

Quotation

Agency & Project

Hesperia, CA

CA, Hesperia -- Main St. Adaptive Corridor
(Phase 2)

Quote Addressed To

Justin Schlaefli

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San Diego, California 92126
USA

Quote Information

Prepared By Jesse Manning

Created Date 6/3/2019

Company Address 11228 Thompson Ave
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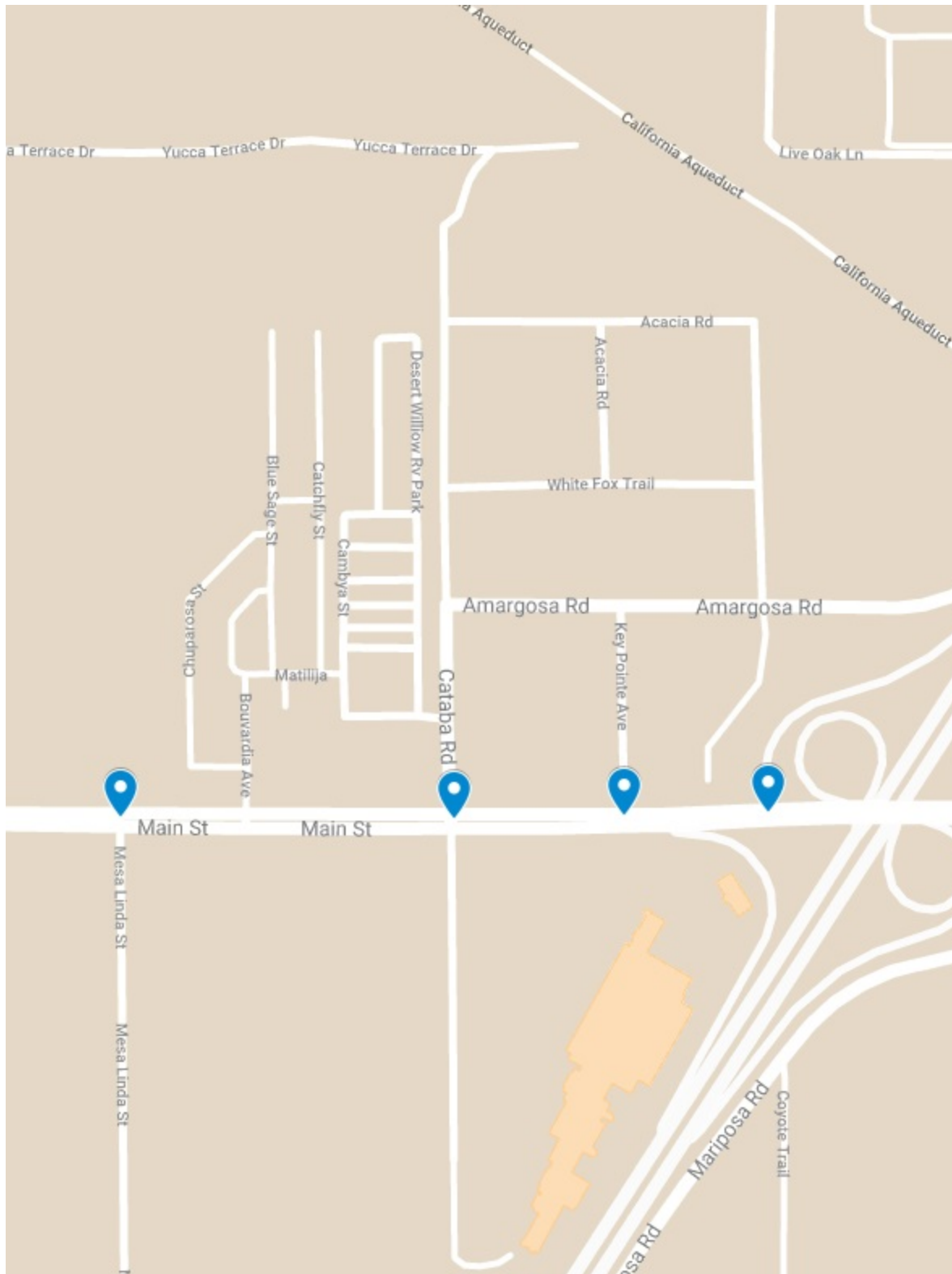
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Addresses

