

ADDENDUM

March 5, 2020

RE: City of Mobile Bid #5390 for Upfitting Tahoe Police Patrol Vehicle

Please consider the following to be Addendum to City of Mobile Bid # 5390 for Upfitting Tahoe Police Patrol Vehicle:

CHANGE

Opening Date

From: 11:00 AM, TUESDAY, MARCH 10, 2020

To: 11:00 AM, WEDNESDAY, MARCH 18, 2020

REPLACE BID SPECIFICATIONS

Delete/remove: Specifications sent with bid.

Replace with: Attached specifications dated March 5, 2020.

Thank you for your consideration in this matter. Sincerely,

John Paine

Purchasing Agent

City of Mobile

JP/ EN

PATROL BUILD

3-5-2020

The Patrol Build Tahoe shall consist of the newest year model full size Chevrolet Tahoe PPV with 2-wheel drive. It shall include standard specifications and be white in color. It shall include the following factory options:

6J7 Flasher, 6J3 Grille Wiring, 6J4 Horn Siren Circuit Wiring, 7X6 Spotlight, 6C7 Interior Dome Lamp, 9U3 20% Front Seat Delete, and fitted front and rear floor mats.

The City will accept no substitutions for the following equipment. The following emergency equipment is computer controlled and/or must be designed to be compatible. The following products shall be provided and installed on the above vehicle:

- 1. (1) SoundOff Signal ENGKTGD002-MPD-P This is a kit which consists of the following:
 - A. (1) SoundOff Signal ENGCC01243 bluePRINT system controller.
 - B. (1) SoundOff Signal ENGHNK01 bluePRINT central controller harness kit.
 - C. (2) SoundOff Signal ENGHNK02 bluePRINT remote node harness kit.
 - D. (1) SoundOff Signal ENGSCR7152 bluePRINT 400 series console mount siren control.
 - E. (2) SoundOff Signal ENGND04101 bluePRINT remote node.
 - F. (2) SoundOff Signal ETSS100N 100N series composite speaker w/ universal bracket.
 - G. (1) SoundOff Signal ENGLNK004 bluePRINT Link Module.
- * bluePRINT® Central Controller Communication Hub for use within the EV Control System 1 Active High Ignition Input, 24 Outputs (100 Amps max) Must use PC configuration software to manage the relationship between input and outputs to create vehicle behaviors to improve officer and public safety
- Must be able to synchronize secondary lights to the light bar
- System must use Visual Diagnostic Indicators and Reliability Records for Each Output:
- Must be able to test and diagnose faults which may include over-current, over-temperature, over-voltage, under-voltage, and open-load.
- Logs are also recorded for the number of times the fault has occurred since last reset to aid in the diagnosis of intermittent connections.
- Each output has to have the ability to be individually timed after ignition is shut down; this eliminates the need for an external timer
- Each output has to have the ability to be programmed to load shed when the battery reaches certain programmed voltage levels
- Must have ignition security included in central controller—warning lights and siren activates when someone tries to steal the vehicle.

Input Voltage: 10-16Vdc (Negative Ground)

Outputs: Up to 82 programmable outputs

Inputs: Up to 40 discretely wired inputs + 24 CAN-BUS inputs

The Central Controller processor stores and interprets the input and output configuration from the software application and control outputs accordingly as well as monitors outputs for fault conditions. The Central Controller is fully software configurable via PC Software app through USB connection. The central controller is the communication hub for other system components within the EV Control System allowing for:

- A communication port for light bar
- A communication port for 14 button control panel
- A communication port for other control system devices
- Up to 5 remote nodes
- Input node
- Up to 2 200R siren amplifiers or (1) 400 series siren amplifier

The central controller allows for 24 outputs for connection to vehicle devices (100 Amps max) and has:

- (4) 10-amp fused outputs constant power
- (8) 10-amp solid state switchable outputs
- (12) 5-amp solid state switchable outputs. Each output to have a status LED to show if output is active

Must have a diagnostic LED to aid in diagnosing system issues

Input Voltage: 10-16Vdc (Negative Ground) Dimensions: 7" x 6.25" x 1" IGN ON: Standby Current: 140mA Operating Temp: -40°C to +65°C

IGN OFF: Sleep Current: 0.34 MICROAMPS Must have the following Program Functions:

