

PROJECT	Grand and Cass Avenue Corridor Improvements	ADDENDUM NUMBER	01
PROJECT NO.	14004 (GRG 308ie)	DATE	4/14/2025
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 – Brian Kunz	Navigate
Project Manager - Hannah Higgins	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:

- Revised sidewalk limits based on recent sidewalk construction.
- Updated Signal sheets
- Updated Regulatory Signage sheets
- Additional MOT/Phasing information
- Updated Bid Form

Additional Attachments:

- Pre-Bid Meeting Minutes
Note: Recording of Pre-Bid Meeting has been added as a document in the Bid Express solicitation.
- Response Memo #01 to Bid Questions as of 4/14/2025.

PART 1 - REVISED DOCUMENTS ISSUED WITH THIS DOCUMENT

1.1 REVISED PROJECT MANUAL DOCUMENTS AND SPECIFICATIONS

A. BID FORM

Updated to reflect adjusted quantities and new pay items identified in this document. Adjustments have been highlighted in red. Three pay items have been omitted and two pay items have been added.

B. JSP-21 INSTALLATION OF TEMPORARY TRAFFIC CONTROL

Added section 3.5 Phasing to provide additional information on MOT requirements and rolling construction phases.

1.2 REVISED DRAWING SHEETS

A. CS5-107 LAYOUT AND MATERIALS PLAN – GRAND – AREA 7: Section of concrete walk, curb and driveway omitted.

A. E2-101 through E2-136 SIGNAL PLANS:
Updated schedules and signal plans and further clarification between Signal Improvements within contract to be installed by Contractor and items to be handled through the adjacent Greenway project by others.
(Note: E2-501 and E2-502 SIGNAL DETAILS included for reference)

B. CS7-103 through C7-109 and C7-501 REGULATORY SIGNAGE PLANS AND DETAILS – Update Street Name sign locations and sign schedule.



BRICKLINE GREENWAY



Brickline Greenway North Connector Phase 1 & Grand and Cass Avenue Corridor Improvements

Pre-bid Meeting Minutes

April 10th, 2025

1. INTRODUCTIONS

a. Key Personal

- i. Great Rivers Greenway (Sponsor)
 - 1. Lonny Boring – Senior Project Manager
 - 2. Kuleya Bruce – Project Manager
- ii. SmithGroup (Lead Designer)
 - 1. Hannah Higgins – Project Manager
 - 2. Ellen Schmidt – Landscape Architect
 - 3. Joe Levy – Civil Engineer (David Mason and Assoc)
- iii. Navigate Building Solutions (Construction Manager)
 - 1. Brian Kunz – Senior Construction Manager
 - 2. Alonzo Washington – Senior Construction Manager
 - 3. La'Toya Tyson – Project Manager

2. FRONT END & BIDDING REQUIREMENTS

- a. Electronic Bids for both projects are to be submitted by **2:00 pm CT, May 1, 2025**, via the Bid Express website at bidexpress.com. All electronic bidders must register with Bid Express to obtain a digital ID which could take up to 5 business days to process. Electronic Bids are the suggested method of submitting.
- b. Sealed Bids for both projects are to be submitted to The Great Rivers Greenway District, 3745 Foundry Way, Suite 253, St. Louis, MO 63110 no later than 2:00 pm CT on May 1, 2025, at which time they will be publicly opened and read aloud.
- c. Proposals received at Smithgroup's or Navigate's offices or by fax will not be accepted.



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- d. Great Rivers Greenway intends to enter into a unit cost Contract (for each project) to lowest, responsive, responsible Bidder within ninety (90) consecutive calendar days after date and time of opening of bids. The bid will be determined by the amount of combined Total Base Bid, as adjusted by accepted alternates, if any. Subject to provisions of the Invitation to Bid (GRG Form 1).
- e. For a contractor to be awarded this project, the contractor must have a fully responsive contractor questionnaire on file with the Missouri Highway and Transportation Commission at least 7 days prior to the bid opening date. All bidders must be on MoDOT's Qualified Contractor List per Section 102.2 of the current Missouri Standard Specifications for Highway Construction. No Second Tier Subcontracting will be allowed.
- f. Great Rivers Greenway reserves the right to reject any and all bids, and to waive any irregularities in the best interest of the owner.
- g. Bidders must complete and submit, including but not limited to, the following for their bid to be considered responsive. Reference the bidding requirements in the Project Manual for more information:
 - i. Documents to be submitted on the day of the Bid:
 - 1. Completed Itemized Bid.
 - 2. A completed, signed and sealed Bid Form acknowledging receipt of all addenda or acknowledging that there were none.
 - 3. The Bid Security required by the Project Manual.
 - a. In the amount of five percent (5%) of the bid amount.
 - 4. Signed Notice to Contractors
 - 5. Signed Certificate of Compliance
 - 6. Signed Work Authorization E-Verify Affidavit
 - 7. Signed and completed Bidder's List Quote Summary
 - ii. Documents to be submitted within three (3) days of the bid opening:
 - 1. A signed Principal Subcontractors Form (MoDOT form C-220) identifying all Subcontractors to be employed in execution of the Work. Failure to complete the list may be cause for non-acceptance as declaration of a non-responsive bid.
 - 2. Completed DBE Submittal Forms.
 - a. The minimum DBE Contract Goal for each project is 8% and DBE Firms must be certified by MoDOT to attain credit towards this contract goal.
 - 3. Signed Affidavit Compliance with Anti-Discrimination Against Israel Act
- h. Workforce Information:
 - i. The On-the-Job Trainee goal for each project is zero (0) hours.

- ii. Federal Workforce Goals for each project, as set forth by the Federal Aid Provisions - Notice of Requirement for affirmative action to ensure equal employment opportunity (Executive Order 11246), Minority Participation

14.7% - Minority Participation

6.9% - Female Participation

- i. **This project is a prevailing wage project (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. 31", that is attached to the bidding document. The applicable federal wage rates for this contract are the effective Davis-Bacon federal wage rates dated February 21, 2025, that are attached to the bidding documents
- j. The successful bidder shall furnish Performance and Payments Bonds in an amount equal to one hundred percent (100%) of the Contract Sum as security for the faithful performance of the Contract and payment of all persons performing or furnishing labor, materials or supplies on the project under this Contract. The Surety shall be a company licensed to do business in the State of Missouri and shall be acceptable to the Owner.
- k. The successful contractor(s), by signing the contract certifies it is not currently engaged in and shall not, for the duration of the contract, 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 as defined by Section 34.600 RSMo.
- l. The successful contractor(s) will be required to meet the Insurance requirements as required by Section 9 of the General Conditions of Contract.
- m. Great Rivers Greenway will issue a Tax Exemption certificate for this project. **Tax Exempt form MO 5060 will be issued to the awarded Contractor. Project shall be bid without sales tax and sales tax shall not be included in the bid proposal value(s).**
- n. All questions or clarifications / questions should be directed via the solicitation on Bid Express. All requests for clarification on these bidding documents must be received in writing by April 21st, 2025, at 2:00 pm. No questions after this date will be recognized. Responses to all questions/clarifications will be issued in the form of Addenda and be posted on Bid Express.

3. PROJECT OVERVIEW:

- a. The Proposed Work consists of:
 - i. Brickline Greenway North Connector Phase 1 (Greenway) Improvements along the west side of Grand Boulevard from Natural Bridge to Cass, the south side of Cass from Grand to Spring, and the west side of Spring from Cass to Page. The proposed work includes earthwork, removals, grading, paving, utility adjustments, street reconfiguration, traffic control, signals, street and pedestrian lighting, greenway trail and new sidewalk, curbs, seatwalls, pavers, trees, landscaping, stormwater bmp's, Irrigation, trail and wayfinding signage, and site furniture. Also, other site related work; and other incidental items and work described in the Project Manual, or reasonably inferable therefrom.
 - ii. Grand & Cass Avenue Corridor Improvements (Streetscape) which includes road resurfacing and streetscape improvements on the west side of Grand Blvd from Natural Bridge to Cass and the north side of Cass Ave from Grand to North Spring Ave. The proposed work includes earthwork, removals, grading, paving, utility adjustments, street reconfiguration, traffic control, signals, street and pedestrian lighting, sidewalk, curbs, pavers, granite, trees, landscaping and site furniture. Also other site related work; and other incidental items and work described in the Project Manual, or reasonably inferable therefrom.
- b. It is anticipated that a Notice to Proceed will be issued:
 - i. Greenway Project in June 2025
 - ii. Streetscape Project in July 2025
- c. All work is to be completed for both projects by November 13th, 2026
- d. 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 \$ 4,300.00

4. Access, Staging, Coordination

- a. The contractor(s) will be required to perform the work along Grand Boulevard at a minimum of three (3) separate construction phases. The proposed work on Cass Ave and North Spring Ave can be completed in conjunction with one of the phases along Grand or as a separate phase. The purpose of phasing construction is to facilitate traffic flow and minimize delays to the motorist. Prior to the start of construction activities, the contractor(s) must submit for approval a detailed phasing and traffic control plan within 10 days of the notice to proceed.
 - i. The contractor(s) shall maintain two-way traffic on Grand and Cass throughout the duration of construction.

- ii. The Contractor(s) shall at all times conduct the work in such a manner as to insure the least obstruction to vehicular and pedestrian traffic. The convenience of the general public and of residents/business owners along the involved streets shall be provided for in an adequate and satisfactory manner as directed by the Developer. The Contractor(s) shall provide and maintain acceptable, temporary access from the street being improved to abutting side streets, alleys, driveways, parking lots, building, houses and/or other property where egress and ingress is required. Temporary access shall be provided using the various means listed below.
 - 1. steel cover plates of the proper size and strength to span the work area
 - 2. wood ramps and boards with railings, spanning the work zone,
 - 3. pedestrian barricades
 - 4. crushed stone
 - 5. or other means approved by the Developer.
 - 6. Temporary access shall meet ADA requirements.
 - iii. The contractor(s) will be permitted to close a quadrant of each side street at a time. Two-way traffic shall be maintained on each two-way side street.
 - iv. It is recommended that all bidding contractors review JSP -21 "Installation of Temporary Traffic Control" and the TC1 "Temporary Traffic Control" series drawings for additional information.
- b. The contractor(s) must establish their staging area totally within the designated Project Limits and/or as shown in the construction plans. Approval by the engineer will be required prior to staging any operations outside of the Project Limits.
- c. Working hours are Monday – Saturday 7:00 am to 7:00 pm and no work is permitted on Sundays. **After-hours work is contingent on approval from the project team with concurrence from the City.**
- d. Always maintain a clean worksite, pick up loose trash daily, and ensure that stored equipment and materials onsite are organized, maintained, and properly secured from damage or theft. The work associated with this project is in an active city setting with elevated risk(s) and it is critical that the work areas are properly secured and maintained in an organized manner throughout construction.
- e. As the "Greenway" and "Streetscape" projects are in close proximity to each other the bidding contractors will need to take into consideration the required coordination between the projects to complete the required work. This includes but is not limited to traffic control, staging, phasing of work, and signalization. It is the intent to hold weekly coordination meetings between both projects.
- f. This Contractor(s) will need to coordinate work with other on-going construction projects, work, maintenance, and/or other project-related activities. It is recommended that that all bidding contractors review JSP-03 "Coordination with Adjacent Projects" for additional information.

5. Questions:

Number	Question	Response
1	Clarification needed on whether both contracts can be awarded to 1 or 2 different contractors?	Yes, the two contracts will be awarded as separate contracts and may be awarded to two different contractors.
2	Clarification needed on whether the Contractor is responsible for purchasing, installing and removal of fire hydrants.	Fire hydrants shall be furnished by the Contractor as required within the project manual and coordination with the City of St Louis Water Division prior to shut off or installation and tapping into existing water main.
3	Are permit acquisitions the responsibility of Contractor or Developer?	Permit acquisition is the responsibility of the Contractor, however a Bid allowance has been added to the Bid Items to acquire permits. If Contractor anticipates that permitting cost will exceed the allowance cost then notify the Developer.
4	Can the proposed granite curb be sourced from the City of St Louis (Hall Street Location) existing Stockpile?	The City of St Louis has verified that their existing stockpile of granite curb is low therefore salvaged curb sales will not be a viable option for curb construction projects at this time, The existing curbs to be removed & salvaged from the project are anticipated to accommodate the required proposed granite curb quantity needs. Therefore, the small quantity of new granite has been added as a safeguard if the salvaged curb quantity will not be sufficient due to the removed curb being damaged.
5	What are the specialty soils verification requirements to be included in both projects?	Refer to Project Manual & JSP's for required procurement and installation requirements.
6	Is Quality Control Testing the responsibility of the Contractor?	General Quality Control Testing will be the responsibility of the Developers Representative (Navigate Building Solutions) and general testing types to be included are (Concrete, Compaction, and Asphalt). If any specialty testing and or inspection is required to be completed by the Contractor, then the project manual will specify those specific requirements and methods that are needed to be fulfilled by the Contractor.
7	How will the risk of encountering contaminated soils be addressed?	An Allowance for unsuitable soils and unforeseen conditions is included in the Bid Form to mitigate the risk associated with removal of existing rail tracks, track foundations & track supports and the risk of constructing the greenway adjacent to a decommissioned Carburetor plant that has been covered and tarped.
8	Will a bid submission extension be granted for the discussed projects?	Developer to address/discuss with Project Manager and response will be verified on a future Addendum.

ATTENDEES

VIRTUAL:

Scott Inserra-RV Wagner, Joe Levy- DMA, Chris Faller-DTLS, Andrew Robinson-DMA, Trevor Panten-unknown, Tyson King- Lochmueller, Hanna Higgins-Smith Group, Joe Grienne-Byrne & Jones, Katie Aholt-Navigate, Brian Brader-unknown, Eschmidt-unknown

IN PERSON (See attached Sign in sheet)



**Brickline Greenway North Connector Phase 1 Project
Grand and Cass Avenue Corridor Improvements Project
Pre-Bid Meeting Attendees**

Date: Thursday April 10, 2025 - 10:30 pm

Company	Name	Email Address	Phone
NAVIGATE	BRIAN KUNZ	brian@navigatebuildingsolutions.com	618-780-2015
Navigate	Alonzo Washington	alonzo@navigatebuildingolutions.com	618-310-6897
GRG	Lonny Boring	lboring@grgstl.org	314-932-4906
PLACHER CONSTR.	MARK SIMPSON	MSIMPSON@PLACHER.CO.COM	618-654-9408
Oldcastle L&G	Ethan Trisk	Ethan.Trisk@oldcastle.com	418-979-0196
Gestenson Const	Kurt Kuehlter	Kuehlter@Gestenson.com	314-260-7757
Tim Kile	Raineri Construction	TKK@rainericonstruction.com	314-667-5913
Jenny Note	Raineri	jnote@rainericonstruction.com	314-667-5913
GRG	Bruce Stolt	BSTOLT@GRGSTL.ORG	314-402-1207

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Sheet 1 of 2



**Brickline Greenway North Connector Phase 1 Project
Grand and Cass Avenue Corridor Improvements Project
Pre-Bid Meeting Attendees**

Date: Thursday April 10, 2025 - 10:30 pm

Company	Name	Email Address	Phone
GRG	Kyleen Bruce	kbruce@grgstl.org	314-932-6113
DTLS	MATT SNEELING	MATT@DTLS-STUDIO.COM	314-402-2313

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Sheet 2 of 2

PROJECT	Grand and Cass Avenue Corridor Improvements (308ie)	DATE	4/14/2025
PROJECT NO.	14004		
PROJECT LOCATION	St. Louis, MO		
SUBJECT	Response to Bid Questions #1 - 4/15/2025		
PREPARED BY	Hannah Higgins/Design Team		

**Federal Project Numbers STBG5617(605)/CMAQ5617(606) GRG Bid #2025-004-308IE
Brickline Greenway: Grand and Cass Avenue Corridor Improvements (308IE)**

Question 1: (received 4/11/25)

There are five new Traffic Signal Controller Cabinets required according to the plans and there is no bid line item for this item.

Response: The signal controller cabinets and controller units are included in the Brickline Greenway North Connector Phase 1 (RAISE) project bid form, as the separate Greenway project will install and power the new signal cabinets. No signal cabinets or controllers are included in the Grand/Cass Corridor (STP/CMAQ) project.

Question 2: (received 4/11/25)

Regarding the bid sheet items, there is 9176 LF (actual quantity not rounded up) Signals Conduit 2 IN Pushed with Tracer Wire required on this project and there is no pay item in the proposal for this item.

Response: The Streetscape (STP/CMAQ) project includes a small quantity of 2" signal conduit, while the Greenway (RAISE) project includes the larger 2" conduit with tracer wire where the new fiber optic cables along the corridor will be installed. See revised signal quantities in Addendum 1 conveying the amount of 2" conduit with tracer wire for each project.

Question 3: (received 4/15/25)

Is there an established cost for the new fire hydrants purchased from the City?

Response: There is not an established cost. The Contractor is responsible for determining the cost of the new fire hydrants.

