In all events, Developer shall pay Contractor not later than thirty (30) days after receipt of the application for payment.

4. **Liquidated Damages.** Contractor acknowledges and agrees that if Contractor fails to achieve Substantial Completion or Final Completion of the Work within the Contract Time as identified in this Contract, Developer will sustain disruption to its business, damages and losses as a result, the exact amount of which are difficult or impossible to quantify at the time of execution of this Contract. In such event, Developer shall be entitled to retain or recover from Contractor, as liquidated damages and not as a penalty, an amount equal to \$2,425.00, per day, and in accordance with Sec 108.8 of the Missouri Standard Specifications for Highway Construction.
5. **Drawings.** Accompanying the Specifications are the following contract drawings which are to illustrate and to be a part of the Specifications and the contract documents:

Brickline Greenway North Connector Phase 3 (308s) – Bid Package

Sheet Number	File Number	Sheet Description
1	General	Cover Sheet
2	General	Sheet Index
3	General	General Notes and Symbols
4	General	Summary of Quantities
5	Civil	Typical Sections
6-9	Traffic	Traffic Control
10	Civil	Key Plan
11-13	Civil	Existing Conditions
14-16	Civil	Erosion Control Plans
17-19	Civil	Demolition Plan
20-27	Civil	Layout and Materials Plans and Enlargements
28-32	Civil	Site Details
33-39	Civil	Grading Plans, Enlargements and Details
40-45	Civil	Utility Plans, Profiles, and Details
46-52	Electrical	Lighting Plans and Electrical Details
53-77	Signals	Signal Intersection Plans, ITS, and Details

78-81	Signage	Regulatory Signage Plans and Details
82-85	Striping	Pavement Marking Plans and Details
86-89	Landscape	Soils Plans and Details
90-95	Landscape	Landscape Plans and Details
96-101	Landscape	Irrigation Plans and Details
102-106	Landscape	Trail Signage and Furnishings Plan and Details

6. **Conditions.** This Contract and the Work performed hereunder shall be completed in conformity with the **GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION (GRG Form 5)** which is specifically made a part of this Contract.
7. **Affidavits and Certifications.** Simultaneously with this its execution and delivery of this Contract, Contractor shall execute and deliver to Owner the following:
- a. Affidavit of Compliance with Section 285.500 R.S.Mo., Et Seq.
 - b. Affidavit of Compliance with Anti-Discrimination Against Israel Act
 - c. Certification of Primary Participant Regarding Responsibility Matters (FAR 52.209-5)

WHEREFORE the parties have set their hand the day and date first above written.

CONTRACTOR

by _____

DEVELOPER

**Metropolitan Park and
Recreation District**

d/b/a **The Great Rivers Greenway District**

by _____

Chief Executive Officer

Approved as to Form:

Husch Blackwell LLP

**Affidavit of Compliance with Section 285.500 R.S.Mo., Et Seq.
For all Agreements in excess of \$5,000.00.
Effective January 1, 2009**

STATE OF _____)
) ss.

COUNTY OF _____)

Before me, the undersigned Notary Public, in and for the County/City of -
_____, State of _____, personally appeared
(Name) _____, who is
_____(Title) of _____
(Name of company), (a corporation), (a partnership), (a sole proprietorship), (a
limited liability company), and is authorized to make this affidavit, and being duly
sworn upon oath deposes and says as follows:

- (1) that said company is enrolled in and participates in a federal work
authorization program with respect to the employees working in
connection with the contracted services; and
- (2) that said company does not knowingly employ any person who is
an unauthorized alien in connection with the contracted services.

The terms used in this affidavit shall have the meaning set forth in Section 285.500
R.S.Mo., et seq.

**Documentation of participation in a federal work authorization program is
attached to this affidavit.**

Signature _____

Name: _____

Subscribed and sworn to before me this _____ day of _____, _____.

Notary Public

My commission expires: _____

**Affidavit of Compliance with Anti-Discrimination Against Israel Act
(Section 34.600)**

For all Agreements in excess of \$100,000.

Effective August 28, 2020

STATE OF _____)

) ss.

COUNTY OF _____)

Before me, the undersigned Notary Public, in and for the County/City of _____, State of _____, personally appeared
(Name) _____, who is _____ (Title)
of _____ (Name of company),
(a corporation), (a partnership), (a sole proprietorship), (a limited liability company)
(the "Consultant"), and is authorized to make this affidavit, and being duly sworn
upon oath deposes and says as follows:

Pursuant to Section 34.600 of the Missouri Revised Statutes, Consultant certifies it is not currently engaged in and shall not, for the duration of this agreement, engage in a boycott of goods or services from the State of Israel; companies doing business in or with Israel or authorized by, licensed by, or organized under the laws of the State of Israel; or persons or entities doing business in the State of Israel.

The terms used in this affidavit shall have the meaning set forth in Section 34.600 R.S.Mo., et seq.

Signature _____

Name: _____

Subscribed and sworn to before me this _____ day of _____, _____.

Notary Public

My commission expires: _____

**Certification of Primary Participant Regarding Responsibility Matters
(FAR 52.209-5)
for Agreements Subject to Federal Funding Requirements**

Effective August 2020

STATE OF _____)

) ss.

COUNTY OF _____)

Before me, the undersigned Notary Public, in and for the County/City of _____, State of _____, personally appeared _____ (Name) _____, who is _____ (Title) of _____ (Name of company), (a corporation), (a partnership), (a sole proprietorship), (a limited liability company) (the "Consultant"), and is authorized to make this affidavit, and being duly sworn upon oath deposes and says as follows:

(a) The Consultant certifies, to the best of its knowledge and belief, that it and/or any of its Principals:

1. ☐ **Are** ☐ **Are not** presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;
2. ☐ **Have** ☐ **Have not** within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) contract or subcontract; violation of Federal or State antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating Federal criminal tax laws, or receiving stolen property;
3. ☐ **Are** ☐ **Are not** presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph 2 of this certification;
4. ☐ **Have** ☐ **Have not** within a three-year period preceding this offer, been notified of any delinquent Federal taxes in an amount that exceeds the threshold at FAR 9.104-5(a)(2) for which the liability remains unsatisfied; and
5. ☐ **Has** ☐ **Has not** within a three-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.

(b) "Principal," for the purposes of this certification, means an officer, director, owner, partner, or a person having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a division or business segment; and similar positions).

- (c) The Consultant shall provide immediate written notice to the Metropolitan Park and Recreation District d/b/a The Great Rivers Greenway District ("GRG") if, at any time prior to contract award, the Consultant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- (d) If the Consultant is unable to certify to any of the statements in this certification, the Consultant shall attach an explanation to this certification.
- (e) A certification that any of the items in paragraph (a) of this certification exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Consultant's responsibility. Failure of the Consultant to furnish a certification or provide such additional information as requested by GRG may render the Consultant nonresponsive.
- (f) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of Consultant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- (g) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Consultant knowingly rendered an erroneous certification, in addition to other remedies available to GRG, GRG may terminate the contract resulting from this solicitation for default.

THIS CERTIFICATION CONCERNS A MATTER WITHIN THE JURISDICTION OF AN AGENCY OF THE UNITED STATES AND THE MAKING OF A FALSE, FICTITIOUS, OR FRAUDULENT CERTIFICATION MAY RENDER THE MAKER SUBJECT TO PROSECUTION UNDER SECTION 1001, TITLE 18, UNITED STATES CODE.

Signature _____

Name: _____

Subscribed and sworn to before me this _____ day of _____, _____.

Notary Public

My commission expires: _____

FILE: C:\Users\hhiggins\DC\ACODocs\SmithGroup\00014654 - Brickline Greenway Phase 2 & 3\Project Files\BIM\05 Civil\03-14654-SG-G1-001.dwg USER: hhiggins DATE: Sep, 01 2026 TIME: 03:02 pm



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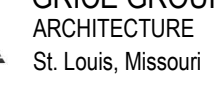
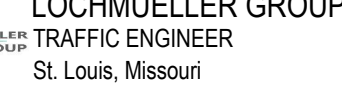
TAP #5401(721)
CDBG# B-23-CP-MO-0886

Client



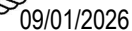
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<u>1</u>	<u>09/01/2026</u>
	<u>08/13/2026</u>

SEALS AND SIGNATURES



KEY PLAN

DRAWING TITLE

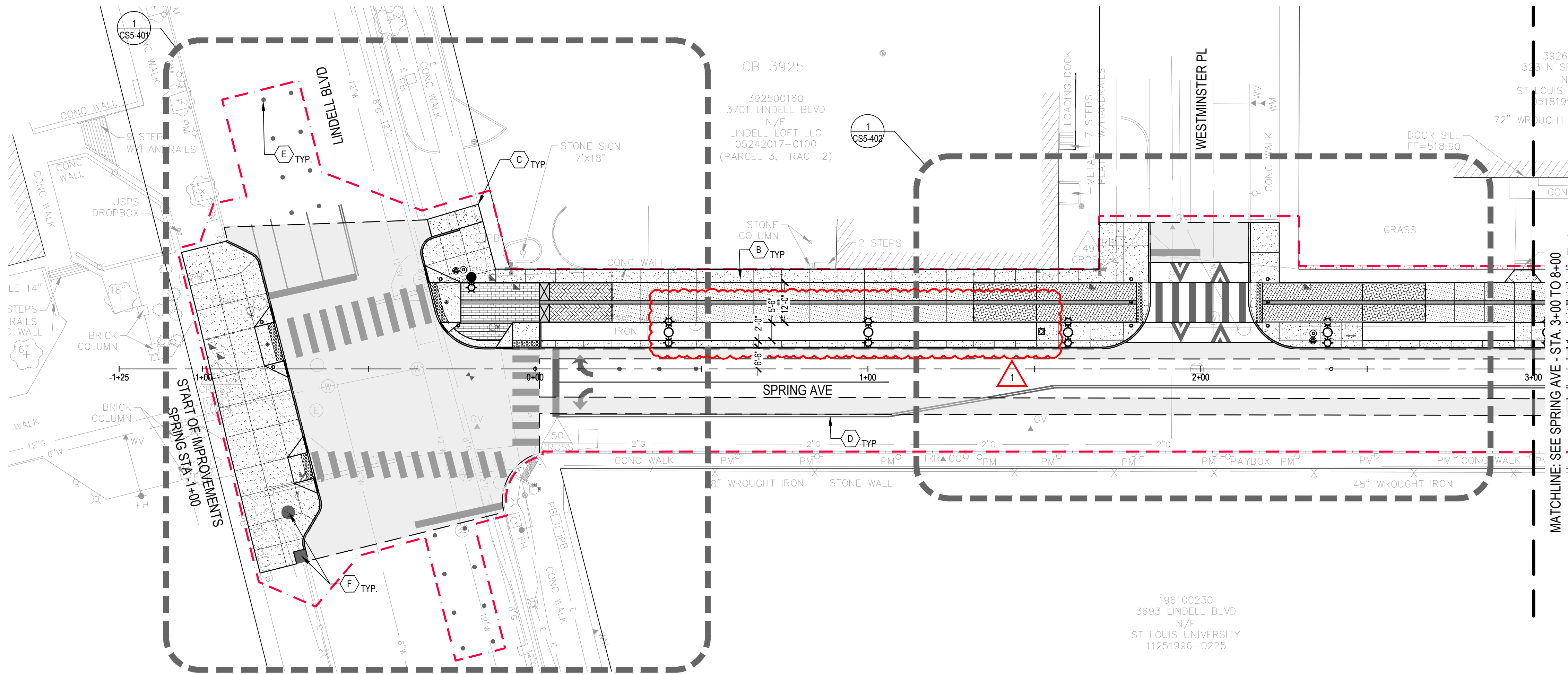
SUMMARY OF QUANTITIES

PROJECT NUMBER 00014654 GRG: 308S
MSD No: 25MSD-00082. MSD BASEMAP 19F3
DRAWING NUMBER

4 OF 106

G2-001





LAYOUT SHEET GENERAL NOTES

1. THESE CONSTRUCTION DRAWINGS HAVE BEEN CREATED WITH AUTOCAD PROGRAM SOFTWARE, USING SITE BENCHMARKS AND A SITE COORDINATE SYSTEM BASED ON THE PROVIDED SURVEY FILES. AN ELECTRONIC COPY OF THE DRAWING FILES, SUITABLE FOR DOWNLOADING INTO SURVEY SOFTWARE PROGRAMS, WILL BE PROVIDED FOR CONSTRUCTION LAYOUT WHEN THE CONSTRUCTION DOCUMENTS ARE "APPROVED FOR CONSTRUCTION". AS SUCH, THESE CONSTRUCTION DRAWINGS ONLY SHOW KEY DIMENSIONS, BASELINES AND CONTROL POINTS OF CERTAIN KEY FEATURES.
2. THE AUXILIARY BENCHMARKS AND CONTROL POINTS AS NEEDED TO LAYOUT AND CONSTRUCTION WORK.
3. ALL DIMENSIONS MUST BE FIELD VERIFIED AND ANY DISCREPANCIES REPORTED TO THE OWNER'S REPRESENTATIVE IMMEDIATELY.
4. DIMENSIONS ARE TO BACK OF CURB, EDGE OF PAVEMENT, OR CENTERLINE OF ROAD/TRAIL, UNLESS OTHERWISE NOTED.
5. ADJUST LAYOUT AS DIRECTED BY THE ENGINEER TO ENSURE PROPER CONNECTION TO EXISTING FACILITIES AND SITE AMENITIES.
6. PAVING RADII SHALL BE FORMED COMPLETELY AND SMOOTHLY TRANSITION INTO TANGENTS AND ADJOINING LINES. FLAT CURVE SEGMENTS IN HORIZONTAL LAYOUT SHALL BE REMOVED AND REPLACED AT NO COST TO OWNER.
7. PLACE CONTROL AND EXPANSION JOINTS AS SHOWN ON PLANS AND IN SECTIONS FOR ALL CURBS, WALLS, WALLS AND CONCRETE PAVING, WHERE JOINTS ARE NOT SHOWN, PLACE CONTROL JOINTS A MAXIMUM OF 10 FEET ON CENTER AND EXPANSION JOINTS A MAXIMUM OF 50' ON CENTER, AT ALL FIXED SITE ELEMENTS, AND BETWEEN ALL SEPARATE POURS.

