

October 27, 2016

RE: Notice to Bidders

Great Rivers Greenway District Centennial Greenway Phase IIA

Federal Project Number: TAP-9900(677) Burns & McDonnell Project Number: 85395

Addendum Number 01

Organizations intending to submit a bid on Centennial Greenway Phase IIA are hereby advised of the following additions and modifications to the bidding documents:

- 1. Revised Bid Opening Date November 15, 2016 at 2:00 pm Central Standard Time. The Invitation to Bid attached to Addendum 1 replaces the item in the project manual.
- 2. Attached is the agenda from the pre-bid meeting.
- 3. Attached are meeting minutes from the pre-bid meeting. Includes question and answers.
- 4. Attached is the sign in sheet of attendees at the pre-bid meeting.
- 5. Notice to Contractors is replaced with the attached notice in this addendum. Bid opening date, section 3 and section 4 were modified.
- 6. Contract agreement is replaced with the attached agreement. Section 3 of the agreement was modified.
- 7. The general provisions (Form GRG 8) and related documents are replaced with the attached General Conditions of the Contract for Construction. References to retainage have been removed. Also, added in daily resolution of quantities installed on the project with Developer's Representative.
- 8. JSP 000003 is replaced with the attached job special provision page. Contact information has been updated for the construction manager.
- 9. JSP 00007B is added to the project manual. The JSP is a CADD release for bidders requesting electronic files. The release is required to be executed prior to releasing CADD files to bidders.
- 10. JSP 000002 is replaced with the attached job special provision. Items have been modified in the section 2 and 3. Sections 4, 5 and 6 were added to the JSP.

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- 11. JSP 000085 is replaced with the attached job special provision for Additional Mobilization for Seeding pay item. Allowance has been reduced from \$10,000 to \$9,600 (16 mobilizations * \$600/mobilization = \$9,600).
- 12. JSP 000082 is replaced with the attached job special provision. Manufacturer information on the Owner Furnished Bike Counter has been included for reference.
- 13. All permit costs from the City of Saint Charles are waived. This includes City of Saint Charles Driveway permit.
- 14. Bidders are required to acknowledge addendums. Return this addendum signed.
- 15. Pre-qualification packages have been received from four suppliers. A pre-qualification list of the approved suppliers will be issued in a future addendum.
- 16. Questions sent in before Thursday, November 10, 2016 at 2:00 pm Central Standard Time will be answered.

Α	CKNOWLEDGEMENT ADDENDUM NO. 1
(Please Sign and Include With Bid)	
Addendum Received By:	Date
(Signature o	of Authorized Representative)
Name:	Title:
(Printed Name of Authorized	Representative)
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Sincerely,

Dennis Koscielski, P.E.

Design Team Project Manager

Centennial Greenway Phase IIA **Addendum Number 01** Page 3

DK/DK

cc: MoDOT – Vince G. Kaimann GRG – Patrick Owens Construction Manager – Craig Schluter Alta – Paul Wojciechowski Cole – Jeremy Roach

INVITATION TO BID: NOTICE TO CONTRACTORS

Sealed bids for Centennial Greenway – Phase IIA will be received by Great Rivers Greenway District, 6178 Delmar Boulevard, St. Louis, MO 63112, until **2:00 PM November 15, 2016** at which time the bids will be publicly opened and read aloud.

Plans, specifications, and bid packages will be available beginning October 11, 2016, from Great Rivers Greenway website at http://greatriversgreenway.org/ http://greatriversgreenway.org/ http://greatriversgreenway.org/jobs-bids/. Questions should be directed to Craig Schluter, at Paric/Navigate Business Solutions (314) 713-6205, or email at craig@navigatebuildingsolutions.com. Questions related to this invitation should be directed to: Ryan Meyer — Paric Corporation - rimeyer@paric.com; phone: (314) 486-2136.

The scope of work includes bridges, grading, paving, and landscaping for Phase IIA of the Centennial Greenway. The project length is approximately 1.0 mile.

Not less than the prevailing hourly rate of wages shall be paid to all workmen performing under this contract in this area according to the rates determined by the Department of Labor and Industrial Relations (federal wage rate) or state wage rate whichever is higher.

A bid security in the amount of five percent (5%) of the bid amount must accompany each bid in accordance with the Instructions to Bidders.

DBE Contract Goal: Bidders to certify that the bidder is familiar with the DBE Program Requirements in this contract. The contract DBE goal for the amount of work to be awarded is 15% of the total project price including all alternates with one trainee.

Optional pre-bid meeting is scheduled for October 20, 2016 at 2:00 pm prevailing local time at Great Rivers Greenway District, 6178 Delmar Boulevard, St. Louis, MO 63112.

The Great Rivers Greenway District hereby notifies all bidders that it will affirmatively ensure 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.

The successful bidder shall comply with the requirements of RSMo § 292.675. The requirements include on-site employees to complete the ten (10) hour Occupational Safety and Health Administration (OSHA) Construction Safety Program, which includes a course in construction safety and health approved by OSHA or a similar program approved by the Department of Labor and Industrial Relations.

Submit completed Contractor Questionnaire and/or Contractor Prequalification Questionnaire with attachments not later than seven (7) days prior to the date and hour of the bid opening. See Secs 101-103 of the Standard Specifications, and Rule 7 CSR 10-15.900, "Prequalification's to Bid of Certain Contractors". Questionnaire and Contact information are provided on MoDOT's website.

Second-tier subcontracting will be not permitted on this project. The proposer states that it will ensure that subcontractors do not subcontract any portion of the work.

For any contract greater than \$5,000, the successful bidder shall comply with RSMo § 285.530, as amended and by sworn affidavit affirming that it does not knowingly employee any person who is an unauthorized alien and participation in a federal work authorization program with respect to the employees working in connection with this contract. The required documentation must be from the federal work authorization program provider. A letter from contractors reciting compliance is not sufficient.

The Great Rivers Greenway District reserves the right to accept or reject any bid and to waive any irregularities in the best interest of the District. A Bid may not be modified, withdrawn or cancelled by the bidder within sixty (60) days following the time and date designated for the receipt of bids, and each bidder so agrees in submitting his bid.

Susan Trautman
EXECUTIVE DIRECTOR
GREAT RIVERS GREENWAY DISTRICT

GRG CENTENNIAL GREENWAY

PRE-BID MEETING AGENDA – 10/20/16

- Introduction
 - o Patrick Owens Great Rivers Greenway's Project Manager
 - Craig Schluter Paric / Navigate Construction Manager
 - o Dennis Koscielski Burns & McDonnell Architect
 - Denis Beganovic MODOT
- Approximately a 1.0 mile long trail that stretches over highway 364 and Old Highway 94 at Heritage Landing to Muegge/Old 94,. The project value is around \$5,200,000 including all the alternates.
- The bid documents currently consist of plans and a specification manual.
 The plans can be retrieved from Smartbid or hard copies can be bought at the Contractor's expense by calling Cross Rhodes Reprographics 314-678-0087.
- Great Rivers Greenway is soliciting bids for one bid package general contractor/ general works with a unit price bid approach.
- A portion of the funding is coming from MODOT so there are federal requirements that are outlined in the specifications.
- Reference BC-1 for the bid checklist.
- Bids are due at <u>11/03/16 at 2 p.m.</u> at Great Rivers Greenway District, 6178
 Delmar Boulevard, St. Louis, MO 63112.
- The contract DBE goal for the amount of work to be awarded is 15% of the total project price including all alternates with one trainee.
 - DBE submittal is due 3 working days after bid opening.
- The bid forms has 7 alternates
 - Alt # 1 Trail Signage
 - Alt # 2 Landscaping & Paver Area
 - Alt # 3 Decorative Railings
 - Alt # 4 Bike Shelter

- Alt # 5 1 Yr. Landscape Maintenance
- o Alt # 6 2 Yr. Landscape Maintenance
- Alt # 7 3 Yr. Landscape Maintenance
- Items included in the lump sum base bid:
 - Monument Walls and pavers
 - Retaining walls
 - Roadway bridge work prefabricated bridges
 - Mass grading
 - Concrete foundations
 - o Asphalt trails
 - Landscaping
 - o Electrical/lighting work
- Schedule The project has several different contract time requirements.
 Please reference "Notice To Contractors" NTC-1 & NTC-2 in specifications
 - Calendar Days: 368
 - Completion Date: December 31, 2017
 - o Notice to Proceed 1 (NTP1): Submittals
 - Anticipated submittal period is from 12/28/2016 to 2/28/2017.
 - o Notice to Proceed 2 (NTP2): Bridge, Road and Trail Construction
 - Approximate time period is March 1, 2017 thru November 15, 2017
 - 260 consecutive Calendar Days
 - Notice to Proceed 3 (NTP3): Landscaping
 - Approximate time
 - Anticipated period for landscaping is September 1, 2017 to December 31, 2017
 - 122 consecutive Calendar Days
 - o Final Inspection and Final Acceptance
- Addendum 1 will contain:
 - o CAD release
 - o Updated liquidated damages JSP from GRG

RE: Notice to Bidders

Great Rivers Greenway District Centennial Greenway Phase IIA

Federal Project Number: TAP-9900(677) Burns & McDonnell Project Number: 85395

RE: Pre-bid Meeting Minutes -- October 20, 2016

- Project Engineer, Burns & McDonnell reminded attendees to read the ADA compliance
 JSP to ensure bidders saw the laser scan requirement and the closeout submittal needed.
 - Question Where are the limits of the ground improvement shown?
 Answer Limits are shown on the retaining wall plan and profile sheets. A minimum length of ground improvement is specifically called out. This dimension is measured longitudinally along the wall center line; the width of ground improvement is up to be determined by the ground improvement Contractor Furnished design.
 - 2. Question an allowance does not match the rate and the amount per mobilization?

Answer – Temporary seed and mulch mobilization will be reviewed by the project team. If a change in this JSP is required it will be re-issued via addendum. The JSP number for this item is number 000085 "ADDITIONAL MOBILIZATION FOR SEEDING" pay item.

- 3. Question Can the Contractor work in multiple areas at once? Answer Yes.
- 4. Question Who is responsible to pay for permits?

 Answer The Contractor will be required to pay for the permit. All permit costs from the City of St. Charles are waived. This includes the St. Charles Driveway permit. The Contractor will be required to pay for any other permits.
- 5. Question Is the bridge to be shop painted. Answer Yes.
- Question Can a retention bond be used?
 Answer No retainage will be held on the Contractor so a retention bond shouldn't be necessary.
- 7. Questions How late will questions be allowed during the bidding? Answer 72 hours. Questions sent in before Thursday, November 10, 2016 at 2:00 pm Central Standard Time will be answered.

NAME	COMPANY	PHONE	FAX	E-MAIL
BILL VONDERA	MILLSTONE WEBER	314-220-1912		Bill Vondera @m. 11stoneweber, com
Charlie Hayes	u u	636-688-8797		Charle. Hayer @Millsfoge Weber. com
Ron Roellin	KCI	314 566 0897		troclige Kcicons Truction. com
Evin Russell	Paric	3636-561-9579		edrossella paric. com
BOY GROSS	STILOUIS ComposT	636-861-3344		RGROSS ESTL COMPEST, COM
Christs Cunningham	OFM	314-518-47-86		CCunningham @ dim ecological
BNIAN CARLSON	CASTLE CONTRACTING	(314)393-9112		BRUN CARLSON @ DIECASTEG. COM
Coupen AUTRY	DIM ECOLOGICAL	314 580 6049		CAUTRY @DJMECOLDGICAC.com
CHRIS ROZEM	KOZENY-WAGNER	3142210216		ckozeny Okozenywagner.com
Toold Murghy	Maxim Crane	913.310.0025		tourphyanoxincrane.com
CHER HISHRY	GERSHENSUN	314-5740835		CRISCISY @ SERSHERSON. Com
James Hunn	L. Keerey	314-258-1660		junna / keckey, com
Shane Hutchens	Cateway Tree Care	636 262-8874		Vhutchens @ gateway troe care. co
Blake Boggs	RV Wagner	314-892-1608		estimating arrwager.com
ERIC RAMSCY	Big Dogs CONTRACTING	G18- 791-0129		bigdosscontractive e hotmail com
RandyBurke	Plattin Creek Excavating	314-713-6226		perestimating Damailicon
Ann Echwetye	BuildingWork, INC	314-647-2812		composition schwetze a,
/	,			buildingworks inc. con

NAME	COMPANY	PHONE	FAX	E-MAIL
VINCE KAIMANN	MODOT	314-453-1750		Uncertainange maditimo. 34V
VINCE KAIMANN CRAIS TUESWAY NICHOLAS KREKEKE	PSI	314-432-8073		Crais. Eredway @ PSIUSA. Mick@ an-design. net
NICHOLAS KREKELER	LANDESIEN	636-578-9311		nick@lan-design.net
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NOTICE TO CONTRACTORS

Sealed bids, addressed to:

Great Rivers Greenway District 6178 Delmar Boulevard St. Louis, MO 63112

Bids for the proposed work will be received by Great Rivers Greenway District until 2:00 PM (prevailing local time) on November 15 November 3, 2016, at the office of Great Rivers Greenway District, 6178 Delmar Boulevard, St. Louis, MO 63112, and at that time will be publicly opened.

Optional pre-bid meeting to occur on October 20, 2016 at 1:00 PM (prevailing local time) at the office of Great Rivers Greenway District, 6178 Delmar Boulevard, St. Louis, MO 63112.

Bids shall be delivered to: Great Rivers Greenway District, 6178 Delmar Boulevard, St. Louis, MO 63112.

- (1) PROPOSED WORK: The proposed work, hereinafter called the work, includes:
 Bridges, grading, paving and landscaping for construction of the Centennial Greenway Phase IIA. The project length is 0.78 miles.
- (2) <u>COMPLIANCE WITH CONTRACT PROVISIONS:</u> All work on this project shall be done in accordance with these specifications, except as herein provided. The adopted specifications are hereinafter referred to as Standard Specifications.
 - A. Missouri Highways and Transportation Commission's Missouri Standard Specifications for Highway Construction, 2011 Edition All bridge work, retaining walls, graffiti protection and removal, pedestrian detours, and ADA compliance applies to this specification unless otherwise stated in the plans and job special provisions.

The bidder, having examined and being familiar with the local conditions affecting the work, and with the contract, contract documents, listed specifications including revisions, hereby proposes to furnish all labor, materials, equipment, services, etc., required for the performance and completion of the work

Please note that the term "Commission" shall be replaced with the term, "Great Rivers Greenway District", 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.

(3) <u>PERIOD OF PERFORMANCE:</u> 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 of the Missouri Standard Specifications for Highway Construction.

See Job Special Provision 02 and 07 for Period of Performance.

Calendar Days: 368

Completion Date: December 31, 2017

In order to minimize disturbance and disruption, there will be multiple notice to proceed documents issued to the contractor for various pieces of work.

Notice to Proceed 1 (NTP1): Submittals

The Contract Time for Pre-Installation Submittals shall be completed within 60 calendar days from the issuance of

NTP1. The Contractor shall not be permitted to start construction activities until pre installation submittals are all complete. Great Rivers Greenway or Construction Manager can provide written authorization to proceed in lieu of all pre installation submittals being complete. Anticipated submittal period is from 12/28/2016 to 2/28/2017. See Submittals JSP for a list of all submittals Contractor shall complete prior to being issued Notice to Proceed 2.

Notice to Proceed 2 (NTP2): Bridge, Road and Trail Construction

The Contract Time for the Project Work (except items included in Notice to Proceed 3) shall be 260 consecutive Calendar Days from issuance of NTP2 (approximate time period is March 1, 2017 thru November 15, 2017). Final Acceptance shall be accomplished within 30 consecutive calendar days after Final Inspection. See Order of Work JSP for specific items to be completed in this period. Contract includes 40 weather days as a portion of the 260 calendar days allocated for NTP2.

Notice to Proceed 3 (NTP3): Landscaping

The Contract Time for the Landscape Planting Project Work shall be 122 consecutive Calendar Days from the receipt of NTP3 to substantial completion as certified by the Construction Manager, Engineer and Landscape Architect. Final Acceptance shall be accomplished within 15 consecutive calendar days after Final Inspection. Approximate time period for landscaping is September 1, 2017 to December 31, 2017. Contract includes 20 weather days as a portion of the 122 calendar days allocated for NTP3.

Final Inspection and Final Acceptance

Contractor shall be allowed 30 calendar days to address project work and prepare post-construction submittals for contract work performed as part of NTP2. Contractor shall be allowed 15 calendar days to address project work and prepare post-construction submittals for contract work performed as part of NTP3. Final Acceptance shall not be provided by Great Rivers Greenway until all of these steps are completed. Substantial letter of completion to be provided after all three items are completed.

(4) <u>LIQUIDATED DAMAGES</u>: 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 of the Missouri Standard Specifications for Highway Construction shall be as follows:

See Job Special Provision 02 and 07 for Liquidated Damages.

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Job Special Provision 02 further specifies the assessment of Liquidated Damages.

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

- **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 anticollusion), 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. All section references noted in paragraph 6 are from the Missouri Standard Specifications for Highway Construction.
- (7) <u>ANTIDISCRIMINATION:</u> 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) <u>FEDERAL AND STATE INSPECTION:</u> 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.
- **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. 23" 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 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:

http://ago.mo.gov/forms/Affidavit_of_Compliance.pdf

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.

name

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/gc_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.

- 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 tenhour 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) <u>BUY AMERICA REQUIREMENTS:</u> 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, and 23 CFR 635.410 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. 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:

http://www.fhwa.dot.gov/programadmin/contracts/b-amquck.cfm

- (13) <u>ADDENDUM ACKNOWLEDGEMENT:</u> The undersigned states that the 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.

Executed by bidd	er this	_ day of		20			
THE BIDDER CE DIRECTLY NOR OTHERWISE TAK BID, AND THAT SUBCONTRACTO	INDIRECTLY KEN ANY ACTI THE BIDDER I	ENTERED INTO ON IN RESTRAIN NTENDS TO PER	ANY AGRE OF FREE C FORM THE V	EMENT, PAR OMPETITIVE ORK WITH I	TICIPATED IN BIDDING IN C TS OWN BONA	N ANY COLI CONNECTION AFIDE EMPLO	LUSION, OR WITH THIS
THE BIDDER AC PERJURY UNDER MISSOURI, AND CERTIFICATION	R THE LAWS (ANY OTHER	OF THE UNITED APPLICABLE ST	STATES ANI TATE OR FE	O/OR FALSE I DERAL LAW	DECLARATION S. THE FAIL	NUNDER THURE TO PRO	E LAWS OF OVIDE THIS
THE BIDDER CER AUTHORIZED TO LAWS AND ALI CONTRACTING A	O WORK IN TH L PROVISIONS	IE UNITED STAT	ES IN ACCO	RDANCE WIT	H APPLICABL	E FEDERAL .	AND STATE
		ONLY if the bidde anation for the refus			all of these cert	tifications. Th	e bidder may
Signature of Bidd	ler's Owner, O	fficer, Partner or A	Authorized A	gent			
Please print or typ	pe name and tit	le of person signi	ing here				
Attest:							
Secretary of Corp	oration if Bidd	ler is a Corporation	on				
A CC: C	C1 (If D: 11	: Cti)					

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 1 slot at 1000 hours per slot.
- (16) <u>SUBCONTRACTOR DISCLOSURE</u>: Requirements contained within Sec 102.7.12 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) <u>MATERIALS INSPECTIONS</u>: 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.

- **CONTRACTOR PREQUALIFICATION**: All prime contractors must have a fully responsive contractor questionnaire on file with the Missouri Highways and Transportation Commission (MHTC) at least seven (7) days prior to the bid opening date. See Secs 101-103 of the Missouri Highway Standard Specifications, and Rule 7 CSR 10-15.900, "Prequalifications to Bid of Certain Contractors". Questionnaire and Contact information are provided on MoDOT's website.
- PROHIBTION AGAINST SECOND-TIER CONTRACTING: Second-tier subcontracting will be not permitted on this project. The proposer states that it will ensure that subcontractors do not subcontract any portion of the work.
- 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 30 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. Second-tier subcontracting will not be permitted on this contract. 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.
- (22)SALES AND USE TAX EXEMPTION: Great Rivers Greenway District, 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.

