



REQUEST FOR PROPOSALS

Intelligent Transportation System Services

The Lower Manhattan Construction Command Center (“LMCCC”), a division of the Lower Manhattan Development Corporation (a subsidiary of the New York State Urban Development Corporation d/b/a Empire State Development Corporation), seeks proposals to provide Intelligent Transportation System Services to support the operations of LMCCC.

September 5, 2006

Deadline for responses: September 29, 2006, 5:00 PM EST

Questions must be submitted in writing and received no later than 5:00PM EST on September 12, 2006 marked “Attention: Jeanette Reteguis” by mail to LMCCC at One Liberty Plaza, 29th Floor, New York, NY 10006 or by facsimile to: (212) 442-5121. Addenda to this RFP, including responses to any questions, will be posted on the LMDC web site www.renewnyc.com by 5:00 PM EST on September 15, 2006. LMDC/LMCCC will not accept, and cannot respond to, questions via any other method.



LOWER MANHATTAN DEVELOPMENT CORPORATION

I. GENERAL INFORMATION

A. Mission and Structure of the Lower Manhattan Development Corporation

The Lower Manhattan Development Corporation (“LMDC”) was established in late 2001 to develop and revitalize Lower Manhattan in the aftermath of the September 11, 2001 terrorist attacks including the World Trade Center Memorial and Cultural Program. As it relates to the work of LMDC, Lower Manhattan refers to all areas in Manhattan south of Houston Street.

LMDC is a subsidiary of the New York State Urban Development Corporation, doing business as Empire State Development Corporation (“ESDC”), a political subdivision and public benefit corporation of the State of New York, created by Chapter 24 of the Laws of New York, 1968, as amended. LMDC is governed by a sixteen member Board of Directors, eight of whom were nominated by the Governor of the State of New York (“State”) and eight of whom were nominated by the Mayor of the City of New York (“City”).

LMDC is funded by federal appropriations administered by the United States Department of Housing and Urban Development (“HUD”) through its Community Development Block Grant (“CDBG”) program. Partial Action Plans relating to the expenditure of these funds are available on LMDC’s web site: <http://www.renewnyc.com>. LMDC also receives a grant described below for construction coordination activities from the Federal Transit Administration (“FTA”).

B. Mission and Structure of the Lower Manhattan Construction Command Center

In November of 2004, the Governor of New York and the Mayor of New York City signed joint Executive Orders creating the Lower Manhattan Construction Command Center (“LMCCC”) and charging it with coordination and oversight of all Lower Manhattan construction projects. As it relates to the work of LMCCC, Lower Manhattan is defined as the area of Manhattan south of Canal Street and southwest of Rutgers Street from the Hudson River to the East River.

LMCCC’s mission, set forth by the executive orders, is to facilitate construction activities, mitigate their impacts on the community, and communicate with the public about the effects of the work taking place. To fulfill this mission, LMCCC brings together private developers, public agencies, utilities, businesses and residents to coordinate billions of dollars in construction and mitigate the impact of that construction on the multiple stakeholders. In addition to its oversight and coordination responsibilities, LMCCC and its Executive Director create a forum for expeditious and consistent decision-making on disputes among agencies. The Executive Director reports directly to both the Governor and the Mayor.

LMCCC is funded in part by federal funds administered by LMDC and accordingly follows administrative, financial and legal policies and procedures of LMDC.

C. Overview of Services Requested and the Submission Process

In fulfilling its responsibility for maintaining mobility in Lower Manhattan during the reconstruction, LMCCC will need to obtain the services of one or more firms to design, build, maintain and service an Intelligent Transportation System (“ITS”) to collect and to provide real-time information on traffic conditions in Lower Manhattan to LMCCC, City and State entities and to the driving public. LMCCC may select one or more firms to provide some of the requested services, or LMCCC may select a single firm to provide all services requested. Firms interested in submitting proposals to provide such services are required to follow the recommended guidelines and instructions contained in this Request for Proposals (“RFP”). In the event it becomes necessary to revise any part of this RFP, revisions will be provided by addenda posted on the LMDC web site: <http://www.renewnyc.com>.

Proposals should provide a straightforward, complete and concise description of the firm’s capabilities to satisfy the requirements of the RFP, as outlined in the scope of services. Please prepare ten (10) copies of your proposal and a minimum of ten (10) work samples in hard copy plus two (2) electronic copies on CD or DVD. Each hard copy of the proposal should be bound in a single volume and include any documentation you may wish to submit.

Firms submitting a proposal in response to this RFP may be required to give an oral presentation of their proposal to LMCCC. This oral presentation may provide an opportunity for the firms to clarify or elaborate on the proposal but will in no way change the original submission. Engagement staff should be present at the oral presentation. LMCCC’s request for an oral presentation shall not constitute acceptance of a proposal.