4. DIMENSIONS ARE TO BACK OF CURB, EDGE OF PAVEMENT, OR CENTERLINE OF ROAD/TRAIL, UNLESS OTHERWISE NOTED
5. ADJUST LAYOUT AS DIRECTED BY THE ENGINEER TO ENSURE PROPER CONNECTION TO EXISTING FACILITIES AND SITE AMENITIES.
6. PAVING RADII SHALL BE FORMED COMPLETELY AND SMOOTHLY TRANSITION INTO TANGENTS AND ADJOINING LINES. FLAT CURVE SEGMENTS IN HORIZONTAL LAYOUT SHALL BE REMOVED AND REPLACED AT NO COST TO OWNER.
7. PLACE CONTROL AND EXPANSION JOINTS AS SHOWN ON PLANS AND DETAILS FOR ALL CURBS, WALKS, WALLS, AND CONCRETE PAVING. WHERE JOINTS ARE NOT SHOWN, PLACE CONTROL JOINTS A MAXIMUM OF 10 FEET ON CENTER AND EXPANSION JOINTS A MAXIMUM OF 50' ON CENTER, AT ALL FIXED SITE ELEMENTS, AND BETWEEN ALL SEPARATE POURLS.

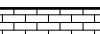
KEYED NOTES

- | | |
|---|---|
| A | SALVAGED GRANITE CURB TO BE PLACED ALONG STRAIGHT CURB SECTIONS WHERE GRANITE CURB WAS REMOVED UNLESS OTHERWISE NOTED. ALL RADIUS CURVES, ADA RAMPS AND DRIVEWAY CURBS TO BE CONCRETE CURB. |
| B | EXTEND CONCRETE PAVEMENT EDGE TO MEET EXISTING BUILDING, FENCE, STAIRS, CURB, OR OTHER ADJACUT VERTICAL STRUCTURE. ITEM C CONCRETE PAVEMENT BEYOND PROPERTY LINE IF VERTICAL STRUCTURE IS WITHIN 12" OF THE PROPERTY LINE WHEN WITHIN TEMPORARY CONSTRUCTION EASEMENT AS SHOWN. |
| C | PROVIDE SMOOTH TRANSITION TO EXISTING HARDSCAPE, TYP. |
| D | PAVEMENT MARKINGS ARE FOR REFERENCE ONLY, SEE PAVEMENT MARKING PLANS. |
| E | WIRELESS VEHICLE DETECTION SYSTEM, SEE SIGNAL INTERSECTION PLANS. |
| F | SEE UTILITY PLANS FOR ALL UTILITY STRUCTURES, INCLUDING INLETS, MANHOLES, AND VALVES. |

LEGEND

- - - - - RIGHT-OF-WAY LINE
 - - - - - PROJECT LIMITS
 TEMPORARY CONSTRUCTION EASEMENT LIMITS
 GRANITE CURB
 CONCRETE CURB

- | | | |
|---|------------------------------|---------------------|
|  | PLANTER CURB | $\frac{3}{CS-501}$ |
|  | CONCRETE PAVEMENT | $\frac{6}{CS-501}$ |
|  | HEAVY DUTY CONCRETE PAVEMENT | $\frac{7}{CS-501}$ |
|  | EXPANSION JOINT | $\frac{10}{CS-501}$ |
|  | CONTROL JOINT | $\frac{10}{CS-501}$ |

- | | | |
|---|---------------------------------------|-----------------------|
|  | ASPHALT PAVEMENT
PATCHING | $\frac{5}{CS5-501}$ |
|  | UNIT PAVING ON
CONCRETE, PATTERN 1 | $\frac{1.3}{CS5-502}$ |
|  | UNIT PAVING ON
CONCRETE, PATTERN 2 | $\frac{1.3}{CS5-502}$ |

- | | | |
|---|--|---|
|  | HEAVY DUTY
CONCRETE
SHARED
USE PATH |  |
|  | CONCRETE
SHARED
USE PATH |  |
|  | RAISED TRAIL
CROSSWALK |  |

- | | | |
|---|---|---|
|  | FLUSH CROSSWALK,
SEE PAVEMENT
MARKING PLANS | |
|  | FIXED BOLLARD |  |
|  | REMOVABLE
BOLLARD |  |
|  | ADA RAMPS |  |

-  DONOR PLAQUE
 -  WATER FOUNTAIN,
SEE SITE FURNISHINGS PLAN
 -  WASTE RECEPTACLE,
SEE SITE FURNISHINGS PLAN
 -  LIGHTING, SEE
ELECTRICAL PLANS
 -  EMERGENCY CALL BOX, SEE SITE
FURNISHINGS / ELECTRICAL PLANS

-  BIKE FACILITIES, SEE
SITE FURNISHINGS PLAN
-  BENCHES, SEE SITE
FURNISHINGS PLAN
-  TABLE & CHAIRS, SEE
SITE FURNISHINGS PLAN
- MISSOURI**
811


-  BENCHES, SEE SITE FURNISHINGS PLAN
-  TABLE & CHAIRS, SEE SITE FURNISHINGS PLAN
- MISSOURI
811**


- TABLE & CHAIRS, SEE
SITE FURNISHINGS PLAN
- MISSOURI**
811

- 

- 

BRICKLINE
GREENWAY NORTH
CONNECTOR
PHASE 3

TAP #5401(721)
CDBG# B-23-CP-MO-0886

Client



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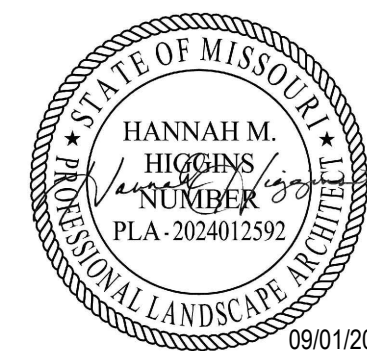
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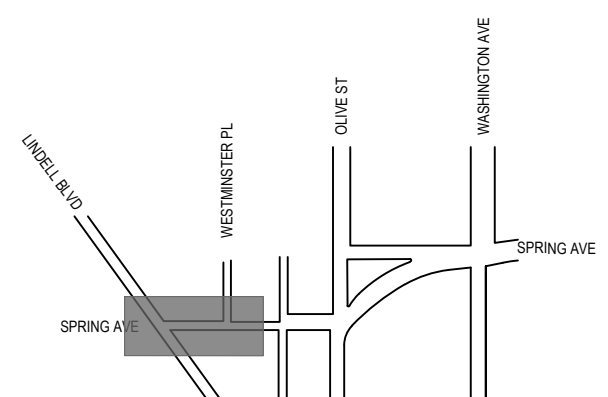
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ISSUED FOR BID		08/13/2026

SEALS AND SIGNATURES



KEY PLAN



DRAWING TITLE

LAYOUT AND
MATERIALS PLAN -
SPRING - AREA 1

10' 20'

PROJECT NUMBER 00014654 GRG: 308S
MSD No: 25MSD-00082, MSD BASEMAP 19F3
DRAWING NUMBER

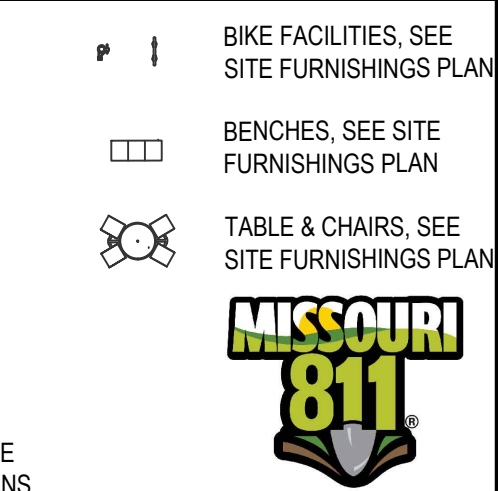
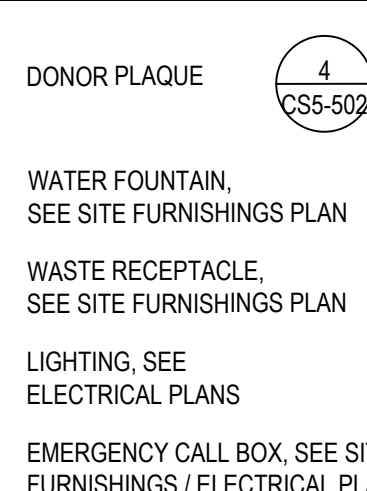
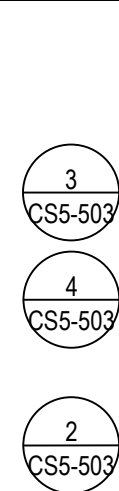
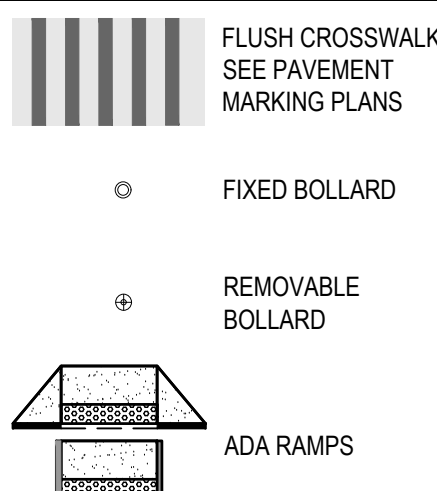
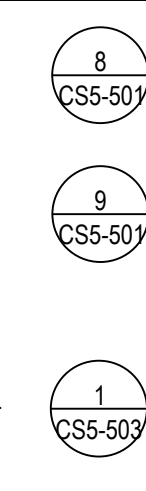
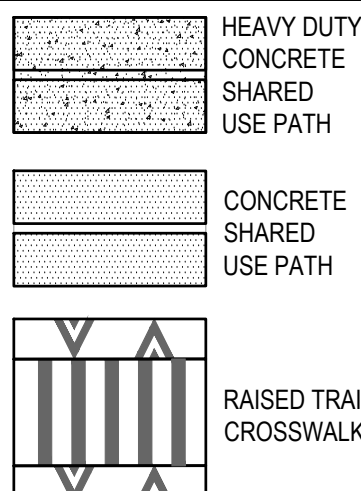
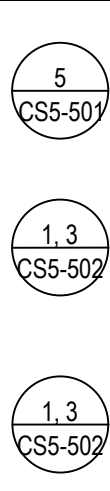
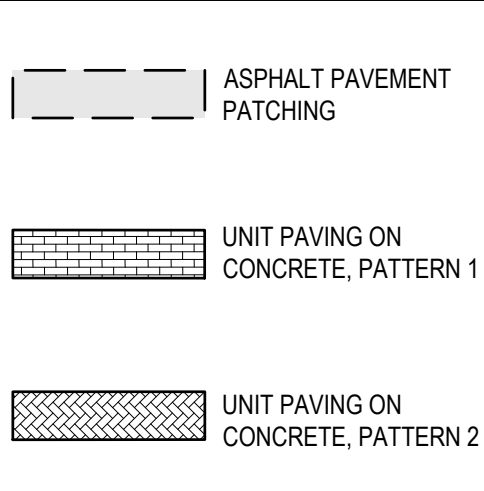
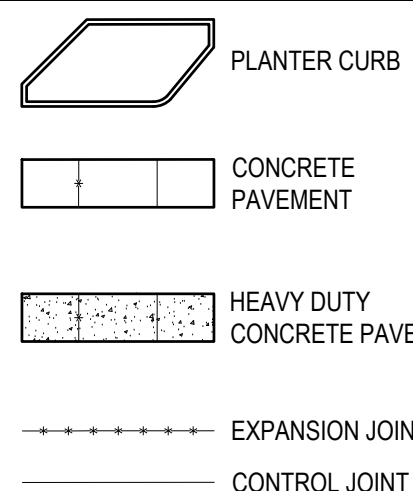
CS5-101

20 OF 106

SCALE: 1" = 10'

A	SALVAGED GRANITE CURB TO BE PLACED ALONG STRAIGHT CURB SECTIONS WHERE GRANITE CURB WAS REMOVED UNLESS OTHERWISE NOTED. ALL RADIUS CURVES, ADA RAMPS AND DRIVEWAY CURBS TO BE CONCRETE CURB.
B	EXTEND CONCRETE PAVEMENT EDGE TO MEET EXISTING BUILDING, FENCE, STAIRS, CURB, OR OTHER ADJACENT VERTICAL STRUCTURE. EXTEND CONCRETE PAVEMENT BEYOND PROPERTY LINE IF VERTICAL STRUCTURE IS WITHIN 12" OF THE PROPERTY LINE WHEN WITHIN TEMPORARY CONSTRUCTION EASEMENT AS SHOWN.
C	PROVIDE SMOOTH TRANSITION TO EXISTING HARDSCAPE, TYP.
D	PAVEMENT MARKINGS ARE FOR REFERENCE ONLY, SEE PAVEMENT MARKING PLANS.
E	WIRELESS VEHICLE DETECTION SYSTEM, SEE SIGNAL INTERSECTION PLANS.
F	SEE UTILITY PLANS FOR ALL UTILITY STRUCTURES, INCLUDING INLETS, MANHOLES, AND VALVES.

— — — — — RIGHT-OF-WAY LINE
 - - - - - PROJECT LIMITS
 TEMPORARY CONSTRUCTION EASEMENT LIMITS
 ————— GRANITE CURB
 ————— CONCRETE CURB



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BID ADDENDUM #1	1	09/01/2026
ISSUED FOR BID		08/13/2026

A map showing the location of the site. The site is marked with a black square at the intersection of Spring Ave and Westminister Pl. Other streets shown include Olive St, Washington Ave, and Spring Ave. A diagonal line labeled 'LINE 1 & 10' is also shown.