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8451 Miralani Dr, #A,
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Project Location



Responsibilities

Rhythm Engineering will be responsible for the following tasks:

1. Provide materials per the approved Quotation and subsequent Purchase Order. Material consists of In|Sync processors, detectors (e.g., video cameras) and enclosures, equipment panel and power supply, RG cable, Ethernet patch cables, detector-cards (if needed), Pedestrian modules, and monitors/keyboards, and other materials as specified.



2. Provide specifications for materials to be supplied by Client – wires, connectors, and specialized installation tools as well as camera mounting hardware if needed.
3. Once VPN access is provided to the entire In|Sync system, provide on-site classroom and hands-on training to Client, or their designee, in installation procedures for the In|Sync equipment listed above. Provide on-site classroom and hands-on training to Client, or their designee, in installation procedures for the In|Sync equipment listed above. This includes at a minimum: desired camera views, drawing detection zones and segments, connection of Ethernet cables, mounting of In|Sync processor(s) and site equipment panel in the traffic cabinet, connection of cables, connection of the pedestrian intercept feature, placing and cabling of detector-cards in the detector card rack (if applicable), monitor mounting and connections, and local processor accessibility. Provide remote support to installer during the installation process. Provide training for Client traffic engineering staff in the system parameters configuration, maintenance and operation of In|Sync.
4. Consult with Client traffic engineering staff to define the operating parameters for initial system operation, including but not limited to: allowed movements, desired progression routes, travel times, phasing, amber times, all-red times, pedestrian walk and flashing don't walk times, traffic counts, traffic patterns, and any unique requirements that the Client may want to allow for during certain time of day scenarios, etc.
5. Provide camera placement guidance and documentation.
6. Perform the on-site integration of the In|Sync adaptive system, including verification of camera views, working with the installer to make any adjustments needed and loading of the predefined software image into the processor. The Rhythm Engineering team will work both on-site and remotely to bring online each In|Sync system. The adaptive system will work "out of the box", but Rhythm Engineering will take time to monitor and modify the adaptive parameters remotely over a period of approximately one to two weeks after the activation of the arterial in order to maximize the performance of In|Sync.
7. Project Manage the entire scope of Rhythm Engineering's responsibilities as listed above and provide updates to the Client as necessary throughout the duration of the project.

Installer will be responsible for the following tasks:

1. Order and provide shielded/outdoor-rated Category 5 Ethernet cable and outdoor rated 3-strand 14 AWG power wire (IMSA 20-1 Traffic Control Cable 14-3 stranded copper) and wires, connectors, and specialized installation tools as well as camera mounting hardware (if applicable) per Rhythm Engineering specifications. Cut-sheets to be provided by Rhythm Engineering at the appropriate time upon request.
2. Perform installation work consisting of: pulling & terminating the required power and Ethernet Cat 5E cables (Comscope 2003 shielded/outdoor rated) from the controller cabinet to the Rhythm Engineering pre-approved mounting location, installation of camera mounting hardware to mast arms/luminaires, mounting of the video cameras, connecting wires to cameras per Rhythm Engineering specifications and training, camera aiming, zooming and focusing.
3. Perform traffic cabinet installation work consisting of: installing the site equipment panel, mounting and connecting the In|Sync processor to the Ethernet switch and installing In|Sync's detector input connection type. Wiring of the RG return cable and connection of the In|Sync® system to the Ethernet network provided via the communications system provided by the Client or communications installer.
4. Ensure that remote VPN access is established to the entire In|Sync system deployment to allow Rhythm Engineering to provide remote assistance in aligning proper views of each camera. Once VPN access is confirmed, Rhythm Engineering can schedule a Rhythm Engineering technician to assist on site for final placement of In|Sync into detector mode.
5. Installer shall not connect Rhythm equipment to power prior to receiving authorization from Rhythm Engineering.
6. During installation, installer shall not place the In|Sync system into detector or adaptive mode without written authorization from Rhythm Engineering.
7. Return to site as needed during system integration to adjust cameras or troubleshoot any cabling or other issues arising from faulty installation.