Proposals must be received no later than 5:00 PM EST, September 29, 2006. Deliver all proposals to:

RFP/RFQ PROCESSOR
Lower Manhattan Development Corporation
One Liberty Plaza, 20th Floor
New York, New York 10006
Attn: LMCCC Intelligent Transportation System RFP

LMDC/LMCCC reserves the right to reject any or all proposals submitted if such election is deemed to be in the best interest of LMCCC. LMCCC assumes no obligation, no responsibility and no liability for costs incurred by the responding firms prior to the issuance of a contract.

The current schedule for this effort is as follows:

- September 12, 2006 – Deadline for submitting questions
- September 15, 2006 – Addendum and answers to questions posted on www.renewnyc.com
- September 29, 2006 – Responses Due
- October 2-6, 2006 – Oral Presentations conducted, if necessary

- October 12, 2006 – Firm Selected

Subject to annual review and approval, contracts issued pursuant to this RFP will cover two separate programs:

1. Program 1 is for design, fabrication, installation and testing of the ITS as described in the Scope of Work below and is funded by the FTA. Program 1 is for six (6) months, with a first option to renew for an additional six (6) months and a second option to renew through December 31, 2010.
2. Program 2 is for maintaining and servicing the ITS as described in the Scope of Work below and is funded by a combination of City and State funds. Program 2 is for two (2) years, with an option to renew through December 31, 2010.

II. ANTICIPATED SCOPE OF SERVICES

A. Purpose and Project Area

LMCCC is seeking proposals from experienced and qualified consulting or contracting firms to design, build, maintain and service ITS in Lower Manhattan to facilitate traffic management during the reconstruction of the World Trade Center and other major Lower Manhattan construction projects by providing LMCCC, City and State agencies and the driving public real-time information about traffic conditions in Lower Manhattan.

All systems will be operated by the New York City Department of Transportation (“NYCDOT”) out of the Traffic Management Center (“TMC”) in Long Island City. In order to provide maximum flexibility in the placement of ITS equipment, all equipment must communicate with, and be controlled by, the TMC wirelessly. Proposals must also include a high-bandwidth telecommunications link between the TMC and LMCCC in Lower Manhattan. The proposed system must conform to the regional architecture and must be compatible with existing systems to the maximum extent possible.

B. Background

LMCCC has identified traffic management as one of its highest priorities and a critical component of the successful downtown reconstruction effort. In order to achieve its goals for maintaining mobility in Lower Manhattan, LMCCC, in conjunction with NYCDOT, the New York Police Department (“NYPD”) and the New York City Department of Buildings (“DOB”), has developed a comprehensive Traffic Management Plan (“the Plan”) focused on giving City agencies the resources needed to coordinate permit issuance and other ministerial activities, to enforce traffic regulations and permit stipulations and to react to incidents as effectively as possible. There are three main components to the Plan: (1) the development of a Master Schedule and Maintenance and Protection of Traffic (“MPT”) Plan; (2) the establishment of a

Construction Permit and Enforcement Taskforce (“CPET”); and (3) the deployment of ITS in Lower Manhattan.

Master Schedule and MPT

LMCCC developed and maintains both a high-level Master Schedule of all major construction projects in Lower Manhattan and a Geographic Information System (“GIS”) database of project locations and activities. By linking the master schedule to a GIS environment, LMCCC is able to generate maps that illustrate anticipated street impacts on any given date in the schedule. The maps identify clusters of potential future traffic impacts years in advance. LMCCC can then develop strategies with the relevant project sponsors and transportation agencies to minimize or eliminate the causes of the impacts.

Construction Permit Enforcement Taskforce (“CPET”)

The CPET is LMCCC’s primary tool for facilitating the coordination of permitting and enforcement activities among various City agencies to mitigate traffic, maintain mobility, ensure proper enforcement and prevent agencies from working at cross purposes to each other. There are three key agencies represented on the CPET: CDOT, NYPD and DOB; additional agencies represented include: the New York City Department of Sanitation, the Community Assistance Unit of the Mayor’s Office, the New York City Department of Parks & Recreation, the Taxi and Limousine Commission and others.

Each key agency will station a supervisor at LMCCC to represent the agency on the CPET and to manage the enforcement personnel in the field. CPET supervisors will meet daily to discuss permitting issues, resolve permitting conflicts, address construction-related complaints and coordinate field operations of enforcement personnel. Though stationed at LMCCC, each CPET supervisor will continue to report to his or her agency.

ITS

Effective enforcement is dependent upon the availability of good data. The Plan envisions providing enforcement personnel supervisors with the best information possible so that they are able to make informed decisions about personnel deployment to maximize their resources as effectively and efficiently as possible. The Plan aims to achieve this goal by leveraging the latest in ITS technologies to bring real-time traffic data to the CPET supervisors located at LMCCC.