Question 4: (received 4/15/25)

Since this project is active in conjunction with the Grand and Cass Avenue Corridor Improvements, which project will take precedence in scheduling and phasing. If one of the projects incurs delays due to unforeseen circumstances, will the other project be slowed to ensure both projects are at the same pace?

Response: The Greenway Project will take precedence in scheduling and phasing. In regards to any delay from either project that may affect the other project then as per section 7.3.1 of Form 5 General Conditions of the Contract for Construction, a non-compensatory time extension will be given to the contractor.

For your easy reference here is a copy of section 7.3.1

7.3. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

7.3.1. If the Contractor is delayed at any time in the progress of the Work by any act or neglect of the Developer or by any employee of either, or by any separate contractor employed by the Developer, or by changes ordered in the Work, or by labor disputes, fire, adverse and unusual weather conditions of a severe nature, unusual delay in transportation, unavoidable casualties, or by any cause which the Developer determines may justify the delay, the Contract Time may be extended by Change Order for such reasonable time as the Developer may determine, but Contractor shall not be entitled to a change order for additional costs for delay, except to the extent such delays are caused by the breach or fault of Developer. Except as provided herein, weather shall not constitute a cause for granting an extension of time.

BID FORM: GRAND AND CASS AVENUE CORRIDOR IMPROVEMENTS

NATURAL BRIDGE AVENUE TO CASS AVE/GRAND TO SPRING AVE
STBG-5617(605) / CMAQ-5617(606) GRG #308ie SmithGroup #14004.000

ITEM #	SPEC	STANDARD SPEC PAY ITEM	ITEM DESCRIPTION	UNIT	UNIT COST	QTY	COST
ROADWAY ITEMS							
1	MoDOT	6181000	MOBILIZATION	LS		1.0	
2	JSP	JSP-21	INSTALLATION OF TEMPORARY TRAFFIC CONTROL	LS		1.0	
3	MoDOT	6161098A	CHANGEABLE MESSAGE SIGN W/O COMM INTERFACE, CONTRACTOR FURNISHED/RETAINED	EA		6	
4	JSP	JSP-04	SEDIMENT AND EROSION CONTROL	LS		2.0	
5	JSP	JSP-09	CONTRACTOR FURNISHED SURVEYING AND STAKING	LS		1.0	
6	JSP	JSP-39	DISPOSAL OF CONTAMINATED SOIL	CY		1,000	
7	MoDOT	104.1	REMOVALS - FIXED OBJECTS (SIGNS, MAILBOXES)	EA		26	
8	MoDOT	104.1	PLYWOOD BARRIER REMOVAL	LF		71	
9	MoDOT	216.8	CONCRETE CURB REMOVAL	LF		1,695	
10	JSP	JSP-17	GRANITE CURB REMOVAL AND STORAGE	LF		3,833	
11	MoDOT	202	PAVEMENT REMOVAL - CONCRETE	SF		110,800	
12	MoDOT	202	PAVEMENT REMOVAL - ASPHALT, FULL DEPTH	SF		80,000	
13	JSP	JSP-05	PAVEMENT REMOVAL - MILL ASPHALT AND HAUL OFF	SF		258,551	
14	JSP	JSP-06	MANHOLE/VALVES ADJUST TO GRADE	LS		1	
15	JSP	JSP-07	STORM SEWER WORK -REMOVE INLET	EA		17	
16	JSP	JSP-18	REMOVAL OF EXISTING LIGHTING EQUIPMENT	EA		31	
17	JSP	JSP-23	REMOVAL OF EXISTING SIGNAL EQUIPMENT	EA		11	
18	JSP	JSP-08	REMOVE AND REPLACE FIRE HYDRANT	EA		9	
19	JSP	JSP-16	6" WATER PIPE	LF		200	
20	JSP	JSP-07	STORM SEWER WORK - NEW CURB/GRATE INLETS	EA		15	
21	JSP	JSP-07	STORM SEWER WORK - NEW MANHOLES	EA		4	
22	JSP	JSP-07	STORM SEWER WORK - 12-STORM SEWER PIPE	LF		450	
23	MoDOT	207	EARTHWORK - MACHINE GRADING	SF		122,900	
24	JSP	JSP-17	ROAD CURB - GRANITE CURB, SALVAGED	LF		3,200	
25	JSP	JSP-17	ROAD CURB - GRANITE CURB, NEW	LF		100	
26	JSP	JSP-40	ROAD CURB - CONCRETE CURB	LF		3,064	
27	MoDOT	403	SURFACE - ASPHALT ROADWAY PATCHING - SUPERPAVE SP125CLP (PG 70-22) MIX	SF		19,594	
28			(PAY ITEM NOT USED)				
29	MoDOT	403	SURFACE - ASPHALT ROADWAY MILL & OVERLAY - SUPERPAVE SP125CLP (PG 70-22) MIX	SF		217,319	
30			(PAY ITEM NOT USED)				
31	JSP	JSP-41	SURFACE - HEAVY DUTY CONCRETE PAVEMENT, 8" (DRIVEWAYS)	SF		10,930	
32	MoDOT	6083006 6092014	SURFACE - CONCRETE PEDESTRIAN REFUGE ISLANDS (CONCRETE CURB TYPE N/CONCRETE MEDIAN STRIP)	SF		4,549	
						SUBTOTAL:	

BID FORM: GRAND AND CASS AVENUE CORRIDOR IMPROVEMENTS

NATURAL BRIDGE AVENUE TO CASS AVE/GRAND TO SPRING AVE
STBG-5617(605) / CMAQ-5617(606) GRG #308ie SmithGroup #14004.000

ITEM #	SPEC	STANDARD SPEC PAY ITEM	ITEM DESCRIPTION	UNIT	UNIT COST	QTY	COST
SIGNING, STRIPING, SIGNALS, AND LIGHTING ITEMS							
33	JSP	JSP-19	LIGHTING - STREET LIGHT POLE (P1), PIPE ARM, DUAL LUMINAIRES, DIRECT BURY FOUNDATION	EA		59	
34	JSP	JSP-20	PLAZA LIGHTING - (SV1) LOW VOLTAGE LIGHTING IN-GRADE TRANSFORMER ENCLOSURE	EA		5	
35	JSP	JSP-29	PLAZA LIGHTING - CONDUIT, 1 IN., TRENCH WITH TRACER WIRE (LTG)	LF		402	
36	MoDOT	9017110	PLAZA LIGHTING - CABLE, 10 AWG 1 CONDUCTOR	LF		1,510	
37	MoDOT	9108343	PLAZA LIGHTING - CABLE, 14 AWG 2 CONDUCTOR (LOW VOLTAGE)	LF		560	
38	JSP	JSP-19	LIGHTING - PEDESTRIAN LIGHT PIPE ARM, LUMINAIRE ON SIGNAL POLE	EA		1	
39	JSP	JSP-29, 9025200	LIGHTING - CONDUIT, 2 IN., TRENCH WITH TRACER WIRE (LTG)	LF		6,182	
40	JSP	JSP-29, 9027200	LIGHTING - CONDUIT, 2 IN., PUSHED WITH TRACER WIRE (LTG)	LF		785	
41	MoDOT	9028208	LIGHTING - CABLE, 8 AWG 1 CONDUCTOR (LTG)	LF		45,977	
42	MoDOT	9028810	LIGHTING - PULL BOX, PREFORMED CLASS 1 (LTG)	EA		23	
43	JSP	JSP-20	ELECTRICAL POWER SUPPLY - EXTERIOR RECEPTACLE	EA		3	
44			(PAY ITEM NOT USED)				
45	JSP	JSP-20	ELECTRICAL POWER SUPPLY - STREET LIGHTING PANELBOARD AT SUBSTATION	EA		2	
46	MoDOT	9039902	SIGNALS - RRFBS	EA		9	
47	MoDOT	9020833	SIGNALS - SH-FLAT SHEET - SIGNAL SIGN	SF		350	
48	MoDOT	9020834	SIGNALS - SIGNAL SIGN, MOUNTING HARDWARE	EA		39	
49	MoDOT	9022704	SIGNALS - POST, SIGNAL 4 FT.	EA		9	
50	MoDOT	9022708	SIGNALS - POST, SIGNAL 8 FT.	EA		6	
51	MoDOT	9023115	SIGNALS - POST, TYPE CL, 15 FT. ARM	EA		2	
52	MoDOT	9023120	SIGNALS - POST, TYPE CL, 20 FT. ARM	EA		1	
53	MoDOT	9023125	SIGNALS - POST, TYPE CL, 25 FT. ARM	EA		1	
54	MoDOT	9023130	SIGNALS - POST, TYPE CL, 30 FT. ARM	EA		4	
55	MoDOT	9023135	SIGNALS - POST, TYPE CL, 35 FT. ARM	EA		1	
56	MoDOT	9023140	SIGNALS - POST, TYPE CL, 40 FT. ARM	EA		2	
57	MoDOT	9023145	SIGNALS - POST, TYPE CL, 45 FT. ARM	EA		1	
58	MoDOT	9020213	SIGNALS - SIGNAL HEAD, TYPE 3S	EA		15	
59	MoDOT	9020513	SIGNALS - SIGNAL HEAD, TYPE 3B	EA		38	
60	MoDOT	9020514	SIGNALS - SIGNAL HEAD, TYPE 4B	EA		1	
61	MoDOT	9020811	SIGNALS - SIGNAL HEAD, TYPE 1S, PEDESTRIAN	EA		40	
62	JSP	JSP-29	SIGNALS - CONDUIT, 2 IN., TRENCH WITH TRACER WIRE (SIGNAL)	LF		150	
63	JSP	JSP-29	SIGNALS - CONDUIT, 4 IN., TRENCH WITH TRACER WIRE (SIGNAL)	LF		400	
64	JSP	JSP-29	SIGNALS - CONDUIT, 4 IN., PUSHED WITH TRACER WIRE (SIGNAL)	LF		310	
65			(PAY ITEM NOT USED)			-	

BID FORM: GRAND AND CASS AVENUE CORRIDOR IMPROVEMENTS

NATURAL BRIDGE AVENUE TO CASS AVE/GRAND TO SPRING AVE
STBG-5617(605) / CMAQ-5617(606) GRG #308ie SmithGroup #14004.000

ITEM #	SPEC	STANDARD SPEC PAY ITEM	ITEM DESCRIPTION	UNIT	UNIT COST	QTY	COST
66	MoDOT	9028308	SIGNALS - CABLE, 16 AWG 2 CONDUCTOR	LF		5,600	
67	MoDOT	9028310	SIGNALS - CABLE, 16 AWG 5 CONDUCTOR	LF		6,080	
68	MoDOT	9028311	SIGNALS - CABLE, 16 AWG 7 CONDUCTOR	LF		8,900	
69	JSP	9028811	SIGNALS - PULL BOX, PREFORMED CLASS 2	EA		4	
70	MoDOT	9029100	SIGNALS - BASE, CONCRETE	CU YD		33	
71	JSP	JSP-33	SIGNALS - APS UNIT WITH SIGN	EA		43	
72			(PAY ITEM NOT USED)			-	
73	JSP	JSP-35	SIGNALS - VEHICLE DETECTION SYSTEM	EA		5	
74	JSP	JSP-24	SIGNALS - TRAFFIC SIGNAL MAINTENANCE AND PROGRAMMING	LS		1	
75			(PAY ITEM NOT USED)			-	
76	MoDOT/STL	9011115	SIGNALS - BRACKET ARM, 15 FT, OR 4.6 M	EA		19	
77	MoDOT/STL	9011311	SIGNALS - LUMINAIRE, LED-A	EA		19	
78			(PAY ITEM NOT USED)			-	
79	MoDOT/STL	9028302	SIGNALS - CABLE 12 AWG 2 CONDUCTOR	EA		3,650	
80	MoDOT	9035004A	REG SIGNAGE - FLAT SHEET SIGN	SF		186	
81	MoDOT	9031250A	REG SIGNAGE - U-CHANNEL POST, 3 LB	LF		360	
82	MoDOT	6206000C	4 IN. WHITE STANDARD WATERBORNE PAVEMENT MARKING PAINT, TYPE P BEADS	LF		6,122	
83	MoDOT	6206001C	4 IN. YELLOW STANDARD WATERBORNE PAVEMENT MARKING PAINT, TYPE P BEADS	LF		12,250	
84	MoDOT	6200012	PREFORMED THERMOPLASTIC PAVEMENT MARKING, 12 IN WHITE	LF		109	
85	MoDOT	6200012A	PREFORMED THERMOPLASTIC PAVEMENT MARKING, 12 IN YELLOW	LF		228	
86	MoDOT	6200015	PREFORMED THERMOPLASTIC PAVEMENT MARKING, 24 IN. WHITE	LF		2,918	
87	MoDOT	6200021	PREFORMED THERMOPLASTIC PAVEMENT MARKING, LEFT/RIGHT ARROW	EA		83	
88	MoDOT	6209903	PREFORMED THERMOPLASTIC PAVEMENT MARKING, ADA PARKING	EA		16	
137	MoDOT	9031280	REG SIGNAGE - 2.5 IN PSST POST	LF		65	
138	MoDOT	9031281A	REG SIGNAGE - DRIVEN POST ANCHOR 2.5 IN PSST - 7 GA	EA		5	
						SUBTOTAL:	
BICYCLE AND PEDESTRIAN ITEMS							
89A	JSP	JSP-41	SURFACE - CONCRETE PAVEMENT (SIDEWALKS)	SF		66,720	
89B	JSP	JSP-41	SURFACE - CONCRETE PAVEMENT (ST LOUIS PLAZA SIDEWALKS)	SF		1,895	
90	JSP	JSP-43	SURFACE - UNIT PAVING ON CONCRETE	SF		1,237	
91	JSP	JSP-43	SURFACE - STEEL EDGING AT UNIT PAVING	LF		170	
92	JSP	JSP-44	SURFACE - DETECTABLE WARNING	SF		1,115	
93	JSP	JSP-49	TRANSIT - BUS SHELTER	EA		10	
						SUBTOTAL:	

BID FORM: GRAND AND CASS AVENUE CORRIDOR IMPROVEMENTSNATURAL BRIDGE AVENUE TO CASS AVE/GRAND TO SPRING AVE
STBG-5617(605) / CMAQ-5617(606) GRG #308ie SmithGroup #14004.000

ITEM #	SPEC	STANDARD SPEC PAY ITEM	ITEM DESCRIPTION	UNIT	UNIT COST	QTY	COST
LANDSCAPING ITEMS							
94	JSP	JSP-53	TREE PRUNING	EA		20	
95	JSP	JSP-54	TREE PROTECTION FENCE	LF		410	
96	MoDOT	2019902	REMOVALS - TREES (SMALL)	EA		14	
97	MoDOT	2019902	REMOVALS - TREES (LARGE)	EA		13	
98	MoDOT	2013000	REMOVALS - LAWN/LANDSCAPE AREA	SF		13,217	
99	JSP	JSP-50	LANDSCAPE - STRUCTURAL SOIL	CY		1,004	
100	JSP	JSP-52	LANDSCAPE - PLANTING SOIL	CY		732	
101	JSP	JSP-55	LANDSCAPE - TURFGRASS SOD	SY		3,044	
102	JSP	JSP-56	LANDSCAPE - PERENNIAL, 2X5 DEEP CELL PLUG	EA		782	
103	JSP	JSP-56	LANDSCAPE - PERENNIAL, 4" (1 QUART) CONTAINER	EA		597	
104	JSP	JSP-56	LANDSCAPE - PERENNIAL, #1 (1 GALLON) CONTAINER	EA		145	
105	JSP	JSP-56	LANDSCAPE - SHRUB, #3 (3 GALLON) TO #10 (10 GALLON)	EA		50	
106	JSP	JSP-56	LANDSCAPE - TREE, ORNAMENTAL (2.5" CALIPER OR #25 TO #65 GALLON)	EA		31	
107	JSP	JSP-56	LANDSCAPE - TREE, SHADE (3" CALIPER OR #45 TO #95/100 GALLON)	EA		53	
108	JSP	JSP-56	LANDSCAPE - TREE, SHADE (3.5" CALIPER OR #65 TO #95/100 GALLON)	EA		14	
109	JSP	JSP-56	LANDSCAPE - MULCH	CY		36	
110	JSP	JSP-56	LANDSCAPE - LANDSCAPE PROTECTION BARRIER	LF		863	
111	JSP	JSP-56	LANDSCAPE - TREE STABILIZATION	EA		98	
112	JSP	JSP-56	LANDSCAPE - LANDSCAPE IRRIGATION BAGS	EA		98	
						SUBTOTAL:	
NON-FEDERAL PARTICIPATING ITEMS							
113	JSP	JSP-57	LANDSCAPE - IRRIGATION SLEEVES	LF		650	
114	JSP	JSP-57	LANDSCAPE - AREAS TO BE IRRIGATED	SF		3,110	
115	JSP	JSP-49	TREE GRATE AND FRAME, 5X5	EA		14	
116	JSP	JSP-49	SITE FURNISHINGS - BENCH, BACKED	EA		5	
117	JSP	JSP-49	SITE FURNISHINGS - BENCH, BACKLESS	EA		3	
118	JSP	JSP-49	SITE FURNISHINGS - WASTE RECEPTACLES (TRASH)	EA		8	
119	JSP	JSP-49	SITE FURNISHINGS - WASTE RECEPTACLES (RECYCLING)	EA		1	
120	JSP	JSP-49	SITE FURNISHINGS - BIKE RACKS	EA		3	
121	JSP	JSP-47	PLAZA - SCULPTURE FOUNDATION	CY		5	
122	JSP	JSP-47/JSP-48	PLAZA - SCULPTURE FOUNDATION - GRANITE VENEER	SF		71	
123	JSP	JSP-47	PLAZA - SKATE DETERRENTS	EA		56	
124	JSP	JSP-45	PLAZA - STAIR A	LF		5	