- Increased visibility at intersections by tapping the horn—15 second aggressive pattern change with splashes of white, wall of white and horn tone, to clear intersections to improve safety, after 15 seconds warning pattern reverts back to last position
- · All Blue Light Heads to Flicker Cruise by Axillary button
- Automatic Siren Cut and slide 1 traffic stop pattern, when vehicle is in park position
- Each door must have timed off/on delay of 8 seconds when officer exits vehicle or opens rear doors during interviews to prevent vision loss
- Automated Arrow control, when vehicle is in Drive, Arrow is disabled and last warning pattern is activated, when in Park, arrow resumes
- Increased visibility when braking when in slide position 2 or 3 (Red Light heads activate to signal following officers)
- Increased safety during high risk stops—Blitz Tactical Feature to be activated by Factory Horn and/or side switch (aggressive flash pattern with splashes of white and dual tone siren horn/piercer tones, 8 seconds, then full scene white lights forward facing, all side and rear lighting is off with exception of Rear Drivers Side Red Steady burn task light in cruise Mode. Vehicle in Park with take downs on, slide position 1 for Blitz to function
- Ignition security activation when officer takes keys out of ignition to keep engine running, lights and siren are activated when someone depresses brake while trying to steal the vehicle. This feature must be included at no-cost. The gun lock will also be disabled after the ISS activates.
- 180 degree Flood/Scene lighting by turning on your high beams when the takedowns are on—gives the officer an advantage to see interior of vehicle without having to reach into press an auxiliary button
- Increased white light for reverse—rear facing light heads to activate solid white when vehicle is in reverse
- Increased red light for braking—rear facing light heads to activate solid red when brake is depressed
- Increased visibility by holding the horn to produce a front wall of white light to clear intersections, activated in slide position 3
- Individual timers to increase battery life and monitor power usage—eliminate extra batteries, all vehicle components are to be timed and load shed based on agency requirements
- Indicator beep will start beeping while service engine light is illuminated and the engine is running, causing officer to bring the vehicle in for fleet to determine cause of service engine warning.
- Must have up to 24 available matrices for expansion beyond what is listed above

NOTE: Due to system integrity and reduction of failure points, ALL programs and Pattern Modes/Matrices are to be achieved without the use of external relays or diodes.

- 2. (2) MNSTAR SOLUTIONS PD-B6I6 12 position split fused distribution block. This product must have 6 constant power, 6 switched power, and 12 ground connections.
- 3. (1) Setina BK2044TAH15 Push bumper with factory installed SoundOff Signal nFORCE blue and white color LED lights. 2 mounted on the front and 2 on the sides. This product must be able to sync with light bar.
- 4. (1) SoundOff Signal ENFLBQE25864 54" nFORCE LED light bar (ENFLB) w/ take downs & alleys clear lenses with blue/white to front w/scene, blue/amber rear for traffic director / 12 LED inboard & 24 LED corners. This product must have multiple driver control boards for reliability.
- 5. (2) SoundOff Signal EMPS2QMS4E mPower 4" fascia light quick mount, 18" hard wire w/ sync option, SAE class 1 & CA Title 13 compliant, 9-32 Vdc, black housing, 12 LED, dual color blue/white. This product must have Dow Corning ClearDuty silicone molded one piece housing and optic design for longer life and to resist gravel pitting, scratching, or cracking.
- 6. (4) SoundOff Signal EMPS2QMS5RBW mPower 4" fascia light quick mount, 18" hard wire w/sync option, SAE class 1 & CA Title 13 compliant, 9-32 Vdc, black housing, 18 LED, tricolor red/blue/white. This product must have Dow Corning ClearDuty silicone molded one piece housing and optic design for longer life and to resist gravel pitting, scratching, or cracking.

- 7. (1) SoundOff Signal ECVDMLTST4G interior cargo/LED dome light, flush mount w/ grey base, 6" x 3", white LEDs.
- 8. (1) Havis C-VS-1300-TAH-2-PM console for 2015-2019 Tahoe 12.5" wide x 13" long.
- 9. (1) Havis C-CUP2-I-A06 dual internal angled cup holder.
- 10. (2) Havis C-ARM-102 console arm rest.
- 11. (1) Havis C-HDM-204 side mount computer stand with telescoping pole.
- 12. (1) Havis C-HDM-402 safety lock assembly.
- 13. (1) Havis C-HDM-305 sliding top 9-15 in.
- 14. (1) Havis C-MD-204 low profile tilt swivel motion device.
- 15. (2) Havis C-MCB mic clip bracket.
- 16. (1) Setina GK11191B1SHKKKSSCA Blac-Rac universal partition mount rifle and shotgun lock.
- 17. (1) Setina PK0602TAH15 recessed panel front partition with polycarbonate, polycarbonate sliding window, and metal backing.
- 18. (1) Setina WK0514TAH15 vertical steel window bars.
- 19. (1) Setina DK0100TAH15 plastic door panel covers.
- 20. (1) Setina QK0566TAH15 Plastic seat replacement, seat belts, and polycarbonate rear partition combo.