C. Scope of Services

The selected firm or firms (“the Contractor”) must perform all tasks set forth in this section. The Contractor will provide one integrated ITS system for control and operation at the TMC and for use at LMCCC. The system shall have subsystems for traffic monitoring cameras, vehicle detection sensors, variable message signs, transponder readers, highway advisory radio

and communications, as described in Task 1 below. The Contractor will work with NYCDOT to develop detailed contract specifications and requirements for each subsystem and submit them to NYCDOT for review and approval. Project design development must be consistent with System Engineering Processes, National ITS Standards and the New York Subregional Architecture.

All equipment installed pursuant to this RFP will be operated by NYCDOT personnel at the TMC. All traffic data, dynamic digital footage or any other form of data collected by equipment installed pursuant to this RFP is the sole property of the City under the jurisdiction of NYCDOT for use by the City and LMCCC. The Contractor's right to install equipment on City infrastructure is non-exclusive and all installations must be done in such a way as not to exclude NYCDOT or other public entities from installing equipment at or near the Contractor's equipment.

Program 1

The volume of construction activity in Lower Manhattan is expected to increase dramatically starting from the fall of 2006 into the spring of 2007. Thus, *time is of the essence* in implementing Program 1.

TASK 1 – SYSTEM DESIGN AND INSTALLATION

Under Program 1, the Contractor will design, secure and construct the ITS subsystems described below. The Contractor will consult with the relevant regional transportation agencies, including, but not limited to, NYCDOT, NYSDOT, PA, MTA and EDC, before proceeding with design. The Contractor will develop a design for each subsystem. LMCCC, in consultation with NYCDOT, will review and approve each design. Once a design is approved, the Contractor will build each subsystem. The Contractor is responsible for obtaining all permits and approvals necessary to install each subsystem as per the approved design. LMCCC must have the ability to test system performance and traffic data accuracy for each subsystem upon initial implementation and prior to any system modifications and upgrades.

Subtask 1.1 – Wireless Traffic Monitoring Cameras

The Contractor will design and build twenty-seven (27) wireless traffic monitoring camera installations, one camera at each location marked by a red circle on the map in Appendix A. The new cameras will supplement the City's existing ten (10) cameras and the four (4) cameras that NYSDOT proposes to install in Lower Manhattan as part of its Route 9A Interim ITS plan. The purpose of the cameras is to monitor traffic conditions on key streets in Lower Manhattan.

Cameras will be mounted on City street lights or other appropriate City-owned infrastructure under the jurisdiction of NYCDOT. Electric power will be taken from the City-owned infrastructure on which each camera is mounted and all communications will be wireless. The Contractor will submit to NYCDOT for review and approval

design documents for mounting a camera at each location. The Contractor may propose alternate locations from those in Appendix A to provide better vantage coverage; alternate locations must be approved by LMCCC, in consultation with NYCDOT, prior to proceeding with designing the installations. NYCDOT may reject proposed locations, infrastructure or installation designs for any reason. The Contractor will ensure that digital feeds from each new camera flow only to NYCDOT. The Contractor will also work with NYCDOT to integrate the digital feeds into a web portal that NYCDOT is currently developing.

Traffic Monitoring Cameras are to have the following characteristics:

- Full pan, zoom and tilt capabilities
- Full color
- IEEE 802.11g technology or greater, plus compatibility with the City's Broadband Wireless Network technologies, described in Task 3, including a weatherproof enclosure with an A/C power outlet for support of future data communications equipment
- Ability to stream at multiple frame rates, which rate can be selected remotely, to minimize bandwidth when not necessary and maximize resolution when necessary
- Ability to support IP based data encryption and security
- Weatherproof 10/100 MB Ethernet connection for IP wired connectivity and maintenance
- Microphone and speaker capability
- Ability to connect to a digital video recording device

Subtask 1.2 – Traffic Sensors

The Contractor will design and build a subsystem for measuring average traffic speeds along defined road segments (road segments can be several blocks long) and for collecting spot traffic volumes and vehicle classification on the key streets marked in red on the map in Appendix B. LMCCC anticipates the system will require up to thirty (30) video detection cameras, which are more accurate at lower speeds, as the primary source of traffic speed data and up to one hundred fifty (150) microwave sensors for supplemental data collection. The purpose of the sensors is to allow for easy identification of traffic problems in Lower Manhattan through the creation of a single, color-coded, user-friendly map showing real-time traffic speeds on key Lower Manhattan streets.

Traffic sensors must collect and transmit to NYCDOT traffic speed, volume and classification data at or near real-time – at a minimum, once every minute. The Contractor will submit to NYCDOT for review and approval a methodology for calculating traffic speed along defined road segments. The Contractor is responsible for developing all necessary algorithms and programs for calculating traffic speeds based on the data collected from the sensors. The Contractor must also provide LMCCC and

NYCDOT with daily traffic volume data in an electronic format to be approved by LMCCC grouped in five (5) minute intervals. Traffic data must include: date, time, sensor ID, location, direction of travel and any anomalous sensor readings.