BID FORM: GRAND AND CASS AVENUE CORRIDOR IMPROVEMENTS

NATURAL BRIDGE AVENUE TO CASS AVE/GRAND TO SPRING AVE
STBG-5617(605) / CMAQ-5617(606) GRG #308ie SmithGroup #14004.000

ITEM #	SPEC	STANDARD SPEC PAY ITEM	ITEM DESCRIPTION	UNIT	UNIT COST	QTY	COST
125	JSP	JSP-45	PLAZA - STAIR B	LF		3	
126	JSP	JSP-58	PLAZA - HANDRAIL	LF		18	
127	JSP	JSP-43	PLAZA - GRANITE PAVER BAND	LF		254	
128	JSP	JSP-47	PLAZA - GRANITE PLANTER CURB	LF		60	
129	JSP	JSP-19	PLAZA LIGHTING - PEDESTRIAN LIGHT POLE (PL#), PIPE ARM, WITH FOUNDATION	EA		2	
130	JSP	JSP-19	PLAZA LIGHTING - (SB3) AIMABLE FLOODLIGHTS WITH ADJUSTABLE BEAM OPTICS ON POLE	EA		8	
131	JSP	JSP-19	PLAZA LIGHTING - (SB4) IN-GRADE SCULPTURE UPLIGHT WITH IN-GRADE HOUSING INSTALLATION	EA		3	
132	JSP	JSP-19	PLAZA LIGHTING - (SB5) AIMABLE TREE FLOODLIGHTS MOUNTED TO GROUND	EA		14	
133	JSP	JSP-7	PLAZA - SLOT DRAIN	LF		74	
134	JSP	JSP-49	BENCH - ST LOUIS PLAZA TYPE 1 - STRAIGHT	EA		4	
135	JSP	JSP-49	BENCH - ST LOUIS PLAZA TYPE 2 - LEFT/RIGHT	EA		3	
136	JSP	JSP-20	ELECTRICAL POWER SUPPLY - PLAZA LIGHTING, EXTERIOR GROUND BOX	EA		2	
						SUBTOTAL:	
ROADWAY SUBTOTAL:							
SIGNING, STRIPING, SIGNALS, AND LIGHTING SUBTOTAL:							
BICYCLE AND PEDESTRIAN SUBTOTAL:							
LANDSCAPING SUBTOTAL:							
FEDERAL TOTAL:							
NON-FEDERAL PARTICIPATING SUBTOTAL:							
ALLOWANCE (UNSUITABLE SOILS AND UNFORESEEN CONDITIONS):						\$	100,000
ALLOWANCE (PERMITS):						\$	10,000
TOTAL:							

JSP-21 INSTALLATION OF TEMPORARY TRAFFIC CONTROL

1.0 DESCRIPTION

- 1.1 This work shall be completed in accordance with Section 616 of the current version of the MoDOT Standard Specifications for Highway Construction, except as herein modified and as detailed on the plans. This work shall consist of furnishing, placing and maintaining, flags, fences, channelizers, trucks with flashers, and furnishing flagmen in accordance with the Manual on Uniform Traffic Control Devices (MUTCD), provisions of this section, per the standard details, according to Section 616 of the "Missouri Standard Specifications for Highway Construction", as shown in the plans, and as required by the Engineer.
- A. The Contractor shall provide, erect, move, and maintain traffic control devices in good condition as necessary to properly protect the work and provide safe and convenient public travel for all work until acceptance by the Engineer.
 - B. The Contractor shall verify daily that proper placement of devices is maintained, and all devices that are no longer necessary have been removed.
 - C. Any device that becomes damaged or unserviceable shall be promptly replaced. Signs shall be placed as indicated on the drawings and as required by the MUTCD. Signs depicted on the traffic control plan are for the Contractor's general information so that the Contractor can provide the appropriate signage in conformance with the MUTCD.
 - D. Any changes to the proposed staging and signage shall be approved by the Engineer in writing. The Contractor may propose an alternative plan for consideration by the Engineer. Alternative plan shall be submitted in writing to the Engineer a minimum of 3 days prior to installation.
 - E. The Contractor shall keep all street name and traffic signs in service during the construction period. If construction activities obscure or otherwise reduce the effectiveness of a traffic sign, the Contractor shall either reset the sign or provide additional signage as required by the Engineer. The Contractor shall reset signs, as appropriate, after construction.
 - F. At any time during construction in which equipment, persons, or materials are located intermittently within a lane open to traffic, flagmen are to be provided. One (1) unobstructed traffic lane in each direction shall be provided at all times except during the presence of flagmen.
 - G. The Contractor shall furnish changeable message signs (CMS) at the quantity shown in the contract documents, and retain at the conclusion of the project. The CMS shall be relocated and programmed with messaging as directed by the Engineer throughout the duration of construction until the project has been accepted for maintenance.

2.0 EMERGENCY CONTACT

- 2.1 The Contractor shall provide the Engineer with the name and telephone number of an individual who shall be on 24-hour call for erection and maintenance of traffic control devices or other problems that may arise.

3.0 TRAFFIC CONTROL PLANS

- 3.1 Vehicle Traffic Control Plan - Within 10 days of the Notice to Proceed, the Contractor must submit a Vehicle Traffic Control Plan for approval by the Construction Manager and must furnish the name of the individual in its direct employ who is to be responsible for the installation and maintenance of the traffic control for this project. If the actual installation and maintenance are to be accomplished by a subcontractor, consent must be requested of the Construction Manager at the time of the preconstruction meeting. This will not relieve the Contractor of the foregoing requirement for a responsible individual in its direct employ.
- A. Contractor shall maintain two-way traffic on Grand and Cass throughout the duration of construction.
 - B. The contractor will be permitted to close a quadrant of each side street at a time. Two-way traffic shall be maintained on each two-way side street.
- 3.2 Pedestrian Traffic Control Plan - Within 10 days of the Notice to Proceed, the Contractor must submit a Pedestrian Traffic Control Plan for approval by the Construction Manager and must furnish the name of the individual in its direct employ who is to be responsible for the installation and maintenance of the traffic control for this project. If the actual installation and maintenance are to be accomplished by a subcontractor, consent must be requested of the Construction Manager at the time of the preconstruction meeting. This will not relieve the Contractor of the foregoing requirement for a responsible individual in its direct employ.
- A. Contractor vehicles must enter or leave work areas in a manner that will not be hazardous to or interfere with normal pedestrian traffic and must not park or stop except within designated work areas. Personal vehicles will not be permitted to park within the right of way except in specific areas designated by the Construction Manager.
 - B. Vaulted sidewalks potentially exist along Grand Blvd. When a vaulted sidewalk is encountered, the pedestrian path shall be maintained on pavement to allow for continuous pedestrian access during the construction of each block, access to abutting properties shall be maintained with a ramp. If the drop off from the ramp exceeds 6 inches, ADA compliant handrails shall be provided. The contractor will restore pedestrian access within 48 hours from the time of closure. Failure to meet this requirement will result in a traffic control deficiency charge for each 24-hour period or portion thereof that said sidewalk is closed.
 - C. NOTES: (Notes 1-9 must be included in the Pedestrian Traffic Control Plan)
 - 1. The Contractor must maintain a continuous sidewalk pedestrian zone as specified in the plans along the building face on main arterial and side streets during the construction of each block. The sidewalk must be longitudinally sawcut the cost of which will be considered incidental to SIDEWALK REMOVAL. The Contractor will be allowed to remove and replace this remaining sidewalk but must reopen it for use within 48 hours. Failure to do so will result in a deduction for Pedestrian Traffic Control and Protection Deficiency as defined in this special provision.
 - 2. Barricades consisting of temporary 6' fencing with privacy screening on temporary footings with sandbags must be placed the distance specified in the plans from the building face separating the pedestrian zone from the work zone. These barricades must be secure from falling over.
 - 3. Use one "Pedestrian Walkway (Arrow)"(black legend on white reflectorized background sign at each end of each sidewalk section being reconstructed.

4. At each point of closure, sufficient numbers of barricades must be used to completely close the pathway.
 5. Pedestrian walkways must be maintained free of any obstructions and hazards such as holes, debris, mud, construction equipment, stored materials, etc. and must be broom swept daily or as directed by the Construction Manager.
 6. All hazards near or adjacent to walkways must be clearly delineated.
 7. Where construction activities involve sidewalks on both sides of the street, the work must be staged so that both sidewalks are not out of service at the same time.
 8. The Contractor must maintain pedestrian access to adjacent properties by installing ADA compliant wood frame-constructed walkways and ramps from the curb line to adjacent property entrances, and at either end of the pedestrian path as directed by the Construction Manager. These ramps can be reused, if maintained in acceptable condition, throughout the project. Pedestrian access to adjacent properties must be uninterrupted until the walk is fully restored.
 9. The Contractor must maintain disabled person pedestrian access to crosswalks across the main arterial street and side streets at all times via ADA compliant wood frame-constructed walkways and ramps through the work zones. These accesses must be observed and protected by the Contractor at all times, as shown on the M.O.T. plans.
- 3.3 If the Contractor requests and receives approval from the Construction Manager to revise or change the staging of the project from that specified on the plans any additional Vehicle or Pedestrian Traffic Control required due to that request will be considered incidental to the contract and no additional payment will be made.
- 3.4 Deduction for Traffic Control and Protection Deficiency: To ensure a prompt response to incidents involving the integrity of the work zone traffic control and protection devices for vehicular and pedestrian traffic, the Contractor must provide a telephone number where a responsible individual can be contacted on a 24-hour-a-day basis. When the Construction Manager is notified or determines a deficiency exists, the Contractor shall dispatch sufficient resources and make needed corrections of deficiencies that constitute an immediate safety hazard within 2 hours of notification from the Construction Manager. The specified time limit to correct the deficiency may be extended as directed by the Construction Manager. Deficiencies shall include, but are not limited to, any work performed by the Contractor within the work zone that presents a hazard to pedestrian or vehicular traffic, untimely and/or incorrect placement of short term, temporary and permanent pavement markings, untimely and/or incorrect placement of traffic control and protection devices and non-compliance with all items of work contained within this item. If the Contractor fails to correct the deficiency within the time limits specified above, the Construction Manager will impose a monetary deduction of **\$2500** per incident and may utilize City personnel to correct the deficiency at the Contractor's expense. The imposed monetary deduction and the cost of correcting the deficiency by City personnel will be deducted from the lump sum unit price for this item. If these costs exceed the lump sum unit price for this item, the amount exceeding the lump sum unit price for this item will be issued as a change order for client credit under this pay item. This corrective action will in no way relieve the Contractor of contractual requirements or responsibilities.

3.5 Phasing - The contractor shall be required to perform the work along Grand Boulevard in a minimum of three (3) separate construction phases. The proposed work on Cass Ave and North Spring Ave can be completed in conjunction with one of the phases along Grand or as a separate phase. The purpose of phasing construction is to facilitate traffic flow, minimize delays to the motorist, and minimize disruption to businesses and pedestrians. Prior to the start of construction activities, the contractor(s) must submit for approval a detailed phasing and traffic control plan within 10 days of the notice to proceed.

1. The contractor shall maintain two-way traffic on Grand and Cass throughout the duration of construction.
2. The contractor shall coordinate all bus stop accommodation with BiState/Metro to maintain bus access.
3. The contractor may utilize rolling construction phases. Contractor to maintain a 3-block or 1,500 LF open work zone from which construction cannot advance until new sidewalk is installed.

4.0 METHOD OF MEASUREMENT

Delete Sec 616.11 and insert the following:

616.11 Method of Measurement. Measurement for relocation of post-mounted signs will be made to the nearest square foot of sign area only for the signs designated for payment on the plans. All other sign relocations shall be incidental. Measurement for construction signs will be made to the nearest square foot of sign area. Measurement will be made per each for each of the temporary traffic control items provided in the contract, including changeable message signs.

616.11.1 Lump Sum Temporary Traffic Control. No measurement will be made for temporary traffic control items grouped and designated to be paid per lump sum. The list of lump sum items provided in the plans or contract is considered an approximation and may be subject to change based on field conditions. This is not a complete list and may exclude quantities for duplicate work zone packages used in simultaneous operations. The contractor shall provide all traffic control devices required to execute the provided traffic control plans for each applicable operation, stage, or phase. No measurement will be made for any additional signs or devices needed except for changes in the traffic control plan directed by the engineer.

5.0 BASIS OF PAYMENT

Delete Sec 616.12 and insert the following:

616.12 Basis of Payment. All temporary traffic control devices authorized for installation by the engineer will be paid for at the contract unit price for each of the pay items included in the contract. Whether the devices are paid individually, or per lump sum, no direct payment will be made for the following:

- (a) Incidental items necessary to complete the work, unless specifically provided as a pay item in the contract.
- (b) Installing, operating, maintaining, cleaning, repairing, removing, or replacing traffic control devices.
- (c) Covering and uncovering existing signs and other traffic control devices.

- (d) Relocating temporary traffic control devices, including permanent traffic control devices temporarily relocated, unless specifically included as a pay item in the contract.
- (e) Worker apparel.
- (f) Flaggers, AFADs, PFDs, pilot vehicles, and appurtenances at flagging stations.
- (g) Furnishing, installing, operating, maintaining, and removing construction-related vehicle and equipment lighting.
- (h) Construction and removal of temporary equipment crossovers, including restoring pre-existing crossovers.
- (i) Provide and maintaining work zone lighting and work area lighting.

616.12.1 Lump Sum Temporary Traffic Control. Traffic control items grouped together in the contract or plans for lump sum payment shall be paid incrementally per Sec 616.12.1.1. Alternately, upon request from the contractor, the engineer will consider a modified payment schedule that more accurately reflects completion of traffic control work. No payment will be made for any additional signs or devices needed except for changes in the traffic control plan directed by the engineer. Additional items directed by the engineer will be paid for in accordance with Sec 109.4. No adjustment to the price will be made for overruns or underruns of other work or for added work that is completed within existing work zones.

616.12.1.1 Partial payments. For purposes of determining partial payments, the original contract amount will be the total dollar value of all original contract line items less the price for Lump Sum Temporary Traffic Control (LSTTC). If the contract includes multiple projects, this determination will be made for each project. Partial payments will be made as follows:

- (a) The first payment will be made when five percent of the original contract amount is earned. The payment will be 50 percent of the price for LSTTC, or five percent of the original contract amount, whichever is less.
- (b) The second payment will be made when 50 percent of the original contract amount is earned. The payment will be 25 percent of the price for LSTTC, or 2.5 percent of the original contract amount, whichever is less.
- (c) The third payment will be made when 75 percent of the original contract amount is earned. The payment will be 20 percent of the price for LSTTC, or two percent of the original contract amount, whichever is less.
- (d) Payment for the remaining balance due for LSTTC will be made when the contract has been accepted for maintenance or earlier as approved by the engineer.

616.12.1.2 Temporary traffic control will be paid for at the contract lump sum price for INSTALLATION OF TRAFFIC CONTROL (Item Number JSP-21) including Construction Signs 616-10.05, Channelizer (Trimline) 616-10.25, and Temporary Fencing 616-10.98B. Changeable message signs will be paid for separate from the lump sum INSTALLATION OF TRAFFIC CONTROL pay item, on a per each basis as CHANGEABLE MESSAGE SIGN W/O COMM. INTERFACE – CONTRACTOR FURNISHED/RETAINED.