(23) (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 mus
mark the box below for those items of work in which they choose to accept the provision. No price adjustments wil
be made, due to fuel price changes, for bidders who do not accept this provision.
Excavation Production Asphalt Production Asphalt Hauling Aggregate Base Hauling (b) ACCEPTANCE FOR PROVISION FOR ASPHALT CEMENT PRICE INDEX, SEAI 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 bor 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 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

ITEMIZED BID: The bidder should complete the following section in accordance with Sec 102.7. The bidder proposes to furnish all labor, materials, equipment, services, etc. required for the performance and completion of the work, as follows:

THE GREAT RIVERS GREENWAY DISTRICT

CONTRACT

This Contract is made and entered into the day of,			
20, 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. <u>Scope of Work.</u> The Contractor will perform such work, including all labor,			
equipment and material as described in plans, specifications, and provisions included			
as part of this Contract. All work shall be performed as described in the "Contract			
Documents" defined in the GENERAL CONDITIONS OF THE CONTRACT FOR			
CONSTRUCTION which shall be a part of this Contract.			
2. <u>Contract Sum.</u> The Developer shall pay the total sum of			
(\$) for the Work described in the contract documents.			
3. Contract Time Period of Performance. The Work Period of Performance			
under this Contract shall be completed per Notice to Contractors and Job Special			
Provision 02. in 368 calendar days and be calculated in accordance with the			
GENERAL CONDITIONS.			

Great	Rivers	Greenway	V
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TAP-9900(677)

Centennial Greenway Phase IIA

- 4. <u>Liquidated Damages.</u> Contractor shall pay liquidated damages as set forth in the Notice to Contractors, and Job Special Provision 02 and Job Special Provision 07 included in the contract documents.
- 5. <u>Conditions.</u> This Contract and the Work performed hereunder shall be completed in conformity with the GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION which is specifically made a part of this Contract.

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

CONTRACTOR	DEVELOPER
	The Great Rivers Greenway District
by	by Executive Director

Form GRG 8

THE GREAT RIVERS GREENWAY DISTRICT

GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION ARTICLE I – CONTRACT DOCUMENTS

1.1 **DEFINITIONS**

1.1.1 THE CONTRACT DOCUMENTS

The Contract Documents consist of the following:

Invitation to Bid

Project Description

Definition of Terms

Instructions to Bidders

Bid Form

Proposed List of Subcontractors (Form GRG 2)

Bid Bond

Contract (Form GRG 4)

Contract Price and Payments (Form GRG 7)

General Conditions of the Contract for Construction

Performance and Payment Bond

Project Tax Exemption Certificate (Included in JSP's)

Partial Receipt of Payment and Waiver of Lien Form (Form GRG 10)

Final Receipt of Payment and Release Form (Form GRG 11)

State Labor Rate Schedule

Special Conditions (Included in JSP's)

Drawings

Job Special Provisions

Missouri Standard Specifications for Highway Construction

Missouri Standard Plans for Highway Construction

and all Addenda issued prior to execution of the Agreement and all modifications thereto. A modification is (a) a written amendment to the Contract signed by both parties, (b) a Change Order and (c) a written order for a minor change in the Work issued by the Developer pursuant to Paragraph 10.1. A modification may be made only after execution of the Contract.

1.1.2 The Special Conditions contain changes and additions to the General Conditions and shall take precedence over inconsistent General Conditions. Where any part of the General Conditions is modified or voided by Special Conditions, unaltered provisions shall remain in effect.

- 1.1.3 The Contract Documents form the Contract. The Contract represents the entire and integrated agreement between the parties hereto and supersedes all prior negotiations, representations, or agreements, either written or oral, including the bidding documents. The Contract may be amended or modified only by a Modification as defined in Subparagraph 10.1.
- 1.1.4 The Work. The term "Work" includes all labor necessary to produce construction required by Contract Documents and all materials and equipment incorporated or to be incorporated in such construction.

1.1.5 THE PROJECT

The "Project" shall be identified as: **Centennial Greenway Phase IIA – Heritage Landing to Muegge/Old 94, TAP-9900(677).**

- 1.2 EXECUTION, CORRELATION, INTENT AND INTERPRETATIONS
 - 1.2.1 The Contract shall be signed in not less than triplicate by Developer and Contractor.
 - 1.2.2 By executing the Contract, Contractor represents that it has visited the site, familiarized itself with local conditions under which the Work is to be performed, and correlated its observations with the requirements of the Contract Documents.
 - 1.2.3 Contract Documents are complementary, and what is required by any one shall be as binding as if required by all. The intention of the Documents is to include all labor, materials, equipment and other items as provided in Paragraph 4.4 necessary for proper execution and completion of the Work. Words which have well-known technical or trade meanings are used herein in accordance with such recognized meanings.
 - 1.2.4 Organization of Specifications into divisions, sections and articles, and arrangement of Drawings shall not control Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.
 - 1.2.5 Written interpretations necessary for proper execution or progress of the Work, in the form of drawings or otherwise, will be issued with reasonable promptness and in accordance with any schedule agreed upon.

1.3 COPIES FURNISHED AND OWNERSHIP

1.3.1 Developer will not supply Contractor copies of Drawings and Specifications; any copies needed to be obtained from Contractor at their own cost.

ARTICLE II – DEVELOPER

2.1 DEFINITIONS

2.1.1 The "Developer" is the Metropolitan Park and Recreation District d/b/a the Great Rivers Greenway District. The contact person for the Developer is:

> Patrick Owens Project Manager The Great Rivers Greenway District 6178 Delmar Boulevard St. Louis, MO 63112 Phone: (314) 436-7009, Extension 102

Fax: (314) 436-8004

E-mail: powens@grqstl.org

2.1.2 The "Owner" of this project is:

City of St. Charles – Parks and Recreation Department 1900 Randolph Street St. Charles, MO 63301 Phone: (636) 949-3372

2.2 PROJECT INFORMATION

- 2.2.1 The Developer will furnish all surveys describing the physical characteristics, legal limits and utility locations for the site of the Project unless otherwise stated in the contract.
- 2.2.2 The Developer will secure and pay for easements for permanent structures or permanent changes in existing facilities unless otherwise stated in the contract.
- 2.2.3 The foregoing are in addition to other obligations of the Developer enumerated herein.

2.3 DEVELOPER'S RIGHT TO STOP WORK

2.3.1 If the Contractor fails to correct defective Work or to supply materials or equipment in accordance with the Contract Documents, the Developer may order the Contractor to stop Work or any portion thereof (without incurring damages for delay), until the cause for such order has been eliminated.

2.3.2 DEVELOPER"S RIGHT TO CARRY OUT THE WORK If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents, or fails to perform any provision of the Contract, the City Developer may, after seven (7) days' written notice to the Contractor and without prejudice to any other remedy Developer may have, make good such deficiencies. In such case an appropriate Change Order shall be issued deducting from the payments then or thereafter due the Contractor the cost of correcting such

deficiencies. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Developer City promptly upon request.

2.4 ASSIGNABILITY

2.4.1 The Contractor shall not assign any interest in this Contract or transfer any interest in this Contract without the prior written consent of the Developer.

<u>ARTICLE III – DEVELOPER'S REPRESENTATIVE</u>

3.1 DEFINITION

3.1.1 Where the term "Developer's Representative" appears it refers to the Owner or, in the absence of an Owner to Developer's Landscape architect. The Developer's Representative on this Project is:

Craig Schluter
Construction Manager
Paric Corporation/Navigate Building Solutions
77 Westport Plaza
Suite 250
St. Louis, MO 63146

Phone: (314) 713-6205 Fax: (636) 561-9501

E-mail: craig@navigatebuildingsolutions.com

3.2 CONSTRUCTION MANAGER'S AUTHORITY AS DEVELOPER'S REPRESENTATIVE

- 3.2.1 Developer's Representative shall have the authority to act on behalf of Developer to the extent provided in Contract Documents unless clearly modified by a written instrument disclosed to the Contractor.
- 3.2.2 Developer and Developer's Representative shall, at all times, have access to the Work being performed on this project. Contractor shall provide facilities for such access.
- 3.2.3 Developer and/or Developer's Representative will make periodic visits to the site to determine in general if the Work is proceeding in accordance with Contract Documents. Neither Developer nor Developer's Representative shall be responsible for construction means, methods, techniques, sequences or procedure, or for safety precautions and programs in connection with the Work. Contractor shall be solely responsible to carry out the Work in accordance with the Contract Documents.

4.1

DEFINITION

3.2.4 Developer's Representative will determine amounts owing to Contractor based upon observations of the Work and Contractor's application for payment as set forth in Article VIII.

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- 3.2.5 Developer shall have sole determination of all questions or disputes pertaining to execution and progress of the Work and requirements of the Contract Document.
- 3.2.6 Developer and/or Developer's Representative shall have the authority to reject Work which does not conform to Contract Documents and will have the authority to require the Contractor to stop the Work or any portion thereof and to require special inspection or testing of the Work as provided in paragraph 4.14 whether or not such Work is then fabricated, installed or completed.
- 3.2.7 Developer and/or Developer's Representative may review Shop Drawing and Samples as provided in Subparagraphs 4.12.1 through 4.12.9, inclusive.
- 3.2.8 Developer's Representative will prepare change orders in accordance with Article X. No such change orders shall be effective until executed in writing by Developer.
- 3.2.9 Developer's Representative will conduct inspections to determine dates of Substantial Completion and Final Completion. Developer's Representative is authorized to receive written guarantees and related documents required by this Contract and assembled by Contractor and will, upon determination of Final Completion, issue a final Certificate for Payment.
- 3.2.10 Duties, responsibilities of authority of Developer's Representative will not be modified or extended without written consent of Developer.

<u>ARTICLE IV – CONTRACTOR</u>

4.1.1	The "C	Contractor" as described herein is:	
	The co	contact person for the Contractor is:	

4.2 REVIEW OF CONTRACT DOCUMENTS BY CONTRACTOR

4.2.1 Prior to the commencement of Work the Contractor shall carefully study and compare the Contract Documents and shall at once report any error, inconsistency or omission it may discover to the Developer's Representative. The Contractor shall not be liable to the Developer for any damage resulting from any such errors, inconsistencies or omissions.

4.3 SUPERVISION AND CONSTRUCTION PROCEDURES

4.3.1 The Contractor shall supervise and direct all Work, using its best skill and attention. The Contractor shall be solely responsible for all construction means, methods, techniques, sequence and procedures and for coordinating all portions of the Work.

4.4 LABOR AND MATERIALS

- 4.4.1 The Contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation and other facilities and services necessary for the proper execution and completion of the Work.
- 4.4.2 Any requests for substitutions from the materials specified in the Contract Document must be accompanied by documented proof of equality of materials.
- 4.4.3 In the case of a substitution involving a difference in price, the Developer shall receive the benefit of all savings and the Contract shall be altered by a Change Order to credit the Developer with any savings so obtained. Any additional cost incurred by a substitution shall be borne by the Contractor.
- 4.4.4 Should the Contractor be authorized in writing to furnish an approved substitute brand, type or class, the Contractor shall be responsible for making all adjustments to the selected item, and to the structure, as may be necessary for proper installation of the item as intended and as necessary to maintain the intended space requirements, functions, and appearance, all at no additional cost to the Developer. If substitutions are of such a nature that revised drawings or designs are required, Developer shall be reimbursed by the Contractor for such extra costs incurred by the Contractor for such extra costs incurred. The provisions of this paragraph are applicable even though approval is listed in the specifications, indicated in an Addendum, or granted by the Developer after the Contract is awarded.
- 4.4.5 All manufactured articles, material, and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned as directed by the manufacturer, unless specified to the contrary in the Contract Documents.

- 4.4.6 The Contractor shall allot suitable and proper space within the project limits, where available, its Subcontractors for the storage of their materials, and for the erection of their storage and tool sheds, but each Subcontractor shall bear the cost of any temporary facilities required for the execution of its Work.
- 4.4.7 The Contractor and each of its Subcontractors shall be individually responsible for furnishing and maintaining all equipment as required for the proper execution of their own Work. All such apparatus, equipment, and construction shall meet the requirements of all applicable city, county, state, and local laws or ordinances.
- 4.4.8 The Contractor shall at all times enforce strict discipline and good order among its employees and subcontractors and shall not employ any unfit person or anyone not skilled in the task assigned to him or her.

4.5 WARRANTY

- 4.5.1 The Contractor warrants to the Developer that all materials and equipment furnished under the Contract and incorporated in the Work will be new unless otherwise specified, and that all Work will be of good quality, free from faults and defects and in conformance with the Contract Documents. All Work not so conforming to these standards shall be considered defective. Contractor shall furnish satisfactory evidence as to the kind and quality of all materials and equipment.
- 4.5.2 The pedestrian bridge superstructure manufacturer shall warrant that it can convey good title to the goods, that they are free of liens and encumbrances and that their engineered steel structure as delivered is free of design, material and workmanship defects, including defects in the paint system, for a period of ten years from the date of delivery.
- 4.5.3 Contractor shall warrant all work until project is accepted for substantial completion.

4.6 **TAXES**

4.6.1 Contractor shall pay all sales taxes or other similar taxes required by law. Developer will cooperate with the Contractor to secure such tax exemptions as may be available to Developer and shall receive appropriate credit against the contract price for all tax savings accomplished thereby. Contractor shall use Form GRG 9 where applicable to receive a project exemption.

4.7 PERMITS, FEES AND NOTICES

4.7.1 The Contractor shall secure and pay for all permits, fees and licenses necessary for the proper execution and completion of the Work.

4.7.2 The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations and orders of any public authority relating to the performance of the Work. If, at any time, the Contractor determines that any of the Contract Documents are at variance with any such law, ordinances, rule regulation or order, the Contractor shall promptly notify the Developer's Representative in writing and shall request an appropriate Change Order. If the Contractor performs any Work knowing it to be contrary to such laws, ordinances, rules or regulations, Contractor shall be solely liable for all costs associated with bringing such Work into compliance.

4.8 SUPERINTENDENT

4.8.1 The Contractor shall employ a competent Superintendent and such assistant superintendents as may be necessary, who shall be in attendance at the project site full time during the progress of the Work. The Contractor shall notify the Developer's Representative of the name of the Superintendent and shall secure the written approval of the Developer's Representative before Work shall commence. The Superintendent shall not be changed or replaced without written consent of the Developer's Representative. The Superintendent shall be the Contractor's representative for all communications about the progress of the project and communications given to the Superintendent shall be binding on the Contractor as if personally delivered to the Contractor.

4.9 RESPONSIBILITY FOR THOSE PERFORMING THE WORK

4.9.1 The Contractor shall be responsible to the Developer for all acts and omissions of the Contractors employees and Subcontractors (including their agents and employees) and all other persons performing any of the Work on this project under contract with the Contractor.

4.10 SCHEDULE

- 4.10.1 Immediately after being awarded the Contract, the Contractor shall prepare and submit a progress schedule for the Work to the Developer's Representative for approval. This schedule shall indicate the starting and completion dates of the various stages of construction. Subject to the approval of the Developer's Representative the progress schedule may be revised as required by the conditions that shall subsequently occur.
- 4.10.2 The Contractor shall schedule and control the Work, including that of its Subcontractors, using a Critical Path Method (CPM) Diagram or bar graph schedule. Within forty eight (48) hours following a Notice to Proceed, the Contractor shall confer with the Developer's Representative to outline the Contractor's method of preparing and presenting its information.

- 4.10.3 Contractor's reports should provide a status of the project to determine if Work is on schedule and to determine problem areas.
- 4.10.4 The Contractor may be required to move equipment and/or materials through and/or install equipment and/or material in areas where other contractors are Working. The Contractor must closely coordinate its efforts with that of the other contractors and shall keep the Developer's Representative advised of all possible interferences. The Contractor shall schedule and control its Work so as to cause the least possible interference and shall show such interfaces with other contractors on its schedules and reports.
- 4.10.5 A diagram shall be drawn to indicate the actual sequence in which Work will be performed. The activities shown on the diagram shall include all construction operations, all interface points with others, shop drawing submittal and shall show milestones covering completion of major items of Work included in the Contract. Each event or node on the network, including milestones, shall be numbered and each activity shall be labeled with a complete and suitable description, together with an estimate of the number of Working days required to accomplish the activity. The critical path shall be indicated on the network, together with the cumulative number of working days required to complete the major items of Work, all milestones, and interface points.
- 4.10.6 The Contractor shall, within fifteen (15) consecutive calendar days after date of Notice to Proceed, submit to Developer's Representative (for approval) four copies of its CPM Diagram or Bar Graph Schedule covering its operations for the total project. After approval, the diagram will be used as a basis for monthly progress reports and progress payment as provided elsewhere in this Contract.
- 4.10.7 The CPM Diagram or Bar Graph Schedules must be prepared on sheets not less than 11 inches by 17 inches, nor more than 24 inches by 36 inches.
- 4.10.8 Monthly, the Contractor shall submit four copies of its updated schedule. It shall indicate by appropriate markings completed and partially completed activities. Anticipated progress for the next monthly period shall be indicated. These reports shall be submitted every fourth Monday for the preceding four weeks.
- 4.10.9 When changes in the Contract or changes in the sequence of Work are made, the schedule shall be revised by Contractor and four copies of the network shall be submitted to the Developer's Representative.
- 4.10.10 If Contractor falls behind in schedule progress, he shall take such steps as required to improve progress and shall submit a revised diagram to demonstrate the manner in which the lost progress will be regained, all without additional cost to Developer. If Developer desires to accelerate the schedule for completion and

- this necessitates premium time, payment for this acceleration will be determined in accordance with Contract Documents.
- 4.10.11 In the event that the Contractor fails to submit diagrams and monthly progress reports for verification of Project progress, the Developer may withhold progress payments until such time as the required diagrams and/or reports are submitted.
- 4.10.12 The Contractor will assign the responsibility for implementation of the scheduling functions to qualified full-time employees. The same employees shall be used for submitting the updated reports throughout the construction phase of the project.
- 4.10.13 The Contractor may schedule and control the Work, including that of its Subcontractors, using an alternate method in place of a CPM network diagram. Approval to use an alternate method of schedule and control must be requested in writing. A sample, indicating the amount of detail and the method of schedule and control proposed to be used, must be submitted with the request. Notification of approval or rejection of the alternate method will be made at the time of award of Contract.

4.11 DRAWINGS AND SPECIFICATIONS AT THE SITE

4.11.1 The Contractor shall maintain one copy of all Drawings, Specifications, Addenda, approved Shop Drawings, Change Orders, and other Modifications, in good order, and marked to record all changes made during construction at the site for Developer's Representative. These shall be available to the Developer's Representative. The Drawings, marked to record all changes made during construction, shall be delivered by the Contractor to the Developer upon completion of the Work.