Traffic sensors are to be mounted on City street lights or other appropriate City-owned infrastructure under the jurisdiction of NYCDOT. Electric power will be taken from the City-owned infrastructure on which each sensor is mounted and all communications are to be wireless. The Contractor will identify and submit to NYCDOT for review and approval proposed suitable infrastructure for mounting the sensors. The Contractor will design the appropriate means of installation at each location and submit such designs to NYCDOT for review and approval. NYCDOT may reject proposed locations, infrastructure or installation designs for any reason. The Contractor will ensure that video or data feeds from any new sensor flow only to NYCDOT. The Contractor will also work with NYCDOT to integrate real-time traffic speed, volume and classification data into a web portal NYCDOT is currently developing.

NYCDOT currently uses microwave sensors to measure traffic speed on arterial highways where speeds are generally higher and more consistent over longer stretches of road. Since such a system has not been used on local streets where traffic signals and competing uses result in slower and more variegated traffic conditions, the Contractor will beta test the subsystem before proceeding with full design and implementation. The Contractor will submit a full program for the beta test, including, but not limited to, methodology, location and duration, to LMCCC. The Contractor may propose alternative technologies or designs. LMCCC, in consultation with NYCDOT, will review and approve the program. The Contractor will design the appropriate means of installation and submit such designs to NYCDOT for review and approval. The Contractor is responsible for obtaining all licenses, approvals and permits necessary to perform the beta test. Upon completion of the beta test, the Contractor will provide written evidence that the system is reporting within +/- 10% of ground truth, where ground truth is defined as the accuracy achieved by travel runs in a car for traffic speed data and by a manual count for traffic volume and classification data, for the beta test to be considered a success. The Contractor is responsible for providing all services necessary to provide sufficient evidence. LMCCC will review the results of the beta test with NYCDOT and FTA before determining whether or not to proceed with full implementation.

If the results of the beta test are not satisfactory, the Contractor will recommend two alternative approaches to meet the goals of the subsystem, only one of which will be selected. The Contractor may also propose reducing the desired functionality of the subsystem and propose a design that meets this reduced functionality. LMCCC, NYCDOT and FTA must agree to any reduction in functionality before the Contractor may propose a design.

Video detection cameras are to have the following characteristics:

- IEEE 802.11g technology or greater, plus compatibility with the City's Broadband Wireless Network technologies, described in Task 3, including a weatherproof enclosure with an A/C power outlet for support of future data communications equipment
- Send traffic speed, volume and classification data to TMC once every minute
- Ability to stream at multiple frame rates, which rate can be selected remotely, to minimize bandwidth when not necessary and maximize resolution when necessary
- Ability to support IP based data encryption and security
- Weatherproof 10/100 MB Ethernet connection for IP wired connectivity and maintenance
- Microphone and speaker capability
- Ability to connect to a digital recording device

Microwave sensors are to have the following characteristics:

- IEEE 802.11g technology or greater, plus compatibility with the City's Broadband Wireless Network technologies, described in Task 3, including a weatherproof enclosure with an A/C power outlet for support of future data communications equipment
- Ability to support IP based data encryption and security
- Weatherproof 10/100 MB Ethernet connection for IP wired connectivity and maintenance
- Send traffic speed, volume and classification data to TMC once every minute

Subtask 1.3 – Variable Message Sign (“VMS”) Boards

The Contractor will purchase twelve (12) VMS boards for installation in and around Lower Manhattan. VMS board displays are to be controlled by NYCDOT personnel from the TMC. The purpose of the VMS boards is to provide the driving public with information about traffic conditions and alternate routes in Lower Manhattan.

The Contractor, in consultation with NYCDOT, NYSDOT, MTA and PA, will propose locations for installing the VMS boards where their effectiveness in communicating information about traffic conditions in Lower Manhattan will be maximized, taking into consideration the availability of other VMS boards, both permanent and temporary, maintained by the agencies listed above. NYCDOT will review and approve the proposed locations. The Contractor will install the VMS boards in the approved locations. The Contractor will also work with NYCDOT to integrate the VMS board locations into a web portal that NYCDOT is currently developing.