LAYOUT AND MATERIALS - ENLARGEMENTS

PROJECT NUMBER 00014654 GRG: 308S
MSD No: 25MSD-00082, MSD BASEMAP 19F3
DRAWING NUMBER

23 OF 106

CS5-401

Client: Great Rivers Greenway

35 EAST WACKER
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BID ADDENDUM #1	1	09/01/2026
ISSUED FOR BID		08/13/2026

SEALS AND SIGNATURES

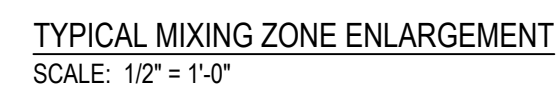
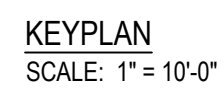


KEY PLAN

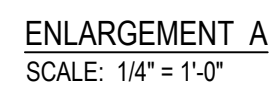
PROJECT NUMBER 00014654 GRG: 308S
MSD No: 25MSD-00082, MSD BASEMAP 19F3
DRAWING NUMBER

32 OF 106

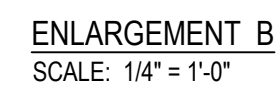
CS5-505



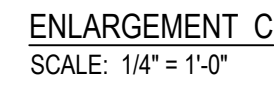
PAVING SCHEDULE		
SYSTEM	DESCRIPTION	MODEL/SIZE/FINISH
	PAVING TYPE 6 - PLAZA FIELD A	SIZE: 4"x12"x3" DEPTH, 6 MM MAX MICRO-BEVEL COLOR: TEXTURED DARK GRAY - H22-072 (HRT-38 NO WHITE AG ADD BLACK GRAY)
	PAVING TYPE 7 - PLAZA FIELD B	SIZE: 4"x12"x3" DEPTH, 6 MM MAX MICRO-BEVEL COLOR: TEXTURED MEDIUM GRAY
	PAVING TYPE 8 - PLAZA PATH	SIZE: 4"x12"x3" DEPTH, 6 MM MAX MICRO-BEVEL COLOR: TEXTURED LIGHT GRAY



①



ENLARGEMENT B
SCALE: 1/4" = 1'-0"



ENLARGEMENT C
SCALE: 1/4" = 1'-0"



TAP #5401(721)
CDBG# B-23-CP-MO-0886

Client:



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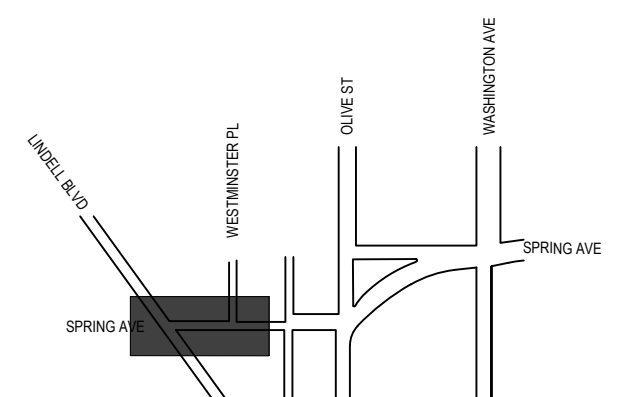


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St. Louis, Missouri

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BID ADDENDUM #1	1	09/01/2026
ISSUED FOR BID		08/13/2026

SEALS AND SIGNATURES

KEY PLAN



DRAWING TITLE

LIGHTING PLAN

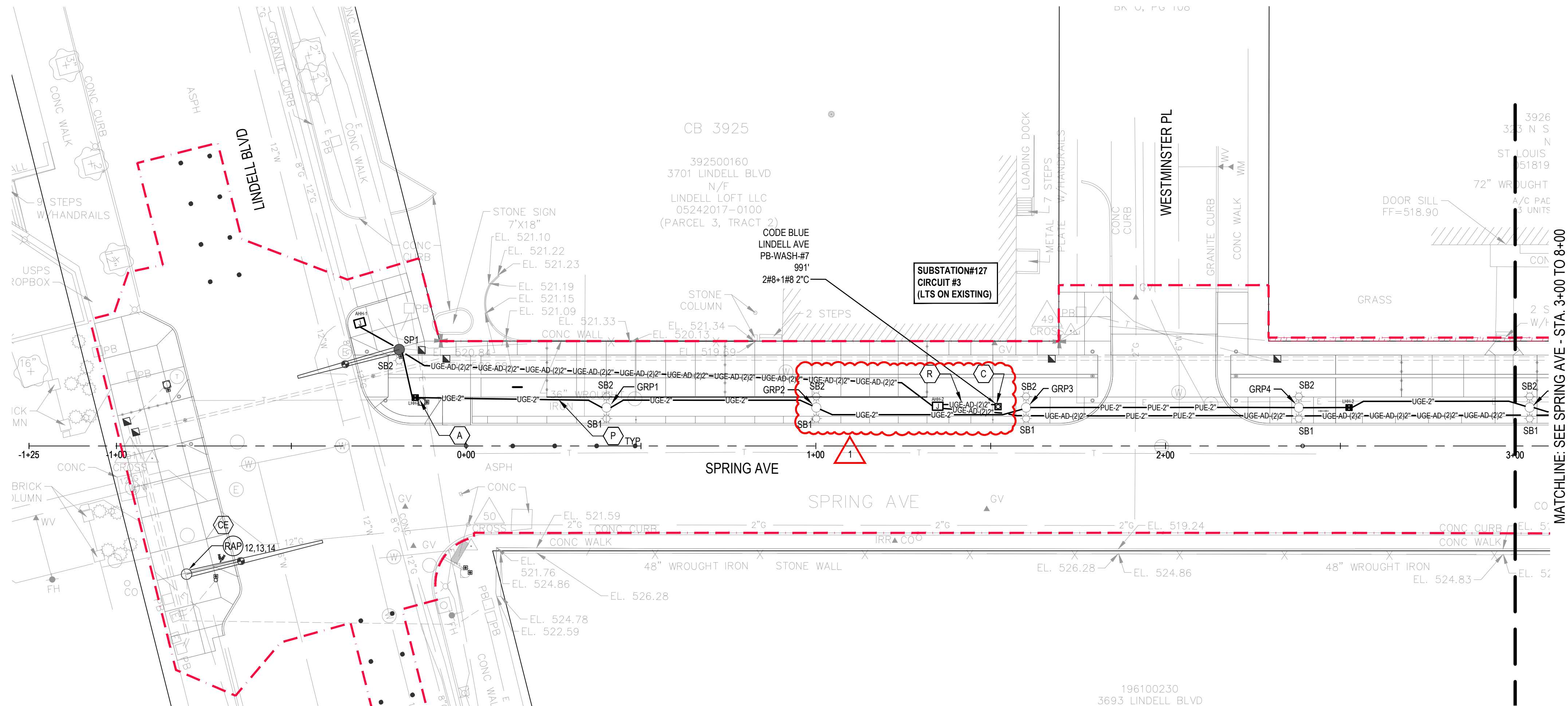
SPRING AREA 1



PROJECT NUMBER 00014654 GRG: 308S
MSD No: 25MSD-00082, MSD BASEMAP 19F3
DRAWING NUMBER

47 OF 106

E1-101



SPRING AVE - STA. -1+00 TO 3+00

KEYED NOTES

- | | | | |
|---|--|--|--|
| <p>A HANDHOLE AT END OF NEW WORK SCOPE TO CONNECT TO EXISTING TO REMAIN AND CONTINUED CIRCUIT. TERMINATION SHALL BE COMPLETED WITH UL LISTED, WET LOCATION SPLICE KIT AND MEET CITY STANDARDS.</p> | <p>C CODE BLUE CONDUIT TERMINATION TO BE COORDINATED WITH FINAL CODE BLUE LOCATION AND INSTALLATION DETAILS. TERMINATE WITHIN UNIT PER FINAL MANUFACTURER'S REQUIREMENTS.</p> | <p>P CONTRACTOR TO INSTALL (1) 2" CONDUIT FOR LIGHTING FIXTURES.</p> | <p>CE FIBER WIRELESS ACCESS POINT (RAP) INCLUDED FOR CLARIFICATION. SEE E2 SERIES FOR ADDITIONAL INFORMATION.</p> |
| | | <p>R CONTRACTOR TO INSTALL (2) 2" CONDUIT FOR ART/DONOR POWER, WITH (1) 2" CONDUIT DESIGNATED FOR LOW VOLTAGE WIRING.</p> | |

SHEET NOTES

- | | | | |
|----|---|-----|--|
| 1. | THE UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTED FROM AVAILABLE INFORMATION AND DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NONEXISTENCE, SIZE, TYPE NUMBER OR LOCATION OF THESE OR OTHER UTILITIES. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITIES, SHOWN OR NOT SHOWN, AND SHALL LOCATE THE UTILITIES IN THE FILED PRIOR TO ANY GRADING, EXCAVATION OR CONSTRUCTION IMPROVEMENTS. | 5. | NEW PROPOSED POWER SOURCES TO BE CONFIRMED BY CITY AND AMEREN AND SHALL BE ADJUSTED AS REQUIRED TO MEET DESIGN INTENT. ALL NEW POWER SUPPLIES TO BE PROVIDED AND INSTALLED TO MEET CITY STANDARDS. |
| 2. | ALL NEW CONDUIT SHOWN TO BE 2" HDPE CONDUIT WITH (3)#8 CONDUCTORS (2 CURRENT CARRYING AND 1 BARE NEUTRAL) UNLESS OTHERWISE NOTED. UTILIZE HANDHOLES WITHIN POLE FIXTURES AS WELL AS PULLBOXES AS SHOWN. INSTALL PER CITY STANDARDS. | 6. | STREET LIGHT POSTS SHALL HAVE DIRECT BURY FOUNDATIONS UNLESS OTHERWISE NOTED AND BE INSTALLED PER CITY OF ST. LOUIS STANDARDS. |
| 3. | ALL CONDUIT BELOW ROADWAYS SHALL BE PUSHED CONDUIT. ALL OTHER CONDUIT ROUTING TO BE TRENCHED U.O.N. | 7. | STREET LIGHT BASE SHALL BE INSTALLED AT A TYPICAL DISTANCE FROM CENTER OF LIGHT TO FACE CURB. COORDINATE WITH ALL OTHER SHEETS WITHIN SET FOR EXACT LIGHTING PLACEMENT. |
| 4. | EXISTING POWER SOURCE (SUBSTATIONS AND PANELS) TO BE UTILIZED FOR NEW LIGHTING CIRCUITS. CIRCUITS AFFECTED FROM LIGHTING WORK SHALL BE PROVIDED WITH A NEW CIRCUIT BREAKER (TO MATCH EXISTING). CONTRACTOR TO PROVIDE NEW PANELBOARD COVER IF EXISTING COVER IS MISSING OR DAMAGED. | 8. | EXISTING UNDERGROUND AND OVERHEAD FACILITIES, STRUCTURES AND UTILITIES, IF SHOWN ON THESE PLANS SHOULD BE CONSIDERED APPROXIMATE ONLY. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION PRIOR TO GRADING, EXCAVATING AND CONSTRUCTION. |
| | | 9. | CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF POWER CONNECTIONS WITH AMEREN (MISSOURI) AND THE CITY OF ST. LOUIS, PRIOR TO ANY WORK ON EXISTING CIRCUITS. |
| | | 10. | PROVIDE TEMPORARY OVERHEAD POWER TO CONTINUE LIGHTING POWER DURING CONSTRUCTION. ALL CONNECTIONS AND TEMPORARY POWER OUTAGES TO BE COORDINATED AND CONFIRMED WITH CITY PRIOR TO SHUTDOWN. |

LEGEND

- | | | |
|---|--|---|
| LIGHTS AND POLES - SEE SHEETS E-501, E-504 FOR MORE INFO
SUBSTATION AND PANELBOARD
CLASS 1 LIGHTING PULLBOX. MUST MEET CITY STANDARDS. B.O.D. QUAZITE 17"x30"x18" (MIN.) PD TYPE, UL LISTED TIER 15 COMPOSITE BOX WITH GASKETED COVER AND BOLTED LID, AND OPEN BOTTOM.
CLASS 2 PULLBOX. MUST MEET CITY STANDARDS. HANDLOX AUXILIARY POWERED HANDHOLE. B.O.D. QUAZITE 17"x30"x18" (MIN.) PD TYPE, UL LISTED TIER 15 COMPOSITE BOX WITH GASKETED COVER, BOLTED LID, AND OPEN BOTTOM.
POWER SUPPLY (PROPOSED/EXISTING)
POWER SUPPLY | CONTROLLER (PROPOSED/EXISTING)
CONTROLLER (EXISTING)
GB# RECEPTACLE GROUND BOX WITH UL LISTING, LOCKING COVER. B.O.D.: LEGRAND XB14-XB814CS20C2BK. INSTALL PER MANUFACTURER'S REQUIREMENTS.
—UGE— CONDUIT TRENCHED NUMBER INDICATES SIZE
—PUE— CONDUIT PUSHED NUMBER INDICATES SIZE
—E— EXISTING CONDUIT
—OHE— EXISTING OVERHEAD ELECTRICAL
PROJECT LIMIT LINE | SUBSTATION LABELS: "S.S. #XXX.CIRCUIT #"
1 CLASS 2 PULLBOX. MUST MEET CITY STANDARDS. ART AND DONOR CIRCUITING HANDHOLES. B.O.D. QUAZITE 17"x30"x18" (MIN.) PD TYPE, UL LISTED TIER 15 COMPOSITE BOX WITH GASKETED COVER, BOLTED LID, AND OPEN BOTTOM.
—UGE-AD— CONDUIT TRENCHED FOR ART DONOR POWER NUMBER INDICATES SIZE
—UGE— CONDUIT TRENCHED NUMBER INDICATES SIZE. PROVIDE (2) CONDUITS U.O.N.
SINGLE GANG PEDESTAL MOUNTED RECEPTACLE WITH LOCKABLE, GASKETED, WHILE-IN-USE COVER. LOW-PROFILE METAL WHILE-IN-USE COVER. B.O.D.: TAYMAC MX4280S
NEMA -1 PANELBOARD INSIDE NEMA 4X ENCLOSURE WITH ADJACENT UTILITY METER
FIBER WIRELESS ACCESS POINT WITH WIFI IDENTIFIER # PROVIDE HOLE AND GROMMET IN POLE. |
|---|--|---|

TAP #5401(721)
CDBG# B-23-CP-MO-0886

Client:  Great Rivers Greenway

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SUITE 900
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St. Louis, Missouri