END OF JSP-21

GRAND AND CASS
AVENUES
CORRIDOR
IMPROVEMENTS

STBG-5617(605) / CMAQ-5617(606)



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ISSUED FOR REV DATE

1 4/24/2025

12/16/2024

SEAL AND SIGNATURE

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POWER SUPPLY									
LOCATION		POWER SUPPLY ASSEMBLY				CIRCUIT BREAKER TRIP RATING			
APPROACH	STATION	OFFSET	CONTROLLER		120V SUPPLY DISCONNECT	EXISTING CONTROLLER (ON POWER SUPPLY)		SERVICE POLE	
			AUXILIARY BREAKER	AUXILIARY BREAKER		120 VOLT MAIN BREAKER	MAIN BREAKER	CONTRACT FURNISH	UTILITY COMPANY
GRAND BLVD	UP	UP	UP (S)	UP (S)	UP (S)	UP (S)	UP (S)	UP (S)	UP (S)
			Amps	Amps	Amps	Amps	Amps	Amps	Amps

CONTROLLER ASSEMBLY AND AUXILIARY EQUIPMENT									
LOCATION		SYSTEM MASTER (CLOSED LOOP)		ACTUATED		ON-OFF SWITCH		COORDINATION INTERFACE *	
APPROACH	STATION	OFFSET	NEMA	T70	NEMA	T70	I	120/277 HINDWIRE (I)	
								TIME BASE	CLOSED LOOP
GRAND BLVD	UP	UP	UP	UP	UP	UP	UP	LOCAL	NEMA
								MASTER	FIBER

- 1) MODOT "D" PLUG SHALL BE WIRED INTO ALL NEMA CONTROLLERS. ALL ALARMS AND PREEMPTIONS SHALL BE TERMINATED ON THE CABINET BACK PANEL.
- 2) PAYMENT IS MADE FOR THE NUMBER OF 2-CHANNEL DETECTOR CARDS AS SHOWN BELOW THE ASSIGNMENT CHART.
- 3) THE EXISTING VIDEO DETECTION SYSTEM SHALL BE USED IN PLACE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LABOR, EQUIPMENT, AND MISCELLANEOUS MATERIALS NECESSARY TO ENSURE THE EXISTING VIDEO DETECTION SYSTEM REMAINS FUNCTIONAL THROUGHOUT THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RELOCATION OF THE EXISTING VIDEO DETECTION CAMERA ASSEMBLY IN THE SOUTHWEST QUADRANT, AS SHOWN IN THE PLANS. NO ADDITIONAL PAYMENT WILL BE ALLOWED.
- 4) THE EXISTING TRAFFIC SIGNAL CONTROLLER AND CABINET ASSEMBLY SHALL BE USED IN PLACE.
- 5) THE EXISTING PAD MOUNTED POWER SUPPLY FOR 120V SIGNAL, 4 CIRCUIT LIGHTING CONTROLLER SHALL BE USED IN PLACE.
- 6) EACH PEDESTRIAN PUSH BUTTON SHALL BE CONSIDERED PART OF AN INDIVIDUAL ACCESSIBLE PEDESTRIAN SIGNAL (APS) UNIT. WHERE PUSH BUTTONS ARE SHOWN IN THE PLANS, AN INDIVIDUAL APS UNIT SHALL BE INSTALLED. THE PEDESTRIAN PUSH BUTTONS SHALL BE MOUNTED 42" ABOVE THE PEDESTRIAN PATH, AND WITHIN A 10" SIDE REACH OF ADJACENT LEVEL LANDING AREA. SEE SPECIAL PROVISIONS FOR DETAILED INFORMATION.

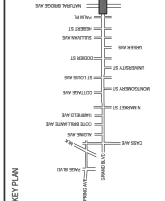
DETECTOR SCHEDULE									
DETECTOR NUMBER	PUSH BUTTON (S)	TYPE		STANDARD	DELAY/EXTEND (S)	CALL UNIT *	VIDEO DETECTION (S)	UP	DOWN
		INDUCTION LOOP	INDUCTION LOOP						
P1	1								
P2	1								
P3	1								
P4	1								
P5	1								
P6	1								
P7	1								
P8	1								
GREENWAY TOTAL	8								

NEMA DETECTOR ASSIGNMENT (S)									
CHANNEL	1	2	3	4	5	6	7	8	VIDEO DETECTION (S)
1									
2									

NEMA LOAD SWITCH ASSIGNMENTS															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
WBL	EB	NBL	SB	WBL	WB	SRL	NB	WBL	NBL	EB	SRL	WBL	NBL	EB	SRL



GRAND BLVD. AT NATURAL BRIDGE AVE.
INTERSECTION

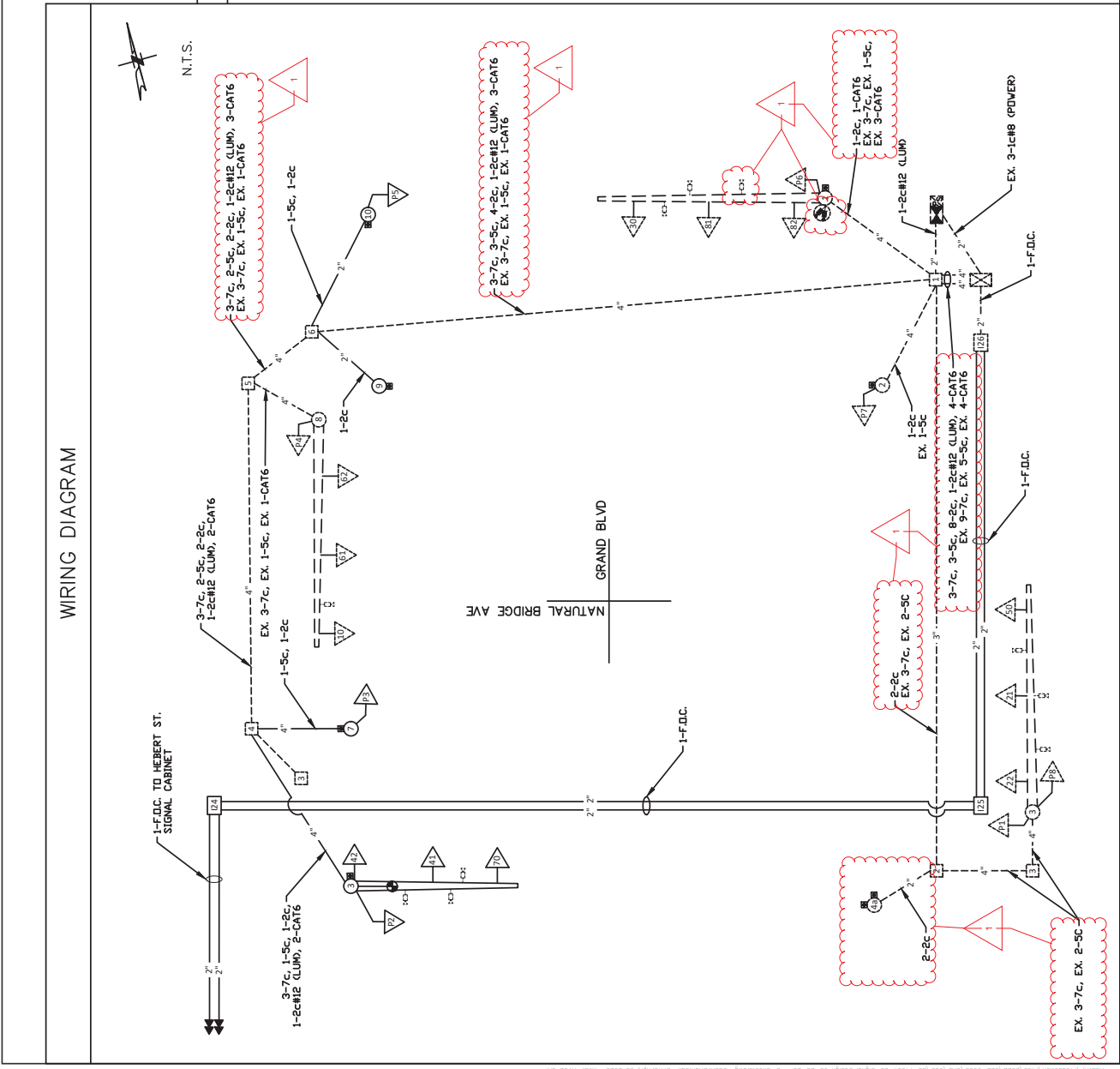


DRAWING TITLE
D-37C - NATURAL
BRIDGE RD



LEGEND

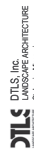
- 3" PROPOSED CONDUIT CONTAINING CABLE WITH SIZE
- CABLE
- X-Xc MULTI-CONDUCTOR CABLE #16 AWG (UNLESS OTHERWISE INDICATED)
- PULL BOX WITH NUMBER
- POST WITH NUMBER
- POST WITH MAIST ARM
- POST WITH MAIST ARM AND LUMINAIRE
- SIGNAL HEAD WITH NUMBER
- SIGNAL CONTROLLER
- POWER SUPPLY
- DETECTION APCC-SPP RADIO
- WIRELESS DETECTION REPEATER
- ACCESSIBLE PEDESTRIAN SIGNAL (APS) UNIT
- SINGLE CAMERA PAN-TILT-ZOOM (PTZ) CAMERA ASSEMBLY
- DASHED LINES INDICATE EXISTING EQUIPMENT





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[illegible]

ADDENDUM #1	1	4/14/2022
ISSUED FOR BID		12/18/2022

SEMS AND SIGNATURES



DRAWING TITLE

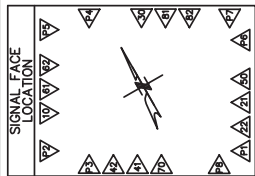
D-38A - NATURAL
BRIDGE RD

PROJECT NUMBER 14004.000
DRAWING NUMBER E2-106
43 OF 231

43 OF 231

43 OF 231

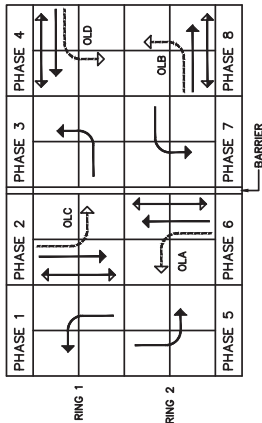
TRAFFIC PHASING AND COLOR SEQUENCE - ACTUATED CONTROLLERS

[illegible]

LEGEND

- ▶ ACTUATED VEHICULAR MOVEMENT
 —————▶ PARTIALLY RESTRICTED ACTUATED VEHICULAR MOVEMENT
 —————▶ NON-ACTUATED VEHICULAR MOVEMENT
 —————▶ PARTIALLY RESTRICTED NON-ACTUATED VEHICULAR MOVEMENT
 —————▶ ACTUATED PEDESTRIAN MOVEMENT
 —————▶ NON-ACTUATED PEDESTRIAN MOVEMENT
 —————▶ ACTUATED BICYCLE MOVEMENT

IF CALLED, ALL NON-CONFLICTING PHASES SHALL COMBINE AND TIME CONCURRENTLY. TIME TO BE DETERMINED BY THE ENGINEER AT SIGNAL TURN ON AND SET IN THE CONTROLLER BY THE CONTRACTOR.



TRAFFIC SIGNAL CONTROL OPERATION

INTERSECTION OF
GRAND BLVD.
WITH

NATURAL BRIDGE AVE.

FLASHING OPERATION	
GRAND BLVD.	FR
NATURAL BRIDGE AVE.	FR
CONTROLLER TYPE	NEMA 800

GRAND AND CASS
AVENUES
CORRIDOR
IMPROVEMENTS



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QUANTITY		MAILED NUMBER		SIZE		AREA		TOTAL AREA EACH SIGN		SIGNAL MOUNTING HARDWARE	
		ITEM NO.		ITEM NO.		ITEM NO.		ITEM NO.		ITEM NO.	
		1		2		3		4		5	
		1		2		3		4		5	
		1		2		3		4		5	
		1		2		3		4		5	
		1		2		3		4		5	
		1		2		3		4		5	
		1		2		3		4		5	
		1		2		3		4		5	
		1		2		3		4		5	
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		1		2		3		4		5	
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		1		2		3		4		5	
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		1		2		3		4		5	
		1		2		3		4		5	
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		1		2		3		4		5	
		1		2		3		4		5	
		1		2		3		4		5	

TRAFFIC PHASING AND COLOR SEQUENCE – ACTUATED CONTROLLERS															
SIGNAL FACE LOCATION		PHASE 01		PHASE 02		PHASE 03		PHASE 04		PHASE 05		PHASE 06		PHASE 07	
															
NOT USED		NOT USED		NOT USED		NOT USED		NOT USED		NOT USED		NOT USED		NOT USED	
OVERLAP D		OVERLAP A		OVERLAP B		OVERLAP C		OVERLAP D		OVERLAP E		OVERLAP F		OVERLAP G	
P7		P8		P9		P10		P11		P12		P13		P14	
P15		P16		P17		P18		P19		P20		P21		P22	
P23		P24		P25		P26		P27		P28		P29		P30	
P31		P32		P33		P34		P35		P36		P37		P38	
P39		P40		P41		P42		P43		P44		P45		P46	
P47		P48		P49		P50		P51		P52		P53		P54	
P55		P56		P57		P58		P59		P60		P61		P62	
P63		P64		P65		P66		P67		P68		P69		P70	
P71		P72		P73		P74		P75		P76		P77		P78	
P79		P80		P81		P82		P83		P84		P85		P86	
P87		P88		P89		P90		P91		P92		P93		P94	
P95		P96		P97		P98		P99		P100		P101		P102	
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P111		P112		P113		P114		P115		P116		P117		P118	
P119		P120		P121		P122		P123		P124		P125		P126	
P127		P128		P129		P130		P131		P132		P133		P134	
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P143		P144		P145		P146		P147		P148		P149		P150	
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P175		P176		P177		P178		P179		P180		P181		P182	
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P199		P200		P201		P202		P203		P204		P205		P206	
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P735		P736		P737		P738		P739		P740		P741		P742	
P743		P744		P745		P746		P747		P748		P749		P750	
P751		P752		P753		P754		P755		P756		P757		P758	
P759		P760		P761		P762		P763		P764		P765		P766	
P767		P768		P769		P770		P771		P772		P773		P774	
P775		P776		P777		P778		P779		P780		P781		P782	
P783		P784		P785		P786		P787		P788		P789		P790	
P791		P792		P793		P794		P795		P796		P797		P798	
P799		P800		P801		P802		P803		P804		P805		P806	
P807		P808		P809		P810		P811		P812		P813		P814	
P815		P816		P817		P818		P819		P820		P821		P822	
P823		P824		P825		P826		P827		P828		P829		P830	
P831		P832		P833		P834		P835		P836		P837		P838	
P839		P840		P841		P842		P843		P844		P845		P846	
P847		P848		P849		P850		P851		P852		P853		P854	
P855		P856		P857		P858		P859		P860		P861		P862	
P863		P864		P865		P866		P867		P868		P869		P870	
P871		P872		P873		P874		P875		P876		P877		P878	
P879		P880		P881		P882		P883		P884		P885		P886	
P887		P888		P889		P890		P891		P892		P893		P894	
P895		P896		P897		P898		P899		P900		P901		P902	
P903		P904		P905		P906		P907		P908		P909		P910	
P911		P912		P913		P914		P915		P916		P917		P918	
P919		P920		P921		P922		P923		P924		P925		P926	
P927		P928		P929		P930		P931		P932		P933		P934	
P935		P936		P937		P938		P939		P940		P941		P942	
P943		P944		P945		P946		P947		P948		P949		P950	
P9															

Owner: Great Rivers Greenway

35 EAST WACKER
SUITE 900
CHICAGO, IL 60601
312.641.0770
www.smifgroup.com

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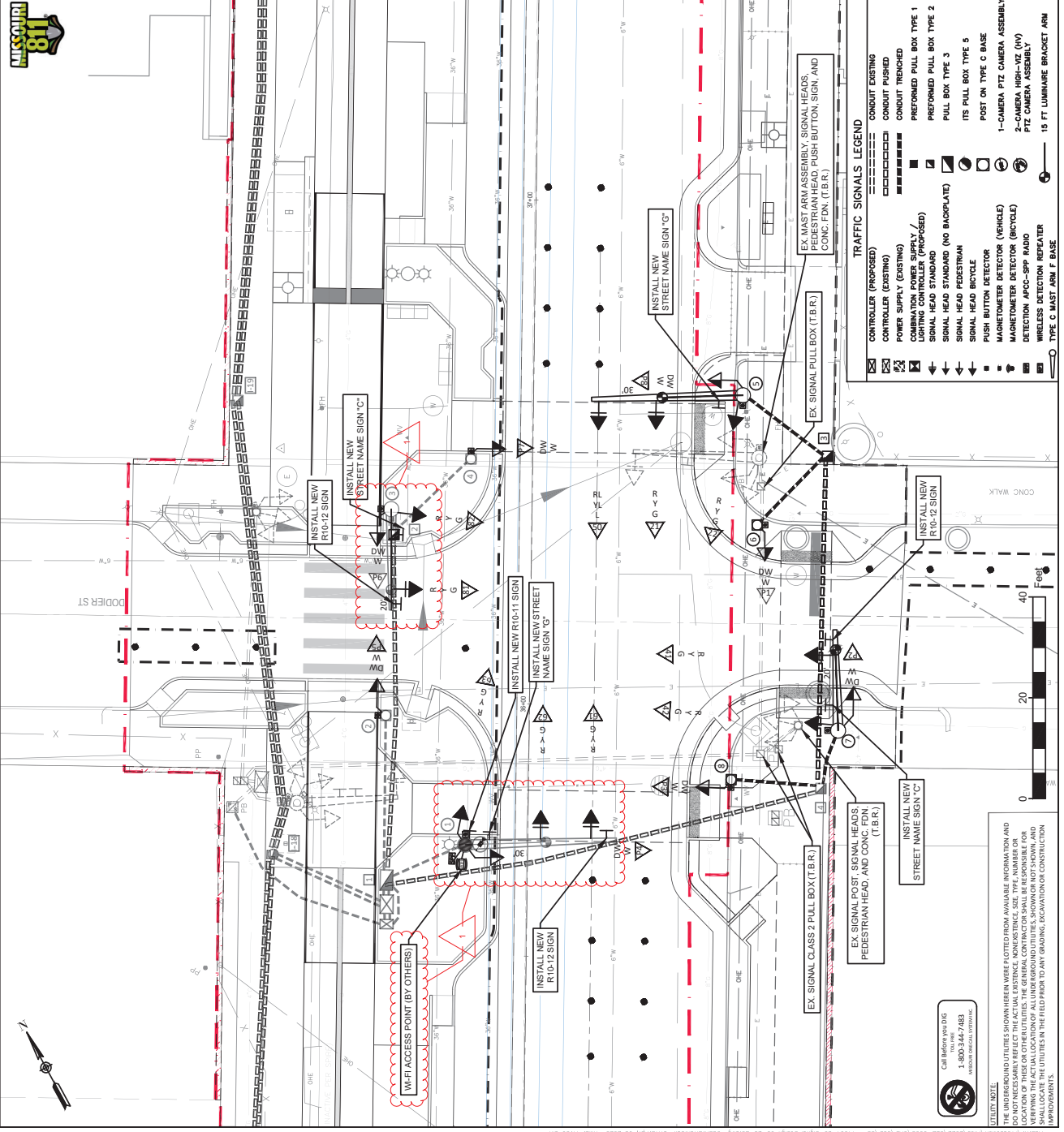
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PROJECT NUMBER	14004.00
DRAWING NUMBER	

150 OF 231

ADVANCED DETECTION AT THE INTERSECTION. NO ADDITIONAL PAYMENT WILL BE MADE SHOULD THE INSTALLATION OF ADDITIONAL EQUIPMENT BE REQUIRED AT THE INTERSECTION.