4.12 SHOP DRAWINGS AND SAMPLES

- 4.12.1 Shop Drawings shall consist of drawings, diagrams, illustrations, schedules, performance charts, brochures, and other data which are prepared by the Contractor or any Subcontractor, manufacturer, supplier or distributor, and which illustrate some portion of the Work.
- 4.12.2 Samples shall consist of physical examples furnished by the Contractor to illustrate materials, equipment or workmanship, and to establish standards by which the Work will be judged.
- 4.12.3 The Contractor shall review, stamp with its approval and submit all Shop Drawings and Samples as required by the Developer's Representative, with reasonable promptness and in orderly sequence so as to cause no delay in the Work or in the Work of any other contractor. Shop Drawings and Samples shall be properly identified as specified, or as the Developer's Representative may

- require. At the time of submission, the Contractor shall inform the Developer's Representative in writing of any deviation in the Shop Drawings or Samples from the Requirements of the Contract Documents.
- 4.12.4 By approving and submitting Shop Drawings and Samples, the Contractor represents that it has determined and verified all field measurements, field construction criteria, materials, catalog numbers and similar data, and that it has checked and coordinated each Shop Drawing and Sample with the requirements of the Work and of the Contract Documents.
- 4.12.5 The Developer's Representative will review and accept Shop Drawings and Samples with reasonable promptness so as to cause no delay, but only for conformance with the design concept of the Project and with the information given in the Contract Documents. The Developer's Representative's acceptance of a separate item shall not indicate approval of an assembly in which the item functions or its compatibility with other systems.
- 4.12.6 The Developer's Representative will utilize an action stamp which will appear on all Submittals of Contractor when returned, appropriately completed, will appear on all Submittals of Contractor when returned by Engineer. Review status designations listed on Engineer's action stamp are defined as follows:
 - A SUBMITTAL APPROVED: Signifies Equipment or Material represented by the Submittal conforms with the design concept and complies with the intent of the Contract Documents and is approved for incorporation in the Work. Contractor is to proceed with fabrication or procurement of the items and with related Work. Copies of the Submittal are to be transmitted to Engineer for final distribution.
 - B SUBMITTAL APPROVED AS NOTED (RESUBMIT): Signifies Equipment and Material represented by the Submittal conforms with the design concept and complies with the intent of the Contract Documents and is approved for incorporation in the Work in accordance with Engineer's notations. Contractor is to proceed with fabrication or procurement of the items and with related Work in accordance with Engineer's notations and is to submit a revised Submittal responsive to notations marked on the returned Submittal or written in the letter of transmittal.
 - C SUBMITTAL RETURNED FOR REVISION (RESUBMIT): Signifies Equipment and Material represented by the Submittal appears to conform with the design concept and comply with the intent of the Contract Documents but information is either insufficient in detail or contains discrepancies which prevent Engineer from completing its review. Contractor is to resubmit

revised information responsive to Engineer's annotations on the returned Submittal or written in the letter of transmittal. Fabrication or procurement of items represented by the Submittal and related Work is not to proceed until the Submittal is approved.

- D SUBMITTAL NOT APPROVED (SUBMIT ANEW): Signifies Equipment and Material represented by the Submittal does not conform with the design concept or comply with the intent of the Contract Documents and is disapproved for use in the Work. Contractor is to provide Submittals responsive to the Contract Documents.
- E PRELIMINARY SUBMITTAL: Signifies Submittals of such preliminary nature that a determination of conformance with the design concept or compliance with the intent of the Contract Documents must be deferred until additional information is furnished. Contractor is to submit such additional information to permit layout and related activities to proceed.
- F FOR REFERENCE, NO APPROVAL REQUIRED: Signifies Submittals which are for supplementary information only; pamphlets, general information sheets, catalog cuts, standard sheets, bulletins and similar data, all of which are useful to Engineer or Owner in design, operation, or maintenance, but which by their nature do not constitute a basis for determining that items represented thereby conform with the design concept or comply with the intent of the Contract Documents. Engineer reviews such Submittals for general content but not for basic details.
- G DISTRIBUTION COPY (PREVIOUSLY APPROVED): Signifies Submittals which have been previously approved and are being distributed to Contractor, Owner, Resident Project Representative, and others for coordination and construction purposes
- 4.12.7 The Contractor shall make any corrections required by the Developer's Representative and shall resubmit the required number of corrected copies of Shop Drawings or new Samples until accepted. The Contractor shall direct specific attention in writing or on resubmitted Shop Drawings to revisions other than the corrections requested by the Developer's Representative on previous submissions.
- 4.12.8 Acceptance by Developer's Representative of Shop Drawings or Samples shall not relieve the Contractor of responsibility for any deviation from the requirements of the Contract Documents, unless the Contractor has informed the Developer's Representative in writing of such deviation at the time of submission and the Developer's Representative has issued written acceptance to the specific

deviation, nor shall the Developer's Representative's acceptance relieve the Contractor from responsibility for errors or omissions in the Shop Drawings or Samples.

- 4.12.9 No portion of the Work requiring a Shop Drawing or Sample submission shall be commenced until the submission has been accepted by the Developer's Representative. All such portions of the Work shall be in accordance with accepted Shop Drawings and Samples.
- 4.12.10 Contractor shall submit one transparency and two prints of each Shop Drawing and Setting Drawing, bearing Contractor's approval stamp until final acceptance is obtained. After completion of the review by the Developer's Representative, the transparency shall be returned to the Contractor. Prints marked "RESUBMIT" shall require the original drawing to be corrected, two prints made and resubmitted for acceptance by the Developer's Representative.

This procedure shall be followed until final acceptance is obtained. Upon receipt of prints marked "NO EXCEPTION TAKEN" the Contractor shall obtain and provide the number of prints, from the transparency, required for distribution.

4.13 USE OF SITE

4.13.1 The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits and the Contract Documents and shall not unreasonably encumber the site with any materials or equipment.

4.14 CUTTING AND PATCHING OF WORK

4.14.1 The Contractor shall do all cutting, fitting or patching of its Work that may be required to make its several parts fit together properly, and shall not endanger any Work by cutting, excavating or otherwise altering the Work or any part of it. Any costs caused by defective or ill-timed Work shall be borne by the Contractor.

4.15 CLEAN UP

4.15.1 The Contractor, at all times, shall keep the premises free from accumulation of waste materials or rubbish caused by its operations. If Contractor fails to remove debris promptly, Developer reserves right to cause same to be removed at Contractor's expense. Debris may not be burned on site without Developers permission and may not proceed until all licenses and permits are obtained from applicable government agencies. All debris removed from the site shall be disposed of in a legal manner. Upon completion of the Work, Contractor shall remove all tools, construction equipment, machinery and surplus materials, shall clean all glass surfaces and shall leave the site "broom clean".

4.15.2 If the Contractor fails to clean the site, the Developer may cause said site to be cleaned and the cost thereof shall be charged to the Contractor.

4.16 COMMUNICATIONS

- 4.16.1 All communication from the Contractor to the Developer should be given to the Developer's Representative with a copy sent to the Developer's contact person identified in Subparagraph 2.1.1.
- 4.16.2 Contractor to reconcile with the Developer's Representative onsite inspector on a daily basis on work that was installed. The Contractor to write on a ticket the item number from the bid form, the description, and the quantity that was installed on that day. The Developer's Representative will verify and sign off on these tickets. The Contractor to then email the Developer's Representative's Construction Manager every Monday by 5 p.m. a spreadsheet that lists all the bid items as shown on the bid form. The spreadsheet to show the weekly totals along with the remaining amounts. This email to include all the tickets that were signed as backup to this spreadsheet.

4.17 SAFETY PRECAUTIONS AND PROGRAMS

- 4.17.1 The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work.
- 4.17.2 It shall be the Contractor's responsibility to ensure that all precautions have been taken and will be maintained during and subsequent to construction to prevent surface water from collecting in excavations or adjacent to completed and existing structures, running down the face of excavated or cut slopes, ponding in the construction area, or saturating the soils below foundations. The Contractor will do all pumping necessary to keep all excavations, floors, pits and trenches free of water at all times.
- 4.17.3 The Contractor shall at all times provide protection against rain, wind, storms, frost and heat so as to maintain all Work, materials and apparatus and fixtures free from injury or damage. At the end of each day's Work, any new Work likely to be damaged shall be covered. During cold weather, Contractor shall protect all Work against damage. If low temperatures make it impossible to continue operations safely in spite of cold weather protection, the Contractor shall cease Work and shall so notify the Developer's Representative. Open fires will not be permitted within or adjacent to any buildings.
- 4.17.4 Work over or adjacent to finished Work shall be protected in the best possible manner. Plank runways shall be used for wheeling over finished floors; drop cloths shall be used to protect finished Work from soiling or staining.

4.18 SAFETY OF PERSONS AND PROPERTY

- 4.18.1 The Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury or loss to:
 - a. all employees on the Work and all other persons who may be affected thereby;
 - b. all the Work and all materials and equipment to be incorporated therein, whether in storage on or off the site, under the care, custody or control of the Contractor or any of its Subcontractors; and
 - c. other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- 4.18.2 The Contractor shall comply with all applicable laws, ordinances, rules, regulations and lawful orders of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. Contractor shall erect and maintain, as required by existing conditions and progress of the Work, all reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards promulgating safety regulations and notifying owners and users of adjacent utilities.
- 4.18.3 The use of explosives shall be carried out only with prior written approval of the Developer, unless specifically required in the Contract Documents. Prior to the commencement of any Work employing the use of any explosives, Contractor shall obtain all necessary permits and shall file copies of insurance certificates, providing for complete coverage against damage of existing property with the Developer's Representative, for approval
- 4.18.4 All damage or loss to any property caused in whole or in part by the Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable, shall be remedied by the Contractor.
- 4.18.5 The Contractor shall designate a responsible member of its organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's Superintendent unless changed in writing by the Contractor to the Developer's Representative.
- 4.18.6 The Contractor shall not load or permit any part of the Work to be loaded so as to endanger its safety.
- 4.18.7 The Contractor in addition to filing notification of all accidents with its insurance company, shall simultaneously notify and file a copy of the insurance notification with the Developer's Representative.

4.19 EMERGENCIES

4.19.1 In any emergency affecting the safety of persons or property, the Contractor shall act, at its discretion, to prevent threatened damage, injury or loss. Any additional compensation or extension of time claimed by the Contractor on account of emergency Work shall be determined as provided in Article X.

4.20 INDEMNIFICATION

- 4.20.1 The Contractor shall indemnify, defend and hold the Developer, its Representative and the Owner, harmless from and against all claims, damages, losses and expenses, including attorneys' fees arising out of or resulting from the performance of the Work which are cause or occasioned in whole or in part by any negligent act or omission of the Contractor, any Subcontractor, their employees or agents. This indemnity, defense, and hold harmless agreement shall inure to the benefit of elected or appointed officials of Owner and employees of Developer's Representative.
- 4.20.2 The obligations regarding claims against the Developer or the Developer's Representative or any of their agents or employees by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable and the indemnification obligation under this Paragraph 4.20 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under Workmen's compensation acts, disability benefit acts or other employee benefit acts.
- 4.20.3 The obligations of the Contractor under this Paragraph 4.20 shall not extend to the liability of any Architect, its agents or employees, arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications, or (2) the giving of or the failure to give directions or instructions by the Architect, its agents or employees, provided such giving or failure to give is the primary cause of the injury or damage.
- 4.20.4 Whenever the Work performed lies within the corporate limits of any city, town or village, the Contractor and its Surety shall also indemnify and save harmless such municipality or municipalities, and the officers, engineers, representatives, agents, and employees thereof from all suits, actions or claims of any character, name or description bought for or on account of any injuries or damages received or sustained by any persons or property by or from the said Contractor, or by or in consequence of any neglect in safeguarding the Work, or by or on account of any act or omission, neglect or misconduct of the said Contractor.

ARTICLE V – SUBCONTRACTORS

5.1 DEFINITIONS

- 5.1.1 A Subcontractor is a person or organization who has a direct contract with the Contractor to perform any of the Work at the site. The term Subcontractor is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative thereof.
- 5.1.2 Nothing contained in the Contract Documents shall create any contractual relation between the Developer or the Developer's Representative and any Subcontractor.
- 5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK
 - 5.2.1 Each bidder shall submit with its bid (on Form GRG 2) a list of the names of the Subcontractors or other persons or organizations (including those who are to furnish materials or equipment fabricated to a special design) proposed for each portion of the Work.

The Subcontractors proposed shall be subject to the approval of the Developer's Representative. Prior to the award of the Contract, the Developer's Representative shall notify the successful bidder in writing if either the Developer of the Developer's Representative, after due investigation, has reasonable objection to any person or organization on such list. Failure of the Developer or Developer's Representative to make an objection to any person or organization on the list prior to the award shall constitute acceptance of such Subcontractor.

The Contractor shall submit sub-contractor agreements to Developer's Representative for review and approval. Minimum requirements and a listing of items to be included in every sub contract can be found the MoDOT LPA Manual, Section 136.11.5. No subcontractor may further subcontract any of his work.

- 5.2.2 If the Developer or Developer's Representative refuses to accept any Subcontractor, the Contractor shall submit an acceptable substitute and the Contract Sum shall be increased or decreased by the difference in cost occasioned by such substitution and an appropriate Change Order shall be issued; however, no increase in the Contract Sum shall be allowed for any such substitution unless the Contractor has acted promptly and responsively in submitting said substitute.
- 5.2.3 The Contractor shall not contract with any Subcontractor who has not been accepted by the Developer's Representative.
- 5.2.4 If the Developer or the Developer's Representative requires a change of any proposed Subcontractor previously accepted by them, the Contract Sum shall be increased or decreased by the difference in cost occasioned by such change and appropriated Change Order shall be issued.

5.2.5 The Contractor shall not make any substitution for any Subcontractor except as provided in this Article 5.

5.3 SUBCONTRACTUAL RELATIONS

- 5.3.1 All Work performed for the Contractor by a Subcontractor shall be pursuant to a written agreement which shall contain provisions that:
 - a. preserve and protect the rights of the Developer under the Contract with respect to the Work to be performed under the subcontract so that the subcontracting thereof will not prejudice such rights;
 - b. require that such Work be performed in accordance with the requirements of the Contract Documents:
 - c. require submission to the Contractor of applications for payment under each subcontract to which the Contractor is a party, in reasonable time to enable the Contractor to apply for payment in accordance with Article VIII.
 - d. require that all claims for additional costs, extensions of time, damages for delays or otherwise with respect to subcontracted portions of the Work shall be submitted to the Contractor in sufficient time so that the Contractor may comply in the manner provided in the Contract Documents for like claims by the Contractor upon the Developer.
 - e. waive all rights the contracting parties may have against one another for damages caused by fire or other perils covered by the property insurance.
 - f. obligate each Subcontractor specifically to consent to the provisions of this Paragraph 5.3.

5.4 PAYMENTS TO SUBCONTRACTORS

- 5.4.1 The Contractor shall pay each Subcontractor, upon receipt of payment from the Developer, an amount equal to the percentage of completion allowed to the Contractor on account of such Subcontractor's Work, less the percentage retained from payments to the Contractor.
- 5.4.2 If the Developer's Representative fails to issue a Certificate for Payment for any cause which is the fault of the Contractor and not the fault of a particular Subcontractor, the Contractor shall pay that Subcontractor on demand, made at any time after the Certificate for Payment should otherwise have been issued, for its Work to the extent completed, less the required retained percentage.
- 5.4.3 The Contractor shall pay each Subcontractor a just share of any insurance moneys received by the Contractor under Article IX.

- 5.4.4 The Developer's Representative may in its sole discretion, furnish information regarding percentage of completion certified by the Contractor (on account of Work done) to any Subcontractor.
- 5.4.5 Developer shall have no obligation to make payment to any Subcontractor. If, in its sole discretion, the Developer's Representative determines that an amount is legitimately due from the Contractor to the Subcontractor which has not been paid in a timely manner, Developer may in its sole discretion pay such amount and deduct it from the payments otherwise due to the Contractor.

<u>ARTICLE VI – OTHER CONTRACTORS</u>

- 6.2.1 The Contractor shall afford other contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their Work and shall properly connect and coordinate its Work with such other contractors.
- 6.2.2 If any part of the Contractor's Work depends for proper execution or results upon the Work of a separate contractor, the Contractor shall inspect and promptly report to the Developer's Representative any apparent discrepancies or defects in such Work which in Contractor's opinion render it unsuitable for such proper execution and results. Failure of the Contractor to inspect and report shall constitute an acceptance of the other contractor's Work as appropriate to receive Contractor's Work.
- 6.2.3 Should the Contractor cause damage to the Work or property of any separate contractor on the Project, the Contractor shall, upon due notice; resolve the issue of payment with the other contractor. If such separate contractor sues the Developer on account of any damage alleged to have been so sustained, the Developer shall notify the Contractor who shall defend such proceedings at the Contractor's sole expense. If a judgment or award against the Developer arises therefrom, the Contractor shall pay or satisfy it and shall reimburse the Developer for all reasonable attorney's fees and court costs which the Developer may have incurred.

ARTICLE VII – TIME

7.1 DEFINITIONS

- 7.1.1 The "Contract Time" is the period allotted in the Contract Documents for completion of the Work.
- 7.1.2 The "Date of Commencement of the Work" is the date established in a "Notice to Proceed".

7.1.3 The date of "Substantial Completion" of the Work is the date certified by the Developer's Representative (or such architect as may be designated by the Developer) when construction is sufficiently complete, in accordance with the Contract Documents, so that the Developer may occupy the Project or use it for the purpose for which it is intended. In the case of parks or trails, "Substantial Completion" shall not occur until the trail or park can be utilized by the public for the purposes intended.

7.2 PROGRESS OF WORK

- 7.2.1 All time limits stated in the Contract Documents are of the essence of the Contract.
- 7.2.2 The Contractor shall begin the Work on the Date of Commencement as defined in Subparagraph 7.1.2. The Contractor shall carry the Work forward expeditiously with adequate forces and shall complete it within the Contract Time.

7.3 TIME OF COMPLETION AND LIQUIDATED DAMAGES

The total amount so payable to the Developer as liquidated damages may be deducted from any sums due or to become due to Contractor from Developer.

If, as a result of any such cause beyond the Contractor's control, the delay in completion of the Work in accordance with the Construction Schedule is so great that is cannot be remedied in the aforesaid manner, or if the backlog of work is so great that it cannot be remedied without incurring additional cost which the Developer does not authorize, then the time of completion and the Construction Schedule shall be extended pursuant to a change Order for the minimum period of delay occasioned by such cause.

Notwithstanding the foregoing above, no extension of time shall be granted for any delay the cause of which occurs more than seven (7) days before claim therefor is made in writing by the Contractor to the Developer, and no extension of time shall be granted if the Developer could have avoided the need for such extension by the exercise of reasonable care and foresight. In the case of a continuing cause of delay, only one claim is necessary

Weather shall not constitute a cause for granting an extension of time.

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, 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.

If the Contractor falls behind the Construction Schedule for any reason, he shall promptly take, and cause his Subcontractors to take, such action as is necessary to remedy the delay, and shall submit promptly to the Developer for approval a supplementary schedule or progress chart demonstrating the manner in which the delay will be remedied; provided, however, that if the delay is excusable, the Contractor will not be required to take, or cause his Subcontractors to take, any action which would increase the overall cost of the Work, unless the Developer shall have agreed in writing to reimburse the Contractor for such increase in cost. Any increase in cost incurred in remedying a delay which is not excusable shall be borne by the Contractor.

- 7.3.2 It is hereby understood and mutually agreed, by and between the Contractor and the Developer, that the date of beginning and the time for completion as specified in the Contract for the Work to be done hereunder are essential conditions of this Contract.
- 7.3.3 It is further agreed that Time is of the essence in each and every portion of this contract and of the specifications wherein a definite and certain length of time is fixed for the performance of any act whatsoever; and where under the Contract and additional time is allowed for the completion of any Work, the new time limit fixed by such extension shall be of the essence of this Contract.
- 7.3.4 If the said Contractor shall neglect, fail or refuse to complete the Work within the time herein specified, or any proper extension thereof granted by the Developer, the Contractor does hereby agree, as part consideration for the awarding of this Contract, to pay to the Developer the amount specified in the Contract liquidated damages for such breach of contract as set forth in the Job Special Provisions..
- 7.3.5 The liquidated damages are fixed and agreed upon by and between the Contractor and the Developer because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Developer would in such event sustain; and said amount is agreed to be the amount of damages which the Developer would sustain. The total amount so payable to the Developer as liquidated damages may be deducted from any sums due or to become due to the Contractor from Developer.
- 7.3.6 The Contractor shall not be charged with liquidated damages or any excess cost when the delay in completion of the Work is due:
 - a. To any preference, priority or allocation order duly issued by Developer
 - b. To unforeseeable cause beyond the control and without the fault or negligence of the Contractor, including, but not restricted to acts of God, or of the Public enemy, acts of the Developer, acts of another Contractor in

the performance of a contract with the Owner or Developer, fires, floods, epidemics, quarantine restrictions, strikes, freight, embargoes

7.3.7 Within ten (7) days from the beginning of a delay referred to in Subsection 7.3.6 the Contractor shall notify the Developer in writing regarding the cause of the delay. In the event this written notice is not given within such ten (7) day period the Contractor shall waive its right to make a claim for exemption from liquidated damages.