SEALS AND SIGNATURES

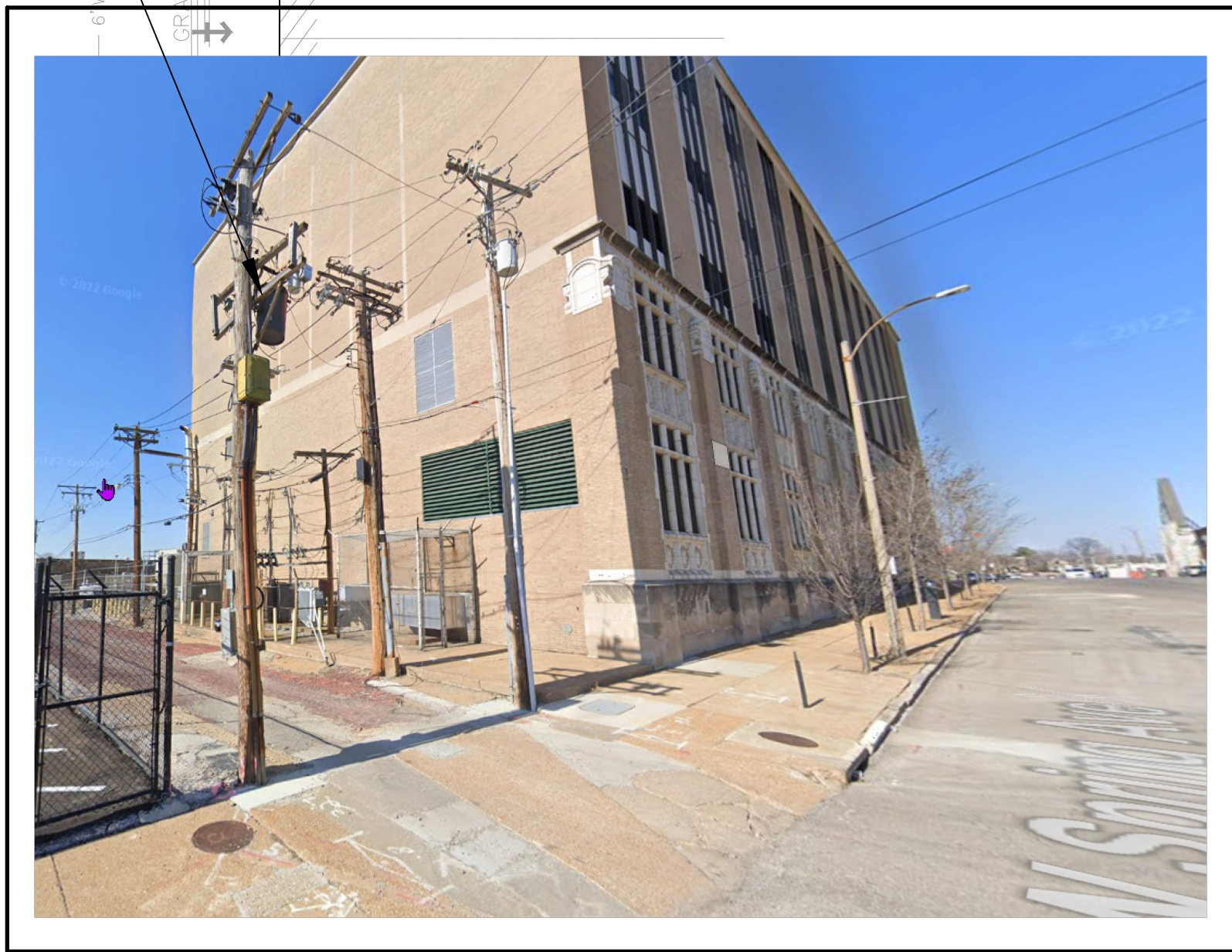
LIGHTING PLANS

SPRING AREA 3

PROJECT NUMBER 00014654 GRG: 308S
MSD No: 25MSD-00082, MSD BASEMAP 19F3
DRAWING NUMBER

49 OF 106

E1-103



SPRING AVE - STA. 8+00 TO 12+18

A HANDHOLE AT END OF NEW WORK SCOPE TO CONNECT TO EXISTING TO REMAIN AND CONTINUED CIRCUIT. TERMINATION SHALL BE COMPLETED WITH UL LISTED, WET LOCATION SPLICE KIT AND MEET CITY STANDARDS.

D CONTRACTOR TO PROVIDE ONE GANG EXTERIOR MOUNTED RECEPTACLE ENCLOSURE WITH WHILE IN USE FLUSH LOCKING COVER, MANUFACTURER PROVIDED WEATHER PROOF, AND TAMPER RESISTANT GFCI. SEE E-502.

P CONTRACTOR TO INSTALL (1) 2" CONDUIT FOR LIGHTING FIXTURES.

- | | |
|-----------|--|
| R | CONTRACTOR TO INSTALL (2) 2" CONDUIT FOR CODE BLUE POWER, WITH (1) 2" CONDUIT DESIGNATED FOR LOW VOLTAGE WIRING. |
| U | NEW AMEREN APPROVED UTILITY METER TO BE MOUNTED ADJACENT TO PANELBOARD ON OUTSIDE OF NEMA 4X ENCLOSURE. COORDINATE ALL REQUIREMENTS WITH AMEREN MANUAL PRIOR TO INSTALLATION. |
| 9B | PROVIDE (1) 4" UNDERGROUND CONDUIT AND 3#4-1/8" FROM NEW SERVICE ENTRANCE RATED HEAVY DUTY LOCKING DISCONNECT SWITCH LOCATED ADJACENT TO NEW UTILITY METER LOCATED AT POLE TO NEW 100A 120/240V PANELBOARD. FINAL AMEREN SUBSTATION LOCATION AND POLE TO BE CONFIRMED BY AMEREN. COORDINATE ROUTING WITH ALL OTHER UTILITIES AND PROVIDE HANDHOLE IF REQUIRED UPON INSTALLATION. FINAL CONDUIT SIZE TO MEET AMEREN REQUIREMENTS. |

- | | |
|----|--|
| CE | FIBER WIRELESS ACCESS POINT (RAP) INCLUDED FOR CLARIFICATION. SEE E2 SERIES FOR ADDITIONAL INFORMATION. |
| DA | FESTOON LIGHTING TO LEFT OF THIS POLE TO BE ON CONTROL ZONE 'A'. FESTOON LIGHTING TO RIGHT OF THIS POLE TO BE ON CONTROL ZONE 'B'. |
| DB | FESTOON LIGHTING LAYOUT INDICATED BY LINES BETWEEN PX TYPE POLES. DASHED LINES REPRESENT CABLES WITH NO LIT BULBS. |
| DC | REFER TO FP1 ASSEMBLY DETAIL AND NOTES ON SHEET E-504. |
| DD | AMEREN TO PROVIDE FINAL SUBSTATION LOCATION |

LEGEND

- | | | | |
|----|---|-----|--|
| 1. | THE UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTED FROM AVAILABLE INFORMATION AND DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NONEXISTENCE, SIZE, TYPE NUMBER OR LOCATION OF THESE OR OTHER UTILITIES. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITIES, SHOWN OR NOT SHOWN, AND SHALL LOCATE THE UTILITIES IN THE FILED PRIOR TO ANY GRADING, EXCAVATION OR CONSTRUCTION IMPROVEMENTS. | 5. | NEW PROPOSED POWER SOURCES TO BE CONFIRMED BY CITY AND AMEREN AND SHALL BE ADJUSTED AS REQUIRED TO MEET DESIGN INTENT. ALL NEW POWER SUPPLIES TO BE PROVIDED AND INSTALLED TO MEET CITY STANDARDS. |
| 2. | ALL NEW CONDUIT SHOWN TO BE 2" HDPE CONDUIT WITH (3)Ø3 CONDUCTORS (2 CURRENT CARRYING AND 1 BARE NEUTRAL) UNLESS OTHERWISE NOTED. UTILIZE HANDHOLES WITHIN POLE FIXTURES AS WELL AS PULLBOXES AS SHOWN. INSTALL PER CITY STANDARDS. | 6. | STREET LIGHT POSTS SHALL HAVE DIRECT BURY FOUNDATIONS UNLESS OTHERWISE NOTED AND BE INSTALLED PER CITY OF ST. LOUIS STANDARDS. |
| 3. | ALL CONDUIT BELOW ROADWAYS SHALL BE PUSHED CONDUIT. ALL OTHER CONDUIT ROUTING TO BE TRENCHED U.O.N. | 7. | STREET LIGHT BASE SHALL BE INSTALLED AT A TYPICAL DISTANCE FROM CENTER OF LIGHT TO FACE CURB. COORDINATE WITH ALL OTHER SHEETS WITHIN SET FOR EACH LIGHTING PLACEMENT. |
| 4. | EXISTING POWER SOURCE (SUBSTATIONS AND PANELS) TO BE UTILIZED FOR NEW LIGHTING CIRCUITS. CIRCUITS AFFECTED FROM LIGHTING WORK SHALL BE PROVIDED WITH A NEW CIRCUIT BREAKER (TO MATCH EXISTING). CONTRACTOR TO PROVIDE NEW PANELBOARD COVER IF EXISTING COVER IS MISSING OR DAMAGED. | 8. | EXISTING UNDERGROUND AND OVERHEAD FACILITIES, STRUCTURES AND UTILITIES, IF SHOWN ON THESE PLANS SHOULD BE CONSIDERED APPROXIMATE ONLY. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION PRIOR TO GRADING, EXCAVATING AND CONSTRUCTION. |
| | | 9. | CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF POWER CONNECTIONS WITH AMEREN (MISSOURI) AND THE CITY OF ST. LOUIS, PRIOR TO ANY WORK ON EXISTING CIRCUITS. |
| | | 10. | PROVIDE TEMPORARY OVERHEAD POWER TO CONTINUE LIGHTING POWER DURING CONSTRUCTION. ALL CONNECTIONS AND TEMPORARY POWER OUTAGES TO BE COORDINATED AND CONFIRMED WITH CITY PRIOR TO SHUTDOWN. |

- | | | | |
|-------|---|---------|--|
| ☼ ☼ ☼ | LIGHTS AND POLES - SEE SHEETS E-501, E-504 FOR MORE INFO | ☒ | CONTROLLER (PROPOSED/EXISTING) |
| ☐ | SLPP SUBSTATION AND PANELBOARD | ☐ | CONTROLLER (EXISTING) |
| ☐ | CLASS 1 LIGHTING PULLBOX. MUST MEET CITY STANDARDS. B.O.D. QUAZITE 17'30"x18"D (MIN). PD TYPE, UL LISTED TIER 15 COMPOSITE BOX WITH GASKETED COVER AND BOLTED LID, AND OPEN BOTTOM. | GB# | RECEPTACLE GROUND BOX WITH UL LISTING, LOCKING COVER. B.O.D.: LEGRAND XB14-XB814C520C2BK. INSTALL PER MANUFACTURER'S REQUIREMENTS. |
| ☐ | CLASS 2 PULLBOX. MUST MEET CITY STANDARDS. HANDHOLE AUXILIARY POWERED HANDHOLE B.O.D. QUAZITE 17'30"x18"D (MIN). PD TYPE, UL LISTED TIER 15 COMPOSITE BOX WITH GASKETED COVER, BOLTED LID, AND OPEN BOTTOM. | — UGE — | CONDUIT TRENCHED NUMBER INDICATES SIZE |
| ☐ | | — PUE — | CONDUIT PUSHED NUMBER INDICATES SIZE |
| | | — E — | EXISTING CONDUIT |
| ☒ | POWER SUPPLY (PROPOSED/EXISTING) | — OHE — | EXISTING OVERHEAD ELECTRICAL |
| ☐ | POWER SUPPLY | — | PROJECT LIMIT LINE |

- [J]** SUBSTATION LABELS: "S.S. #XXX.CIRCUIT #"

[K] CLASS 2 PULLBOX. MUST MEET CITY STANDARDS. ART AND DONOR CIRCUITING HANDHOLES. B.O.D.: QUAZITE 17"x30"x18" (MIN.) PD TYPE, UL LISTED TIER 15 COMPOSITE BOX WITH GASKETED COVER, BOLTED LID, AND OPEN BOTTOM.

—UGE—AD— CONDUIT TRENCHED FOR ART DONOR POWER NUMBER INDICATES SIZE

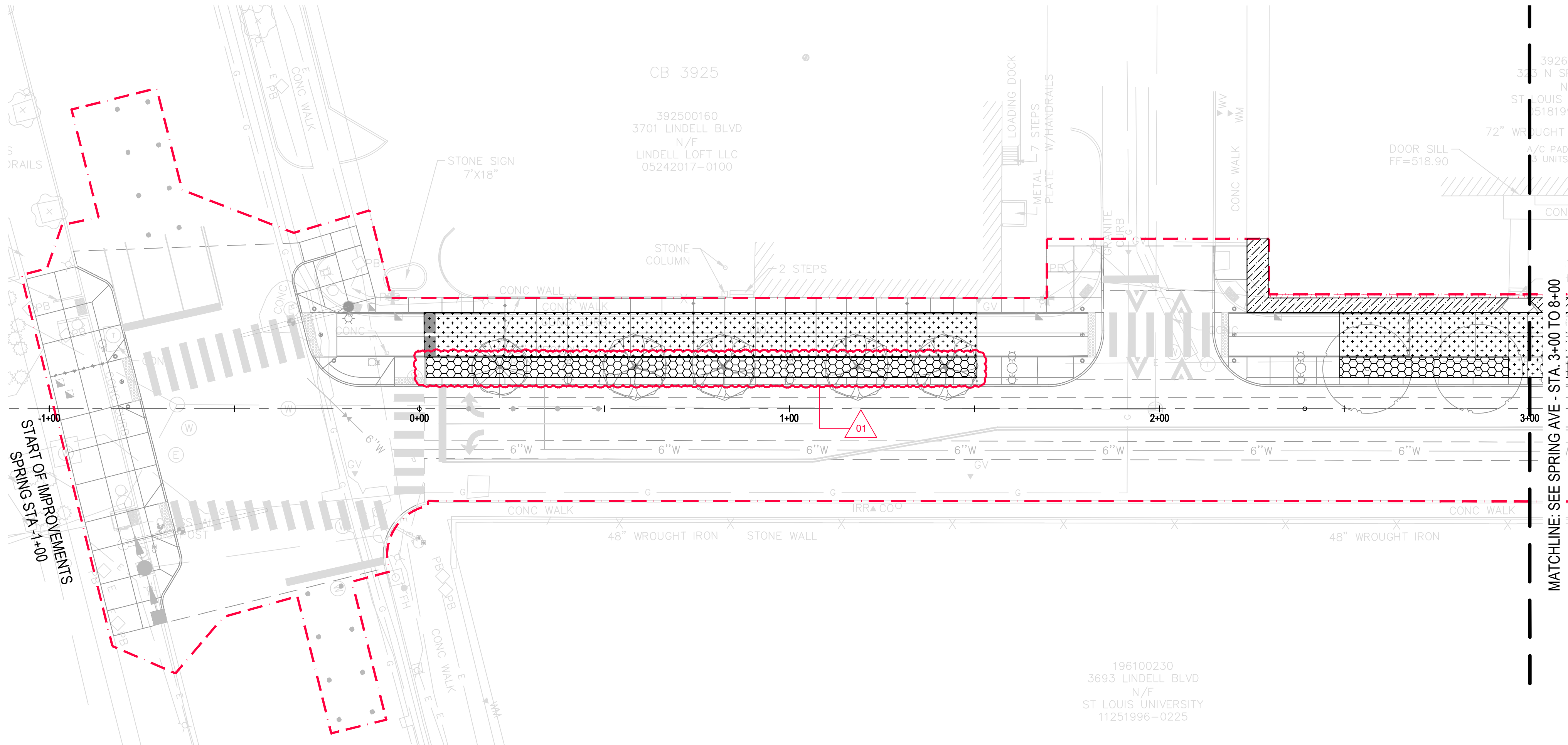
—UGE— CONDUIT TRENCHED NUMBER INDICATES SIZE. PROVIDE (2) MOUNTS U.O.N.