VMS boards are to have the following characteristics:

- IEEE 802.11g technology or greater, plus compatibility with the City's Broadband Wireless Network technologies, described in Task 3, including a weatherproof

enclosure with an A/C power outlet for support of future data communications equipment

- Ability to support IP based data encryption and security
- Weatherproof 10/100 MB Ethernet connection for IP wired connectivity and maintenance
- Solar panels and generators for power
- Three (3) lines of text
- Conform with the Manual of Uniform Traffic Control Devices (“MUTCD”) and all applicable State and City codes, rules and laws

Subtask 1.4 – Transponder Readers

The Contractor will design and build thirteen (13) Transponder Reader installations, one at each location marked by a red circle on the map in Appendix C. The purpose of the readers is to collect origin and destination and traffic volume data for NYCDOT. All necessary care must be taken to ensure that readers do not collect personal information. The Contractor is strictly prohibited from using the readers for any purpose other than the acquisition of traffic data.

The Contractor will submit to NYCDOT for review and approval a methodology for calculating and tabulating origin and destination data based on tracking when a specific car passes a reader on its way into Lower Manhattan and then passes it again on its way out. Origin and destination data must be stored in a format approved by NYCDOT that is generally consistent with the input data for the Paramics traffic modeling software package. The Contractor is responsible for developing all necessary algorithms and programs for calculating and tabulating origin and destination data. The Contractor will periodically use manual counts in the field to verify the total vehicles passing each reader. The Contractor must also provide LMCCC and NYCDOT with daily traffic volume data grouped in five (5) minute intervals. Traffic data must include: date, time, sensor ID, location, direction of travel and any anomalous sensor readings.

Transponder Readers are to be mounted on City street lights or other appropriate City-owned infrastructure under the jurisdiction of NYCDOT. Electric power will be taken from the City-owned infrastructure on which each reader is mounted and all communications are to be wireless. The Contractor will submit to NYCDOT for review and approval design documents for mounting a reader at each location in Appendix C. The Contractor may propose alternate reader locations to achieve the purpose better; alternate locations must be approved by LMCCC, in consultation with NYCDOT, prior to proceeding with designing the installations. NYCDOT may reject proposed locations, infrastructure or installation designs for any reason. The Contractor will ensure that data feeds from each transponder flow only to NYCDOT. The Contractor will also work with NYCDOT to integrate the transponder reader feeds into a web portal that NYCDOT is currently developing.

Transponder Readers are to have the following characteristics:

- IEEE 802.11g technology or greater, plus compatibility with the City's Broadband Wireless Network technologies, described in Task 3, including a weatherproof enclosure with an A/C power outlet for support of future data communications equipment
- Ability to support IP based data encryption and security
- Weatherproof 10/100 MB Ethernet connection for IP wired connectivity and maintenance

Subtask 1.5 – Highway Advisory Radio

The Contractor will design and build a Highway Advisory Radio system that will provide coverage for the area south of Houston Street. Broadcasts are to be controlled by NYCDOT personnel in the TMC. The purpose of the highway radio system is to provide the driving public with detailed information about traffic issues in Lower Manhattan and suggested alternate travel routes.

The Contractor will identify locations for the installation of radio broadcast equipment and design the appropriate means of installation at each location. Electric power will be taken from adjacent City-owned infrastructure. The Contractor will submit such designs to NYCDOT for review and approval. NYCDOT may reject proposed locations, infrastructure or installation designs for any reason. The Contractor will build the system per the approved design.

Highway Advisory Radio broadcast boxes are to have the following characteristics:

- IEEE 802.11g technology or greater, plus compatibility with the City's Broadband Wireless Network technologies, described in Task 3, including a weatherproof enclosure with an A/C power outlet for support of future data communications equipment
- Ability to support IP based data encryption and security
- Weatherproof 10/100 MB Ethernet connection for IP wired connectivity and maintenance
- Solar panels

Subtask 1.6 – TMC-LMCCC Telecommunications Link

The Contractor is responsible for providing a high-speed telecommunications link between the TMC and LMCCC's offices on the 29th floor of One Liberty Plaza in Lower Manhattan. The Contractor will submit a proposed communications system, including backup provisions, to LMCCC for review and approval. The Contractor will meeting with DoITT and NYCDOT prior to starting design.

The Contractor will own all hardware, software, software licenses and equipment purchased under Program 1 for the duration of both contracts. Upon the expiration of both contracts,

ownership of all hardware, software, software licenses and equipment will be transferred to NYCDOT. The Contractor will warrantee equipment for one (1) year from the date of transfer.

TASK 2 – DATA ANALYSIS EQUIPMENT

The Contractor will be responsible for installing all necessary hardware and software at the TMC to process data from assets in the field and to integrate the ITS system installed under Program 1 into existing systems currently maintained by NYCDOT. The Contractor will meet with NYCDOT prior to design to assess needs and will submit designs to NYCDOT for review and approval. The Contractor is responsible for purchasing and installing all necessary hardware, software services or licenses to complete this requirement.