ARTICLE VIII – PAYMENTS

8.1 CONTRACT SUM

8.1.1 The "Contract Sum" is stated in the Contract and is the total amount payable by the Developer to the Contractor for the performance of the Work under the Contract Documents. For any changes in the work, GRG allows a maximum of 10% markup for fee on any change order.

8.2 SCHEDULE OF VALUES

8.2.1 Before the first application for payment, the Contractor shall submit to Developer's Representative schedule of values of the various portions of the Work, including quantities, if required.

8.3 PROGRESS PAYMENTS

- 8.3.1 At least ten (10) days before each progress payment is due, the Contractor shall submit to the Developer's Representative an itemized application for payment, supported by such data substantiating the Contractor's right to payment as the Developer or the Developer's Representative may require.
- 8.3.2 If payments are to be made on account of materials or equipment not incorporated in the Work, but delivered and suitably stored at the site, or at some other location agreed upon in writing, such payments shall be conditioned upon submission by the Contractor of bills of sale or such other procedures satisfactory to the Developer to establish the Developer's title to such materials or equipment or otherwise protect the Developer's interest, including applicable insurance and transportation to the site.
- 8.3.3 The Contractor warrants and guarantees that title to all materials and equipment covered by an application for payment, whether incorporated in the Project or not, will pass to the Developer upon the receipt of such payment by the Contractor, free and clear of all liens, claims, security interests or encumbrances"; and that no materials or equipment covered by an application for payment will have been

acquired by the Contractor; or by any other person performing the Work at the site, or furnishing materials and equipment for the Project subject to an agreement under which an interest therein or an encumbrance thereon is retained by the seller or otherwise imposed by the Contractor or such other person.

8.4 CERTIFICATES FOR PAYMENT

- 8.4.1 When the Contractor has made application for payment, the Developer's Representative will, with reasonable promptness but not more than seven (7) days after the receipt of the application, issue a "Certificate for Payment" to the Developer, with a copy to the Contractor, for such amount as he determines to be properly due, or state in writing the reasons for withholding a Certificate as provided in Subparagraph 8.5.1.
- 8.4.2 After the Developer's Representative has issued a Certificate for Payment, the Developer shall make payment in the manner provided in this Agreement.
- 8.4.3 No certificate for a progress payment, nor any progress payment, nor any partial or entire use or occupancy of the Project by the Developer, shall constitute an acceptance of any Work not in accordance with the Contract Documents.

8.5 PAYMENTS WITHHELD

- 8.5.1 The Developer's Representative may decline to approve an application for payment and may withhold the Certificate in whole or in part if in its opinion the Work is unsatisfactory. The Developer's Representative may also nullify, in whole or in part, any Certificate for Payment previously issued to such extent as may be necessary in its opinion to protect the Developer from loss because of:
 - Defective Work not remedied.
 - Third party claims filed or reasonable evidence indicating probable filing of such claims.
 - c. Failure of the Contractor to make payments promptly to Subcontractors or others for labor, materials, or equipment.
 - d. Reasonable doubt that the Work can be completed for the unpaid balance of the Contract Sum.
 - e. Damage to another contractor.
 - f. Reasonable indication that the Work will not be completed within the Contract Time.
 - g. Unsatisfactory prosecution of the Work by the Contractor.
- 8.5.2 When the above grounds in Subparagraph 8.5.1 are removed, payment shall be made for amounts withheld because of them.

8.6 SUBSTANTIAL COMPLETION AND FINAL PAYMENT

- 8.6.1 When the Contractor determines that the Work or a designated portion thereof acceptable to the Developer is substantially complete, the Contractor shall prepare for submission to the Developer's Representative, a list of items to be completed or corrected ("Punch List"). The failure to include any items on such Punch List does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. When the Developer's Representative determines that the Work is substantially complete, he will then prepare a Certificate of Substantial Completion which shall establish the date of Substantial Completion, shall state the responsibilities of the Developer and Contractor for maintenance, heat, utilities and insurance and shall fix the time within which the Contractor shall complete the items listed in the Punch List, said time to be within the Contract Time unless extended pursuant to Article VII. The Certificate of Substantial Completion shall be submitted to the Developer and the Contractor for their written acceptance of the responsibilities assigned to them in such Certificate.
- 8.6.2 Upon receipt of written notice that the Work is ready for final inspection and acceptance and upon receipt of a final application for payment, the Developer's Representative will promptly make such inspection, and when he finds the Work acceptable under the Contract Documents and the Contract fully performed, he will promptly issue a final Certificate for Payment stating that to the best of its knowledge, information and belief of Developer's Representative, and on the basis of its observation and inspections, the Work has been completed in accordance with the terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor and noted in said final Certificate is due and payable.
- 8.6.3 Neither the final payment nor any part of the retained percentage shall become due until the Contractor shall deliver to the Developer waivers of lien arising out of the Contract, an affidavit that waivers include all the labor, materials and equipment for which a lien could be filed and that all payrolls, bills for material and equipment and other indebtedness connected with the Work for which the Developer or the Owner's property might in any way be responsible have been paid, consent of Surety to final payment; and such other data establishing payment of all such obligations as the Developer may require. If any item remains unsatisfied after all payments are made, the Contractor shall refund to the Developer all moneys that the latter may be compelled to pay in discharging such item or a lien thereof, including all costs and attorney's fees. Waivers of Lien will be submitted with each monthly application for payment, except the first. The second and each subsequent application will be accompanied by waivers covering the full amount paid by the Developer the previous month, and in no case shall more than 30 days elapse between receipt of payment and submission of waivers.
- 8.6.4 If after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor, and the Developer's Representative so confirms, the Developer shall without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the

remaining balance for Work not fully completed or corrected is less than the retainage, the written consent of the surety to the payment of the balance due of that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Developer's Representative prior to certification of such payment, except that it shall not constitute a waiver of claims.

- 8.6.5 The making of final payment shall constitute a waiver of all claims by the Developer except those arising from;
 - a. unsettled liens.
 - b. faulty or defective Work appearing after Substantial Completion,
 - c. failure of the Work to comply with the requirements of the Contract Documents, or
 - d. terms of any special guarantees required by the Contract Documents.
- 8.6.6 The acceptance of final payment shall constitute a waiver of all claims by the Contractor except those previously made in writing and still unsettled.

ARTICLE IX – INSURANCE

9.1 CONTRACTOR'S INSURANCE

- 9.1.1 The contractor shall purchase and maintain such insurance as will protect it from claims set forth below which may arise out of or result from the Contractor's operations under the Contract, whether such operations be by himself or by any subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable.
 - a. Claims under Workmen's Compensation, disability benefits, and other similar employee benefit statutes.
 - b. Claims for damages because of bodily injury, occupational sickness or disease, or death of its employees.
 - c. Claims for damages because of bodily injury, sickness or disease, or death of any person other than contractor's employees.
 - d. Claims for damages insured by usual personal injury liability coverage which are sustained (a) by any person as a result of an act or omission directly or indirectly related to the employment of such person by the Contractor, or (b) by any other person.
 - e. Claims for damages because of injury to or distribution of tangible property, including loss of use resulting therefrom.

- 9.1.2 The Contractor agrees it will carry the following Insurance Coverage during the period of this Contract, and will provide Developer with a Certificate of Insurance on all required coverages.
 - a. WORKERS' COMPENSATION:
 - 1. Required Minimum Insurance Coverage:
 - i. Statutory Limits
 - ii. Employer's Liability: \$1,000,000 Bodily Injury Per Occurrence
 - 2. Each Contractor shall purchase and maintain Workers' Compensation Insurance for all of its employees employed at the site of the Project. In case any Work is sublet, the Contractor shall require the Subcontractor to similarly provide Workers' Compensation Insurance for all of the latter's employees, unless such employees are covered by the protection afforded by the Contractor. In case any class of employees of Contractor or any Subcontractor engaged in Work under this Contract at the site of the Project is not protected under the Workers' Compensation Act, the Contractor shall provide, and shall cause said Subcontractor to provide any such employees with Employer's Liability Insurance for the protection of said employees.
 - b. COMMERCIAL GENERAL & UMBRELLA LAIBILITY Contractor agrees to maintain a commercial general liability (CGL) acceptable to Developer's Representative and if necessary, commercial umbrella insurance with a limit of not less that \$2,000,000 each occurrence. If such CGL insurance contains a general aggregate limit, it shall apply separately to this location or Project. CGL insurance shall be written on ISO occurrence form CG 2010 1185 (or a substitute form providing the equivalent coverage) and shall cover liability arising from premises, operations, independent contractors, product completed operations, personal injury and liability assumed under an insured contract (including the tort liability of another assumed in a business contract). Developer, Owner, Architect/Engineer and the Developer's Representative shall be named as additional insured as applies to this coverage.
 - c. BUSINESS AUTOMOBILE LIABILITY: Maintain a standard ISO version Business Automobile Liability coverage form, or its equivalent, providing coverage of not less that \$1,000,000 per occurrence for claims involving bodily injury and property damage that might arise during the term of this agreement. Coverage shall extend to owned and non-owned autos.
 - d. The Contractor shall require each of its Subcontractors to procure and maintain during the life of its subcontract, Subcontractor's Insurance of the

type and in not less than the amount s specified hereinabove, except explosion, collapse and underground coverage to be required only of Subcontractors whose Work involves these hazards.

- e. The successful bidder by accepting this Contract, agrees to defend, Indemnify and hold harmless, Developer, Architect/Engineer, Developer's Representative, Owner, its elected and appointed officials, employees, and volunteers from and against any and all liability, for damage arising from Injuries to persons, or damage to property, occasioned by any acts or omission of Contractor, Subcontractor, agents, servants or employees.
- f. WAIVER OF SUBROGATION: Contractor's Insurer shall waive all rights of subrogation (with the exception of Workers' Compensation) against the Developer, Architect/Engineer, Construction Manager and Owner, its elected and appointed officials, employees, and volunteers for losses arising from Work performed under this agreement.
- g. Each Insurance policy required by this sections shall be endorsed to state that coverage shall not be suspended, voided, cancelled by either party, reduced In coverage or In limits, except after thirty (30) days prior written notice by certified mail, return receipt requested, has been provided to the Developer.
- 9.1.3 A Certificate of Insurance acceptable to Developer shall be filed with Developer's Representative prior to Contractor or any Subcontractor commencing Work and until all insurance required has been obtained and approved. Approval of the insurance by Developer shall not relieve or decrease the liability of the Contractor. These certificates shall contain a provision that coverages afforded under the policies shall not be canceled or materially changed until at least thirty (30) days prior written notice has been received by Developer.
- 9.1.4 Upon receipt of any notice of cancellation or alteration, Contractor shall within five (5) days procure other policies of insurance similar in all respects to the policy or policies about to be canceled or altered. If Contractor fails to provide, procure and deliver acceptable policies of insurance or satisfactory certificate or other evidence thereof, Developer may obtain such insurance at the cost and expense of Contractor without notice to Contractor.

9.2 ADDITIONAL INSURANCE REQUIREMENTS

9.2.1 No Contractor shall commence Work under the Contract until it has obtained all insurance required in Article IX as specified herein, nor shall the Contractor allow any Subcontractor commence Work or any portion of the Work unless all insurance required of the Subcontractor has been similarly approved by the Contractor.

- 9.2.2 Waive of Subrogation and Release: Contractor and/or Subcontractors must release and waive, on behalf of themselves and their respective insurers, any and all rights of recovery against the Developer, Owner, Architect/Engineer and/or Construction Manager, and their representatives, for loss of damage to Contractor or any Subcontractor, or any third party to the extent that such loss or damage is insured against or under any applicable insurance policy.
- 9.2.3 Insured Parties: All of the insurance policies required to be obtained by Contractor and any Subcontractors set forth herein (except Workers' Compensation Insurance) shall name Developer, Owner, Burns & McDonnell Engineers, Inc. and Construction Manager as additional insured's. Contractor's Liability Coverage's are primary and non-contributing with respect to any other insurance or self-insurance, which may be maintained by Developer, Owner, Architect/Engineer and Contractor.
- 9.2.4 Certificates of Insurance: Prior to commencement of Work, and within fifteen (15) business days after receipt of the Notice of Ward, the Contractor shall cause to be delivered to Owner and Developer's Representative, for their review and approval, two (2) copies of Certificates of Insurance from the insurer, evidencing that all of the above described insurance has been obtained by Contractor and all Subcontractors. All of such Certificates of Insurance shall (1) specify that the respective insurance policies shall not be canceled, modified or amended without and until thirty (30) days advance written notice issued to Owner and Developer's Representative, (2) contain a specified acknowledgement of this Agreement and the Contractual liability indemnification obligations of the insurers herein, (3) evidence the additional insured's on the respective policies, and (4) evidence the coverage amounts, deductibles and limits of each policy. The certificate shall state the type of insuring agreement, whether Occurrence or Claims Made.
- 9.2.5 Indemnity Agreement: The Contractor agrees that it will save and keep harmless, the Developer, Owner, Architect/Engineer and Developer's Representative from any and all claims that may arise on the part of any of said Contractor's employees, agents or servants, by reason of injury, death or any claim while in pursuit of the Contractor's obligations under this contract, and that all employees, agents or servants of the Contractor shall in no way be construed to be employees of the Developer, Owner, Architect/Engineer or Developer's Representative.
- 9.2.6 Any money due the Contractor by insurance under and by virtue of this Contract as shall be considered necessary by the Developer or Owner for such purpose, may be retained for the use of the Developer or Owner, or in case no money is due; contractor's surety shall be held until such suite, actions or claims have been settled and suitable evidence to that effect furnished to the Developer or Owner.
- 9.2.7 The cost of providing all insurance specified herein shall be included in the bid price submitted by the Contractor for this Project. It shall be the Contractor's sole responsibility to notify its insurance carrier of the requirements of these conditions

and of the entire contract documents, and the Contractor's non-compliance with the specified insurance requirements shall be just cause for the Developer to retain and collect the full amount of the Contractor's bid security.

ARTICLE X – CHANGES AND CORRECTIONS

10.1 CHANGE ORDERS

- 10.1.1 The Developer, without invalidating the Contract may order Changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and the Contract Time being adjusted accordingly. All such Changes in the Work shall be authorized by Change Order and shall be executed under the applicable conditions of the Contract Documents.
- 10.1.2 A Change Order is a written order to the Contractor signed by the Developer or Developer's Representative issued after the execution of the Contract, authorizing a change in the work or an adjustment in the Contract Sum or the Contract Time. The change in work Order, the Contract Sum and the Contract Time may be changed only by such written Change Order as defined by Section 10.1.2 with written authorization of the Developer.
- 10.1.3 The cost or credit to the Developer resulting from a change in the work shall be reasonable, allocable in accordance with generally accepted accounting procedures consistently applied, and will be determined in one or more of the following ways:
 - a. by mutual acceptance of a lump sum properly itemized;
 - b. by unit prices stated in the Contract Documents or subsequently agreed upon; or
 - c. by cost and a mutually acceptable fixed or percentage fee.
- 10.1.4 If none of the methods set forth in Subparagraph 10.1.3 is agreed upon, he Contractor, provided he receives a Change Order, shall promptly proceed with the Work involved. The cost of such Work shall then be determined by the Developer's Representative on the basis of the Contractor's reasonable expenditures and savings, including, in the case of an increase in the Contract Sum, a reasonable allowance for overhead and profit. In such case, the Contractor shall keep and present, in such form as the Developer's Representative may prescribe, an itemized accounting together with appropriated supporting data. Pending final determination of cost to the Developer, payments on account shall be made on the Certificate for Payment. The amount of credit to be allowed by the Contractor to the Developer for any deletion or change with results in a net decrease as confirmed by the Developer's Representative. When both additions

and credits are involved in any one change, the allowance for overhead and profit shall be figured on the basis of net increase or decrease, if any. In no event shall the Contractor stop the Work based upon a failure to agree upon cost or credit unless the Developer's Representative shall authorized such stoppage.

10.1.5 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if the quantities originally contemplated are so changed in a proposed Change Order that application of the agreed unit prices to the quantities of Work proposed will create a hardship on the Developer or the Contractor, the applicable unit prices shall be equitably adjusted to prevent such hardship.

10.2 CLAIMS FOR ADDITIONAL COST OR TIME

10.2.1 If the Contractor wishes to make a claim for an increase in the Contract Sum and/or extension in the Contract Time, it shall give the Developer written notice within ten (10) days after the occurrence of the event giving rise to such claim. This notice shall be given by the Contractor before proceeding to execute the Work, and Contractor shall receive Developer's approval prior to beginning any work, except in an emergency endangering life or property, in which case the Contractor shall proceed in accordance with Subparagraph 4.19. No such claim shall be valid unless so made. Any change in the Contract Sum or Contract Time resulting from such claim shall be authorized by Change Order.

10.3 MINOR CHANGES IN THE WORK

10.3.1 The Developer's Representative shall have authority to order minor changes in the Work not involving an adjustment in the Contract Sum or an extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes may be effected by Field Order or by other written order. Such changes shall be binding on the Developer and the Contractor.

10.4 FIELD ORDERS

10.4.1The Developer's Representative may issue written Field Orders which interpret the Contract Documents which order minor changes in the Work without change in Contract Sum or Contract Time. The Contractor shall carry out such Field Orders promptly.

10.5 UNCOVERING OF WORK

- 10.5.1 If any Work should be covered contrary to the Specification requirements, it must be uncovered, at the request of the Developer's Representative for observation and replaced at the Contractor's expense.
- 10.5.2 If any other Work has been covered which the Developer's Representative has not specifically requested to observe prior to being covered, the Developer's

Representative may request to see such Work, and it shall be uncovered by the Contractor. If such Work be found in accordance with the Contract Documents, the cost of uncovering and replacement shall, by appropriate Change Order, be charged to the Developer. If such Work be found not in accordance with the Contract Documents, the Contractor shall pay such costs.

10.6 CORRECTION OF WORK

- 10.6.1 The Contractor shall promptly correct all Work rejected by the Developer's Representative as failing to conform to the Contract Documents whether observed before or after Substantial Completion and whether or not fabricated, installed, or completed. The Contractor shall bear all costs of correcting such rejected Work, including the cost of any additional services of Developer's Representative or Architect thereby made necessary.
- 10.6.2 All such defective or non-conforming work shall be removed from the site where necessary, and the work shall be corrected to comply with the Contract Documents without cost to the Developer.
- 10.6.4 The Contractor shall bear the cost of making good all work of separate contractors destroyed or damaged by such removal or correction.
- 10.6.5 If the Contractor does not remove such defective or non-conforming Work within a reasonable time fixed by written notice from the Developer's Representative, the Developer may remove it and may store the materials or equipment at the expense of the Contractor. If the Contractor does not pay the cost of such removal and storage with ten (10) days thereafter, the Developer may upon ten (10) additional days' written notice sell such material or equipment at auction or at private sale and shall account for the net proceeds thereof, after deducting all the costs that should have been borne by the Contractor including compensation for additional architectural services. If such proceeds of sale do not cover all costs which the Contractor should have borne, the difference shall be charged to the Contractor and an appropriate Change Order shall be issued. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Developer.
- 10.6.6 If the Contractor fails to correct such defective or non-conforming Work, the Developer may correct it in accordance with Paragraph 11.2.1.
- 10.6.7 The obligations of the Contractor under this Paragraph 10.6 shall be in addition to and not in limitation of any obligations imposed upon it by special guarantees required by the Contract Documents or otherwise prescribed by law.