[L] SINGLE GANG PEDESTAL. MOUNTED RECEPTACLE WITH LOCKABLE, GASKETED, WHILE-IN-USE COVER.

[M] LOW-PROFILE METAL WHILE-IN-USE COVER: B.O.D.: TAYMAC MX4280S

[N] NEMA -1 PANELBOARD INSIDE NEMA 4X ENCLOSURE WITH ADJACENT UTILITY METER

[RAD] FIBER WIRELESS ACCESS POINT WITH WIFI IDENTIFIER # PROVIDE HOLE AND GROMMET IN POLE.



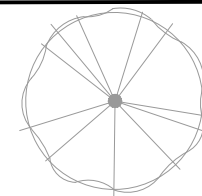
SPRING AVE - STA. -1+00 TO 3+00

SOILS NOTES

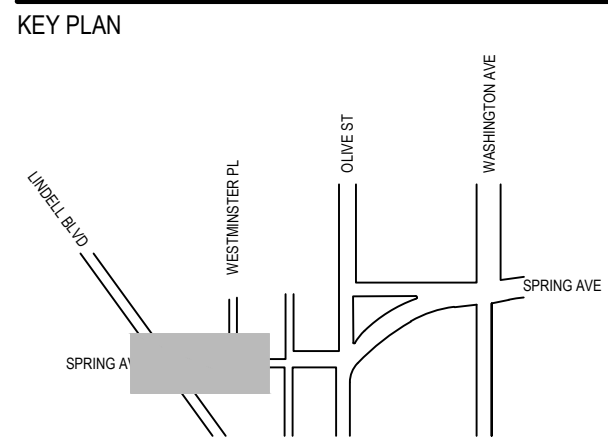
1. GRADING AND SUBGRADE PREPARATION SHALL BE COMPLETED PRIOR TO SOIL PREPARATION. SEE CIVIL DRAWINGS FOR COMPLETE GRADING PLAN.
2. PLANTING AREAS SHALL BE FREE OF ALL WEEDS (PLANTS NOT SPECIFIED IN PLANTING AREAS), STONES, STUMPS, ROOTS, OR OTHER DEBRIS 1-INCH IN DIAMETER AND GREATER.
3. SOIL SHALL BE GRADED TO A SMOOTH AND EVEN SURFACE CONFORMING TO REQUIRED FINISH GRADE. FINISH GRADE ADJACENT TO WALKS, PAVED AREAS, CURBS, MANHOLES, CLEANOUTS, VALVE BOXES, AND SIMILAR FEATURES SHALL BE 1-INCH BELOW THE SURFACE IN TURF AND 2-INCHES BELOW IN GROUND COVER/SHRUB AREAS. GRADES BETWEEN SUCH FEATURES SHALL BE CAREFULLY SUSTAINED AND BLENDED TO ELIMINATE ABRUPT CHANGES.
4. CONTRACTOR SHALL ALLOW FOR SOIL AMENDMENTS WHEN ESTABLISHING SUB GRADE ELEVATIONS. ALL PLANTING AREAS SHALL HAVE A FINISH GRADE CONFORMING TO APPROVED PLANS AND SPECIFICATIONS AFTER FULL SETTLEMENT HAS OCCURRED.
5. INSPECTION SHALL BE MADE DURING AND AT THE COMPLETION OF FINE GRADING (FILL/BACKFILL AND EXCAVATION). IF GRADING IS NOT SATISFACTORY, ADDITIONAL GRADING SHALL BE PERFORMED AT THE DIRECTION OF THE LANDSCAPE ARCHITECT UNTIL WORK CONFORMS TO THE PLANS.
6. BEFORE MIXING, CLEAN TOPSOIL OF ROOTS, PLANTS, SODS, STONES, CLAY LUMPS, AND OTHER EXTRANEOUS MATERIALS HARMFUL OR TOXIC TO PLANT GROWTH.
7. MIX SOIL AMENDMENTS AND FERTILIZERS WITH TOPSOIL AT RATES SPECIFIED BY TESTING LAB. DELAY MIXING OF FERTILIZER IF PLANTING WILL NOT FOLLOW PLACING OF PLANTING SOIL WITHIN 5 DAYS.
8. TOPSOIL FOR THE LANDSCAPE WORK SHALL BE FURNISHED BY THE LANDSCAPE CONTRACTOR. TOPSOIL MUST BE FURNISHED AS SPECIFIED. IT SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO DETERMINE SOURCE OF TOPSOIL WHICH MEETS SPECIFICATIONS, OR CAN BE AMENDED TO MEET SPECIFICATIONS.
9. OBTAIN TOPSOIL FROM LOCAL SOURCES. OBTAIN TOPSOIL ONLY FROM NATURALLY, WELL-DRAINED SITES WHERE TOPSOIL OCCURS IN A DEPTH OF NOT LESS THAN 4 INCHES; DO NOT OBTAIN FROM BOGS OR MARSHES.
10. TEST AND ANALYSIS OF THE PROPOSED MATERIAL SHALL BE PERFORMED BY THE LOCAL STATE AGRICULTURAL EXPERIMENT STATION, OR ANY AGRICULTURAL LABORATORY RECOMMENDED BY THE U.S. DEPARTMENT OF AGRICULTURE, AND SHALL MEET THE REQUIREMENTS OUTLINED IN THE SPECIFICATIONS.
11. IN ALL LAYDOWN AREAS WHERE LIMESTONE GRAVEL WAS USED OR DUMPED, THE AGGREGATE SURFACING AND ANY ASSOCIATED FILTER FABRIC SHOULD BE COMPLETELY REMOVED FROM ALL PLANTING AREAS. ANY AREAS DISTURBED BY CONSTRUCTION AND/OR EQUIPMENT AND MATERIALS SHALL BE TILLED OR SCARIFIED TO A MINIMUM DEPTH OF 18" TO ALLEVIATE SOIL COMPACTION. ALL DISTURBED AREAS SHALL BE SODDED.
12. REFER TO DETAIL 1/L2-501 FOR FURTHER SOIL REQUIREMENTS RELATED TO TREE PLANTINGS.
13. REFER TO JSP 50 & JSP 52 FOR FURTHER REQUIREMENTS.

LEGEND

- RIGHT-OF-WAY LINE
- - - PROJECT LIMITS
- TEMPORARY CONSTRUCTION EASEMENT LIMITS
- PLANTING SOIL, 1/L1-501 & JSP-51
- PLANTING SOIL, 3/L1-501 & JSP-51
- PLANTING SOIL AT TURF, 2/L1-501 & JSP-51
- STRUCTURAL SOIL, 4/L1-501 & JSP-50



PROPOSED TREES:
SYMBOLS VARY,
SEE L2 SERIES



SOIL PLAN - SPRING - AREA 1

SCALE: 1" = 20'

PROJECT NUMBER 00014654 GRG: 308S
MSD No: 25MSD-00082, MSD BASEMAP 19F3
DRAWING NUMBER
L1-101

87 OF 106

91 OF 106



TAP #5401(721)
CDBG# B-23-CP-MO-0886

SMITHGROUP



DAVID MASON AND ASSOCIATES
CIVIL ENGINEERING
St. Louis, Missouri

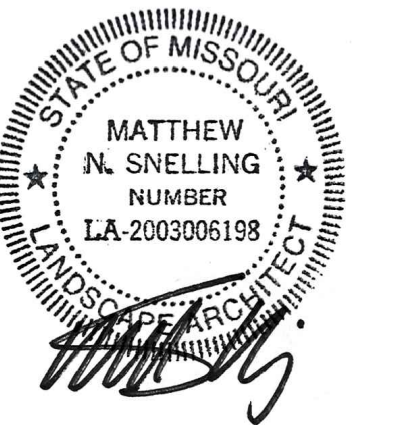
 **LOCHMUELLER GROUP**
TRAFFIC ENGINEER
St. Louis, Missouri



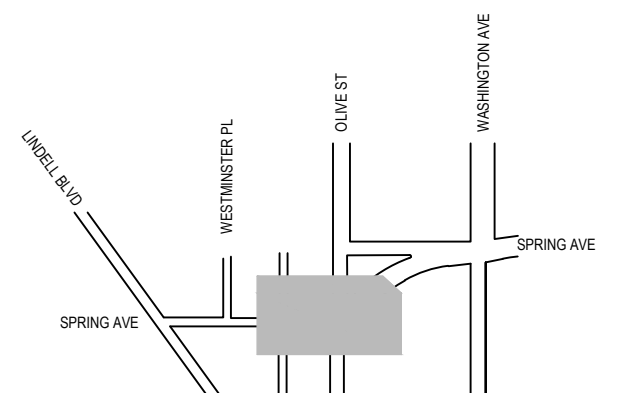
GRICE GROUP
ARCHITECTURE
St. Louis, Missouri

ISSUED FOR	REV	DATE
BID ADDENDUM #1	1	09/01/2026
ISSUED FOR BID		08/13/2026

SEALS AND SIGNATURES



KEY PLAN



DRAWING TITLE

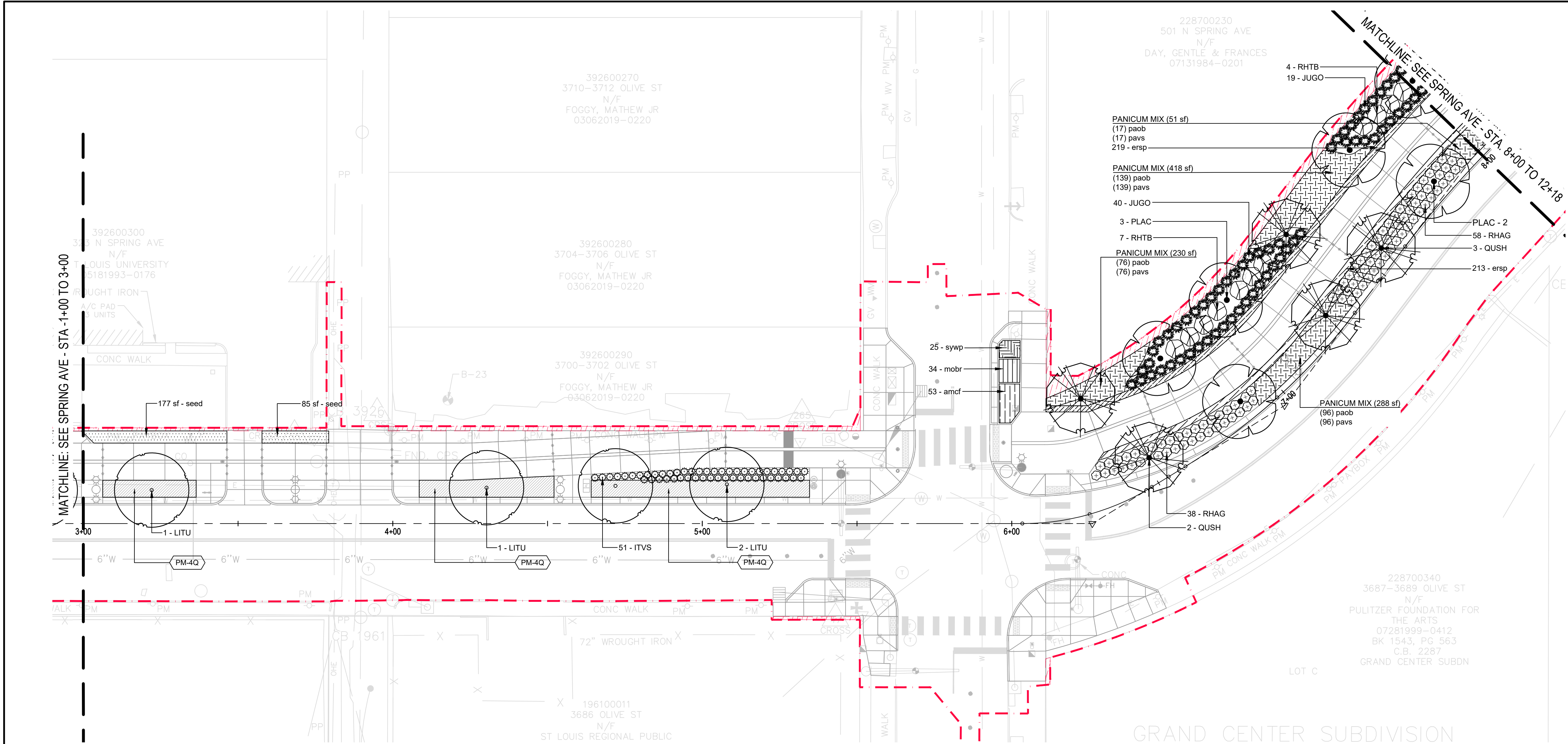
0' 10' 20' 40'

SCALE: 1" = 20'

PROJECT NUMBER 00014654 GRG: 308S
MSD No: 25MSD-00082, MSD BASEMAP 19F3
DRAWING NUMBER

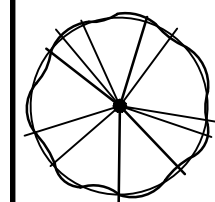
92 OF 106

L2-102



SPRING AVE - STA. 3+00 TO 8+00

— — — — — RIGHT-OF-WAY LINE
- - - - - PROJECT LIMITS



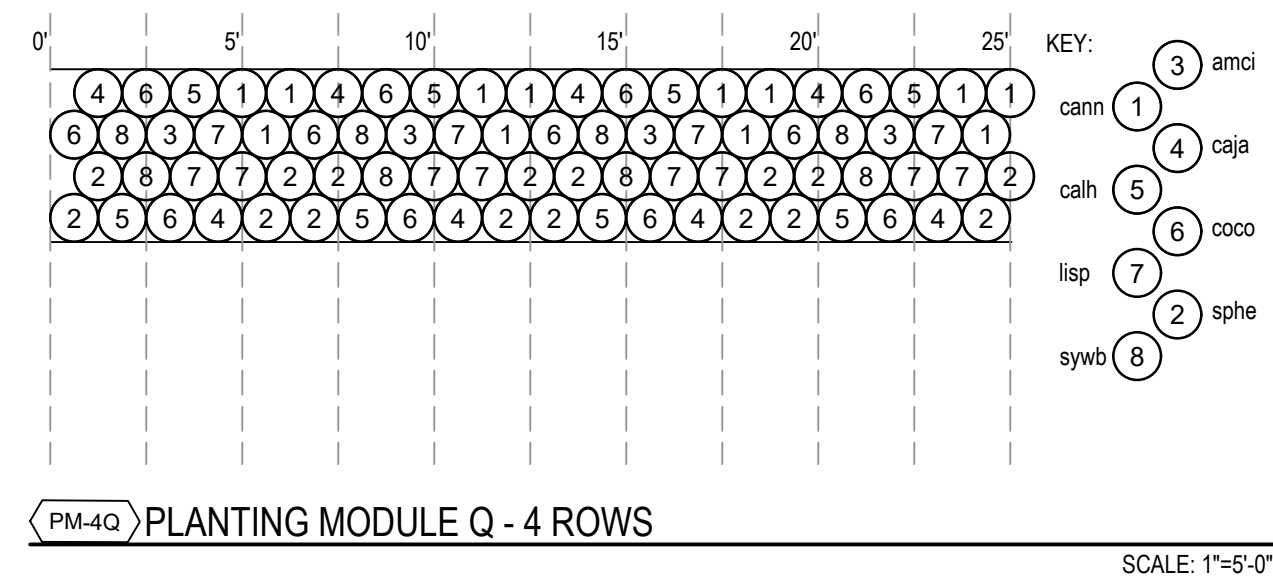
PROPOSED TREES:
SYMBOLS VARY,
SEE PLANT SCHEDULE



PROPOSED SHRUBS:
SYMBOLS VARY,
SEE PLANT SCHEDULE

NOTES:

- 1) ALL PLANT BEDS TO BE INSTALLED WITH SPRING BULBS ("Narc" - NARCISSUS OR SIMILAR), WITH TRIANGULAR SPACING, 30" O.C. SEE SCHEDULE ON SHEET L2-501 FOR QUANTITIES
- 2) ALL PLANT BEDS TO BE INSTALLED WITH LANDSCAPE PROTECTION BARRIER AT PERIMETER PER DETAIL 6/L2-501
- 3) PLANTING MODULES ARE INTENDED TO REPEAT CONTINUALLY THROUGH MULTIPLE PLANTERS AND ACROSS INTERRUPTIONS FROM DRIVES, WALKS, AND ADJACENT PLANTINGS UNLESS OTHERWISE NOTED



PLANT SCHEDULE AREA 2

<u>CODE</u>	<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>	<u>SIZE</u>	<u>CONTAINER</u>	<u>QTY</u>
TREES					
LITU	Liriodendron tulipifera	Tulip Poplar	3.5" Cal.	#65, #95/100 Acceptable	4
PLAC	Platanus x acerifolia	London Plane Tree	3.5" Cal.	#65, #95/100 Acceptable	5
QUSH	Quercus shumardii	Shumard Oak	3" Cal.	#45, #65, #95/100 Acceptable	5

<u>CODE</u>	<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>	<u>SIZE</u>	<u>CONTAINER</u>	<u>SPACING</u>	<u>QTY</u>
SHRUBS						
ITVS	Itea virginica 'Sprich'	Little Henry® Sweetspire	2' Ht.	#3, #5, #7 Acceptable	30" o.c.	51
JUGO	Juniperus x 'Grey Owl'	Grey Owl Juniper	2' Ht.	#3, #5, #7, #10 Acceptable	48" o.c.	59
RHAG	Rhus aromatica 'Gro-Low'	Gro-Low Fragrant Sumac	2' Ht.	#3, #5, #7, #10 Acceptable	36" o.c.	96
RHTB	Rhus typhina 'Bailtiger'	Tiger Eyes® Staghorn Sumac - LOS	5' Ht.	#3, #5, #7 Acceptable	72" o.c.	11

GROUND COVERS

amcf	Amsonia ciliata filifolia	Threedaef Bluestar	1 qt.	Cont.	15° o.c.	53
amci	Amsonia ciliata	Fringed Bluestar	1 qt.	Cont.	15° o.c.	23
caja	Carex jamesii	James' Sedge	1 qt.	Cont.	15° o.c.	47
calh	Carex laxiculmis 'Hobb'	Bunny Blue Spreading Sedge	1 qt.	Cont.	15° o.c.	47
coco	Conoclinium coelestinum	Wild Ageratum	1 qt.	Cont.	15° o.c.	70
ersp	Eragrostis spectabilis	Purple Lovegrass	1 qt.	Cont.	15° o.c.	432
lisp	Liatris spicata	Blazing Star	1 qt.	Cont.	15° o.c.	70
mobr	Monarda bradburiana	Eastern Bee Balm	1 qt.	Cont.	15° o.c.	34
narc	Narcissus sp.	Daffodil	bulb	Cont.	30° o.c.	439
paob	Packera obovata	Golden Groundsel	1 qt.	Cont.	15° o.c.	328
pavs	Panicum virgatum 'Shenandoah'	Shenandoah Switch Grass	1 gal.	Cont.	15° o.c.	328
ruhu	Ruellia humilis	Wild Petunia	1 qt.	Cont.	15° o.c.	70
seed	Turf Seed Fescue Blend		seed			262 sf
sphe	Sporobolus heterolepis	Prairie Dropseed	1 gal.	Cont.	15° o.c.	94
sywb	Symphytotrichum novi-belgii 'Wood's Blue'	Wood's Blue New York Aster	1 qt.	Cont.	15° o.c.	47
sywp	Symphytotrichum novi-belgii 'Wood's Pink'	Wood's Pink New York Aster	1 qt.	Cont.	15° o.c.	25





NOTES:

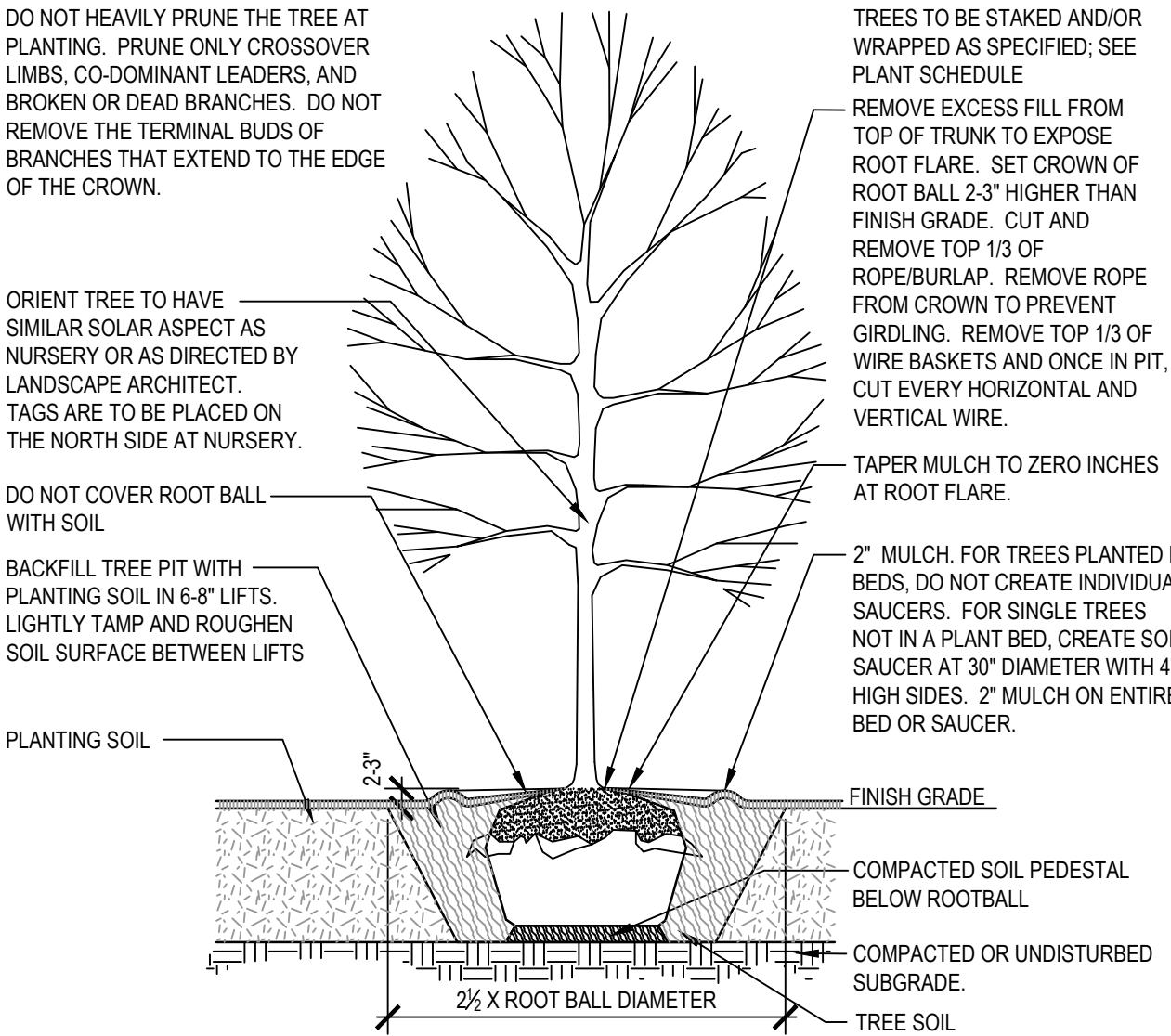
- 1) ALL PLANT BEDS TO BE INSTALLED WITH SPRING BULBS ("Narc" - NARCISSUS OR SIMILAR), WITH TRIANGULAR SPACING, 30" O.C. SEE SCHEDULE ON SHEET L2-501 FOR QUANTITIES
- 2) ALL PLANT BEDS TO BE INSTALLED WITH LANDSCAPE PROTECTION BARRIER AT PERIMETER PER DETAIL 612-501
- 3) PLANTING MODULES ARE INTENDED TO REPEAT CONTINUALLY THROUGH MULTIPLE PLANTERS AND ACROSS INTERRUPTIONS FROM DRIVES, WALKS, AND ADJACENT PLANTINGS UNLESS OTHERWISE NOTED

<u>CODE</u>	<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>	<u>SIZE</u>	<u>CONTAINER</u>	<u>SPACING</u>	<u>QTY</u>
TREES						
PLAC	Platanus x acerifolia	London Plane Tree	3.5" Cal.	#65, #95/100 Acceptable		5
QUSH	Quercus shumardii	Shumard Oak	3" Cal.	#45,#65,#95/100 Acceptable		4
SHRUBS						
JUGO	Juniperus x 'Grey Owl'	Grey Owl Juniper	2' Ht.	#3, #5, #7, #10 Acceptable		16
RHAG	Rhus aromatica 'Gro-Low'	Gro-Low Fragrant Sumac	2' Ht.	#3, #5, #7, #10 Acceptable		79
RHTB	Rhus typhina 'Baltiger'	Tiger Eyes® Staghorn Sumac - LOS	5' Ht.	#3,#5,#7 Acceptable		3
GROUND COVERS						
amcf	Amsonia ciliata filifolia	Threadleaf Bluestar	1 qt.	Cont.	15" o.c.	27
ersp	Eragrostis spectabilis	Purple Lovegrass	1 qt.	Cont.	15" o.c.	544
narc	Narcissus sp.	Daffodil	bulb	Cont.	30" o.c.	284
paob	Packera obovata	Golden Groundsel	1 qt.	Cont.	15" o.c.	502
pavs	Panicum virgatum 'Shenandoah'	Shenandoah Switch Grass	1 gal.	Cont.	15" o.c.	502
sywp	Symphoricarum novi-belgii 'Wood's Pink'	Wood's Pink New York Aster	1 qt.	Cont.	15" o.c.	36



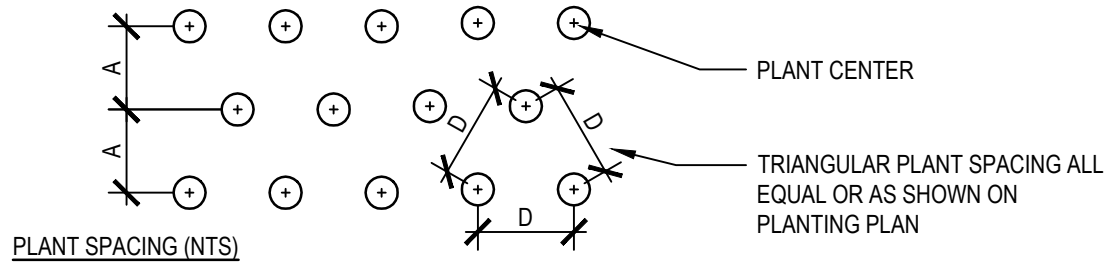
L2-103



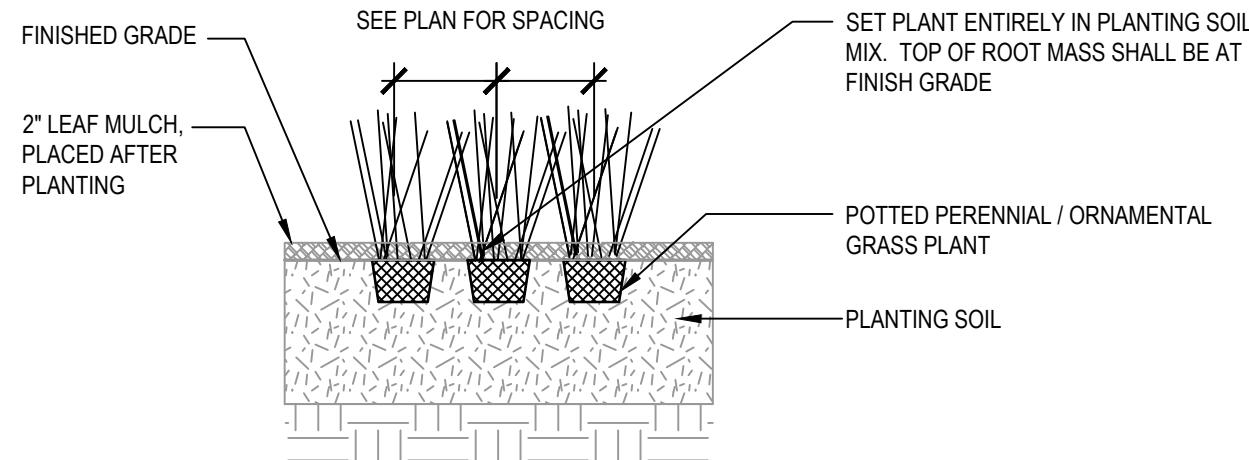


1 DECIDUOUS TREE PLANTING

SCALE: 1/4" = 1'