TASK 3 – COMMUNICATIONS

The Contractor is responsible for establishing a wireless communications system to connect all field assets installed under Program 1 with the TMC using a public provider (i.e., Cellular Service Provider). LMCCC shall not incur any costs for providing communication services. The communications method employed by the Contractor must be secure from tampering or theft of data. The Contractor is responsible for purchasing and installing all necessary hardware, software, services or licenses to provide the communications system.

The Contractor will propose a wireless communications system for LMCCC to review and approve, in consultation with the New York City Department of Information and Telecommunications Technology (“DoITT”) and NYCDOT. The communications system must be compatible or easily convertible to the system being considered as part of the Citywide Broadband Wireless Program by DoITT. Prior to starting design, the Contractor must meet with DoITT to ensure that this requirement is met.

Program 2

Program 2 commences once the first piece of hardware, software or equipment is installed under Program 1.

TASK 4 – MAINTENANCE AND SERVICE

Under Program 2, the Contractor will perform all necessary work to maintain each subsystem installed under Program 1. The Contractor will develop a Maintenance Plan that complies with all NYCDOT and FTA requirements for the maintenance of all assets installed in the field, at the TMC or approved satellite locations. The Maintenance Plan must cover the following:

- establishment of the useful life for each asset installed under Program 1;
- tracking all assets installed under Program 1 in accordance with the FTA handbook;
- prompt resolution of a malfunctioning asset which results in loss of digital data feeds, inaccuracy or loss of traffic data or other system failure;
- preventative maintenance; and
- repairing and/or replacing all assets to keep all subsystems operable.

The Contractor will submit the Maintenance Plan to LMCCC. LMCCC, in consultation with FTA and NYCDOT, will review and approve the Maintenance Plan. The Contractor will be responsible for performing all work necessary to implement the Maintenance Plan.

Under Program 2, the Contractor must monitor and audit system performance. The Contractor will develop an Audit Plan that details procedures for identifying and measuring system performance. Minimally, the Contractor must provide LMCCC and NYCDOT with a monthly report indicating system performance levels for each subsystem and indicate system activity that is found to be below predetermined performance levels. The Audit Plan must include independent monitoring and verification of system performance by LMCCC, NYCDOT and others. Minimally, the Contractor must provide LMCCC with the means to record automatically system operations status and produce daily reports the downtime of each subsystem. The Contractor will submit the Audit Plan to LMCCC for review and approval.

The Contractor shall upgrade each subsystem as necessary to keep all systems operable. At any point during Program 2, the Contractor may propose modifications or upgrades to any subsystem. LMCCC, in consultation with NYCDOT, must review and approve all proposed modifications or upgrades prior to implementation.

Under Program 2, the Contractor will also service assets installed under Program 1 at the direction of LMCCC. In the context of this RFP, servicing means adjustments made to an asset in the field, at the TMC or at approved satellite locations that are not related to ongoing maintenance. Servicing could include, but is not limited to, repositioning or relocating an asset, performing minor upgrades of an asset or temporarily or permanently removing an asset to allow for construction, reconstruction, maintenance or operation activities by other entities.

Under Program 2, the Contractor will provide for ongoing communications service between assets in the field and the TMC and between the TMC and LMCCC's offices in Lower Manhattan.

The Contractor is responsible for obtaining all permits and approvals necessary to perform any maintenance or service work described under this Task on any subsystem.

D. Project Schedule

As stated above, the volume of construction activity in Lower Manhattan is expected to increase dramatically starting in the fall of 2006, continuing into the spring of 2007. Thus *time is of the essence* in implementing this plan as quickly as possible is of paramount concern to LMCCC.

The following table sets out key milestones and deliverables for Program 1:

<u>Milestone</u>	<u>Days</u>	<u>Deliverable</u>
NTP	0	

Design (except Traffic Sensors)	30	
Traffic Sensor Beta Test Preliminary Design	30	Beta test proposal
Traffic Sensor Beta Test Final Design	45	Report summarizing beta test
Installation (except Traffic Sensors)	60	
Traffic Sensor Beta Test Implementation	75	Report summarizing beta test results
Traffic Sensor Beta Test Evaluation	90	
Traffic Sensor Design	120	
Traffic Sensor Installation	150	
End Program 1	180	

The following table sets out key milestones and deliverables for Program 2:

<u>Milestone</u>	<u>Days</u>	<u>Deliverable</u>
NTP	0	
Program 1 Installation (except Traffic Sensors), Program 2 commences	60	
End Program 2	730	

III. SUBMISSION REQUIREMENTS

Please letter your responses exactly as the questions are presented below. Please limit your submission to twenty-five (25) one-sided pages, not including work samples, which must be included in a separate, bound, appendix. Interested firms are invited to submit proposals that contain the following information:

- A. Experience, Structure, and Personnel
1. A history of the firm's experience providing ITS services to economic development organizations, municipalities, other governmental entities, private developers, not-for-profits and civic organizations in New York City.
 2. A description of the firm's organizational structure, including resumes of the principals, project manager(s), office and field engineers and professional staff who would work directly with LMCCC.
 3. Detailed documentation of the firm's qualifications and experience related to the scope of work required by this RFP.
 4. Samples of up to ten (10) major ITS projects that the firm has completed in the past five (5) years. Include the client, the name of a contact person who is able to provide a reference, a description of the nature of the work, the size and complexity of the project, and the amount and the agreed fee arrangements.