Client will be responsible for the following tasks:

1. Provide an Ethernet network with TCP/IP connectivity between signals.
2. Provide traffic engineering information per intersection including, but not limited to: traffic counts, traffic pattern by time of day, phasing, allowed and prohibited movements, current timing plans, amber times, all-red times, pedestrian walk and flashing don't walk times.
3. Reserve and provide Rhythm Engineering with Internet Protocol (IP) Addresses for each intersection's equipment. Rhythm Engineering requires that ten (10) Local Area Network (LAN) IP addresses be reserved per intersection. Client is responsible for providing the listing of addresses for each intersection to Rhythm Engineering.
4. Establish Simple Mail Transfer Protocol (SMTP) and Network Time Protocol (NTP) server connection, as well as access to the intersections via a Virtual Private Network (VPN) connection or other remote connectivity for support and monitoring purposes during the warranty/support period.



5. A detailed before-and-after study measuring delay, stops, travel time, fuel consumption and emissions over multiple time periods throughout the weekday could be conducted (AM Peak, AM Off-peak, Noon Peak, Afternoon Off-Peak, PM Peak, Evening Off-Peak). This task is not funded as part of this SOW/Quote, but may be let out to a consultant or other entity as part of the total job scope of work.

Project Deployment

Cabinet hardware & detection camera installation may be completed by agency staff and/or a hired contractor. Rhythm Engineering provides installation training with a Rhythm technician onsite to lead this training and ensure staff gain sufficient understanding & capability. If Client determines that a hired contractor is desired, a detailed installation quote should be developed by that contractor. Development of the detailed installation quote would require additional information about the corridor including a cabinet inspection and site survey.

Rhythm Engineering will completely deploy this project within the mutually agreed upon schedule. Client is responsible for ensuring all signals are operational and ready for equipment installation, including Ethernet connectivity and wiring completion. Any delays in implementation outside of Rhythm Engineering's control are excluded from this timeframe.

Terms & Conditions

Payment Terms:

- Quote does not include additional fees in the event Rhythm serves as a primary contractor.
- Any required bonding or licensing fees are not included in quote.
- All taxes are the responsibility of client. FOB Point: Lenexa, KS
- Payment is due within 30 days of the invoice date. Client understands that Rhythm depends on Client prompt payment in the conduct of Rhythm's business. In particular, Client's failure to pay timely the amounts owed to Rhythm jeopardizes Rhythm's ability to pay its employees, suppliers, and other creditors and may result in an impairment of Rhythm's credit standing and status with sureties and lenders. Because the damages Rhythm may sustain as a result of Client's late payment are difficult, if not impossible, to calculate, Client agrees that if Rhythm has not received payment within 30 days of invoicing, Client shall pay to Rhythm as liquidated damages an amount equal to 5% of the unpaid amounts. Client and Rhythm agree that the amount of liquidated damages is a reasonable estimate of Rhythm's damages, which are otherwise difficult to calculate. If payment exceeds 60 days past the invoice date (30 days past due), additional finance charges shall be applied at an interest rate of 18% APR. Finance charges are computed against the unpaid invoice balance, plus any liquidated damages and/or fees.