UTILITY NOTE: THE UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTED FROM AVAILABLE INFORMATION AND DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NON-EXISTENCE, 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 FIELD PRIOR TO ANY GRADING, EXCAVATION OR CONSTRUCTION IMPROVEMENTS.

GRAND AND CASS
AVENUES
CORRIDOR
IMPROVEMENTS

STBG-6677(09) / CMAQ-5677(06)

CHRYSLER



SMITHGROUP

35 EAST WACKER
SUITE 900
CHICAGO, IL 60601
312.641.0770
www.smithgroup.com



DAVID MASON AND ASSOCIATES
100 N. LAKE STREET
SUITE 200
CHICAGO, IL 60601
312.641.0770
www.dma.com



DLS, Inc.
100 N. LAKE STREET
SUITE 200
CHICAGO, IL 60601
312.641.0770
www.dls.com



LOCHMEYER GROUP
100 N. LAKE STREET
SUITE 200
CHICAGO, IL 60601
312.641.0770
www.lochmeyer.com



GRACE GROUP
100 N. LAKE STREET
SUITE 200
CHICAGO, IL 60601
312.641.0770
www.gracegroup.com

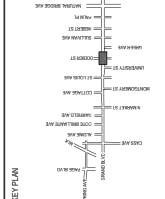


SMITH GROUP
100 N. LAKE STREET
SUITE 200
CHICAGO, IL 60601
312.641.0770
www.smithgroup.com



REV DATE
1 4/14/2006
12/16/2004

SCALE AND DIMENSIONS



DRAWING TITLE

D-37A - DODIER ST

PROJECT NUMBER
14004.000

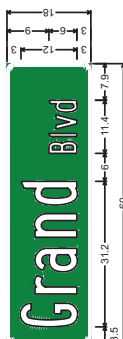
DRAWING NUMBER
E2-114

151 OF 231

QUANTITY		SIZE		AREA		TOTAL SIGNAL MOUNTING (EACH SIGNAL HARDWARE)	
MATERIAL		INCHES		SQ. FT.		TRANS.	
2		60 X 18		7.50		15.0	
1		36 X 18		12.00		12.0	
3		30 X 30		7.50		22.5	
7		9 X 15		0.94			
1		9 X 15		0.94			
STREETCARE SUBTOTAL				6.10		6.10	
STREETCARE TOTAL				7.00		7.00	



STREET NAME SIGN "C"



STREET NAME SIGN "C"

LOCATION		BASE										PULL BOX				POST				LUMINAIRE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
APPROACH		STATION		OFFSET		A		F		C		CLASS 1		CLASS 2		CLASS 3		STANDARD		DOUBLE		DRAIN TYPE		DRAIN TYPE		TYPE & CL		TYPE & S.B.L.		LEFT FRAME		RIGHT FRAME		INCLUDED																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
POST NUMBER		PULL BOX NUMBER		PULL BOX NUMBER		PULL BOX NUMBER		PULL BOX NUMBER		PULL BOX NUMBER		PULL BOX NUMBER		PULL BOX NUMBER		PULL BOX NUMBER		PULL BOX NUMBER		PULL BOX NUMBER		PULL BOX NUMBER		PULL BOX NUMBER		PULL BOX NUMBER		PULL BOX NUMBER		PULL BOX NUMBER		PULL BOX NUMBER		PULL BOX NUMBER																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
1	GRAND BLVD	30+77.95	12.4' E	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	12	11	10.5	9.5	6	1

POWER SUPPLY									
CIRCUIT BREAKER TRIP RATINGS					LIGHTING CONTROL * (ON POWER SUPPLY)				
LOCATION		POWER SUPPLY ASSEMBLY			POWER SUPPLY DISCONNECT			SERVICE ROLE	
APPROACH	STATION	OFFSET	CONTROLLER		MAIN BREAKER		120V VOLT CONTROL CABINET	CONTRACT FURNISH	UTILITY COMPANY
GRAND BLVD	35+55+89	27.8 LT	AUXILIARY BREAKER	MAIN BREAKER	SIGNALS	LIGHTING	100 Amps	30 Amps	FL
			15 Amps	40 Amps	100 Amps	100 Amps			

CONTROLLER ASSEMBLY AND AUXILIARY EQUIPMENT									
LOCATION		SYSTEM MASTER (CLOSED LOOP)		ON-OFF * SWITCH		CONNECTION INTERACT *		NEMA CABINET TYPE *	
APPROACH	STATION	OFFSET	TYPE	TYPE	TIME BASE	CLOSED LOOP	FIBER	170 SOFTWARE *	170 SOFTWARE *
GRAND BLVD	35+58.94	27.8 LT	I	II	LOCAL	NEMA	170	E	332

DETECTOR SCHEDULE	DETECTOR NUMBER	TYPE		PUSH BUTTON (B)	STANDARD DELAY/EXTEND *	WIRELESS DETECTION (D)
		INDUCTION LOOP	CALL UNIT *			
WIRELESS DETECTION	P1	1	1			
	P2	1				
	P3	1				
	P4	1				
	P5	1				
	P6	1				
	P7	1				
	P8	1				
STREETCARE TOTAL		8				

- (1) MODOT "D" PLUG SHALL BE WIRED INTO ALL NEMA CONTROLLERS. ALL ALARMS AND PREEMPTIONS SHALL BE TERMINATED ON THE CABINET BACK PANEL.
- (2) PAYMENT IS MADE FOR THE NUMBER OF 2-CHANNEL DETECTOR CARDS AS SHOWN BELOW THE ASSIGNMENT CHART.
- (3) THE CONTRACTOR SHALL FURNISH AND INSTALL A COMPLETE WIRELESS MAGNETOMETER VEHICLE DETECTION SYSTEM THAT IS COMPATIBLE WITH THE CITY'S EXISTING CENTRAL SIGNAL SOFTWARE, OR BE AN EQUIVALENT APPROVED BY CITY STAFF.
- (4) THE CONTRACTOR SHALL PROVIDE AN ETHERNET ENABLED NEMA TS/2 SIGNAL CONTROLLER. CABINET SETUP SHALL BE TS/2 TYPE 1 WITH SXLG CONNECTORS FOR APPLICABLE SIGNAL ELEMENTS. THE SIGNAL CONTROLLER SHALL BE FULLY COMPATIBLE WITH THE CITY'S EXISTING CENTRAL SIGNAL SOFTWARE, OR BE AN EQUIVALENT APPROVED BY CITY STAFF.
- (5) THE CONTRACTOR SHALL PROVIDE AND INSTALL A PAD MOUNTED POWER SUPPLY FOR 120V SIGNAL AND 240V, 4 CIRCUIT BREAKER. THE CONTRACTOR SHALL ALSO PROVIDE AND INSTALL AN UNINTERRUPTIBLE POWER SUPPLY FOR THE SIGNAL POWER SUPPLY AND OTHER CONTROLLER CABINET. SEE DETAILS INCLUDED IN THESE PLANS AND SPECIAL PROVISIONS FOR FURTHER INFORMATION AND REQUIREMENTS.
- (6) EACH PEDESTRIAN PUSH BUTTON SHALL BE CONSIDERED PART OF AN INDIVIDUAL ACCESSIBLE PEDESTRIAN SIGNAL (APS) UNIT. WHERE PUSH BUTTONS ARE SHOWN IN THE PLANS, AN INDIVIDUAL APS UNIT SHALL BE INSTALLED. THE PEDESTRIAN PUSH BUTTONS SHALL BE MOUNTED 42" ABOVE THE PEDESTRIAN PATH, AND WITHIN A 10' SIDE REACH OF ADJACENT LEVEL LANDING AREA. SEE SPECIAL PROVISIONS FOR DETAILED INFORMATION.

NEMA DETECTOR ASSIGNMENT (2)									
LOCATION		SYSTEM MASTER (CLOSED LOOP)		ON-OFF * SWITCH		CONNECTION INTERACT *		NEMA CABINET TYPE *	
APPROACH	STATION	OFFSET	TYPE	TYPE	TIME BASE	CLOSED LOOP	FIBER	170 SOFTWARE *	170 SOFTWARE *
GRAND BLVD	35+58.94	27.8 LT	I	II	LOCAL	NEMA	170	E	332

NEMA LOAD SWITCH ASSIGNMENTS															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
N/U	02	NB	N/U	04	EB	NBL	SB	06	NBL	08	VB	N/U	10	12	14

IMPROVEMENTS
STBG-5617(605) / CMAQ-5617(606)

Owner:



35 EAST WACKER
SUITE 900
CHICAGO, IL 60601
312.641.0770
www.smithgroup.com



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



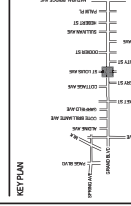
St. Louis, Missouri



ISSUED FOR

[illegible]

SEALS AND SIGNATURES



DRAWING TITLE

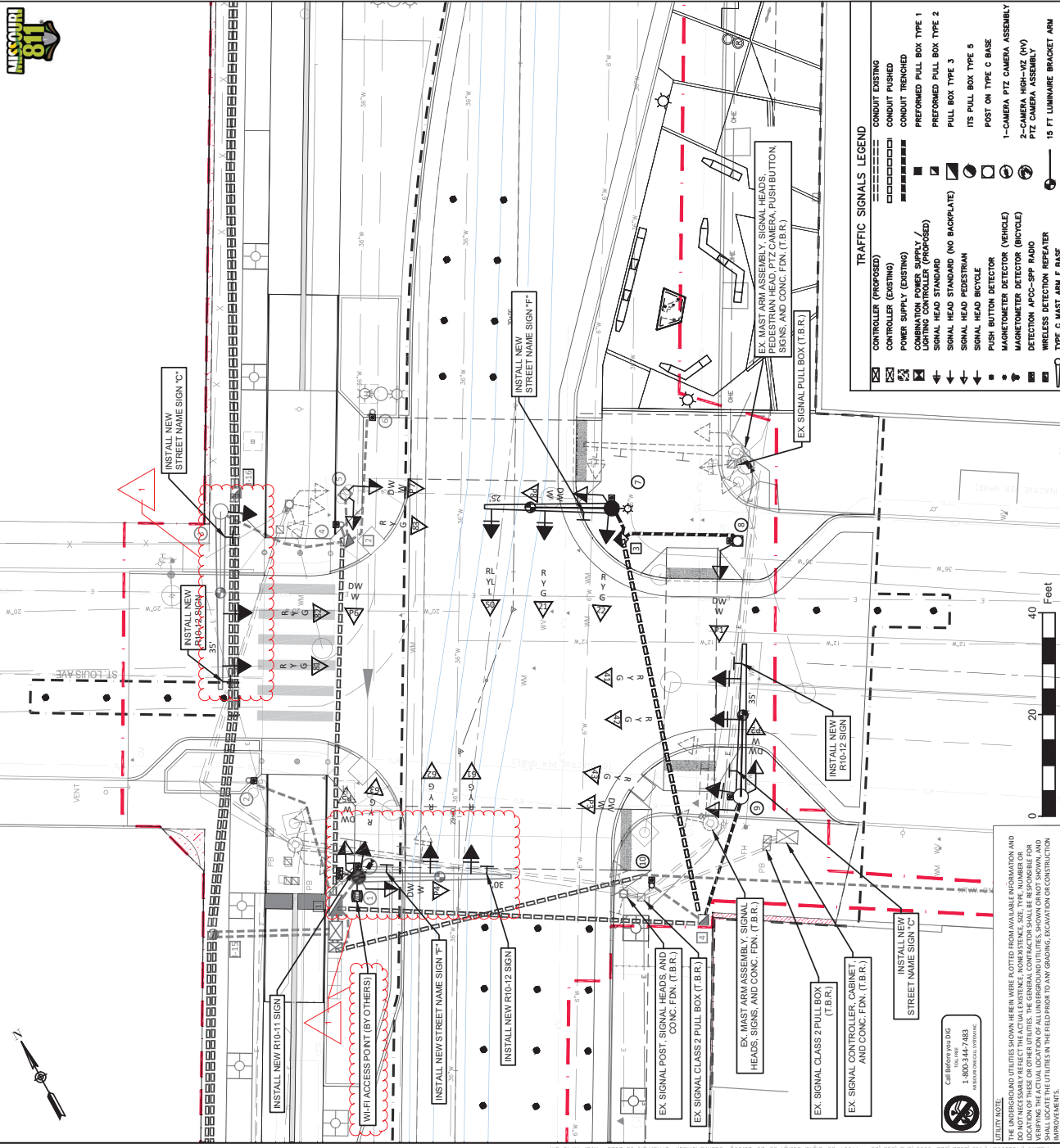
SIGNAL INTERSECTION
PLAN - ST. LOUIS AVE

PROJECT NUMBER	14004.00
DRAWING NUMBER	

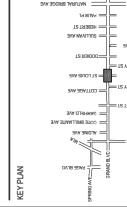
156 OF 231

1. THE INSTALLATION OF THE TRAFFIC SIGNALS SHALL BE IN ACCORDANCE WITH THE MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION'S STANDARD SPECIFICATIONS, LATEST EDITION.

- [illegible]



UTILITY NOTE: 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 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 FIELD PRIOR TO ANY GRADING, EXCAVATION OR CONSTRUCTION IMPROVEMENTS.