10.7 ACCEPTANCE OF DEFECTIVE OR NON-CONFORMING WORK

10.7.1 If the Developer prefers to accept defective or non-conforming work, he may do so instead of requiring its removal and correction, in which case a Change Order will be issued to reflect an appropriate reduction in the Contract Sum, of if the amount is determined after final payment, it shall be paid by the Contractor.

ARTICLE XI – TERMINATION

11.1 BY DEVELOPER

- 11.11.1Performance of the Work hereunder may be terminated by the Developer by giving three (3) days prior written notice to the Contractor if the Developer, in its sole discretion, decides to discontinue or suspend construction. In the event of such termination, the Contract Sum shall be reduced in an equitable manner by agreement between the parties.
- 11.1.2 The Developer may terminate this contract at any time without cause by giving notice in writing to the Contractor at least ten (10) days prior to termination. If the Contract is terminated by the Developer as provided herein, the Developer will pay to the Contractor an amount which bears the same ratio to the total compensation as the services actually performed bear to the total services of the Contract, less payments of compensation previously made; provided, however, that if less than sixty percent (60%) of the services covered by this Contract have been performed as of the effective date of termination, the Developer will reimburse the Contractor (in addition to the above payment) for that portion of the actual out-of-pocket expenses (not otherwise reimbursed under this Contract) incurred by the Contractor during the contract period which are directly attributable to the uncompleted portion of the services covered by this Contract (not to exceed 20% of the total contract price attributable to services).
- 11.1.3 The Developer may terminate this Contract for cause if the Contractor defaults or fails to perform any provision of this Contract. Said termination shall be effective after seven (7) days from the date of written notice by the Developer unless Contractor shall rectify said default or failure to the satisfaction of Developer.

11.2 DEVELOPER'S RIGHT TO CARRY OUT WORK

11.2.1 If the Contractor defaults or neglects to carry out the work in accordance with the Contract Documents or fails to perform any provision of the Contract, the Developer may, after seven (7) days' written notice to the Contractor and without prejudice to any other remedy it may have, make good such deficiencies. In such case an appropriate Change Order shall be issued deducting from the payments then or thereafter due the Contractor the cost of correcting such deficiencies, including the cost of the Architect's additional services made necessary by such default, neglect or failure. If the payments then or thereafter due to Contractor are

not sufficient to cover such amount, the Contractor shall pay the difference to the Developer.

11.3 BY CONTRACTOR

11.3.1 The Contractor may terminate this contract if the work is stopped for a period of thirty (30) days under an order of any Court or other public authority having jurisdiction if said stoppage is not due in whole or in part by acts or omissions of the Contractor.

ARTICLE XII – COMPLAINCE WITH EMPLOYMENT LAWS

12.1 EQUAL EMPLOYMENT OPPORTUNITY

- 12.1.1 During the performance of this Contract the Contractor agrees to comply with all State and Federal laws applicable to employees working on the Project, including but not limited to the following.
 - a. The Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, color, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this non-discrimination clause.
 - b. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex, or national origin.
 - c. The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer, advising the labor union or worker's representative of the Contractor's commitments under Section 202, of Executive Order No. 11246 of September 24, 1965, as amended by Executive Order No. 11375 supplemented by Department of Labor regulations (41 CFR Chapter 60) and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

- d. The Contractor will comply with all provisions of Executive Order No. 12246 of September 24, 1965, as amended by Executive Order No. 11375 supplemented by Department of Labor regulations (41 CFR Chapter 60) and the rules, regulations and relevant orders of the Secretary of Labor.
- e. The Contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, as amended by Executive Order No. 11375 supplemented by Department of Labor regulations (41 CFR Chapter 60) and by the rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.
- f. The contracting agency or the Secretary of Labor may direct that any bidder or prospective contractor shall submit, as part of its Compliance Report, a statement in writing, signed by an authorized office or agent on behalf of any labor union or any agency referring workers or providing for supervising apprenticeship or other training, with which the bidder or prospective contractor deals, with support information, to the effect that the signer's practices and policies do not discriminate on the grounds of race, color, religion, sex, or national origin, and that the signer either will affirmatively cooperated in the implementation of the policy and provisions of this order or that it consents and agrees that recruitment, employment, and the terms and conditions of employment under the proposed contract shall be in accordance with the purposes and provisions of the order. In the event that the union, or the agency shall refuse to execute such a statement, the Compliance Report shall also certify and set forth what efforts have been made to secure such a statement and such additional factual material as the contracting agency or the Secretary of Labor may require.
- g. In the event of the Contractor's non-compliance with the non-discrimination clauses of this Contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further government contracts in accordance with procedure, authorized in Executive Order No. 11246 of September 24, 1965, as amended by Executive Order No. 11375 supplemented by Department of Labor regulations (41 CFR Chapter 60) and such remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, as amended by Executive Order No. 11375 supplemented by Department of Labor regulation (41 CFR Chapter 60) or by rules, regulations, or by order of the Secretary of Labor, or as otherwise provided by Law.

h. The Contractor will include the provisions of the foregoing paragraphs (a) through (g) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, as amended by Executive Order No. 11375 supplemented by Department of Labor regulations (41 CFR Chapter 60) so that such provisions will be binding upon each Subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order Developer as a means of enforcing such provision, including sanctions for noncompliance. Provided, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with a Subcontractor or vendor as a result of such direction by the contracting agency, the Contractor may request the United States to enter into such litigation to protect the interest of the United States.

ARTICLE XIII – DRAWINGS

13.1 SCHEDULE OF DRAWINGS

- 13.1.1 Drawings listed herein are of the Essence to the Contract. Said drawings may be amended by Addenda issued prior to the opening of bids.
- 13.1.2 Contractor shall provide to Developer drawings of all Work including mechanical, plumbing and electrical upon completion of Project.
- 13.1.3 In addition to the items required by Paragraph 4.11, Contractor shall purchase and maintain one (1) set of blue line prints of contract drawings at the site at all times. Contractor shall record all deviations to the contract drawings made necessary by field change orders during the course of the Project on the blue line prints. Contractor shall purchase one (1) complete set of .003" thick Mylar reproducibles of all drawings and shall transfer all deviations from the blue line prints to the Mylar reproducibles using competent draftsman. Upon substantial completion of Project and before final payment can be approved, a complete "As-built" set of Mylar reproducibles and a complete set of blue line prints must be submitted to Developer.

<u>ARTICLES XIV – MISCELLANEOUS</u>

14.1 GOVERNING LAW

14.1.1 Missouri Law shall govern the interpretation of this Contract.

14.2 SUCCESSORS AND ASSIGNS

14.2.1 The Contractor hereunder binds itself, its partners, successors, and legal representative to the Developer in respect to all covenants, agreements and obligations contained in the Contract Documents. No contractor hereunder shall assign or sublet all or any part of its obligations or responsibilities hereunder without the written consent of the Developer, nor shall any Contractor hereunder assign any moneys due, or to become due, to it hereunder, without the previous written consent of the Developer.

14.3 WRITTEN NOTICE

14.3.1 Written notice shall be deemed to have been duly served if delivered in person to the contact person designated herein, or if delivered or sent by registered or certified mail to the last business address known to the party who gives the notice.

14.4 CLAIMS FOR DAMAGES

14.4.1 Should either party to this Contract suffer injury or damage to person or property because of any act or omission of the other party or of any of its employees, agents or others for whose acts it is legally liable, claim shall be made in writing to such other party within a reasonable time after the first observance of such injury or damage.

14.5 PERFORMANCE BOND AND PAYMENT BOND

- 14.5.1 Prior to execution of the Contract, the Developer will require the Contractor to furnish bonds covering the faithful performance of the Contract and the payment of all obligations arising thereunder in such form and amount as the Developer may prescribe and with such Sureties as are approved by the Developer. The premiums shall be paid by the Contractor. The Contractor shall deliver the required bonds to the Developer not later than the date of execution of the Contract; or if the Work is commenced prior thereto in response to a Notice to Proceed, the Contractor shall, prior to commencement of the Work, submit evidence satisfactory to the Developer that such bonds will be issued.
- 14.5.2 The Contractor is required, as a condition precedent to the execution of the Contract, to furnish bond in a penal sum of one hundred percent (100%) of the total amount payable by the terms of the Contract.
- 14.5.3 The bond required by Subparagraph 14.5.2 shall be executed on AIA Standard Form 312, two-part Performance Bond and Labor and Material Payment Bond, with the amount shown on each part equal to 100% of the total amount payable by terms of the Contract. Surety shall be a company licensed to do business in the State of Missouri and acceptable to the Developer and listed in the Federal Register, Department of Treasury listing of companies holding Certificates of Authority as Acceptable Sureties on Federal Bonds. The bond shall be written in favor of the Developer. The Bonds furnished shall require the attorney-in-fact who

- executes the required Bonds on behalf of the surety to affix thereto a certified and current copy of his power of attorney.
- 14.5.4 The Contractor is required to notify the Surety company concerning any changes in the Contract amount which are authorized by the Developer in a written Change Order. The Change Order amount should include, under overhead expense, any additional bonding costs.

14.6 RIGHTS AND REMEDIES AND COPYRIGHTS

- 14.6.1 The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.
- 14.6.2 No reports, maps, or other documents produced in whole or in part under this Contract shall be the subject of an application for copyright by or on behalf of the Contractor.

14.7 ROYALTIES AND PATENTS

14.7.1 The Contractor shall pay all royalties and license fees. It shall defend all suits or claims for infringement of any patent rights and shall save the Developer harmless from loss on account thereof, except that the Developer shall be responsible for all such loss when a particular design, process or the product of a particular manufacturer or manufacturers is specified; but if the Contractor has reason to believe that the design, process or product specified is an infringement of a patent, it shall be responsible for such loss unless it promptly gives such information the Developer's Representative.

14.8 TESTS BY PUBLIC AUTHORITIES

- 14.8.1 If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any Work to be inspected, tested or approved, the Contractor shall give the Developer's Representative minimum 24 hour notice of its readiness and of the date arranged so the Developer's Representative may observe such inspection, testing or approval. The Contractor shall bear all costs of such inspections, test, and approvals unless otherwise provided.
- 14.8.2 If after commencement of the Work, the Developer's Representative determines that any Work requires special inspection, testing or approval which Subparagraph 14.8.1 does not include, it will, upon written authorization from the Developer, instruct the Contractor to order such special inspection, testing or approval, and the Contractor shall give notice as in Subparagraph 14.8.1. If such special inspection or testing reveals a failure of the Work to comply (1) with the requirements of the Contract Documents or (2) with respect to the performance of

the Work, with laws, ordinances, rules, regulations or orders of any public authority having jurisdiction, the Contractor shall bear all costs thereof, including additional services of the Developer's Representative or Architect made necessary by such failure; otherwise, the Developer shall bear such costs, and an appropriate Change Order shall be issued.

- 14.8.3 Required certificates of inspection, testing or approval shall be secured by the Contractor and promptly delivered to the Developer's Representative.
- 14.8.4 If the Developer's Representative wishes to observe the inspections, test, or approvals required by this Paragraph 14.8, it will do so promptly.
- 14.8.5 Neither the observations of the Developer's Representative, nor inspections, test or approvals by persons other than the Contractor shall relieve the Contractor from its obligations to perform the Work in accordance with the Contract Documents.

14.9 INTEREST OF DEVELOPER

14.9.1 No member of the Board of Directors of Developer shall be admitted to any share or part of this contract or to any benefit to arise therefrom.

14.10 INTEREST OF GOVERNMENT REPRESENTATIVES

14.10.1No member, officer, or employee of the City, County or governing body of the Owner or the locality in which the Project is situated, and no other public official of such locality who exercises any functions or responsibilities with respect to the Project, shall, during his/her tenure, or for one year thereafter, have any interest, direct or indirect, in this contract or the proceeds thereof.

14.11 ARCHITECTURAL BARRIERS ACT

14.11.1The design of any facility (building, outdoor recreation or restroom facility) must comply with the "American Standard Specifications for Making Buildings and Facilities Accessible and Usable by the Physically Handicapped."

14.12 COMPLIANCE WITH AIR AND WATER ACTS

This Contract is subject to compliance by the Contractor with the Clean Water Act, as amended, 42 USC 1857 et seq., the Federal Water Control Act, as amended, 33 USC 1251 et seq., and the Regulations of the Environmental Protection Agency (EPA) with respect thereto, at 40 CFR Part 15, as amended.

The Contractor and all Subcontractors working thereunder shall not utilize in the performance of work under this Contract any facility listed on the list of violating facilities issued by EPA pursuant to 40 CFR 15.20.

The Contractor, all Subcontractors working thereunder shall give Developer prompt notice of any notification received from the Director, Office of Federal Activities, EPA, indicating that a facility utilized or to be utilized under the terms and conditions of said Contract is under consideration to be listed on the EPA list of violating facilities. The Contractor agrees that the requirements set forth in this paragraph will be included in every subcontract under this Contract and will take the necessary action as directed by EPA to enforce the provisions set forth above.

14.13 REPORTS AND INFORMATION

14.13.1The Contractor, at such times and in such form as Developer may require, shall furnish Developer such periodic reports as it may request pertaining to the services undertaken pursuant to this Contract, the costs and obligations incurred or to be incurred in connection therewith, and any other matters covered by this Contract.

14.14 RECORDS AND AUDITS

14.14.1The Contractor shall maintain accounts and records, including personnel, property and financial records, adequate to identify and account for all costs pertaining to the Contract and such other records as may be deemed necessary by Developer to assure proper accounting for all activity funds. These records will be made available for audit purposes to Developer or any authorized representative, and will be retained for five (5) years after the expiration of this Contract unless permission to destroy them is granted by the Developer.

14.15. COMPLIANCE WITH AMERICANS WITH DISABILITIES ACT

14.15.1Notwithstanding any other provisions of this Contract, the Contractor shall perform all task in strict compliance with the American with Disabilities Act, As Amended, 42 U.S.C. 12101 et seq., 47 U.S.C. 225,611, and all standards set forth in the regulations promulgated by the United States Department of Justice (2010 ADA Standards and the 2009 Draft Final Accessibility Guidelines for Outdoor Developed Areas) and Missouri's accessibility standards set out in the Missouri revised Statutes at 8.610 et seq as well as any modifications, amendments or update to any of these standards in effect at the time of construction. Regarding any trail involving property owned, leased, operated or governed by the Missouri Department of Transportation, Contractors will ensure that all requirements of that agency pertaining to this Contract are met. Any deviation from the standards of the Americans with Disabilities Act, as Amended, Missouri's accessibility standards or MoDOT requirements whether in accordance with plans or at the discretion of the Contractor must be approved in writing by the Developer or its authorized representative before construction or installation by the Contractor.

14.16 SCHEDULING OF WORK AND INTERFERENCE WITH TRAFFIC

- 14.16.1The contractor's Work must be schedule and accomplished in stages such that local traffic is maintained during construction. It shall be the Contractor's responsibility to provide a traffic way that is usable in all weather conditions. The Contractor shall construct and maintain in a safe condition temporary pavements and connections for local traffic.
- 14.16.2 Areas of intersections and roadways within the construction limits shall be constructed in phases so that at no time will access be denied.
- 14.16.3 When the plans have been altered or when disagreement exists between the Contractor and the Developer as to the accuracy of the plan quantities of any balance, or the entire project, either party shall have the right to request a recompilation of contract quantities within any area, by hand calculation of the average-end-area method for cubic yard quantities, and standard measurement methods for other quantities, by written notice to the other party. The written notice shall contain evidence that an error exists in the original ground line elevation or in the original computations which will affect the final payment quantity in excess of 15%. When such final measurement is required, it will be made from the latest available ground surface and the design section.
- 14.16.4 The contractor shall at all times employ sufficient labor and equipment for prosecuting the work to full completion in the manner and time required by these specifications. All workmen shall have sufficient skill and experience to perform properly the work assigned to them. The labor provided by the Contractor shall be directed to be of a workmanlike character with respect to the methods of construction and quality of completed work; and, shall not encumber the premises or adjacent property or streets with materials and/or equipment.

<u>ARTICLE XV – FORMS</u>

- 15.1 The following forms shall be used by the contractor and make up part of the contract documents.
 - 15.1.1 GRG Form 2 List of Principal Sub-Contractors
 - 15.1.2 GRG Form 7 Contract Price and Payments
 - 15.1.3 GRG Form 10 Partial Receipt of Payment and Waiver of Lien
 - 15.1.4 GRG Form 11 Final Receipt of Payment and Release Form

FORM GRG 2

LIST OF PRINCIPAL SUB-CONTRACTORS

DATE:				
PROJECT: Centennial Greenway Phase IIA – Heritage Landing to Muegge/Old 94 PROJECT NUMBER: TAP-9900(677)				
CONTRACTOR proposed to be	: e employed by you on a	(List beloabove project)	ow Sub-Contractors	
Contractor or Supplier (Name and Address)	Description of work, Suppliers or Services	Dollar value of work Supplies or Services	Percent of total Contract	
(Combined Ref.				
(Continue list o	on other side of this pa	ge ii necessary)		

FORM GRG 7

THE GREAT RIVERS GREENWAY DISTRICT

CONTRACT PRICE AND PAYMENTS

The Contract Sum to be paid under this Contract is ______.

In progress payments payable on 90% of the value of materials and work incorporated in the Work as approved by the Developer and Owner less the aggregate amount of previous payments subject to submission of Waivers of lien for previous payments for each category of work billed progress of work. Further, on any changes in the work, The Great Rivers Greenway District allows a maximum of 10% markup for fee on any change order. Said amount will be payable as follows:

- Pencil/ draft copies of pay application due to the Developer Representative by the 20th of every month.
- Final Pay application due to Developer Representative by the 25th of every month.
- Under the payment schedule set forth in Article VIII of the GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION (Form GRG 8)

PARTIAL RECEIPT OF PAYMENT AND WAIVER OF LIEN

Title

	L MEN BY THESE PRESENTS THAT		
hereinaftei	called "Subcontractor" who hereto		
			he performance of work
	furnishing of material for the co		
	Phase IIA - Heritage Landing to Mu		
	ers Greenway, Developer, which		
incorporat	ed herein, in consideration of such	payment by Contra	ictor.
DOES HER	REBY:		
1	. ACKNOWLEDGE that he has been done by him, or done by his subclinature suppliers, agents and empthe work called for by the afores or additions approved to date otherwise.	ontractors, materia ployees, or otherwi aid Contract and a	I vendors, equipment and see in the performance of II modifications or extras
2	equipment and fixture suppliers due them to date, or any of them, i or anything done or omitted by to construction of said improvements.	and everyone else in connection with p them or any of the	has been paid all sums performance of said work,
	DATED this	day of	20 <u> </u>
	Name of Subcontracto	or	
	Typed or Printed Nam	<u>e</u>	
	Signature		
	Signature		

FINAL RECEIPT OF PAYMENT AND RELEASE FORM

KNOW A	ALL MEN BY THESE PRESENTS THAT:	
hereinaf	fter called "Subcontractor" who heretofore entered into a subcontract with	
	, hereinafter called "Contractor", for the	е
performa	nance of work and/or the furnishing of material for the construction of a proj	ect
entitled (Centennial Greenway Phase IIA – Heritage Landing to Muegge/Old 94, Project N	lumbei
TAP-990	00(677), for Great Rivers Greenway, Developer, which said subcontract is by	this
referenc	ce incorporated herein, in consideration of such payment by Contractor.	
DOES H	HEREBY:	
1.	. ACKNOWLEDGE that he has been paid in full all sums due him for everything do him, or done by his subcontractors, material vendors, equipment and fixture sup agents and employees, or otherwise in the performance of the work called for by aforesaid Contract and all modifications or extras or additions thereto, for the construction of said project or otherwise.	pliers,
2.	RELEASE and fully, finally and forever discharge Contractor and the Developer of from any and all suits and actions, claims and demands of whatsoever kind of character arising out of or in any manner related to anything and everything don omitted by Subcontractor, its subcontractors, material vendors, equipment and suppliers, agents and employees, in the performance of or connected with its/the performance of said work, or otherwise.	e or fixture
3.	REPRESENT that all of this employees, subcontractors, material vendors, equipped and fixture suppliers and everyone else has been paid in full all sums due them, of the, in connection with performance of said work, or anything done or omitted them or any of them in connection with the construction of said improvements, on otherwise.	or any I by
	DATED thisday of, 20	
	Name of Subcontractor	
	<u>B</u> y	
	Typed or Printed Name	
	Signature	
	Title	

Centennial Greenway Phase IIA
TAP-9900(677)
TIP # 6546-16
Great Rivers Greenway District
Project Contact for Contractor/Bidder Questions

JSP 03 - PROJECT CONTACT FOR CONTRACTOR/BIDDER QUESTIONS

All questions concerning this project during the bidding process shall be forwarded to the project contact listed below.