5. Any other information that you believe would make the firm's work on behalf of LMCCC superior to that of other firms or information about your firm's specialty or particular skill to perform a specific requested service.

B. Methodological Approach

1. A description of how the Contractor intends to address the anticipated scope of services set forth in Section II of this RFP, including the following:
 - a. A technical plan to construct and operate each subsystem, including the general nature of each subsystem deployment and expected device specifications for each subsystem in sufficient detail to identify the device's ability to achieve the stated aim of each subsystem.
 - b. A plan to identify and measure system performance and data quality, including expected levels of system performance and data accuracy; an audit procedure to monitor system performance and identify anomalous performance; quality control/quality assurance procedures that will be employed to detect and report equipment malfunction; and guaranteed data accuracy level and plan that will be followed to maintain data accuracy (e.g. asset calibration plan).
 - c. A plan for the method and manner assets will be installed, maintained and serviced, including minimal permissible outage times.
 - d. A telecommunications plan indicating the methods, services and data formats used to communicate data from the field to the TMC.
 - e. A generic schedule to design, construct, test and initiate each system.
2. A statement explaining the firm's approach to ITS, including methods, analytical techniques, or models, etc. that would be employed.

C. Fee

1. Total estimated firm fee for completion of Program 1, including the cost of purchasing and installing all hardware and software required to complete Tasks 1, 2 and 3, as a lump sum based on deliverables. The firm must complete and submit the attached form (Attachment 7). The form must be signed by a corporate officer.
2. Total estimated firm fee for completion of Program 2 as a sum of daily fees for each subsystem installed under Program 1. The firm must complete and submit the attached form (Attachment 8). The form must be signed by a corporate officer. Daily fees are to be prorated against any system downtime above five (5) percent per day on a system by system

basis. A penalty equivalent to thirty (30) days fee will be assessed against the Contractor for system downtime greater than twelve (12) percent. (See Attachment 9.)

3. The normal hourly pay rate, multiplier and estimate of hours for each principal and staff member whose resume is provided or whose job category may be required, and the rate used in the proposal.
4. Any reduced fees offered to other municipalities, governmental entities, economic development or nonprofit organizations, and civic organizations.
5. Any other fees or charges.

NOTE: The fee proposal must be submitted in a separate, clearly marked, sealed envelope. The fees will not be opened until all proposals have been initially evaluated. Although proposed fees will be taken into account, LMCCC reserves the right to negotiate a lower or different fee structure with any Contractor that is selected.

D. Contact Information (NOTE: does not count toward 25-page limit)

On a single cover sheet in your proposal, please provide:

1. The lead firm or individual name;
2. The lead firm's contact person;
3. License or certification information of lead firm principal or individuals working on the LMCCC ITS project;
4. Telephone, fax, and wireless numbers for firm principals or individuals working on the LMCCC ITS project;
5. E-mail address for firm principals or individuals working on the LMCCC ITS project;
6. The Street address of lead firm or individual;
7. The year the firm or individual practice established;
8. The MBE/WBE status of the firms (Minority-owned Business Enterprise or Women-owned Business Enterprise, as certified by New York State);
9. The type of work or specialty and size of firm; and
10. The signature of the lead individual, and the date of the signature.

E. Conflicts of Interest (NOTE: does not count toward 25-page limit)

1. Submit a statement describing any potential conflict of interest or appearance of impropriety, relating to other clients of the firm, or officers, directors, and employees of LMDC and LMCCC, that could be created by providing services to LMCCC.
2. Indicate what procedures will be followed to detect and notify LMCCC and to resolve any conflicts of interest.
3. Indicate any pending litigation and/or regulatory action by any oversight body or entity that could have an adverse material impact on the firm's ability to serve LMCCC.

4. Indicate if the firm has ever had a prior contract with any governmental entity terminated for any reason, and provide an explanation.
 5. Submit a completed Standard Background Questionnaire (Attachment 3).
 6. Submit a completed Contractor Disclosure Contracts Form and the Contractor Disclosure of prior Non-Responsibility Determinations form (Attachment 5) in compliance with New York State Executive Order 127.
- F. Non-discrimination Policy (NOTE: Does not count toward 25-page limit)
1. Firms with 50 or more employees shall submit a copy of their nondiscrimination or affirmative action plan.
 2. Firms with less than 50 employees shall submit a statement of their commitment to equal opportunity and affirmative action from their chief executive officer.
 3. Each firm must also complete and submit both
 - a. Attachment 1 relating to the anticipated workforce to be utilized on the contract, and
 - b. Attachment 2 relating to the anticipated participation of minority and women-owned business enterprises as subcontractors, if any.