QUANTITY		MATERIAL NUMBER	SIZE		AREA	TOTAL AREA EACH SIGN	SIGNAL MOUNTING HARDWARE	
			INCHES	SQ. FT.			ITEM NO.	ITEM QTY
1		2	2 STREET NAME SIGN, T	60 X 18	7.20	15.2	2	90208.34
2		2	2 STREET NAME SIGN, T	72 X 18	9.00	18.2	2	90208.34
3		1	1 STREET NAME SIGN, T	36 X 18	4.50	9.1	1	90208.34
4		1	1 STREET NAME SIGN, T	36 X 24	12.00	25.2	1	90208.34
5		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
6		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
7		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
8		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
9		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
10		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
11		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
12		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
13		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
14		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
15		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
16		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
17		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
18		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
19		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
20		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
21		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
22		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
23		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
24		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
25		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
26		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
27		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
28		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
29		2	2 10 X 10	9 X 15	0.84	1.68	2	90208.34
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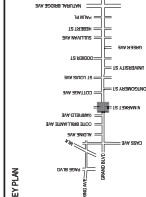
Owner:

Great Rivers Greenway

385 EAST WACKER
SUITE 900
CHICAGO, IL 60601
312.641.0770
www.smithgroup.com

[illegible]

SEALS AND SIGNATURES



RAYMONG TITLE

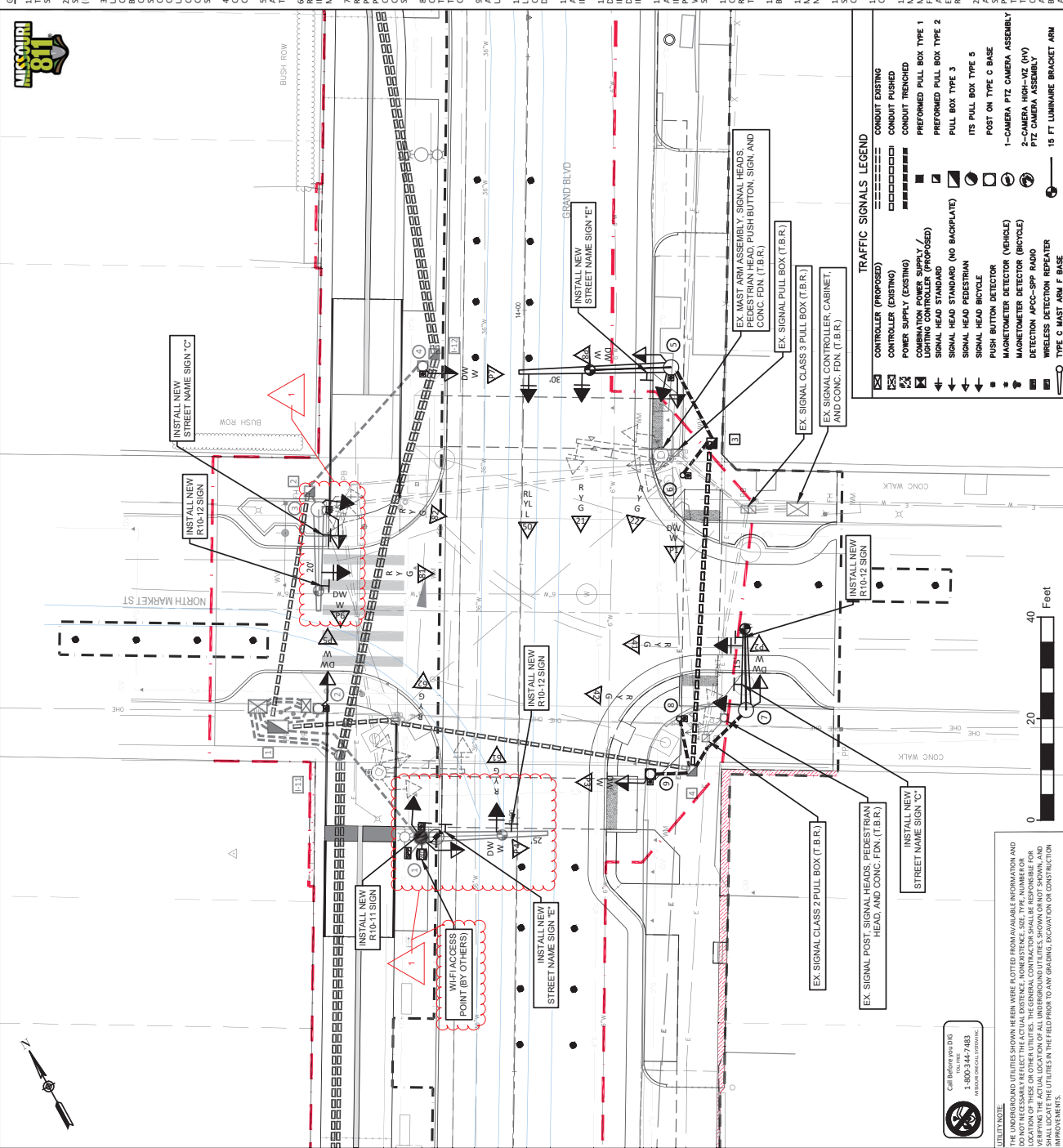
PROJECT NUMBER	14004.000
DRAWING NUMBER	

52 OF 231

52 OF 231

GENERAL NOTES

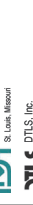
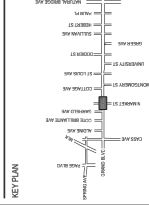
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TILT/ITY NOTE:

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 FIELD PRIOR TO ANY GRADING, EXCAVATION OR CONSTRUCTION IMPROVEMENTS.

 Call Before you DIG
TOLL FREE
1-800-344-7483
ASK FOR ONE CALL STOPPING

[illegible]

DRAWING TITLE

D-37B - N MARKET ST

PROJECT NUMBER

14004.000

DRAWING NUMBER

E2-127

164 OF 231

[illegible]

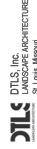
- (1) ALL POWER AND COMMUNICATION CABLES FOR THE WIRELESS DETECTION SYSTEM SHALL BE INCIDENTAL TO THE WIRELESS DETECTION SYSTEM - COMPLETE. NO SEPARATE PAYMENT WILL BE MADE.
- (2) ALL POWER, VIDEO, AND COMMUNICATION CABLES FOR THE PTZ CAMERA SYSTEM SHALL BE INCIDENTAL TO THE PTZ CAMERA SYSTEM - COMPLETE. NO SEPARATE PAYMENT WILL BE MADE.

GRAND BLVD. AT MARKET ST.
INTERSECTION



SMITHGROUP

35 EAST WACKER
SUITE 900
CHICAGO, IL 60601
312.641.0770
www.smithgroup.com



ISSUED FOR	REV	DATE
ROBERTSON #1	1	4/14/2025
ISSUED FOR BUD		12/19/2024



DRAWING TITLE

D-37D - N MARKET ST

PROJECT NUMBER	14004 000
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DRAWING NUMBER

E2-129

166 OF 231

LEGEND

— 3" — PROPOSED CONDUIT CONTAINING CABLE WITH SIZE

_____ CABLE

X-XC
MULTI-CONDUCTOR CABLE #16 AWG (UNLESS OTHERWISE INDICATED)

PULL BOX WITH NUMBER ☒

POST WITH NUMBER ☒

⊗ POST WITH MAST ARM

ⓧ POST WITH MAST ARM AND LUMINAIRE

SIGNAL HEAD WITH NUMBER

☒ SIGNAL CONTROLLER

POWER SUPPLY

SPP DETECTION APCC-SPP RADIO

RPT WIRELESS DETECTION REPEATER

 ACCESSIBLE PEDESTRIAN SIGNAL (APS) UNIT

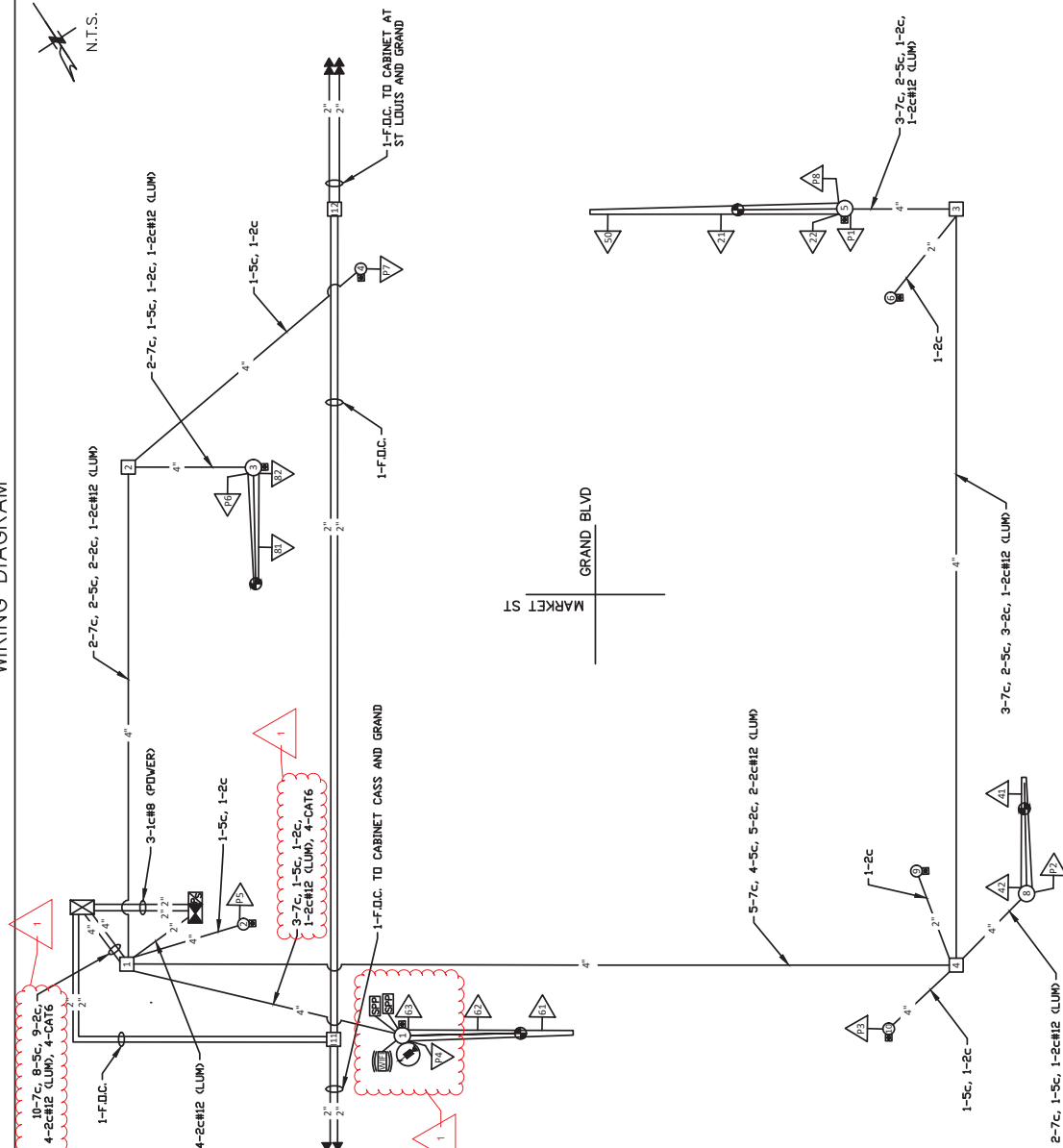
 SINGLE CAMERA PAN-TILT-ZOOM (PTZ) CAMERA ASSEMBLY

*DASHED LINES INDICATE EXISTING EQUIPMENT

GRAND BLVD. AT MARKET ST.

INTERSECTION

WIRING DIAGRAM



NOTE: WIRING DIAGRAM DEPICTS FULLY INSTALLED SIGNAL ELEMENTS. SEE D-37B AND PLAN SHEETS FOR

Owner:
Great Rivers Greenway

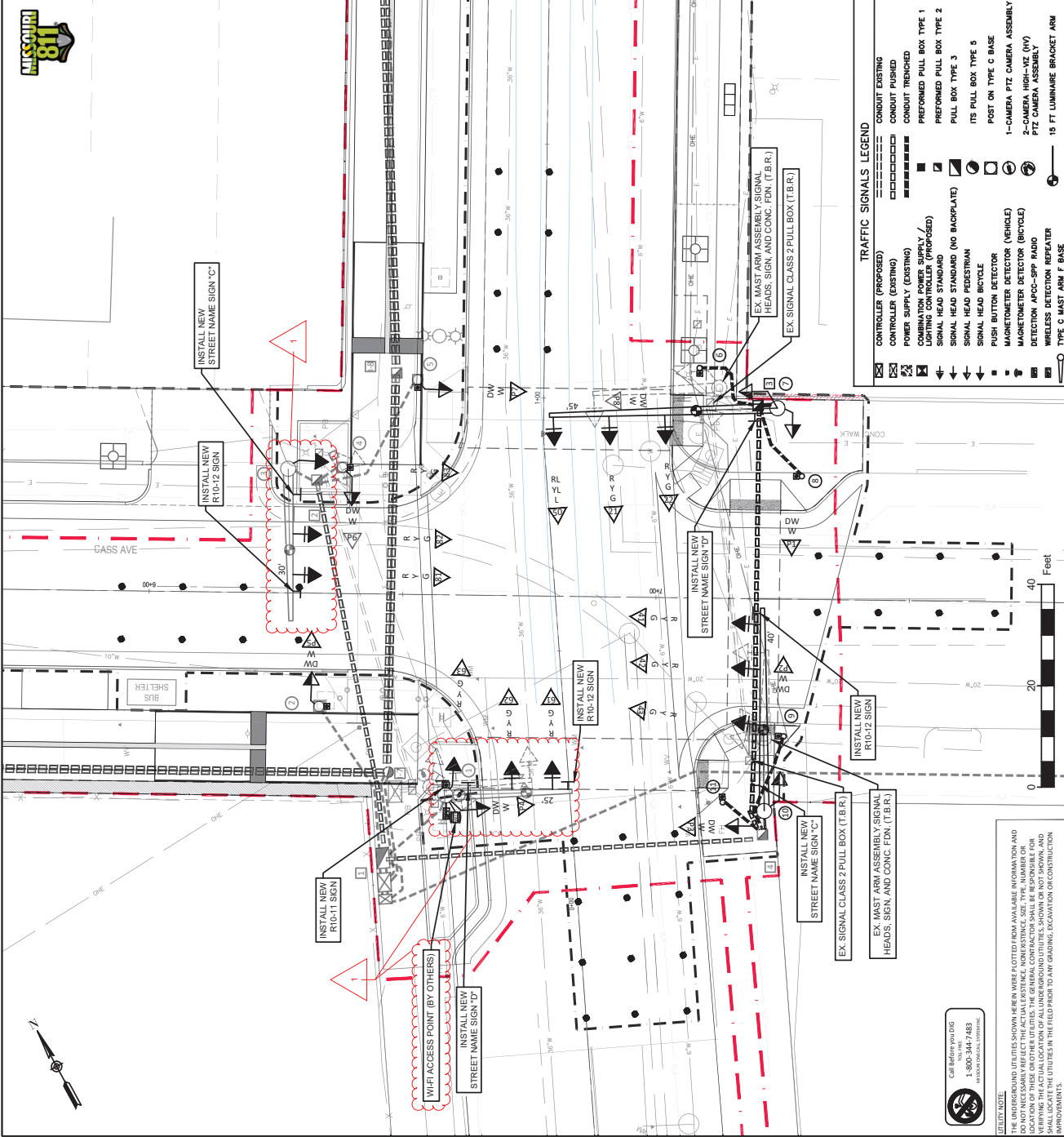
35 EAST WACKER
SUITE 900
CHICAGO, IL 60601
312.641.0770
www.smithgroup.com

[illegible][illegible]

PROJECT NUMBER	14004.00
DRAWING NUMBER	

168 OF 231

20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING ALL EQUIPMENT REQUIRED FOR A FULLY OPERATIONAL WIRELESS DETECTION SYSTEM AT THE INTERSECTION. PAYMENT FOR ALL QUANTITIES SHOWN ON THE PLANS ARE FOR INFORMATIONAL PURPOSES ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE MANUFACTURER TO DETERMINE THE SPECIFIC WIRELESS DETECTION SYSTEMS CAPABLE OF STOP BAR AND ADVANCED DETECTION AT THE INTERSECTION. NO ADDITIONAL PAYMENT WILL BE MADE SHOULD THE INSTALLATION OF ADDITIONAL EQUIPMENT BE REQUIRED AT THE INTERSECTION.



UTILITY NOTE: 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 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 FIELD PRIOR TO ANY GRADING, EXCAVATION OR CONSTRUCTION IMPROVEMENTS.