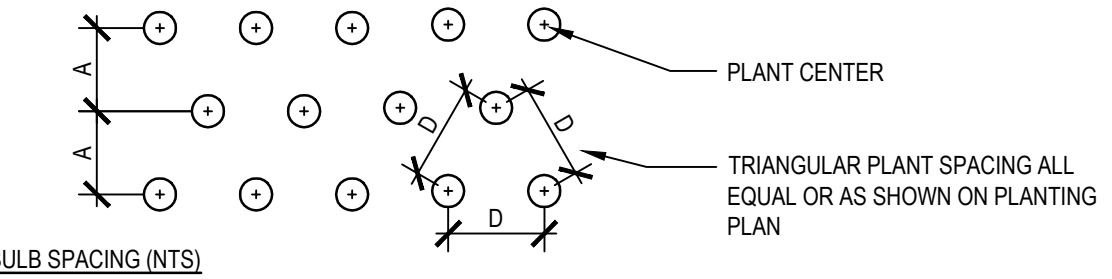


SPACING "D"	ROW "A"	PLANTS PER SQ. FT.	NOTES:
24" O.C.	20.8"	0.29	PLANT QUANTITIES WERE DETERMINED BY MULTIPLYING AREA (SQ. FT.) BY NUMBER OF PLANTS PER SQ. FT. FOR REQUIRED SPACING
18" O.C.	15.6"	0.50	
12" O.C.	10.4"	1.15	
10" O.C.	8.7"	1.66	
8" O.C.	6.9"	2.60	QUANTITY OF PLANTS AND SPACING AS NOTED IN PLANTING SCHEDULE
6" O.C.	5.2"	4.00	

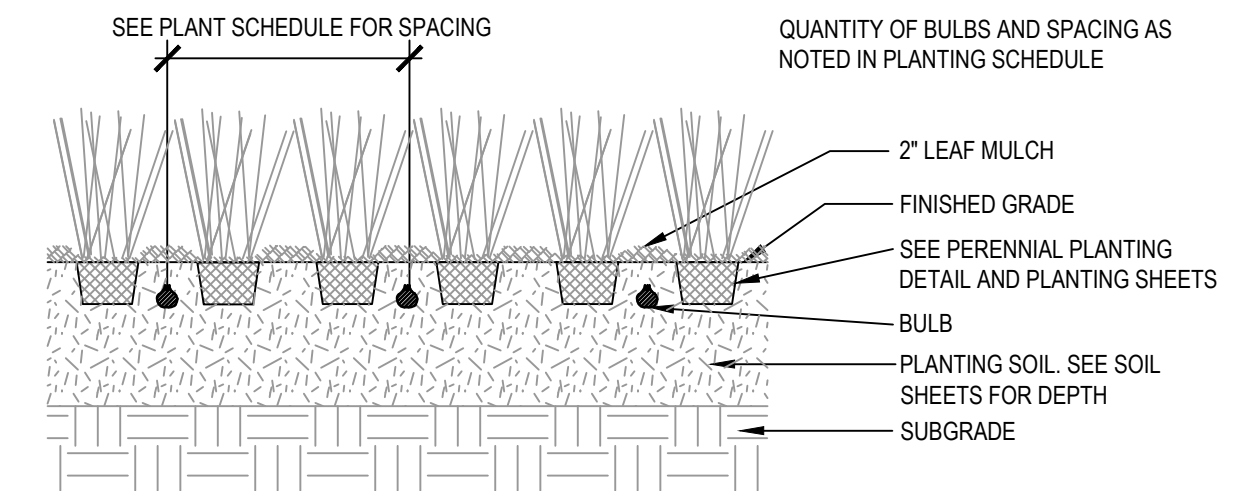


3 PERENNIAL PLANTING

SCALE: 1/2" = 1'

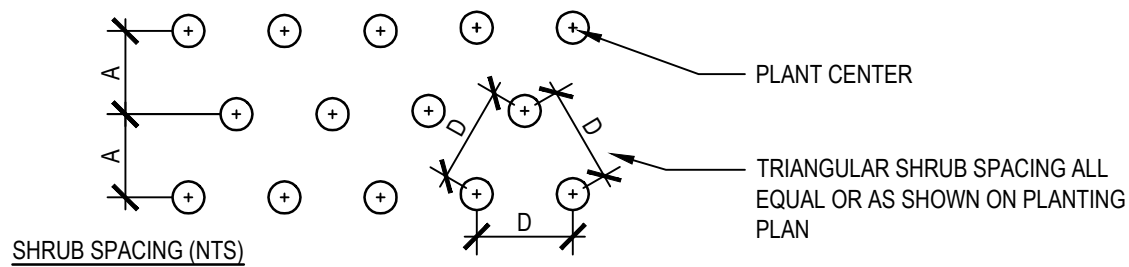


SPACING "D"	ROW "A"	BULBS PER SQ. FT.	NOTES:
30" O.C.	26"	0.185	BULB QUANTITIES WERE DETERMINED BY MULTIPLYING AREA (SQ. FT.) BY NUMBER OF BULBS PER SQ. FT. FOR REQUIRED SPACING

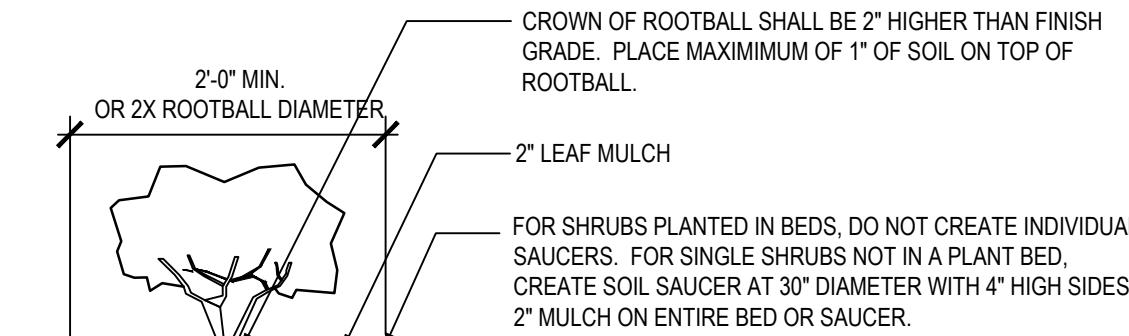


5 BULB PLANTING

SCALE: 1/2" = 1'

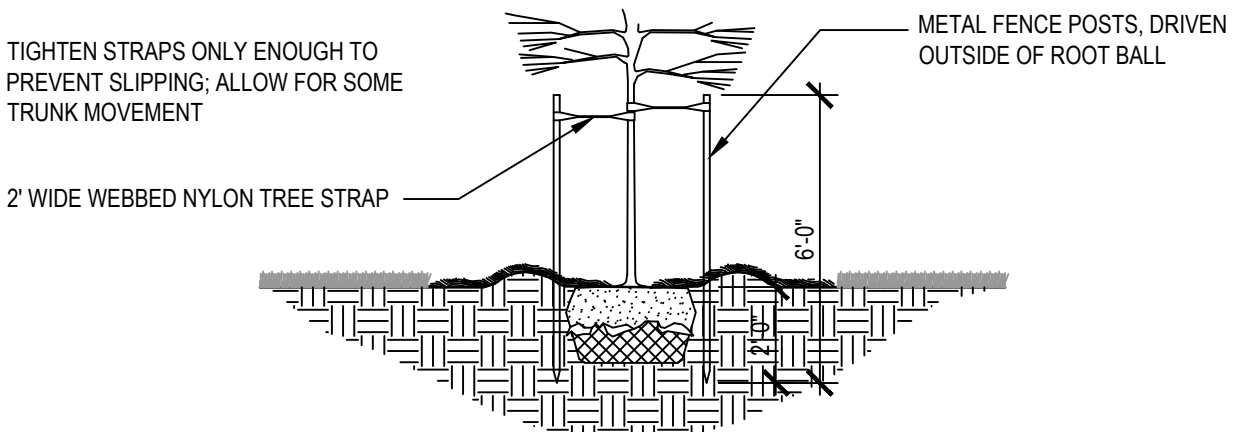


SPACING "D"	ROW "A"	PLANTS PER SQ. FT.	QUANTITY OF SHRUBS AND SPACING AS NOTED IN PLANTING SCHEDULE
24"	20.8"	.290	
30"	26"	.185	
36"	30"	.120	
4"	41.5"	.073	
5"	52"	.046	



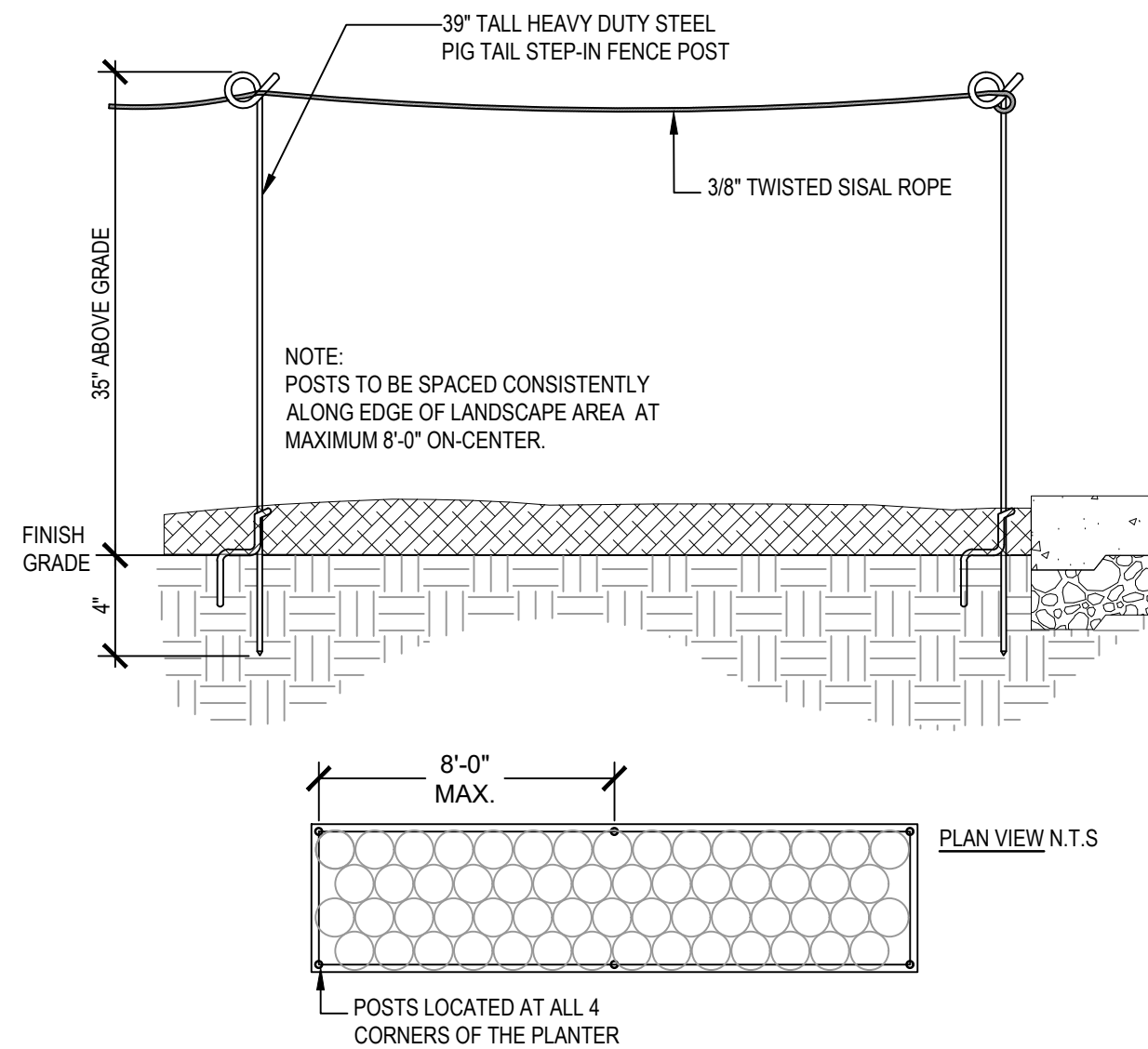
TREES LESS THAN 12' HT. AND 2.5" CAL. REQUIRE 2 STAKES, 180" APART

TREES UP TO 14' HT. AND UP TO 4" CAL. REQUIRE 3 STAKES, 120" APART



4 TREE STAKING

SCALE: 1/4" = 1'



6 LANDSCAPE PROTECTION BARRIER

SCALE: 1" = 1'-0"

PLANT SCHEDULE

CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY
TREES					
AMGA	Amelanchier x grandiflora 'Autumn Brilliance'	Autumn Brilliance Apple Serviceberry	8" Ht.	#25, #45, #65 Acceptable	3
ASTR	Asimina triloba	Pawpaw	2" Cal.	#25, #45, #65 Acceptable	3
BEND	Betula nigra 'BNMTF'	Dura Heat® River Birch	3" Cal.	#65, #95/100 Acceptable	1
CEOC	Celtis occidentalis	Common Hackberry	3" Cal.	#45, #65, #95/100 Acceptable	2
GIBI	Ginkgo biloba	Princeton Sentry® Maidenhair Tree	3.5" Cal.	#65, #95/100 Acceptable	3
LITU	Liriodendron tulipifera	Tulip Poplar	3.5" Cal.	#65, #95/100 Acceptable	6
NYSG	Nyssa sylvatica 'NSUHH'	Green Gable™ Tupelo	2.5" Cal.	#25, #45, #65 Acceptable	1
NYSY	Nyssa sylvatica	Tupelo Black Gum	3" Cal.	#45, #65, #95/100 Acceptable	4
PLAC	Platanus x acerifolia	London Plane Tree	3.5" Cal.	#65, #95/100 Acceptable	10
QUSH	Quercus shumardii	Shumard Oak	3" Cal.	#45, #65, #95/100 Acceptable	9

CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	QTY
SHRUBS						
ARMM	Aronia melanocarpa 'Morton'	Iroquois Beauty™ Black Chokeberry	3' Ht.	#3, #5, #7 Acceptable	48" o.c.	10
HAVA	Hamelis vernalis 'Autumn Embers'	Autumn Embers Ozark Witchhazel	5' Ht.	#5, #7, #10 Acceptable	96" o.c.	3
ITVS	Itea virginica 'Sprich'	Little Henry® Sweetspire	2' Ht.	#3, #5, #7 Acceptable	30" o.c.	51
JUGO	Juniperus x 'Grey Owl'	Grey Owl Juniper	2' Ht.	#3, #5, #7, #10 Acceptable	48" o.c.	75
RHAG	Rhus aromatica 'Gro-Low'	Gro-Low Fragrant Sumac	2' Ht.	#3, #5, #7, #10 Acceptable	36" o.c.	175
RHTB	Rhus typhina 'Baltiger'	Tiger Eyes® Staghorn Sumac - LOS	5' Ht.	#3, #5, #7 Acceptable	72" o.c.	14
RIOD	Ribes odoratum	Clove Currant - LOS	5' Ht.	#3, #5, #7 Acceptable	60" o.c.	10

SHRUBLIKE PERENNIALS						
saca	Sambucus canadensis	American Elderberry	1 gal.	Cont.	48" o.c.	6