Installation details:

- Item #1 SoundOff Signal ENGKTGD002-MPD-P shall be installed as per manufacturer's specifications using factory supplied hardware. The system controller and harness kit will be mounted inside the Havis center console. The remote nodes and harnesses will be mounted at locations to be determined. The SoundOff light and siren controller will be mounted on the Havis console using a Havis specific bracket. The siren speakers will be mounted to the push bumper using the supplied brackets.
- Item #2 MNSTAR SOLUTIONS PD-B616 shall be installed per manufacturer's specifications inside the Havis console. It will protect as well as provide power for all aftermarket equipment. Wiring connections for this item will be connected as follows:

Constant Power: Connected to constant power on front factory upfitter harness. Ignition Power: Will be provided and managed by the bluePRINT system. Ground: Connected to ground on front factory upfitter harness.

- **Item #3 Setina BK2044TAH15** shall be installed as per manufacturer's specifications to the front bumper.
- Item #4 SoundOff Signal ENFLBQE25864 shall be installed as per manufacturer's specifications to the rooftop of the Tahoe aligned with the "B" pillar. All wiring from the light bar will be protected by a grommet when passing through the roof and sealed with silicone.

- Item #5 SoundOff Signal EMPS2QMS4E shall be installed as per manufacturer's specifications.

 They will be installed on the front driver and passenger fenders and aligned horizontally.
- Item #6 SoundOff Signal EMPS2QMS5RBW shall be installed as per manufacturer's specifications. One set will be installed on the panel above the tail lights and aligned vertically. The other set will be installed on the panel beside the tag and aligned horizontally.
- Item #7 SoundOff Signal ECVDMLTST4G shall be installed as per manufacturer's specifications and centered on the inside of the rear hatch.
- Item #8-10 Havis C-VS-1300-TAH-2-PM, Havis C-CUP2-I-A06, & Havis C-ARM-102 shall be installed as per manufacturer's specifications. The Havis console will be installed between the front two seats. The cup holders and arm rests will be installed on the Havis console.
- Item #11-15 Havis C-HDM-204, Havis C-HDM-402, Havis C-HDM-305, Havis C-MD-204, & Havis C-MCB shall be installed as per manufacturer's specifications. The side mount computer stand will mount to the outside passenger side of the Havis console. The safety lock assembly will mount to the telescoping pole. The sliding top will mount to the safety lock assembly. The low profile tilt swivel motion device will mount to the sliding top. The mic clip brackets will mount to the sides of the Havis console.
- Item #16-20 Setina GK11191B1SHKKKSSCA, Setina PK0602TAH15, Setina WK0514TAH15, Setina DK0100TAH15, & Setina QK0566TAH15 shall all be installed as per manufacturer's specifications.

Additional Requirements:

Mobile Radio Wiring – the wiring harnesses for this item will be connected as follows:

Power:

Connected to constant power on the MNSTAR fused distribution block.

Ignition:

Connected to ignition power on the MNSTAR fused distribution block.

Ground:

Connected to ground on the MNSTAR fused distribution block.

There are 2 power wiring harnesses, 1 for the head unit (display) and 1 for the MRU unit (brain). The head unit will be mounted on the Havis console using the specific Havis bracket. The MRU will be mounted on the rear of the rear partition with a specific Harris bracket. A 3pin data cable will run between these 2 units. A Harris combination radio and GPS antenna will be installed on the rear of the roof. A RG-58 coaxial antenna cable and a GPS antenna cable will run from the combination antenna and terminate with a TNC connector and a SMA connector respectively at the location of the MRU. A radio speaker will be mounted with the supplied mounting bracket and hardware inside the Havis console.

- **Factory Flashers** –The factory flashers are factory installed. There will be an activation wire in the factory upfitter wiring harness that will be extended and connected to the SoundOff control unit so as to activate when programmed to.
- The installer will furnish to the City of Mobile a full diagram listing where The wire runs are located and listing what wiring scheme is being used (EX: Red=Constant Power, Yellow=Ignition Power, Black=Ground, Pink=Trigger, Blue and Brown=Siren, ETC).
- A warranty and service agreement will be made detailing what service will be provided and for what length of time.
- The company awarded the contract or its contractor shall stock replacement parts or have them readily available for repairs.

- '- 'All wiring shall be protected by a raceway, channel, loom, or conduit. Any wiring outside of the passenger compartment shall be loomed. Any connections made outside of the passenger compartment shall be soldered and heat shrunk, or at minimum a heat shrink type connector shall be used. The connections on any wire 10 gauge or larger in diameter **must** have a mechanical connection (uninsulated crimp), as well as be soldered and heat shrunk regardless of location.
- All lights will be synchronized together.
- The installer is responsible for providing and installing all wiring, shop supplies, and any equipment not specifically listed as being provided by the City of Mobile; as necessary for a professional installation of the above listed items.
- All installations must be professional, neat in appearance, and performed by one organization. All manners of installation and wiring must be uniform and appropriate for the equipment being used as well as comply with industry standards.
- All wires will be routed behind trim and floor covering and positioned as to not interfere with other components.
 - * All above equipment to be installed prior to delivery
 - *** Install shall include a Harris radio wiring kit to be provided to the contractor by the City of Mobile.