STREET NAME SIGN "C"

INTERSECTION

STREETSCAPE SUBTOTAL CONVENTIONAL	100	100
STREETSCAPE TOTAL CONVENTIONAL	100	100

E2-132

D-37A - CASS AVE

GRAND AND CASS
AVENUES
CORRIDOR
IMPROVEMENTS

STBG-4617(605) / CMAQ-5617(606)

Client:



SMITHGROUP

35 EAST WACKER
SUITE 900
CHICAGO, IL 60601
312.641.0770
www.smithgroup.com



DAVID MASON AND ASSOCIATES
811 N. LAKE STREET
SUITE 200
CHICAGO, IL 60610
312.641.0770



DTLS, Inc.
LANDSCAPE ARCHITECTURE
811 N. LAKE STREET
SUITE 200
CHICAGO, IL 60610



LOCHMUELLER GROUP
811 N. LAKE STREET
SUITE 200
CHICAGO, IL 60610

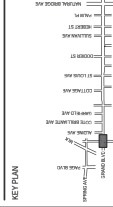


GRACE GROUP
811 N. LAKE STREET
SUITE 200
CHICAGO, IL 60610

ISSUED FOR REV. DATE

1	4/14/2025
2	12/16/2024

SEAL AND SIGNATURES



DRAWING TITLE

D-37B - CASS AVE

PROJECT NUMBER 14004.000

DRAWING NUMBER

E2-133

170 OF 231

CONDUIT

CABLE

CONDUIT														CABLE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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SMITHGROUP

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ILLINOIS
LANDSCAPE ARCHITECTURE



TRAFFIC ENGINEER
St. Louis, Missouri

A PRICE GROUP



GRICE GROUP
ARCHITECTURE

St. Louis, Missouri

REV	ED FOR
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INDUIM #1 _____ 1

LEGEND

— 3" — PROPOSED CONDUIT CONTAINING CABLE WITH SIZE

— CABLE

X-XC MULTI-CONDUCTOR CABLE #16 AWG (UNLESS OTHERWISE INDICATED)

PULL BOX WITH NUMBER

POST WITH NUMBER

POST WITH MAST ARM

POST WITH MAST ARM AND LUMINAIRE

SIGNAL HEAD WITH NUMBER

SIGNAL CONTROLLER

POWER SUPPLY

DETECTION APCC-SPP RADIO

WIRELESS DETECTION REPEATER

ACCESSIBLE PEDESTRIAN SIGNAL (APS) UNIT

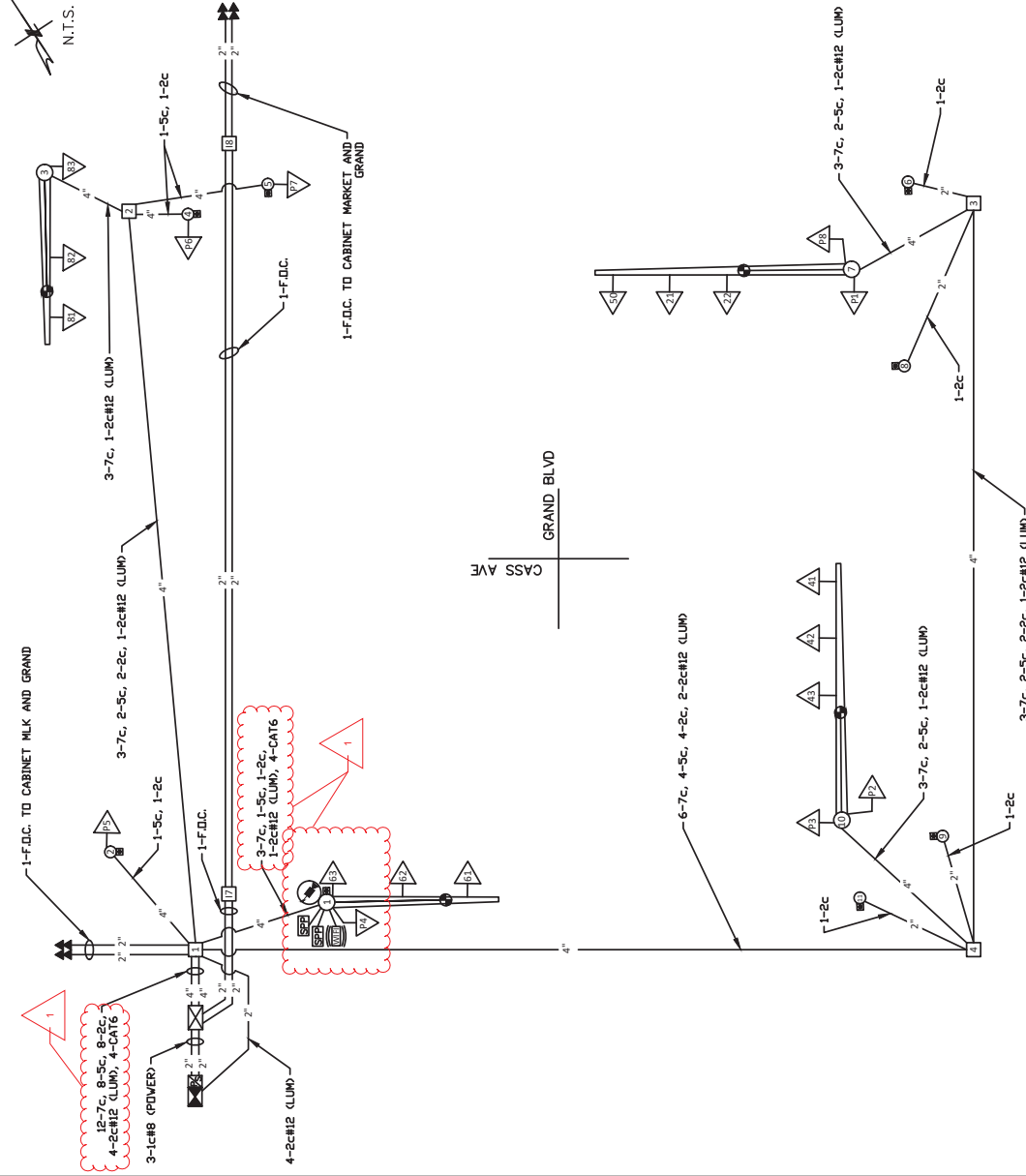
SINGLE CAMERA PAN-TILT-ZOOM (PTZ) CAMERA ASSEMBLY

*DASHED LINES INDICATE EXISTING EQUIPMENT

GRAND BLVD. AT CASS AVE.

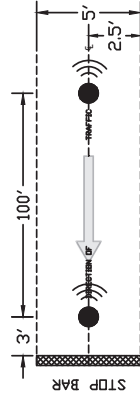
INTERSECTION

WIRING DIAGRAM



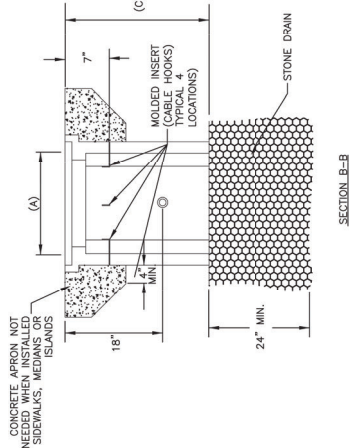
NOTE: WIRING DIAGRAM DEPICTS FULLY INSTALLED SIGNAL ELEMENTS. SEE D-37B AND PLAN SHEETS FOR CARRYING TO BE INSTALLED ON THIS PROJECT.

SENSYS DETECTION INSTALLATION DETAILS



CYCLE TRACK (BIKES + SCOOTERS)
DETECTION DETAIL AT STOP BAR

DETAIL "B"
TRAFFIC SIGNAL PULLBOXES



NUMBER OF ENTERING CONDUCTORS	CLASS	PREFORMED PULL BOX MINIMUM DIMENSIONS		
		A	B	C
< 23	1	17"	30"	22"
23 - 68	2	24"	36"	24"
> 68	3	30"	48"	36"

PROJECT NUMBER

14004,000

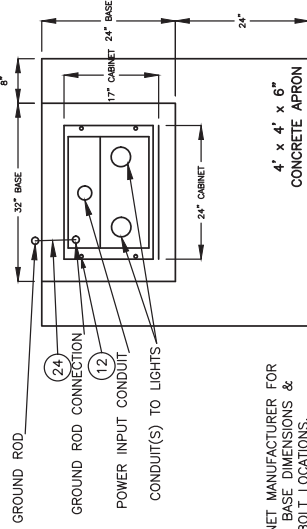
DRAWING NUMBER

E2-501

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TRAFFIC SIGNAL POWER SUPPLY

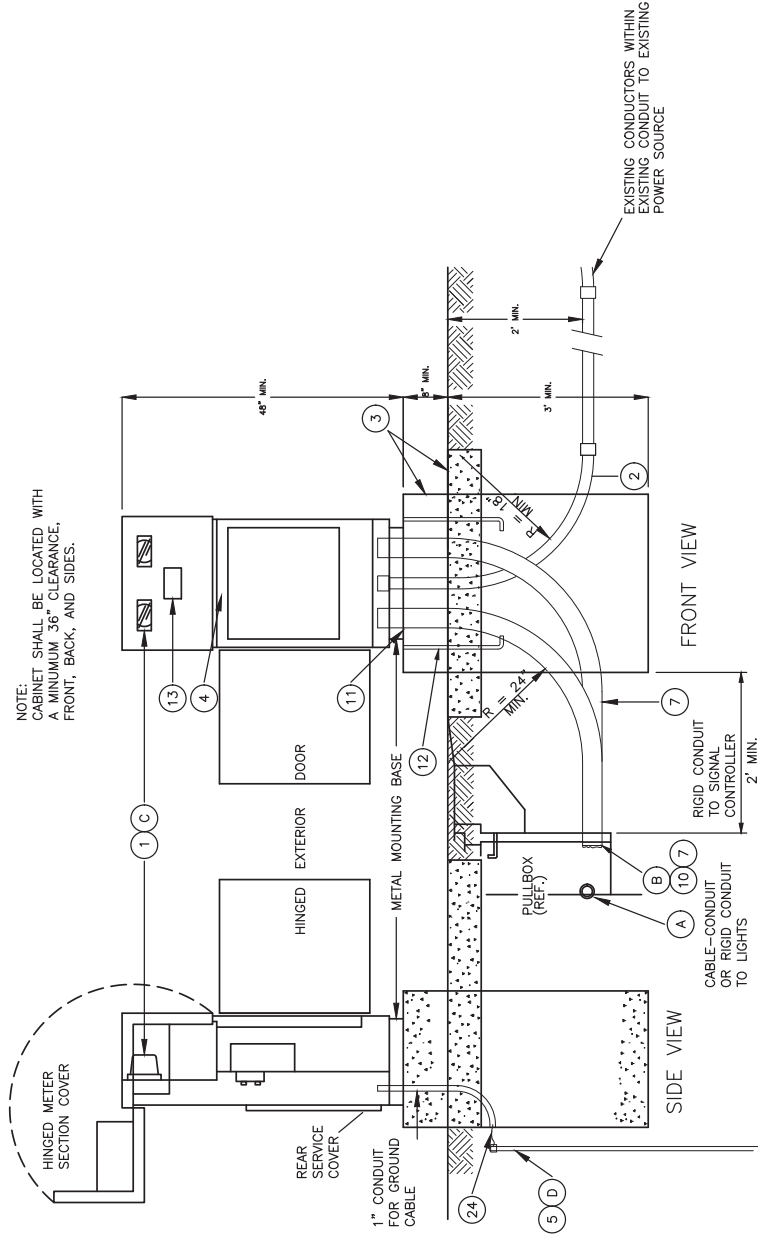
TRAFFIC SIGNAL POWER SUPPLY



SEE CABINET MANUFACTURER FOR
MOUNTING BASE DIMENSIONS &
ANCHOR BOLT LOCATIONS.

TOP VIEW

NOTE:
CABINET SHALL BE LOCATED WITH
A MINIMUM 36" CLEARANCE,
FRONT, BACK, AND SIDES.

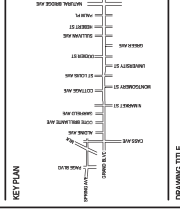


LIST OF MATERIALS	
ITEM	DESCRIPTION
1	METER SCOTCH, 200 AMP
2	PVC CONDUIT, 2" MIN. TO UTILITY CO. FACILITIES
3	WELLS 8" DIA. 10' MIN. TO GROUND
4	NEANS 8" DIA. 10' MIN. TO GROUND, CANNET
5	GROUND ROD, 3/4" DIA. 8" MIN. W/IN. IN SOIL
6	RIGID CONDUIT TO FIRST PULL BOX (SEE PLANS FOR SIZE)
7	PURGE DUCT SPACANT
8	ANCHOR BOLTS, 1/2" X 18" LONG
9	ANCHOR BOLTS, 1/2" X 18" LONG, HOT DIP GALVANIZED, 4 REQUIRED
10	ANCHOR BOLTS, 1/2" X 18" LONG, HOT DIP GALVANIZED, 4 REQUIRED
11	ANCHOR BOLTS, 1/2" X 18" LONG, HOT DIP GALVANIZED, 4 REQUIRED
12	ANCHOR BOLTS, 1/2" X 18" LONG, HOT DIP GALVANIZED, 4 REQUIRED
13	WEATHERPROOF ADHESIVE LABEL VINYL RASSED LETTERING
14	WEATHERPROOF ADHESIVE LABEL VINYL RASSED LETTERING
24	SPRING MISC 2' 8" MIN.

NOTES

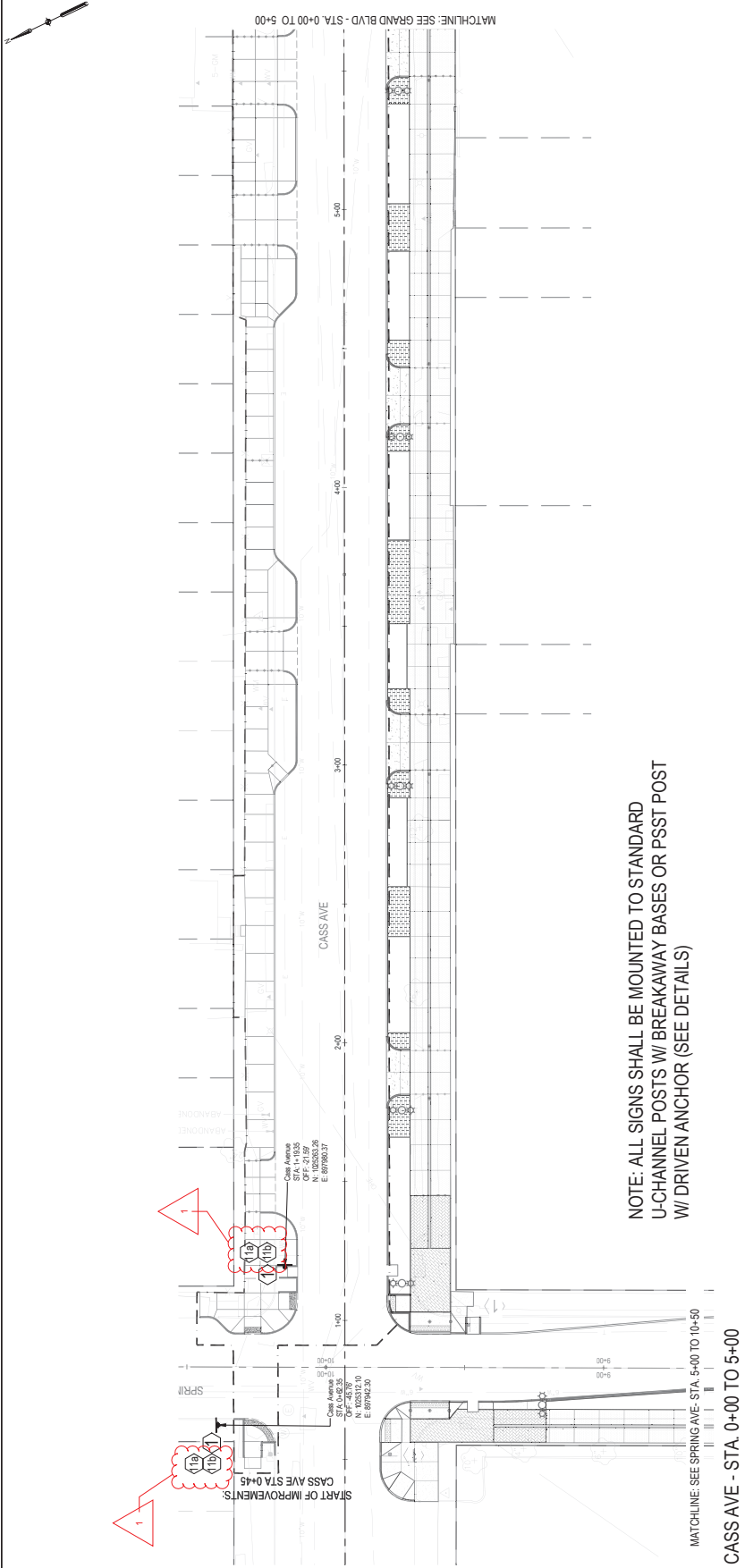
- A ☐ IF CABLE-CONDUIT IS SPECIFIED, THE CONDUIT SHALL BE CUT AWAY FROM CABLES BY THE CONTRACTOR.
- B ☐ WAST AWAY LIGHTING SHALL BE 120-VOLT CIRCUIT USING MOOT LULU LUMINAIRES.
- C ☐ CONTROLLED CABINET WITH POWER SUPPLY SHALL BE ALUMINUM OR STAINLESS STEEL, ALL HARDWARE, PINCES, CATCHES, ETC. SHALL BE STAINLESS STEEL.
- D ☐ METAL SOCKET AND OTHER EQUIPMENT AND MATERIAL SHALL BE WELL APPROVED, PROVIDING POWER.
- E ☐ IF SURFACE CONDITIONS DISTURB WHICH PROHIBIT THE PLACEMENT OF THE GROUND ROD, THE GROUND ROD MAY BE DRIVEN IN AN ADJACENT LOCATION TO A MINIMUM OF 10 FEET, BUT NOT LESS THAN 10 FEET, IN AT LEAST 5" DEEP CONNECTION TO GROUND ROD SHALL BE DOWNELED.
- F ☐ THE COMPANY SHALL DECIDE IF LIGHTNING ARRESTERS ARE TO BE CONNECTED TO THE LOAD OR LINE SIDE OF THE TRANSFORMER. THE UTILTY COMPANY SHALL ALSO BE NOTIFIED.