General Terms and Conditions:

- Client agrees that all Purchase Orders submitted to Rhythm in response to this Scope of Work and Quote do hereby incorporate any and all terms and conditions stated in this Scope of Work and Quote unless such terms or conditions are clearly and expressly rejected in writing within the submitted Purchase Order. In the event of such rejection, Rhythm shall not be deemed to have accepted Client's counteroffer unless Rhythm provides express written acceptance of the terms of Client's counteroffer. Purchase Orders submitted in response to this document that contain no payment terms are deemed to be a complete acceptance of the payment terms set forth in this document pursuant to these general terms and conditions.
- Client agrees that the laws of the State of Kansas apply to this Contract and all actions arising out of it. Client further agrees that this Contract is made in Kansas and Client subjects itself to the exclusive jurisdiction of federal or state court presiding over cases originating in Johnson County, Kansas and further agrees that venue is properly placed in a federal or state court presiding over cases originating in Johnson County, Kansas.
- Invoices are generated upon shipment of material.
- Client agrees that in the event either Rhythm or Client must initiate litigation or other enforcement proceeding the prevailing party in such litigation or other proceeding shall be entitled to recover its attorneys' fees and associated costs from the other party.

Quote Line Items



Product	Product Description	Quantity	Sales Price	Total Price
Cable, Belden Shielded CAT5e 1000 ft	7937A Belden Shielded CAT5e, 1000 ft. Roll 24 AWG Twisted Pair, Solid, Bare Copper, Polyolefin Insulation, LLPE Jacket	8.00	\$640.00	\$5,120.00
Cable, ABC Y, mode 0,7 (Standard)		6.00	\$1,500.00	\$9,000.00
Cable, C1, Mode 0, Standard		3.00	\$1,500.00	\$4,500.00
Cable, Power 14-3 with shield	1000-ft roll of camera power cable	8.00	\$450.00	\$3,600.00
DIN Relay IV	Digital-Loggers Ethernet DIN Relay IV	8.00	\$279.00	\$2,232.00
Equipment Panel		8.00	\$900.00	\$7,200.00
Fusion Module	Integrates Detection Devices	2.00	\$5,000.00	\$10,000.00
In Sync	InSync System	8.00	\$25,000.00	\$200,000.00
Keyboard & Monitor Kit	Perixx 505 plus Keyboard Lilliput 10.1 Monitor	8.00	\$700.00	\$5,600.00
Mast Arm Camera Mount Kit	Pelco AS-3009-120-SS-PNC Pelco SH-0514-PNC Pelco AB-2003-74	30.00	\$325.00	\$9,750.00
On Site Deployment Services	On-Site Services Provided by Rhythm	1.00	\$5,000.00	\$5,000.00
Pedestrian Integration	Integrates Pedestrian Operations. Includes hardware (Intercept Module) if necessary.	8.00	\$5,000.00	\$40,000.00
Processor, Shelf Mount	Processor, Shelf Mount	1.00	\$4,500.00	\$4,500.00
Shipping & Handling	FOB Lenexa	8.00	\$150.00	\$1,200.00
Spare In Sync System	1 In Sync Processor 1 Equipment Panel 2 Cameras with Enclosure Cables	1.00	\$12,500.00	\$12,500.00

Subtotal \$320,202.00
Total Price \$320,202.00
Grand Total \$320,202.00

Phase 2 of Hesperia's adaptive deployment on Main Street has shifted from previously-planned intersections to a section of the corridor close to I-15. This phase will not tie into the previous deployment but will stand on its own.

Exclusions

Mounting hardware is required for each detection camera. Cat5E and Camera Power Cable are required for ASCT system function. Ethernet cable runs from processor to detection cameras that exceed 100 m (328 ft) may require Ethernet repeaters. These required items may be purchased through Rhythm Engineering or procured through other sources.

Additional Items (may be purchased from Rhythm Engineering or elsewhere)

Description	Unit Cost
1000-ft roll of Ethernet Cat 5E Cable (conservative estimate: 1200 ft per intersection)	\$640.00
1000-ft roll of IMSA 20-1 Traffic Control Cable 14-3 stranded copper (conservative estimate: 1200 ft per intersection)	\$450.00



Ethernet repeaters and injector (required for cable runs exceeding 320 ft)	\$960.00
EZRJ45 Cat 5E shielded connectors (package of 50) [conservative estimate: 1 package needed per 5 intersections]	\$80.00