Craig Schluter
Construction Manager
Paric Corporation/Navigate Business Solutions
77 Westport Plaza
Suite 250
St. Louis, MO 63146

Phone: (314) 713-6205 Fax: (636) 561-9501

E-mail: craig@navigatebuildingsolutions.com

Centennial Greenway Phase IIA
TAP-9900(677)
TIP # 6546-16
Great Rivers Greenway District
Project Contact for Contractor/Bidder Questions

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Insert Date:	 	
Insert Name:		
Insert Title: Insert Company		

Re: Centennial Greenway – Phase IIA Agreement for Transfer of E-Files

Pursuant to your request, you ("Requesting Party") have asked for copies of certain drawings and other documents for the above Project (the "E-FILES") to be transferred to you electronically, whether via e-mail or other electronic media (CD, thumb drive, etc.). Burns & McDonnell Engineering Co., Inc. ("BMEC") has obtained permission of the Project Owner, Great Rivers Greenway, to provide you with an electronic copy of the E-FILES. In consideration of the execution of the Release set out on the attached Exhibit A, and your agreement to the terms of this Agreement, BMEC will furnish you with one copy (1) of the following documents:

[Electrical CAD Files]

Terms & Conditions.

- BMEC shall furnish the E-FILES for use solely by Requesting Party in connection with the development of Project-related reference material for the above-referenced Project and for no other purpose.
- 2. For documentation purposes, BMEC shall continue to retain the original E-FILES disks.
- 3. Due to the potential for the information set forth in the E-FILES to be modified by Requesting Party, or others, unintentionally or otherwise, Requesting Party shall remove all indicia of BMEC on any file utilized.
- 4. Files have been created using BMEC's software and hardware. BMEC makes no warranty, expressed or implied, as to the readability or usability of the information contained on the E-FILES under any operating environment.
- 5. The E-FILES files may not reflect any change that may have been made to the design since the beginning of construction of the Project. Requesting Party shall be responsible to independently verify the as-built conditions.



- 6. BMEC makes no warranty, expressed or implied, that the E-FILES contain no defects or are otherwise "virus" free. Requesting Party shall utilize its own virus scan software before opening the E-FILE media.
- 7. BMEC shall have no liability, loss or damage, directly or indirectly arising out of Requesting Party's use of the E-FILES or the information contained therein, including, but not limited to, any loss of business or incidental or consequential damage.
- 8. Requesting Party assumes all risk and hereby releases and indemnifies and holds harmless BMEC, the Owner, their respective officers, directors, employees, servants, agents, successors and assigns, from and against each and every claim or cause of action that Requesting Party (or others who obtain the E-FILES from the Requesting Party) may have, or which may arise in the future, in connection with either the use of the E-FILES or the information contained therein.
- 9. Requesting Party agrees that it will not release any information on the E-FILES disks to any other party, without first obtaining BMEC's written authorization and a signed release (in the form attached as Exhibit A) from such other party.

Please indicate your acceptance of the above conditions by signing the enclosed copy of this letter at the place indicated below for your signature and returning it to me.

BURNS & McDONNELL ENGINEERING CO., INC.	ACCEPTED: Requesting Party Insert Company Name:
Dennis Koscielski	Signature
	Name:
	Title:
	Date:



Exhibit A

RELEASE

Project: Centennial Greenway - Phase IIA

Location: St. Charles, Missouri

Project Owner: Great Rivers Greenway

In consideration of the use of certain E-FILES and the information contained thereon, furnished by Burns & McDonnell Engineering Co., Inc. ("BMEC") to the Requesting Party, the undersigned assumes all risks in connection with said use and hereby releases BMEC and the Project Owner, their respective officers, directors, employees, servants, agents, successors and assigns, from and against each and every claim or cause of action that Requesting Party (or others who obtain the E-FILES from the Requesting Party) may have, or which may arise in the future, in connection with either the use of the E-FILES or the information contained therein.

AGREED:

Requesting Party	
Insert Company Name:	
Signature	_
Name:	
Title:	-
Data	

<<END OF JOB SPECIAL PROVISION 03>>



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JSP 02 - CONTRACT LIQUIDATED DAMAGES

- **1.0 Description.** If completion of activities specified by the three phases of the Notice to Proceed are not completed within the calendar dates identified in Section 2.0, the District, the traveling public, and state and local police and governmental authorities will be damaged in various ways, including but not limited to administration, potential liability, traffic and traffic flow regulation cost, traffic congestion and motorist delay, with its resulting cost to the traveling public.
- **2.0 Liquidated Damages Specified for Failure To Complete Work on Time.** These costs are not reasonably capable of being computed or quantified. Therefore, the contractor will be charged with liquidated damages specified **PER CALENDAR DAY** for each full calendar day that all work described in the list below is not complete, in excess of the limitation as specified elsewhere in the special provision. It will be the responsibility of the **Developer's Representative** engineer to determine the quantity of excess calendar days to be assessed for each intermediate completion date listed below.

Work Item	Allocated Calendar Days	Liquidated Damages
Pre-Installation Submittals (NTP1 Work)	60	\$750.00
Bridge, Road and Trail Construction (NTP2 Work)	260	\$2,050.00
Landscaping (NTP3 Work) See Section 6.0 in this JSP for more information on NTP3.	122	\$ 2,050.00 -\$750.00
Final Inspection, Final Acceptance (NTP2 and NTP3) See Section 3.0 for additional information in this JSP.	30	\$500.00

- 2.1 The said liquidated damages specified will be assessed in addition to any other liquidated damages charged under the Missouri Standard Specifications for Highway Construction, such as outlined in Section 4.9 of JSP 7 Work Zone Management, and as indicated elsewhere in this contract.
- 2.2 This deduction will continue until such time as the necessary work is completed.
- **3.0 Liquidated Damages Specified for Failure To Complete Final Payment Documents.** These costs are not reasonably capable of being computed or quantified. Therefore, if the final payment documents and post-construction submittals are not completed and ready for final processing within 30 calendar days of final inspection of

work authorized under NTP2, and within 15 calendar days of final inspection of work authorized under NTP3, the Contractor shall pay to the Contracting Authority the amount of \$500.00 as liquidated damages and as a penalty for each Calendar Day until the final payment documents and post-construction submittals are completed and ready for final payment. Separate calendar day counts shall be made for post-construction submittals required for NTP2 and NTP3 and damages can be assessed for delay in one or both portions of the work. The amount of liquidated damages shall be deducted from any payments due or to become due to the Contractor. Final payment documentation shall include but not be limited to the following:

- (a) An affidavit, on the form prescribed by the Contracting Authority, to the effect that all payments have been made and all claims have been released for all material, labor and other items covered by the contract bond.
- (b) A Certification, on the form prescribed by the Contracting Authority, showing the actual final DBE participation on the project including name of DBE, type of work and amount paid to each DBE firm.
- (c) An affidavit, on the form prescribed by the Contracting Authority, to the effect that all workers have been paid in compliance with prevailing wage requirements within the contract.
- (d) All post-construction submittals listed in Contractor Submittals JSP apply.

4.0 Notice to Proceed Information

In order to minimize disturbance and disruption, there will be multiple notice to proceed documents issued to the contractor for various pieces of work.

Notice to Proceed 1 (NTP1): Submittals

The Contract Time for Pre-Installation Submittals shall be completed within 60 calendar days from the issuance of NTP1. The Contractor shall not be permitted to start construction activities until pre-installation submittals are all complete. Great Rivers Greenway or Construction Manager can provide written authorization to proceed in lieu of all pre-installation submittals being complete. Approximate submittal period is from 12/28/2016 to 2/28/2017. See Submittals JSP for a list of all submittals Contractor shall complete prior to being issued Notice to Proceed 2.

Notice to Proceed 2 (NTP2): Bridge, Road and Trail Construction

The Contract Time for the Project Work (except items included in Notice to Proceed 3) shall be 260 consecutive Calendar Days from issuance of NTP2 (approximate time period is March 1, 2017 thru November 15, 2017). Final Acceptance shall be accomplished within 30 consecutive calendar days after Final Inspection. See Order of Work JSP for specific items to be completed in this period. Contract includes 40 weather days as a portion of the 260 calendar days allocated for NTP2.

Centennial Greenway Phase IIA

TAP-9900(677)

TIP # 6546-16

Great Rivers Greenway District

Contract Liquidated Damages

Notice to Proceed 3 (NTP3): Landscaping

The Contract Time for the Landscape Planting Project Work shall be 122 consecutive Calendar Days from the receipt of NTP3 to substantial completion as certified by the Construction Manager, Engineer and Landscape Architect. Final Acceptance shall be accomplished within 15 consecutive calendar days after Final Inspection. Approximate time period for landscaping is September 1, 2017 to December 31, 2017. Contract includes 20 weather days as a portion of the 122 calendar days allocated for NTP3.

Final Inspection and Final Acceptance

Contractor shall be allowed 30-calendar days to address project work and prepare post-construction submittals for contract work performed as part of NTP2. Contractor shall be allowed 15-calendar days to address project work and prepare post-construction submittals for contract work performed as part of NTP3. Final Acceptance shall not be provided by Great Rivers Greenway until all of these steps are completed. Substantial letter of completion to be provided after all three items are completed.

5.0 Liquidated Damages for Winter Months

- 1.0 Description. Revise Sec 108.8.1.2 (a) and (b) and substitute the following for the project:
- (a) Liquidated damages will be assessed from December 15 to March 15
- (b) Liquidated damages will be assessed for Saturdays, Sundays and Holidays.

6.0 Add Alternates Five, Six & Seven

Landscape Operation & Maintenance Pay Items if elected shall be removed from contract by change order and Developer will enter into separate agreement with landscape maintenance provider. The provider shall be defined as the landscape installer on the project.

<< End of JSP 02 >>

Centennial Greenway Phase IIA
TAP-9900(677)
TIP # 6546-16
Great Rivers Greenway District
Contract Liquidated Damages

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Centennial Greenway Phase IIA TAP-9900(677) TIP # 6546-16 Great Rivers Greenway District Additional Mobilization for Seeding

JSP 85 – ADDITIONAL MOBILIZATION FOR SEEDING

- **1.0 Description**. This provision provides compensation for additional mobilization for seeding, as specified herein.
- **2.0 Additional Mobilization for Seeding.** Additional mobilization to perform temporary or permanent seeding, beyond the initial occurrence, may be necessary as specified in MoDOT Specifications Section 806.50.2 and as required per terms of the SWPPP. Mobilization of all equipment, workers and materials necessary to perform seeding and mulching shall be considered included in this work.

An allowance of \$10,000 \$9,600 shall be included in the Contractor's bid for this item.

- 2.1 Measurement of the number of occurrences authorized by the Construction Manager to mobilize equipment onto the project to perform temporary or permanent seeding will be made per each occurrence, except for the initial occurrence and as specified herein. No measurement will be made for mobilization necessary to perform repair work to previously seeded areas or for mobilization necessary due to removal of equipment prior to completion of seeding all areas available for seeding, as determined by the Construction Manager.
- **3.0 Basis of Payment.** The accepted occurrences of Additional Mobilization for Seeding will be paid for under JSP-85, "ADDITIONAL MOBILIZATION FOR SEEDING", at a fixed unit price of \$600 per each occurrence. Payment for the initial occurrence to mobilize for seeding, and any additional mobilization costs in excess of the fixed price, shall be considered completely covered under other items.

<<END OF JOB SPECIAL PROVISION 85>>

Centennial Greenway Phase IIA
TAP-9900(677)
TIP # 6546-16
Great Rivers Greenway District
Additional Mobilization for Seeding

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Centennial Greenway Phase IIA
TAP-9900(677)
TIP # 6546-16
Great Rivers Greenway District
Install Owner Furnished Bike Counters

JSP-82 - INSTALL OWNER FURNISHED BIKE COUNTERS

01. <u>SCOPE</u>

This work shall include all labor and equipment necessary for the installation of Owner Furnished Bike Counters.

Contractor shall be responsible for picking up bike counters at a location designated by Construction Manager or arranging delivery.

Where called for on the Project Drawings and Specification, or as instructed by the Project Engineer, "Install Owner Furnished Bike Counters".

02. MATERIALS

All materials shall conform to the provided manufacturer specifications.

03. EXECUTION

Delivery to be responsibility of Contractor.

Contractor shall carefully Install Owner Furnished Bike Counters as indicated on the plans, specifications and at locations designated by Engineer. Contractor shall verify the placement for Install Owner Furnished Bike Counters.

All materials and construction requirements shall conform to the installation guide included in this specification.

04. <u>METHOD OF MEASUREMENT</u>

"Installation of Owner Furnished Bike Counters" completed shall be measured per each, and shall include all delivery, labor, equipment, materials, etc necessary to "Install Owner Furnished Bike Counters".

05. BASIS OF PAYMENT

Payment for "Installation of Owner Furnished Bike Counters" will be made per each at the contract unit bid price, and paid for under item number: JSP-82. Cost for "Install Owner Furnished Bike Counters" shall include all costs for delivery, materials, equipment, labor, sub-grade preparation, hauling, placing, repairing of pavement, etc.

<< End of JSP-82 >>

Centennial Greenway Phase IIA TAP-9900(677) TIP # 6546-16 Great Rivers Greenway District Install Owner Furnished Bike Counters

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ECO-MULTI URBAN POST + ZELT Counter

Processing and storage of data from different sensors

The Eco-MULTI Urban Post¹ + ZELT Inductive loops is an all-inclusive counting system specifically designed to blend into the urban environment. The counter has the capacity of differentiating between cyclists and pedestrians on shared areas, or counting pedestrians on sidewalks and cyclists on high street. The complete system brings together different sensor technologies, each sensor being dedicated to a single user type. The different signals are analyzed by an intelligent system, the SMART Connect, which is able to prioritize choices in order to classify the different user types.

For more information about the Urban Post itself, please refer to the "Urban Post Counter" technical sheet.

Counting System General Characteristics

Technology	PYRO Sensor: Passive Infrared Pyroelectric ZELT Sensor: Electromagnetic ZELT
Battery Life	1 or 2 ZELT loops: 2 years More than 2 ZELT loops: 1 year
Calibration/Adjustments	Autocalibration
Settings	Sensitivity can be set up with delivered Software
Direction	Direction recognition possible with a bidirectional PYRO Sensor, or with option direction recognition by the ZELT Loops
Covered Width	Up to 6m (19.5')
Data Backup	60-minute or 15-minute data recording interval
Memory	15-minute data recording interval: 330 days 60-minute data recording interval: 640 days
Waterproofness	IP 6.6.
Temperature Resistance	-40°C to + 50°C (-40°F to 120°F)
Configurations	Standard: Urban Post installed on the edge of the path. Specific: Urban Post centered in the middle of the past with detection on both sides.



Example of an Eco-MULTI differentiating between cyclists and pedestrians on a shared area

Physical Characteristics / Environment

PYRO Sensor	
	Unidirectional Sensor (or without direction detection) : 18 mm x 40 mm x 110 mm (0.7" x 1.6" x 4.5")
External Dimensions	Bidirectional Sensor : 18 mm x 40 mm x 110 mm (0.7" x 1.6" x 4.5")
	PYRO-Zoom Sensor: 18 mm x 40mm x 103 mm (0.7" x 1.6" x 4")
Cells Dimensions	Ø 10 mm (0.4") / Thickness: 0.7 mm (0.03")
Cable Length	4 m (13')
Cells Material	Short- and medium-range PYRO Sensors: High-density Polyethylene (HDPE) PYRO-Zoom option: Germanium
Sensor Body Material	Polyvinyl chloride
Connections	Buccaneer
Min. Sensitivity	1°C (2°F) from the ambient environment
Range of the Sensor	1 m (3.5'), 4 m (13') or 15 m (50')
Installation Height	80 cm (31")
Setup	Sensor positioned vertically, perpendicular to the path
Beam Angle	Short- and medium-range PYRO Sensors: 7° PYRO-Zoom Sensor: 4,5°





The Urban Post is specifically designed to resist vandalism

Europe | Worldwide

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co-counter@eco-counter.com | www.eco-counter.com

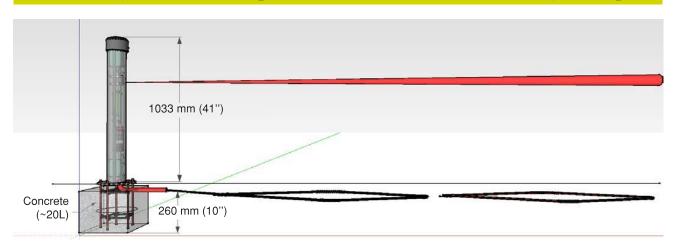
ECO-MULTI URBAN POST + ZEL



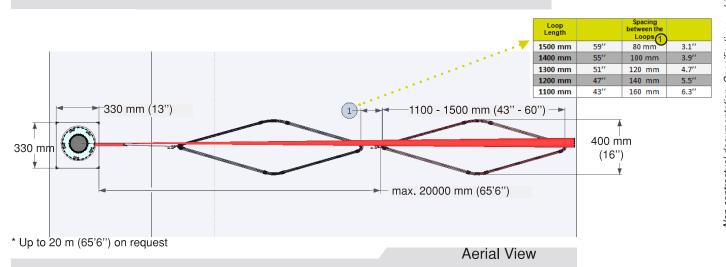
ZELT Sensor	
Power Supply 7,2 V / 34 Ah	
Dimensions	Length: 110 cm to 150 cm (3.6' to 4.9')
	Width: 40 cm (15.7")
	Spacing between two loops installed side by side: 8 cm to 16 cm (3.1" to 6.2")
Installation	Trenches Depth: 4 to 5 cm (1.5" to 1.9")
	Trenches Width: 2 cm (0.8")



Installation Example with Medium-Range PYRO Sensor and Two ZELT Inductive Loops for Bicycles



Side View



All Eco-Counter products are designed and manufactured in France.

Europe | Worldwide

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Non contractual documentation. Specifications subject to change without notice.





URBAN POST + ZELT ECO-MULTI SYSTEM

INSTALLATION GUIDE





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I. INTRODUCTION

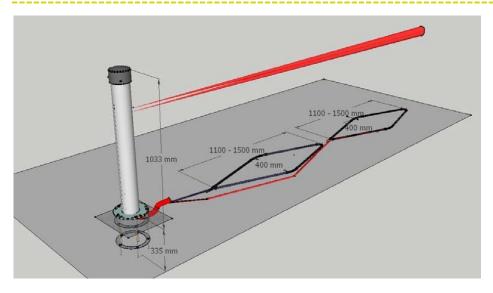
Thank you for purchasing this Eco-Counter! We hope that you will enjoy using it and that the data will be helpful to you for many years to come.

This document will guide you through the appropriate steps for installation of the Urban Post + ZELT Eco-MULTI system. Following these instructions step by step will allow you to achieve the best results possible.

This Eco-Counter has been tested to be resistant to the most severe environmental conditions (moisture, salt content, dust, temperature variations, etc.).

However we remind you that it remains a measuring system, and therefore it should always be handled with care.