ISSUED FOR	REV	DATE
AGENDUM #1	1	4/14/2025
ISSUED FOR BID		12/18/2024
SEAL & REMITTANCE		



SIGNAL DETAILS

PROJECT NUMBER 14004, 0000
DRAWING NUMBER E2-502
175 OF 231



NOTE: ALL SIGNS SHALL BE MOUNTED TO STANDARD
U-CHANNEL POSTS W/ BREAKAWAY BASES OR PSST POST
W/ DRIVEN ANCHOR (SEE DETAILS)

SHEET NOTES

- 1. ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FABRICATED AS DETAILED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL.
- 2. ALL SIGNS SHALL BE LOCATED SUCH THAT A MINIMUM OF 10' CLEARANCE FROM THE FACE OF CURB IS ACHIEVED.

LEGEND

PROPERTY LINE	2" OF SEWER LINE	GAS METER	TELEPHONE MANHOLE	SEWER MANHOLE	PROPOSED SIGN	REG. SIGNED LMT.	RECTANGULAR
RIGHT-OF-WAY LINE	24" SEWER LINE	UTILITY VALVE BOX	LIGHT STANDARD	YARD DRAIN	PROPOSED SIGN (BACK TO BACK)	WITH (SPEED LIMIT)	WITH (SPEED LIMIT)
SEWER LINE	MANHOLE	WATER METER	TRAFFIC SIGNAL	SEWER JUNCTION	R 41 (STOP)	REG. ONE WAY (LEFT)	REG. ONE WAY (LEFT)
OVERHEAD ELECTRIC LINE	WATER METER	REGISTRATION	STREET SIGN	PROJECT LIMITS	W 6-7 1/2 Diagonal (down arrow)	REG. ONE WAY (RIGHT)	REG. ONE WAY (RIGHT)
ELECTRIC LINE	WATER METER	WATER VALVE	PARKING METER		R 41 (STOP)		
WATER LINE	WATER VALVE	WATER VALVE	ROLLUP		W 6-7 1/2 Diagonal (down arrow)		
GAS LINE	WATER VALVE	FIRE HYDRANT	STORM INLET		R 41 (STOP)		
COMMUNICATIONS LINE	WATER VALVE	WATER VALVE	GATE INLET		R 41 (STOP)		

REGULATORY SIGNAGE PLANS

DRAWING TITLE	REGULATORY SIGNAGE PLANS
PROJECT NUMBER	14004.000
DRAWING NUMBER	CS7-103
DATE	1/15/2021

GRAND AND CASS
AVENUES
CORRIDOR
IMPROVEMENTS

Owner:
Great Rivers Greenway

SMITHGROUP

35 EAST WACKER
SUITE 900
CHICAGO, IL 60601
312.641.0770
www.smithgroup.com

DAVID MASON AND ASSOCIATES

1000 N. LAKE STREET
SUITE 200
CHICAGO, IL 60610
312.641.0770
www.dma-ill.com

DTLS, Inc.

LANDSCAPE ARCHITECTURE
1000 N. LAKE STREET
SUITE 200
CHICAGO, IL 60610
312.641.0770
www.dtls.com

LOCHMEYER GROUP

ARCHITECTURE
1000 N. LAKE STREET
SUITE 200
CHICAGO, IL 60610
312.641.0770
www.lochmeyer.com

GRACE GROUP

ARCHITECTURE
1000 N. LAKE STREET
SUITE 200
CHICAGO, IL 60610
312.641.0770
www.gracegroup.com

SEAL AND SIGNATURES

1000 N. LAKE STREET
SUITE 200
CHICAGO, IL 60610
312.641.0770
www.sealandsignatures.com

KEY PLAN



Great Rivers Greenway

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

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

GRICE GROUP
ARCHITECTURE
St. Louis, Missouri

PROJECT NUMBER

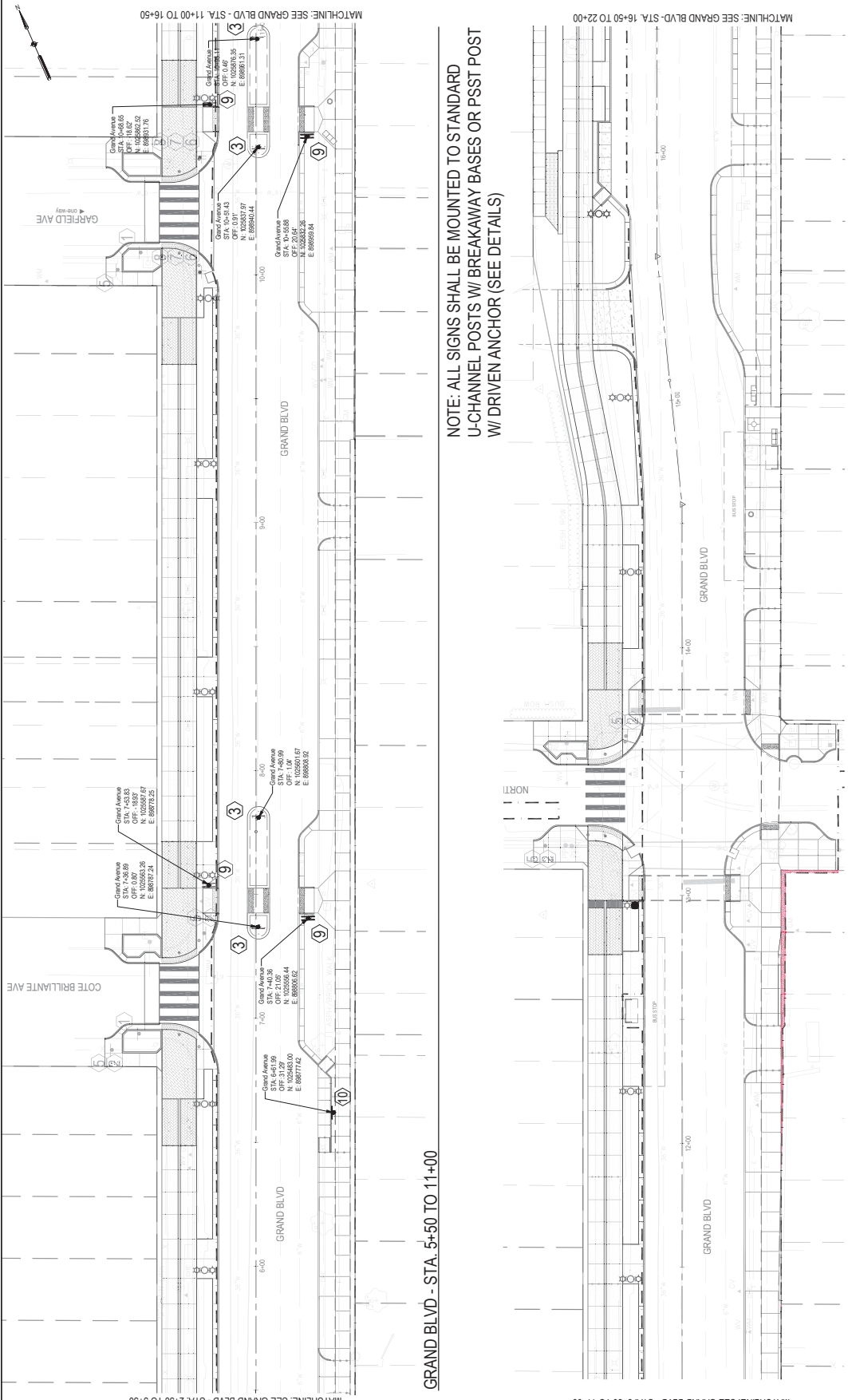
14004,000

DRAWING NUMBER

CS7-104

171 OF 231





GRAND BLVD - STA. 5+50 TO 11+00

NOTE: ALL SIGNS SHALL BE MOUNTED TO STANDARD
U-CHANNEL POSTS W/ BREAKAWAY BASES OR PSST POST
W/ DRIVEN ANCHOR (SEE DETAILS)

MATCHLINE: SEE GRAND BLVD - STA. 5+50 TO 11+00

MATCHLINE: SEE GRAND BLVD - STA. 16+50 TO 22+00

GRAND BLVD - STA. 11+00 TO 16+50

SHEET NOTES

- 1. ALL SIGNS SHOWN WITH DIMENSIONS ARE TO BE FABRICATED AS
DETAILED IN THE MANUAL ON HIGHWAY TRAFFIC CONTROL.
- 2. ALL SIGNS SHALL BE LOCATED SUCH THAT A MINIMUM OF 10'
CLEARANCE FROM THE FACE OF CURB IS ACHIEVED.

LEGEND



Owner: Great Rivers Greenway

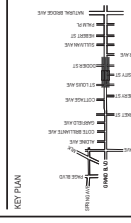
35 EAST WACKER
SUITE 900
CHICAGO, IL 60601
312.641.0770
www.smifgroup.com

DTLS DTLS, Inc.
LANDSCAPE ARCHITECTURE

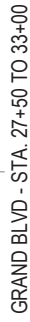
TRAFFIC ENGINEERING GROUP
St. Louis, Missouri

ISSUED FOR

ADJUDICATOR #1	4/14/2025
ISSUED FOR BID	12/19/2024
SEALS AND SIGNATURES	



PROJECT NUMBER 14004.000
 DRAWING NUMBER CS7-107
 180 OF 231



NOTE: ALL SIGNS SHALL BE MOUNTED TO STANDARD
U-CHANNEL POSTS W/ BREAKAWAY BASES OR PSST POST
W/ DRIVEN ANCHOR (SEE DETAILS)

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Grand Avenue
STA 3+50-38+03
GPR 4685
4686
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SHEET NOTES

1. ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FABRICATED AS DETAILED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (CURRENT EDITION)
2. ALL SIGNS SHALL BE LOCATED SUCH THAT A MINIMUM OF 18" CLEARANCE FROM THE FACE OF CURB IS ACHIEVED.

PROPERTY LINE	_____
RIGHT-OF-WAY LINE	_____
UNDERGROUND	_____
UNDERGROUND	_____
OVERHEAD	_____
ELECTRIC LINE	_____
WATER LINE	_____
GAS LINE	_____
COMMUNICATIONS	_____

- [illegible]

- | | | | | | |
|----------------------------|--------------------|----------------------|-------------------|-------------------------------------|-----------------------|
| 4 | 5 | 6 | 9 | 10 | 11x |
| RD-1 (SPEED LIMIT, 35 MPH) | W17-1 (SPEED HUMP) | RD-3 (ONE WAY, LEFT) | RD-2 (AHEAD WORK) | STREET NAME SIGN (SEE DETAIL SHEET) | RD-5 (ONE WAY, RIGHT) |
| RD-1 (SPEED LIMIT, 35 MPH) | W17-1 (SPEED HUMP) | RD-3 (ONE WAY, LEFT) | RD-2 (AHEAD WORK) | STREET NAME SIGN (SEE DETAIL SHEET) | RD-5 (ONE WAY, RIGHT) |

ENTERING



SMITH GROUP

35 EAST WACKER
SUITE 900
CHICAGO, IL 60601
312.641.0770
www.smithgroup.com



DTLS
LANDSCAPE ARCHITECTURE

DTLS, Inc.
LANDSCAPE ARCHITECTURE
St. Louis, Missouri

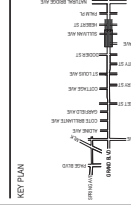


GRICE GROUP
ARCHITECTURE
St. Louis, Missouri

ISSUED FOR	REV	DATE
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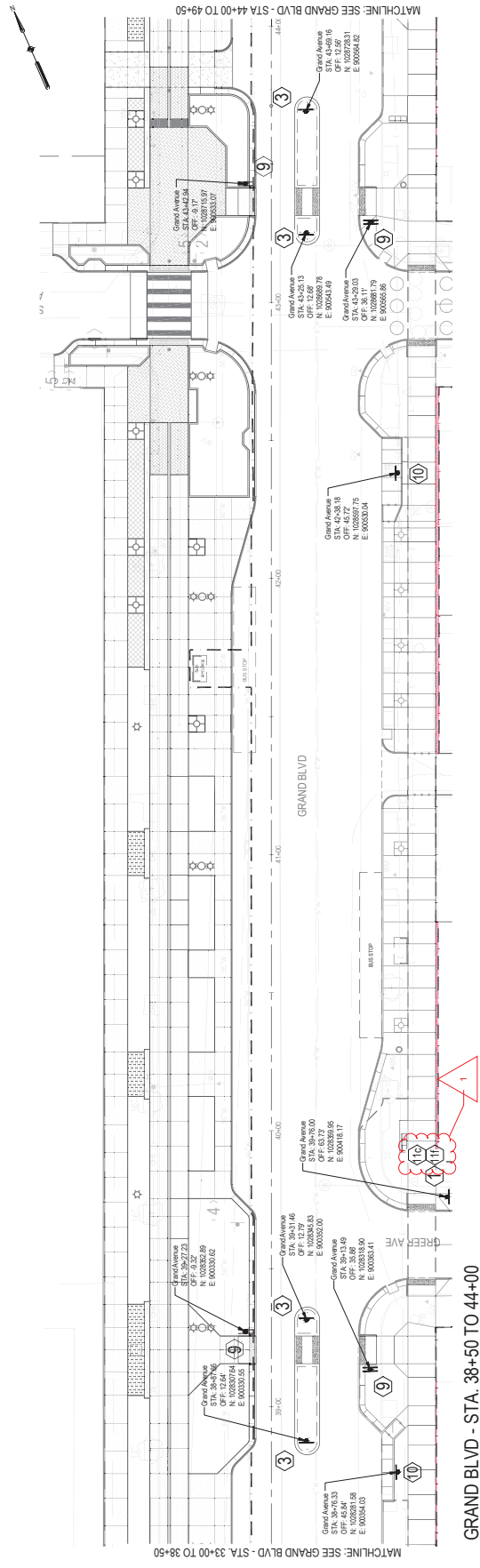
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SEALS AND SIGNATURES

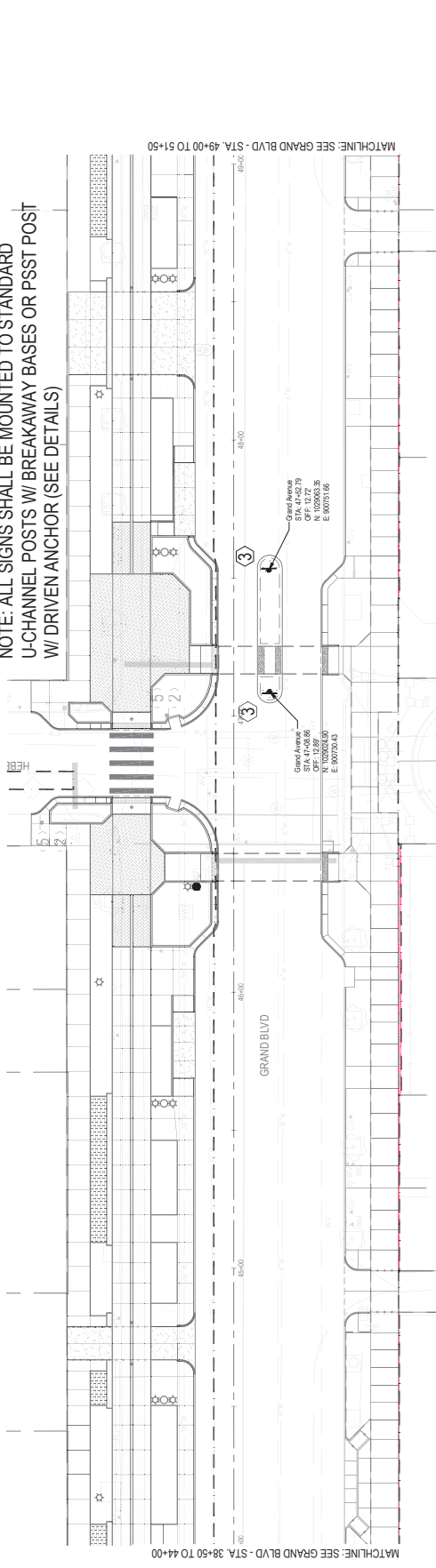


DRAWING TITLE

PROJECT NUMBER	14004.000
DRAWING NUMBER	CS7-108
181 OF 231	



NOTE: ALL SIGNS SHALL BE MOUNTED TO STANDARD U-CHANNEL POSTS W/ BREAKAWAY BASES OR PSST POST W/ DRIVEN ANCHOR (SEE DETAILS)



GRAND BLVD - STA. 44+00 TO 49+50

SHEET NOTES	LEGEND
1. ALL SIGNS SHOWN WITH DIMENSIONS ARE TO BE FABRICATED AS DETAILLED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL.	PROPERTY LINE _____
2. ALL SIGNS SHALL BE LOCATED SUCH THAT A MINIMUM OF 1' CLEARANCE FROM THE FACE OF CURB IS MAINTAINED.	RIGHT-OF-WAY LINE _____
	24" SIDEWALK _____
	ELECTRIC LINE _____
	CORNERPAD _____
	ELECTRIC LINE _____
	WATER LINE _____
	GAS VALVE _____
	COMMUNICATIONS LINE _____