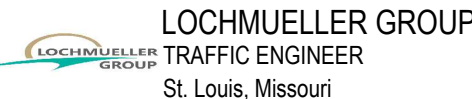
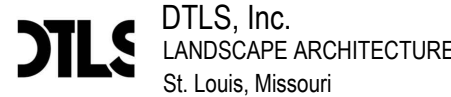
GROUND COVERS						
acmi	Achillea millefolium	Common Yarrow	1 qt.	Cont.	15" o.c.	182
agbf	Agastache x 'Blue Fortune'	Blue Fortune Anise Hyssop	1 qt.	Cont.	15" o.c.	160
amcf	Amsonia ciliata filifolia	Threadleaf Bluestar	1 qt.	Cont.	15" o.c.	80
amci	Amsonia ciliata	Fringed Bluestar	1 qt.	Cont.	15" o.c.	54
asin	Asclepias incarnata	Swamp Milkweed	1 qt.	Cont.	15" o.c.	51
assu	Asclepias sullivantii	Prairie Milkweed	1 qt.	Cont.	15" o.c.	38
cach	Carex cherokeensis	Cherokee Sedge	1 qt.	Cont.	15" o.c.	183
caja	Carex jamesii	James' Sedge	1 qt.	Cont.	15" o.c.	110
calh	Carex laxiculmis 'Hobb'	Bunny Blue Spreading Sedge	1 qt.	Cont.	15" o.c.	110
coco	Conoclinium coelestinum	Wild Ageratum	1 qt.	Cont.	15" o.c.	164
ersp	Eragrostis spectabilis	Purple Lovegrass	1 qt.	Cont.	15" o.c.	976
frvi	Fragaria virginiana	Wild Strawberry	2"x5" DC	Plug	12" o.c.	204
jute	Juncus tenuis	Path Rush	2"x5" DC	Plug	15" o.c.	80
lisp	Liatris spicata	Blazing Star	1 qt.	Cont.	15" o.c.	202
mobr	Monarda bradburiana	Eastern Bee Balm	1 qt.	Cont.	15" o.c.	139
narc	Narcissus sp.	Daffodil	bulb	Cont.	30" o.c.	1,269
paob	Packera obovata	Golden Groundsel	1 qt.	Cont.	15" o.c.	813
pavs	Panicum virgatum 'Shenandoah'	Shenandoah Switch Grass	1 gal.	Cont.	15" o.c.	813
pymu	Pycnanthemum muticum	Blunt Mountainmint	1 qt.	Cont.	15" o.c.	222
ruhu	Ruellia humilis	Wild Petunia	1 qt.	Cont.	15" o.c.	164
seed	Turf Seed Fescue Blend	seed				657 sf
sphe	Sporobolus heterolepis	Prairie Dropseed	1 gal.	Cont.	15" o.c.	347
sywb	Symphyotrichum novi-belgii 'Wood's Blue'	Wood's Blue New York Aster	1 qt.	Cont.	15" o.c.	110
sywp	Symphyotrichum novi-belgii 'Wood's Pink'	Wood's Pink New York Aster	1 qt.	Cont.	15" o.c.	61

BRICKLINE GREENWAY NORTH CONNECTOR PHASE 3

TAP #5401(721)
CDBG# B-23-CP-MO-0886



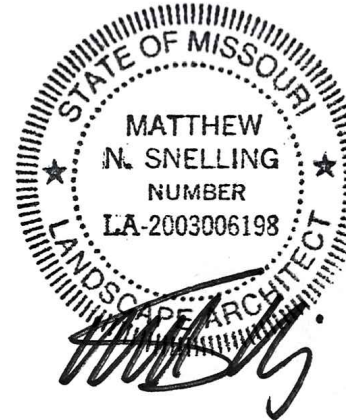
35 EAST WACKER
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CHICAGO, IL 60601
312.641.0770
www.smithgroup.com



ISSUED FOR REV DATE

BID ADDENDUM #1 1 09/01/2026
ISSUED FOR BID 08/13/2026

SEALS AND SIGNATURES



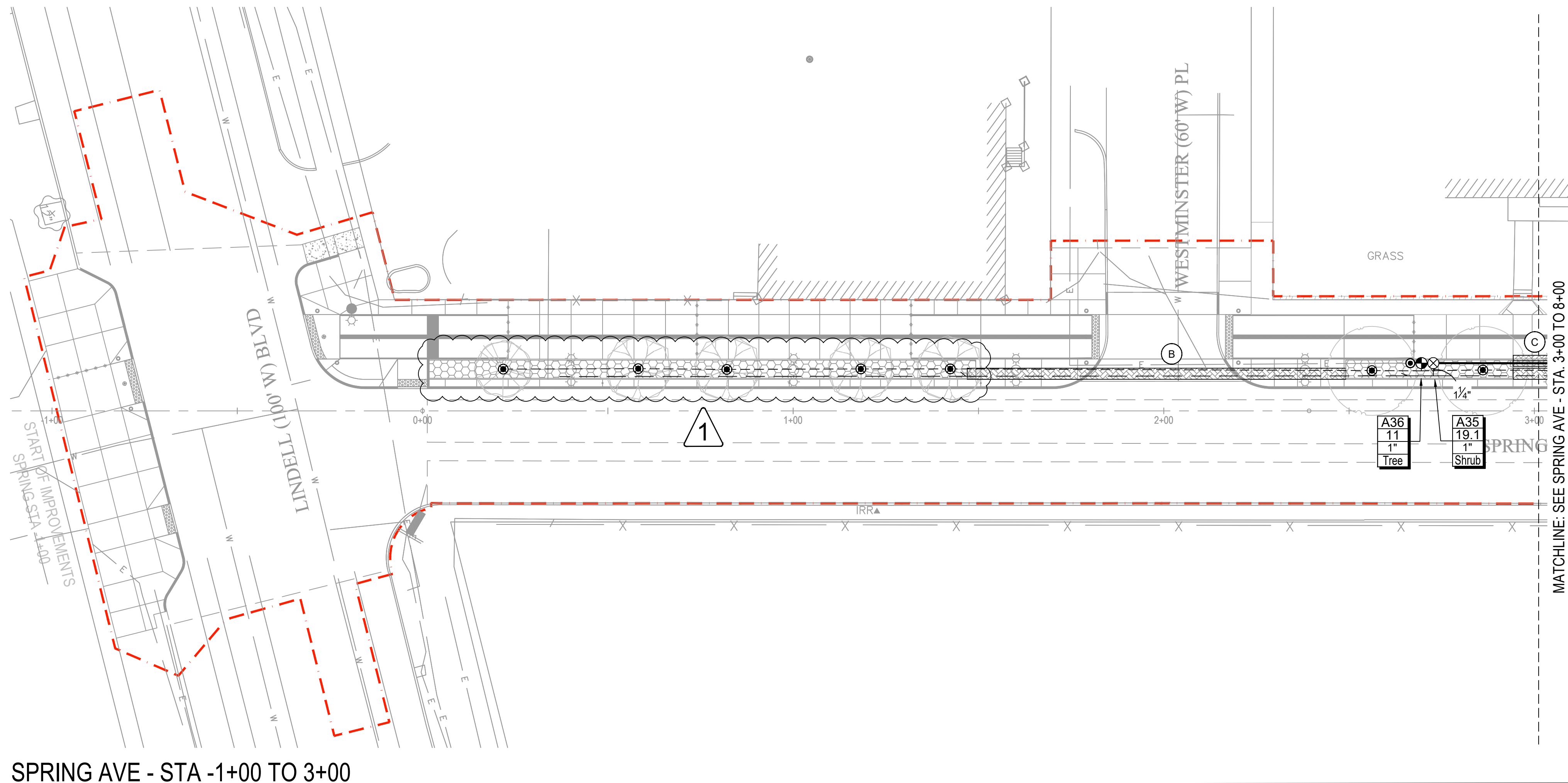
KEY PLAN

DRAWING TITLE
**LANDSCAPE DETAILS
AND SCHEDULE**

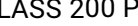
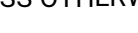
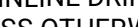
PROJECT NUMBER 00014654 GRG: 308S
MSD No: 25MSD-00082, MSD BASEMAP 19F3
DRAWING NUMBER

95 OF 106

L2-501



IRRIGATION LEGEND

- | | | | | | |
|---|---|---|--|---|---|
|  | SLEEVES: CLASS 200 PVC 2" SIZE UNLESS OTHERWISE INDICATED |  | QUICK COUPLING VALVE ASSEMBLY: RAIN BIRD 5RC |  | GROUNDING AND SURGE ARRESTOR ASSEMBLY: TORO TW-LA-1 |
|  | SLEEVES: CLASS 200 PVC CONTROL WIRE SLEEVE |  | ISOLATION GATE VALVE ASSEMBLY: MATCO 514 |  | IRRIGATION MAINLINE CAP ASSEMBLY |
|  | POINT-OF-CONNECTION ASSEMBLY |  | FLOW SENSOR ASSEMBLY: FLOWMEC QS200 ULTRASONIC (1") W/TW-DAC-FLOW |  | TREE BUBBLER ASSEMBLY: TWO (2) RAIN BIRD 14002 BUBBLERS
PRESSURE: 30 PSI
FLOW (GPM): 0.50 PER BUBBLER; 1.00 PER ASSEMBLY |
|  | MAINLINE PIPE: CLASS 200 PVC
2-INCH SIZE UNLESS OTHERWISE INDICATED |  | BACKFLOW PREVENTION ASSEMBLY: FEBCO 850-FZ DCA (1") |  | DECODER CABLE FUSE DEVICE (DCFD) WITH LIGHTNING PROTECTION: PAIGE P7407D |
|  | LATERAL PIPE TO SPRINKLERS: CLASS 200 PVC
1-INCH SIZE UNLESS OTHERWISE INDICATED |  | MASTER VALVE ASSEMBLY: RAIN BIRD PEB (1") W/ TORO TW-D-1 DECODER | | |
|  | LATERAL PIPE TO TREE EMITTERS: CLASS 315 PVC
1-INCH SIZE UNLESS OTHERWISE INDICATED | | | | |
|  | LATERAL PIPE TO INLINE DRIP HEADER: CLASS 200 PVC
1-INCH SIZE UNLESS OTHERWISE INDICATED |  | <ul style="list-style-type: none"> INDICATES CONTROLLER AND STATION NUMBER INDICATES LATERAL DISCHARGE (GPM) INDICATES VALVE SIZE (INCHES) INDICATES LANDSCAPE APPLICATION |  | POP-UP SPRAY SPRINKLER: HUNTER PROS-06-PRS30-CV W/8 SERIES NOZZLE
PRESSURE: 30 PSI RADIUS: 8 FEET
FLOW (GPM): Q-0.24 H-0.47 F-0.97 |
|  | UNCONNECTED PIPE CROSSING |  | IRRIGATION CONTROLLER UNIT
WITH TEXAS ELECTRONICS RAIN BUCKET TR5251
DXI-CELL-KIT W/DXI-FMW-WMS
TORO DXI-SPEDTW |  | POP-UP SPRAY SPRINKLER: HUNTER PROS-06-PRS30-CV W/10 SERIES NOZZLE
PRESSURE: 30 PSI RADIUS: 10 FEET
FLOW (GPM): Q-0.42 H-0.88 F-1.59 |
|  | INLINE DRIP TUBING: RAIN BIRD XFS-06-12 WITH RAINBIRD XOF DRIPLINE HEADER
0.6 GPH EMITTERS, 12" EMITTER SPACING, 18" ROW SPACING |  | SOIL MOISTURE SENSOR: BL-5311 COMPACT W/TW-DAC-SOIL |  | POP-UP SPRAY SPRINKLER: HUNTER PROS-06-PRS30-CV W/12 SERIES NOZZLE
PRESSURE: 30 PSI RADIUS: 12 FEET
FLOW (GPM): Q-0.67 H-1.30 F-2.70 |
|  | REMOTE CONTROL VALVE ASSEMBLY FOR SPRINKLER LATERALS:
RAIN BIRD PEB (SIZED PER PLAN) W/ TORO TW-D-1 DECODER |  | IRRIGATION CONTROL WIRES IN CONDUIT OR WITH WARNING TAPE |  | POP-UP SPRAY SPRINKLER: HUNTER PROS-06-PRS30-CV W/15 SERIES NOZZLE
PRESSURE: 30 PSI RADIUS: 15 FEET
FLOW (GPM): Q-0.97 H-1.86 F-3.75 |
|  | REMOTE CONTROL DRIP VALVE ASSEMBLY: RAIN BIRD XCZ-PRB-100-COM
W/TORO TW-D-1 DECODER | | | | |

LEGEND

- — — — — RIGHT-OF-WAY LINE
- — — — — PROJECT LIMITS
- TEMPORARY
CONSTRUCTION
EASEMENT LIMITS



BRICKLINE
GREENWAY NORTH
CONNECTOR
PHASE 3

TAP #5401(721)
CDBG# B-23-CP-MO-0886

Client:



SMITHGROUP

35 EAST WACKER
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St. Louis, Missouri



DTLS, Inc.
LANDSCAPE ARCHITECTURE
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TRAFFIC ENGINEER
St. Louis, Missouri



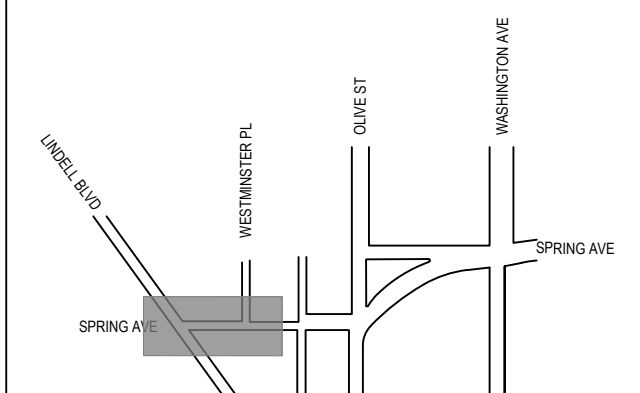
GRICE GROUP
ARCHITECTURE
St. Louis, Missouri

ISSUED FOR	REV	DATE
BID ADDENDUM #1	1	09/01/2026
ISSUED FOR BID		08/13/2026

SEALS AND SIGNATURES

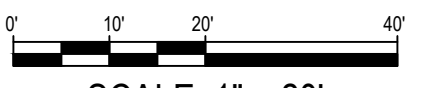


KEY PLAN



DRAWING TITLE

IRRIGATION PLAN - SPRING - AREA 1



PROJECT NUMBER 00014654 GRG: 308S
MSD No: 25MSD-00082, MSD BASEMAP 19F3
DRAWING NUMBER

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L3-101