Example of a completed system:



Please see appendix A (page 35) for various loop configurations.

II. PREPARING THE INSTALLATION

A.SAFETY

Risk of bodily harm!

- Use safety cones and hazard signs to secure the work site.
- Wear a reflective safety vest, protective glasses and footwear, noise-cancelling headphones, anti-dust mask, and protective gloves when necessary.















POST & HARDWARE



For more information about the components, please refer to appendix B (page 38).

FIXING CAGE & FIXING HARDWARE



COMPUTER & SOFTWARE

- Depending on your order, you may also have the optional items below
 - A laptop with the Eco-Link software¹ installed or
 - A Bluetooth adapter and a link to the Eco-Link software².
- A username and password to access the online Eco-Visio platform.

DOCUMENTS

- A warranty certificate containing the serial number of the Eco-Combo logger. Please be sure to keep this.
- A user guide.
- An identification sheet for your counter where you will record the installation location.
- A template that will be used to install the fixing cage in the right position.

¹ If you have an Eco-Combo with the automatic data transmission option activated, data will be automatically transferred to the online Eco-Visio platform. Eco-Link is not necessary to enable data analysis.

² Depending on whether you ordered a laptop with the Eco-Link software or a Bluetooth adapter to use with your current laptop.

C. REQUIRED EQUIPMENT

To trace the saw cuts

Straight edge, tape measure, and chalk (or felt-tip marker).

To cut the saw cuts into the asphalt

Thermal saw with a blower and diamond disk capable of cutting out a gutter measuring 10 mm (1/2") wide and 50 mm (2") deep.

To install the loops

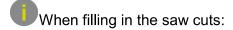
To form the loops: Drill, pliers and a short ruler (to push in the loops).

To verify the inductance of the loops (optional): A multimeter.

To protect the loop ends: Conduit Ø 25 mm (1"), utility knife.

To fill in the saw cuts

Asphalt or other filler regularly used for roadwork with a **temperature that does not exceed 60° C** (140° F), a sponge, water and a trowel.



- We recommend using micro-cement for sealing the road work (example: sika fastfix-138tp, 714 scellflash micro-beton (micro-cement)).

- We recommend putting foam over the loops in order to hold the cables in place.

To dig a hole for the Urban Post and a gutter for the conduit

Shovel and pickaxe.

To fix the Urban Post

To fix the fixing cage: Spirit level, equipment necessary for making cement.

To bolt down the Urban Post: M8 spanner

To test the system

A bicycle and a laptop with the Eco-Link software installed.

If you do not have a laptop with the Eco-Link software, please ensure that there are two people present in order to correctly test the system.

To add a photo to the counter location in Eco-Visio (optional)

A camera.

D. INSTALLATION SITE

It is important to follow the instructions below to choose the appropriate installation site for your Eco-Counter.



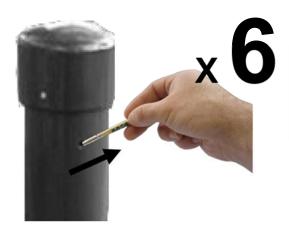
- Do not point the PYRO sensor towards:
 - A path where motor vehicles pass.
 - A surface that is directly exposed to sunlight.
 - Vegetation or objects that are likely to move (bushes, branches etc).
 - A metallic or reflective surface (i.e. metal, glass).
 - A door.
 - A radiator.
- Do not install the PYRO Sensor:
 - Behind a window.
 - At a spot where pedestrians or cyclists are likely to stop or linger (rest spots, information posters, steep surfaces, etc.).
 - At a location where other undesired subjects could be counted such as animals, cars, undesired pedestrians or cyclists.
 - Near a heat source such as a rock or leaves that are exposed to the sun.
 - Near devices that can generate rapid fluctuations in temperature (vents, cars, etc.).
- Do not install the system:
 - In a location that is subject to electromagnetic fluctuations: other counting loops, buried or overhead high-tension electrical cables, buried telecommunication equipment.
 - On natural soil subject to erosion.



- A path reserved for pedestrians and bicycles.
- An area where movement is fluid.
- An area where the PYRO sensor can be installed on the border of the path.
- A location where the PYRO Sensor can be positioned perpendicular to the flow of traffic with its lenses facing the path.
- A location where the PYRO Sensor can be pointed at a non-reflective surface (i.e. wood, brick, concrete).
- If using automatic data transmission, select a location with sufficient cellular network coverage.
 - Verify the cellular network coverage on site by proceeding as follows:
- 1. Wake-up your Urban Post by waving the magnetic key over the activation zone.
- 2. Wave the magnetic key 6 times over the activation zone.

The activation zone will start flashing blue before turning solid blue after 12 minutes.





- Send a text message to the telephone number found on the identification sheet of your Urban Post or on the Eco-Combo logger itself. Do not use capital letters. The text message should read:
 - .gsm. zw

4. You will receive a text message similar to the example below:



The level of GPRS coverage appears just after the text "GSM=". In the above message, the level is 13.

A level of 10 or above is considered sufficient.

A. SAFETY



Risk of bodily harm!

- Use safety cones and hazard signs to secure the work site.
- Wear a reflective safety vest, protective glasses and footwear, noisecancelling headphones, anti-dust mask, and protective gloves when necessary.









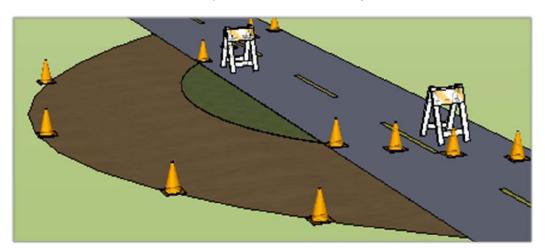








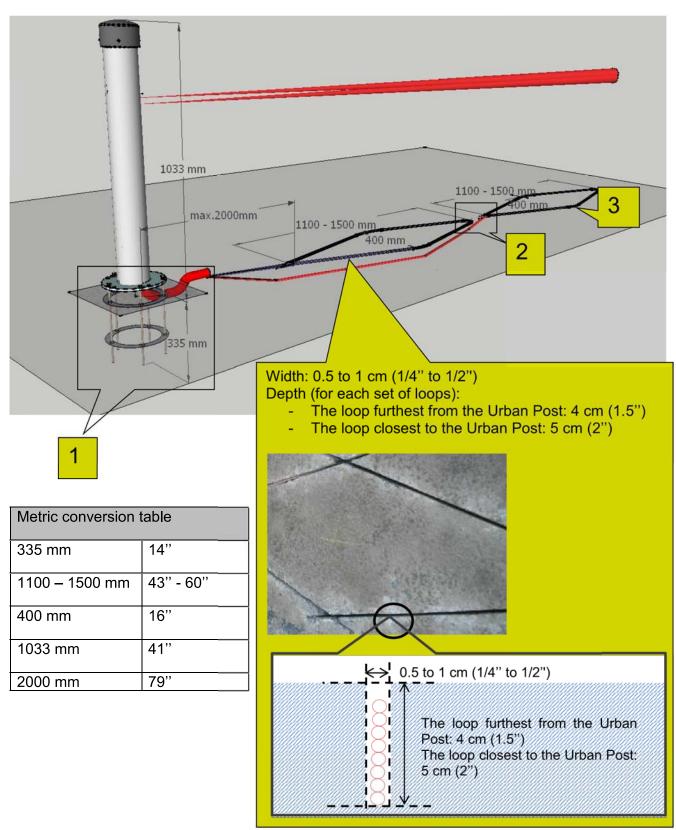
Secure the worksite with safety cones and hazard signs.



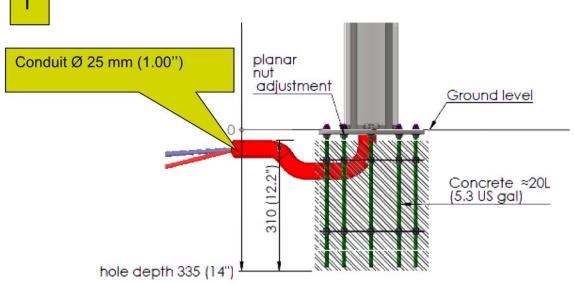
Wear the necessary protective equipment.

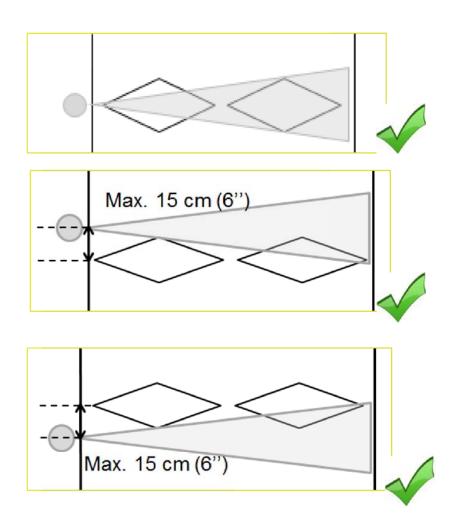


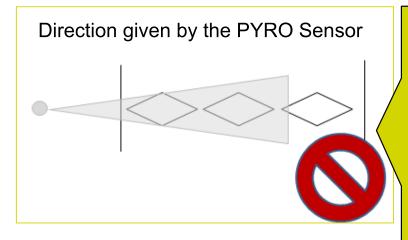
For other loop configurations, please refer to appendix A (page 35).











For Eco-MULTI systems with direction identified by the PYRO sensor, please make sure that the range of the PYRO sensor covers each loop.



Range of the medium-range PYRO Sensor: 4 m (15')

Range of the PYRO-Zoom:

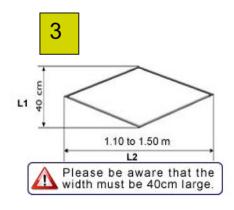
15 m (50')

A sticker indicates if the PYRO Sensor is a PYRO-Zoom.



It is very important to apply the corresponding spacing to the length of the loops and distance between each loop:

Loop length	Distance	Loop length	Distance
Greater than 1500 mm (59")	Co	ntact Eco-Counter	to evaluate feasibility
1500 mm	80 mm	59"	3.00"
1400 mm	100 mm	55"	4.00"
1300 mm	120 mm	51"	4.75"
1200 mm	140 mm	47"	5.50"
1100 mm	160 mm	43"	6.25"
Less than 1100 mm (43")	Co	ontact Eco-Counter	to evaluate feasibility



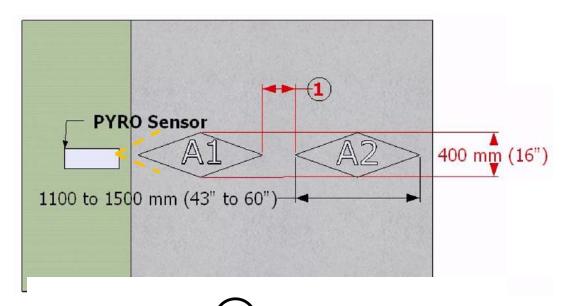
A loop consists of 8 turns.

The width L1 of the diamond must be 400 mm (16").

The length L2 can be adjusted between 1100 mm (43") and 1500 mm (60") (1400 mm (55") is the most common) depending on the width of the path where it will be installed.

The diamond shape must be perfect.

If there is a need for the loops to be a different size, please contact Eco-Counter to verify whether or not the desired dimensions are feasible.



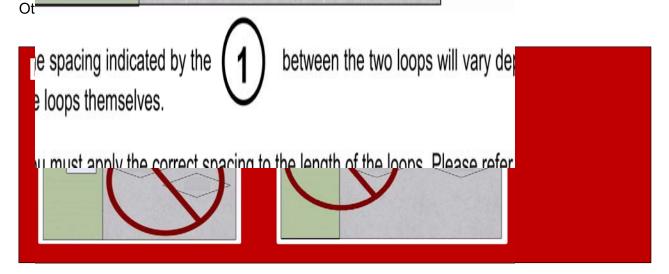
The spacing indicated by the the loops themselves.

between the two loops will vary depending on the length of

You must apply the correct spacing to the length of the loops. Please refer to chart 2 on page 16.

Dig. But the correct spacing to the length of the loops. Please refer to chart 2 on page 16.

must be maintained.



C.INSTALLING THE ZELT LOOPS

1- Trace the cut out for the ZELT Inductive Loops while making sure to respect the dimensions and positioning indicated in the layout patterns (see the section **Layout** (page 14), and appendix A (page 35).



2- Cut into the asphalt according to the markings.



Width: 0.5 to 1 cm (1/4" to 1/2")

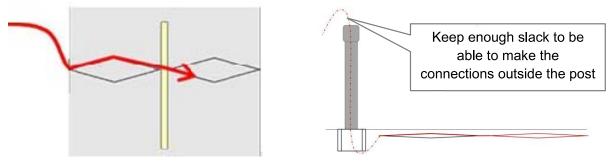
Depth (per set of loops):

- The loop furthest from the Urban Post: 4 cm (1.5")
- The loop closest to the Urban Post: 5 cm (2")

3- Clear out gravel from the saw cuts using a blower.
Use the short ruler to remove any remaining pieces of gravel.



- 4- Form loops consisting of 8 turns.
- If you have two pairs of loops (4 loops total), form loops A1 and A2 with the red conductive wire and loops B1 and B2 with the black conductive wire.
- If you would like to use your own wire to form the loops, just make sure that you use a stranded wire.
 - a) Start with the loop farthest from the Urban Post. Run the wire first through the trench of the first loop to access the farthest loop. Keep enough slack at the beginning of the wire so that it easily extends back to the top of the Urban Post.



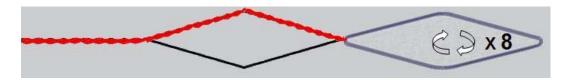
b) Run the wire around the loop until it has gone full circle 8 times.



c) Push the wire into the saw cut with the small ruler.



d) Stretch out the end of the two wires (red portion in the diagram below) and twist them as indicated in the following instructions:

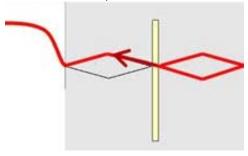


- 1. Attach the two extremities of the wire to a drill or an electric screwdriver.
- 2. Stretch out the wires.
- 3. Twist the wires.
- 4. Keep the wires tought while rotating the drill at a slow pace in order to achieve optimal results.

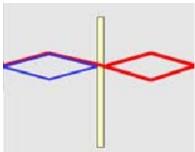
There should be at least 30 twists per meter (per yard).



e) Run the twisted wires back towards the Urban Post guiding the twisted wires through the trench of the loop closest to the Urban Post.



f) For the second and closest loop, run the wire around the loop 8 times, similarly to the first loop. Keep enough slack so that the wire extends back to the Urban Post. Repeat steps d and e.



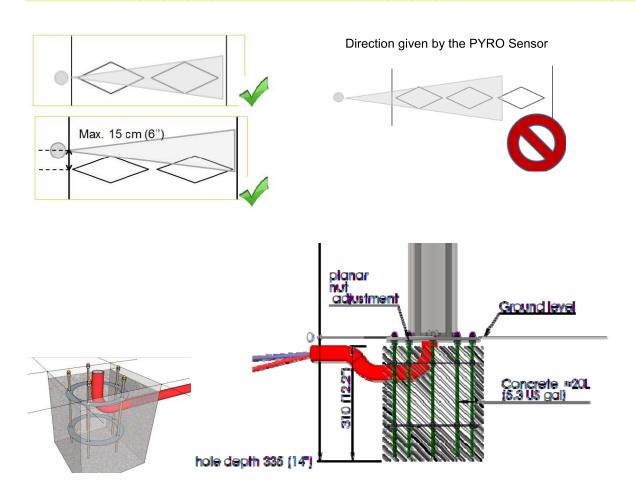
5- Verify the inductance of the loops. The level of inductance must be between 100 and 150 μH.



01. INSTALLING THE FIXING CAGE

1- Dig the hole for the fixing cage at maximum 2 meters (79") from the loop closest to the Urban Post.

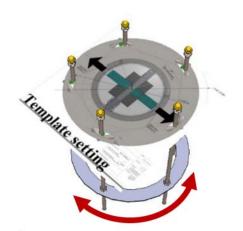
Installation rules - Reminder:

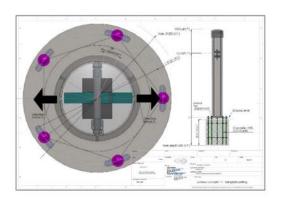


2- The positioning of the fixing cage determines the positioning of the PYRO Sensor(s).

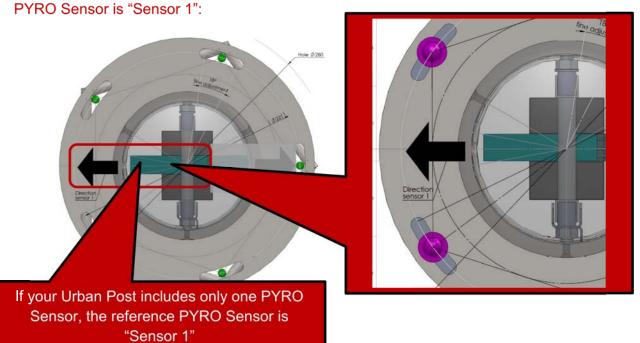
Adjust the positioning of the fixing cage by using the template supplied so that:

- The axis of the PYRO Sensor(s) is/are perpendicular to the path once the installation has been accomplished.
- The PYRO Sensor(s) is/are pointing at the right direction.

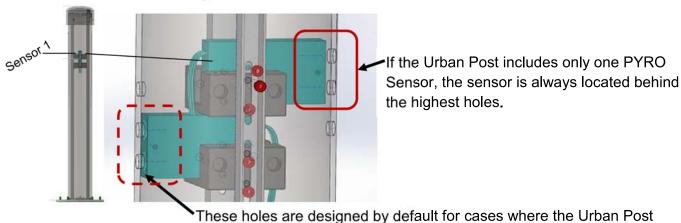




The template supplied has been designed by default for cases where the Urban Post includes two PYRO Sensors. If your Urban Post includes only one PYRO Sensor, the reference



When the Urban Post includes only one PYRO Sensor, the PYRO Sensor is indeed always located behind the highest holes.



contains two PYRO Sensors.

If your Urban Post includes two PYRO Sensors having different ranges (i.e. medium-range PYRO Sensor + PYRO-Zoom), identify the location of each PYRO Sensor in order to correctly position the fixing cage:

a) Open the Urban Post by unscrewing the three screws located on the cap using the screwdriver delivered.



b) Remove the inner structure from the Urban Post to identify which PYRO Sensor is located on which side.

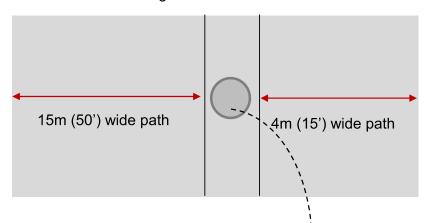


A sticker on the PYRO Sensor indicates the range:

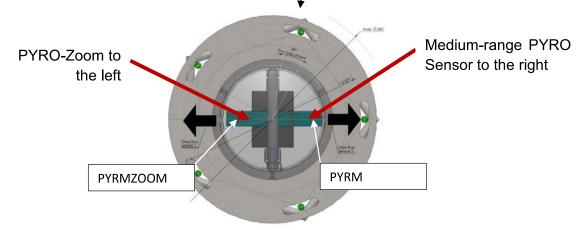
Sticker	Type of PYRO Sensor
Pyrm1	Medium-range PYRO Sensor without direction recognition
Pyrm2	Medium-range PYRO Sensor with direction recognition
Pyrc1	Short-range PYRO Sensor without direction recognition
Pyrc2	Short-range PYRO Sensor with direction recognition
Pyrmzoom1	PYRO-Zoom without direction recognition
Pyrmzoom2	PYRO-Zoom with direction recognition

c) Adjust the position of the fixing cage according to the site configuration.

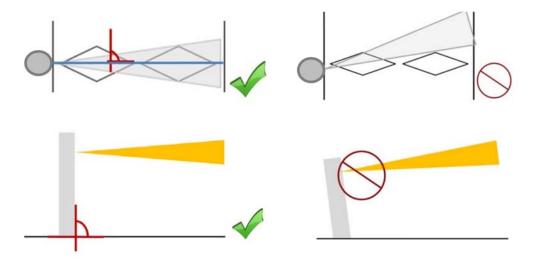
Example: for an Urban Post with one medium-range PYRO sensor and one PYRO-Zoom and a site configuration as shown:



➤ If "sensor 1" is the PYRO-Zoom and "Sensdr 2" is the medium-range PYRO Sensor, you will position the fixing cage as shown: '



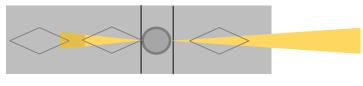
Installation rules - Reminder:

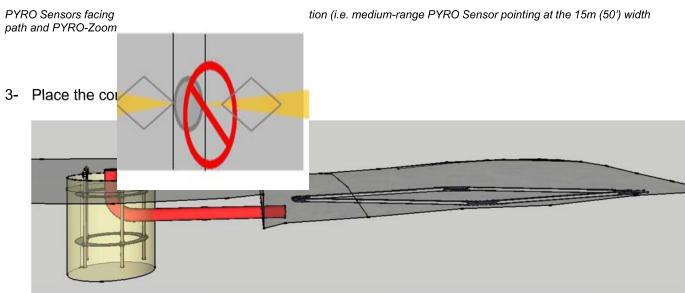


Urban Post with one PYRO Sensor



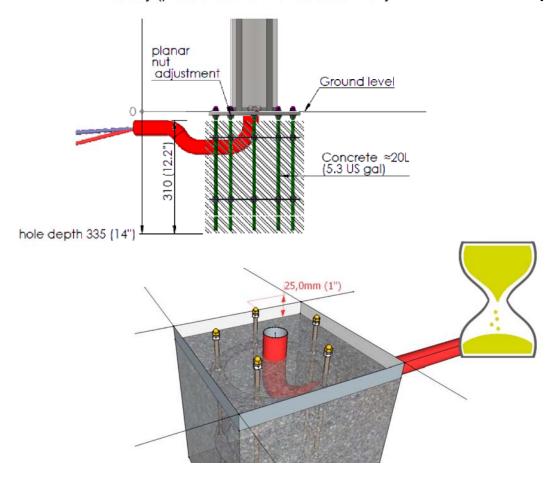
Urban Post with two PYRO Sensors





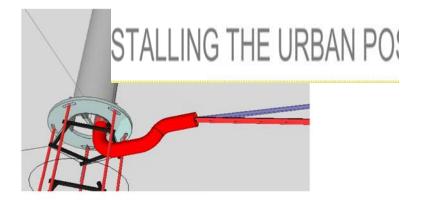
4- Fill in the hole and the fixing cage with concrete. Ensure the rod tips of the fixing cage protrude 2.5cm (1") above the concrete surface as shown in the image below.

Let the concrete dry (please refer to the instructions of your concrete for the drying time).

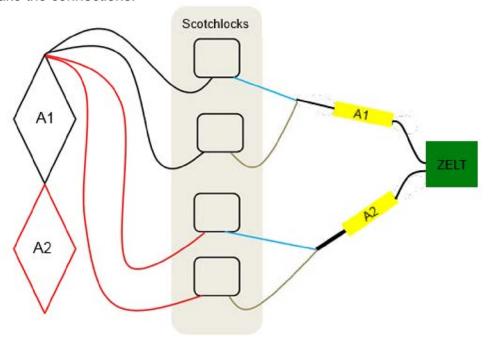


02. INSTALLING THE URBAN POST

- 1- Run the twist
- 2- Run the conc



3- Make the connections.



- Make sure that you connect the proper wire to the correct Scotchlock connector.
- If you have installed three ZELT Inductive Loops, Cable B1 will not be used. In this case, apply
 a Scotchlock connector to the end of this cable.
- Install the Scotchlock connectors by proceeding as follows:



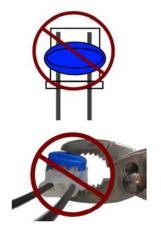
 Insert the two wires into the two external holes of the Scotchlock connector.



Insert the wires as far as possible - there is no need to strip the wires.



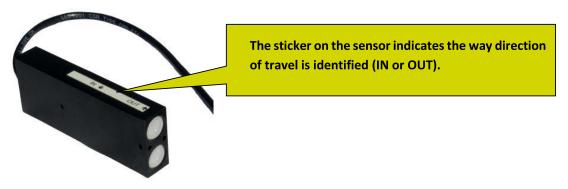
3) Close the connector by using a pair of pliers to release the gel and establish a connection.





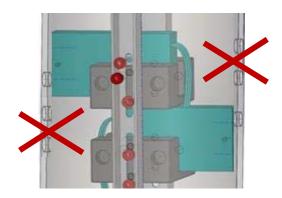


4- Identify directions IN and OUT on the PYRO Sensor(s) in order to know to which direction of travel they correspond when you will analyze the data in Eco-Visio.



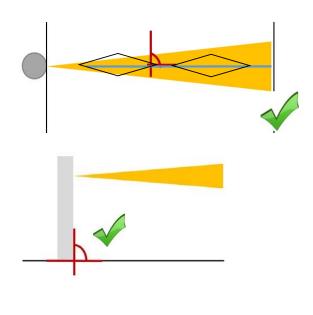
5- Put the inner structure back inside the Urban Post in its original position.

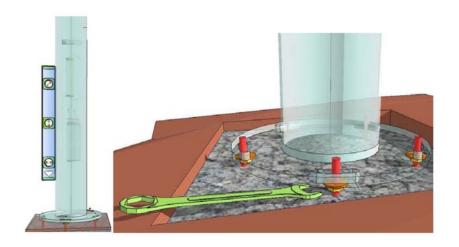
Do not rotate the inner structure, otherwise the PYRO Sensors won't be aligned with the holes anymore.



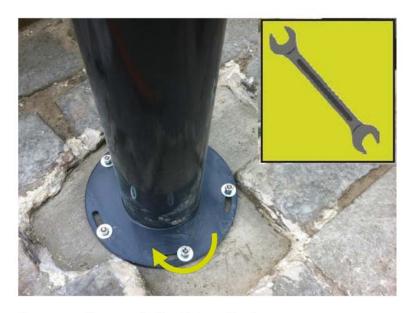
6- Place the Urban Post on the fixing cage and adjust its position so that the axis of the PYRO Sensor is perpendicular to the path.



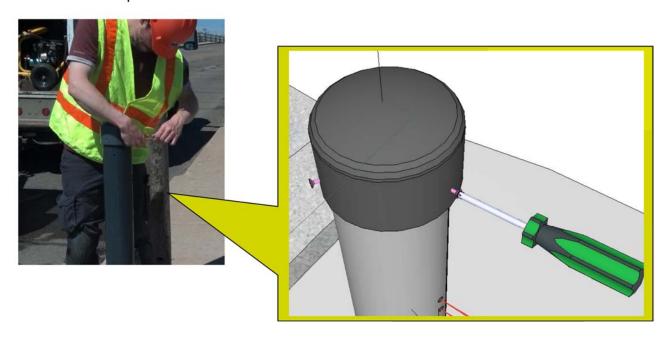




7- Bolt down the Urban Post



8- Screw on the cap to the Urban Post.



01. BLUETOOTH COMMUNICATION



The following section is only relevant if you are using the software Eco-Link.

If you have a laptop with the Eco-Link software installed, you will connect to the Urban Post as follows:

1- Wake up the Urban Post by waving the magnetic key over the activation zone.



2- Start Eco-link and click Retrieve, Check the counter.



3- Click on the Search button.



The counters detected by Eco-link appear in the column Serial Number.

4- Click on the serial number of the Urban Post and then click *Connection*.



- You may be asked to enter a PIN code. If so, enter the PIN code 0000.
- A message will appear indicating a Bluetooth connection. Click on the message to authorize the connection.



5- Give your counter a name and add a short commentary if desired. Click Ok.



A tab named *Main* will appear. You are now connected to the Urban Post.

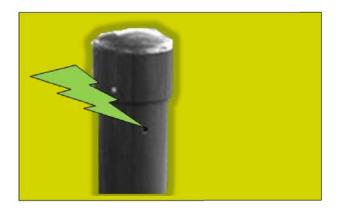
02. COUNTING FUNCTION

1- Wake up the Urban Post if it is in energy-saving mode (activation zone is not blinking) by waving the magnetic key over the activation zone.



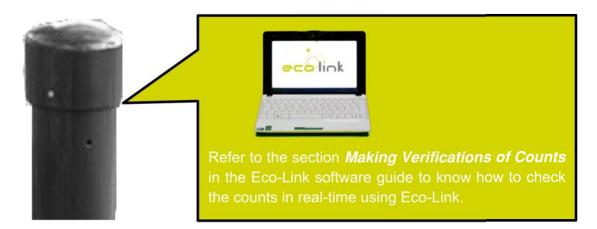
2- If you do not have a laptop with Eco-Link:

 Verify that the Urban Post flashes green every time a person passes in front of the PYRO Sensor or rides over the loops. Make sure to ride over each Loop.



If you have a laptop with Eco-Link:

Check directly on Eco-Link that the passages are being correctly recorded.

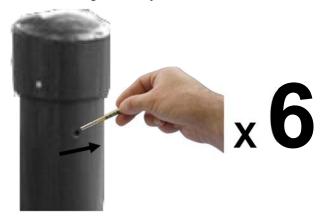


03. AUTOMATIC DATA TRANSMISSION

1- Wake up the Urban Post if it is in energy-saving mode (activation zone is switched off) by waving the magnetic key over the activation zone, and:

2- If you do not have a laptop with Eco-Link:

Wave the magnetic key 6 times over the activation zone.



The modem is now activated for 12 minutes. The following light signals indicate the modem is functioning correctly:

 Blue activation zone, 3 flashes 	Modem attempting to connect to the cellular network.
Blue activation zone, 2 flashes	Modem connected to the cellular network.
3. Blue activation zone, 1 flash	Modem connected to the server.
Steady blue light in activation zone	Data file transmitted to the server.

If you have a laptop with Eco-Link: follow the section *Testing automatic data transmission* in the Eco-Link software guide to learn how to test automatic data transmission automatically.



F. FILLING IN THE SAW CUTS

1- Fill in the saw cuts.

Attention: the wiring used in the loops will not withstand temperatures exceeding 60° C (140° F). Do not use a substance that surpasses this temperature when filling in the saw cuts.

You can place foam on top of the cable to hold it in place when filling in the saw cuts.



2- Take a picture of the counter to show your counting site on Eco-Visio.

I. ABACUS

A.LOOP LENGTH AND CORRESPONDING SPACING

The spacing indicated by the between the two loops is very important to respect and will vary depending on the length of the loops themselves.

Apply the corresponding spacing to the length of the loops:

Loop length	Distance	Loop length	Distance
Greater than 1500 mm (59")	Contact Eco-Counter to evaluate the feasibility		
1500 mm	80 mm	59"	3.00"
1400 mm	100 mm	55''	4.00"
1300 mm	120 mm	51"	4.75"
1200 mm	140 mm	47"	5.50"
1100 mm	160 mm	43"	6.25"
Less than 1100 mm (43")	Contact Eco-Counter to evaluate the feasibility		

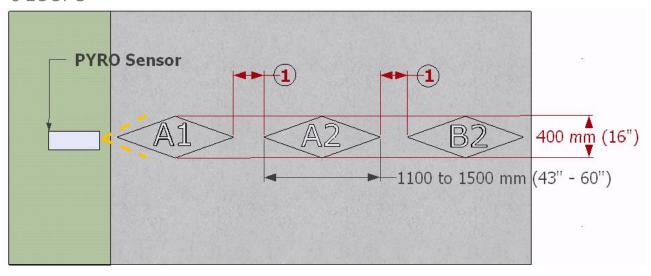
B.FIXED DIMENSIONS

The dimensions in red in the diagrams are fixed dimensions which must be maintained. Other dimensions can be adjusted +/-20 mm ($+/-\frac{1}{2}$ ") if needed.

II. MULTI SYSTEMS WITH DIRECTION INDICATED BY THE PYRO SENSOR

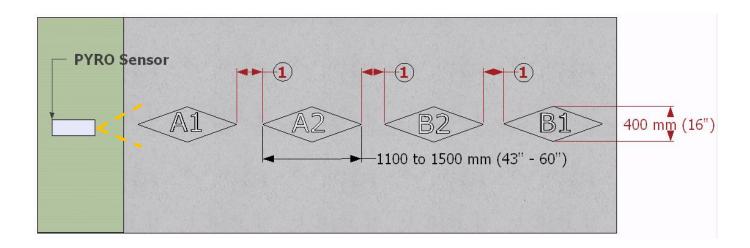
Attention! If you have specifically ordered a MULTI System with direction recognition through the ZELT Inductive Loops, follow the layout patterns in the section MULTI Systems with Direction Given by the Loops, page 37.

3 LOOPS



Cable B1 will not be used in this configuration – do not remove the Scotchlock connector at the end of this cable.

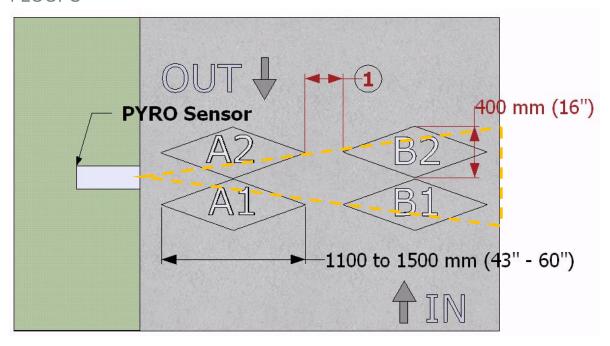
4 LOOPS



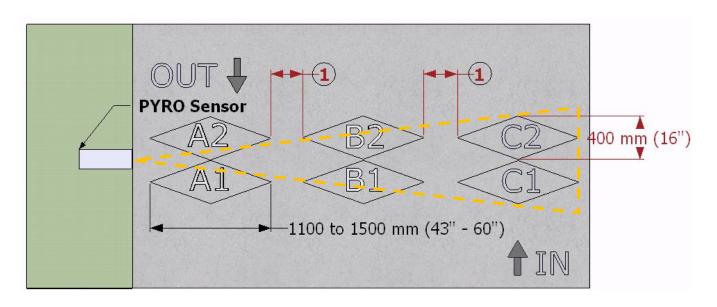
III. MULTI SYSTEMS WITH DIRECTION GIVEN BY THE LOOPS

Attention! Follow the installation diagrams below only if you have specifically ordered a MULTI System with direction recognition through the ZELT Inductive Loops.

4 LOOPS



6 LOOPS



I. THE COUNTING SYSTEM

The Eco-MULTI counting system is capable of differentiating between cyclists and pedestrians.

The system is composed of multiple sensors using different technologies to detect different modes of transportation (pedestrians and cyclists). The signals are analysed by an intelligent system called a **Smart Connect**, capable of deciding user type and classifying data. The signals are then sent to the **Eco-Combo logger** which collects and saves the data.

The data is then transmitted automatically by GPRS to an online platform called Eco-Visio if your Eco-Combo logger is equipped with an active automatic data transmission option. If your Eco-Combo is not equipped with the active automatic data transmission option, you will retrieve the data manually on site with a laptop computer equipped with Bluetooth and the **Eco-Link** software and then transfer it to the Eco-Visio online platform.

II. THE COMPONENTS

A.COUNTING SYSTEM

01. ECO-COMBO LOGGER

The Eco-Combo is the result of several years of Research & Development and is compatible with the entire Eco-Counter range. This intelligent logger collects, stores and transmits data - via a Bluetooth connection or automatic data transmission - directly to the online data management platform Eco-Visio.

For more information about the Eco-Combo logger, please refer to the Eco-Combo user guide.



02. SMART CONNECT

The **Smart Connect** connector is an intelligent system, serving as an interface between sensors and the logger when utilizing multiple sensors.



03. ZELT

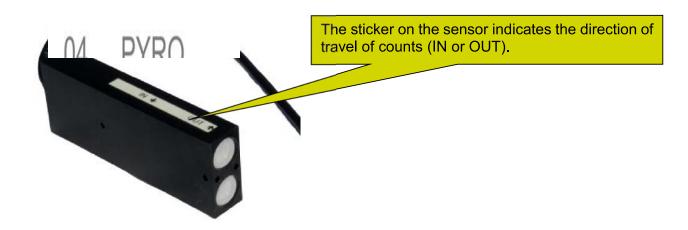
Eco-Counter's unique and patented ZELT Inductive Loop technology has been continuously improved by our Research and Development Team for over 5 years. The ZELT loop precisely analyzes the electromagnetic signature of each bicycle wheel, with 13 differentiation criteria.



If you have a three or four-loop system, two ZELT sensors are required.



use the combination of passive infrared technology and a high change in temperature created by a human body passing in the



05. BATTERIES

i. BATTERY FOR AUTOMATIC DATA TRANSMISSION

The battery pictured below supplies power to the modem which sends data automatically. This battery has a two-year life.



ii. ZELT BATTERIES

The ZELT batteries supply power to the ZELT sensor. This battery set has a two year battery life on one or two-loop systems, and a one-year battery life on systems with more than two loops.



06. CONNECTORS

i. WIRE TO FORM THE ZELT LOOPS

The following cable is a multi-stranded cable used to form the ZELT loops.



If you would like to use your own wire to form the loops, please be sure to use a stranded wire.

ii. SCOTHLOCK CONNECTORS

The Scotchlock connectors are used to connect the ZELT loops to the ZELT sensor. In the diagrams, they are represented by the symbol \nearrow .



B.SOFTWARE

01. DATA RETRIEVAL: ECO-LINK



Eco-Link is a software program installed on a laptop which enables users to interact with the logger. Eco-link allows users to:

- Retrieve data from an Eco-Counter manually (a necessary step for Eco-Counters without active automatic data transmission option)
- Transfer data to Eco-visio online software
- Modify the Eco-Counters settings

If you purchased a laptop through Eco-Counter, the Eco-Link software is preinstalled.

If you received a Bluetooth adapter, you only need to download and install Eco-Link.

You will find all the information needed to use Eco-Link in the Eco-Link software guide.

02. DATA ANALYSIS: ECO-VISIO



Eco-Visio is an online platform that can be used to analyze data, edit reports, manage counting sites, etc. This platform is accessed via the Eco-Counter website by logging in with a username and password.

If you have a logger with the automatic data transmission option activated, the data is automatically transferred online. Manual data retrieval is not necessary to initiate data analysis.

If you have a logger without the active automatic data transmission option, data must be retrieved before it can be analysed through Eco-Visio. This step is performed using a laptop and Eco-Link software.

CUSTOMER SERVICE

HARDWARE

The entire system is guaranteed for **2 years** starting from the date printed on the warranty certificate (the warranty certificate is delivered with your product).

In the rare case that there is a problem with a part in your system, the product must be returned with the Product Return Sheet. Please contact us to receive this sheet.

The logger serial number (please see the warranty certificate delivered with the product) must be identified on the Product Return Sheet.

The warranty cannot be implemented in the case of mishandling, incorrect installation (by someone other than Eco-Counter), or any other reason listed in the warranty certificate. If the product can be repaired, a quote will be submitted to the customer prior to repair. Any product damaged as a result of mishandling or improper use will be either replaced or repaired according to the parts price list used at the time of the request.

SOFTWARE

Problems related to the use of the software can be dealt with remotely. Please do not hesitate to contact Customer Service for assistance:

Europe / World

Tel: +33 (0)2.96.48.48.83

Fax: +33 (0)2.96.48.69.60

Email: support@eco-counter.com

North America

Toll Free: 1-866-518-4404

Phone: 1-514-849-9779

Email: <u>help@eco-counter.com</u>



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