All information and documents described in subsections A through D above must be included or addressed in the submission. LMCCC reserves the right, in its discretion, to disqualify a proposal that does not include all of the information in subsections A through D.

IV. CRITERIA FOR SELECTION

In evaluating proposals submitted pursuant to this request, LMCCC places high value on the following factors, not necessarily in order of importance:

- Approaches in methodology with respect to the anticipated scope of services that demonstrate maximum comprehension of and ability to provide such services to LMCCC.
- Ability to deliver both Program 1 and Program 2.
- Innovative or outstanding work by the firm, included in the submitted work samples, that demonstrates the firm's unique qualifications to provide ITS.
- Experience of the firm and employees to be assigned to the project on comparable projects in New York City, with particular focus on:
 - Knowledge of and experience with video detection systems;
 - Knowledge of and experience with transponder readers and attendant potential first amendment issues.
- The firm's staff ability, availability and facility for working with LMCCC directors, officers, staff and consultants.

- Conformity with or exceeding of applicable LMDC's/LMCCC's policies as noted herein, including specific policies relating to nondiscrimination and affirmative subcontracting goals.
- Projected cost of services.

V. CONTRACT TERMS AND REQUIREMENTS

The contents of the proposal prepared by the Contractor, with any amendments approved by LMCCC, will become a part of the Contracts that are signed as a result of this RFP Process. The terms outlined throughout this RFP should be considered all inclusive.

The Contractor will be required to:

- Work with LMCCC staff and its consultants to provide ITS Services to LMCCC on matters that may arise in connection with the planning, development, and revitalization of Lower Manhattan.
- Maintain accurate accounting records and other evidence pertaining to costs incurred in providing services, and on LMCCC request, to make such records available to LMCCC at all reasonable times during the contract period and for six (6) years after the date of the final payment to the firms under the contract.
- Assume sole responsibility for the complete effort as required by this RFP, and be the sole point of contact with regard to contractual matters.
- Refrain from assigning, transferring, conveying, subletting or otherwise disposing of the contract or its rights, titles or interest therein or its power to execute such agreement to any other person, firm, partnership, company, or corporation without the prior consent and approval in writing of LMCCC.
- Comply with applicable law governing projects initiated or supported by LMCCC including all applicable HUD and FTA requirements and regulations. (See Attachment 6 for FTA's requirements).

LMCCC may hire more than one firm that responds to this RFP.

LMCCC reserves the right to terminate any contract entered into as a result of this RFP at any time, provided that written notice has been given to the firm at least thirty (30) days prior to such proposed termination date.

VI. MISCELLANEOUS CONDITIONS

A. Obligation Only on Formal Contract

The issuance of this RFP, the submission of a response by any firm, and the acceptance of such response by LMCCC do not obligate LMCCC in any manner. Legal obligations will only arise on the execution of a formal contract by LMCCC and the firm selected by LMCCC. LMCCC's

formal contract will consist of more than one schedule, including one substantially in the form of the accompanying "Schedule A" (Attachment 4). LMCCC provides this form for informational purposes only and may amend its schedules from time to time.

Responses to this RFP will be prepared at the sole cost and expense of the firms. No materials submitted in response to this RFP will be returned.

B. Retainage

LMCCC shall retain five (5) percent of each invoice for partial payment submitted by the Contractor.

Retainage for Program 1 will be released upon substantial completion and provision of signed lien releases from the contractor and all subcontractors and materialmen who provided goods and services for the project. Substantial completion is defined as the point at which all subsystems are both used and useful for the purposes for which they were intended. Monies, equivalent to twice the value of any punchlist items will continue be held pending closeout of the punchlist items.

Retainage for Program 2 will be released one year after completion of the contract. Any unfulfilled warrantee costs will be deducted from these funds by the LMDC, LMCCC or Designee. At the end of the one year warrantee period, all remaining funds will be released to the contractor.

C. LMCCC Reservation of Rights

LMCCC may (i) amend, modify, or withdraw this RFP, (ii) revise requirements of this RFP, (iii) require supplemental statements or information from any firm, (iv) accept or reject any or all responses hereto, (v) extend the deadline for submission of responses thereto, (vi) negotiate or hold discussions with any respondent and to waive defects and allow corrections of deficient responses which do not completely conform to the instructions contained herein, and (vii) cancel this RFP, in whole or in part, if LMCCC deems it in its best interest to do so. LMCCC may exercise the foregoing rights at any time without notice and without liability to any respondent or any other party for their expenses incurred in the preparation of the responses hereto or otherwise.

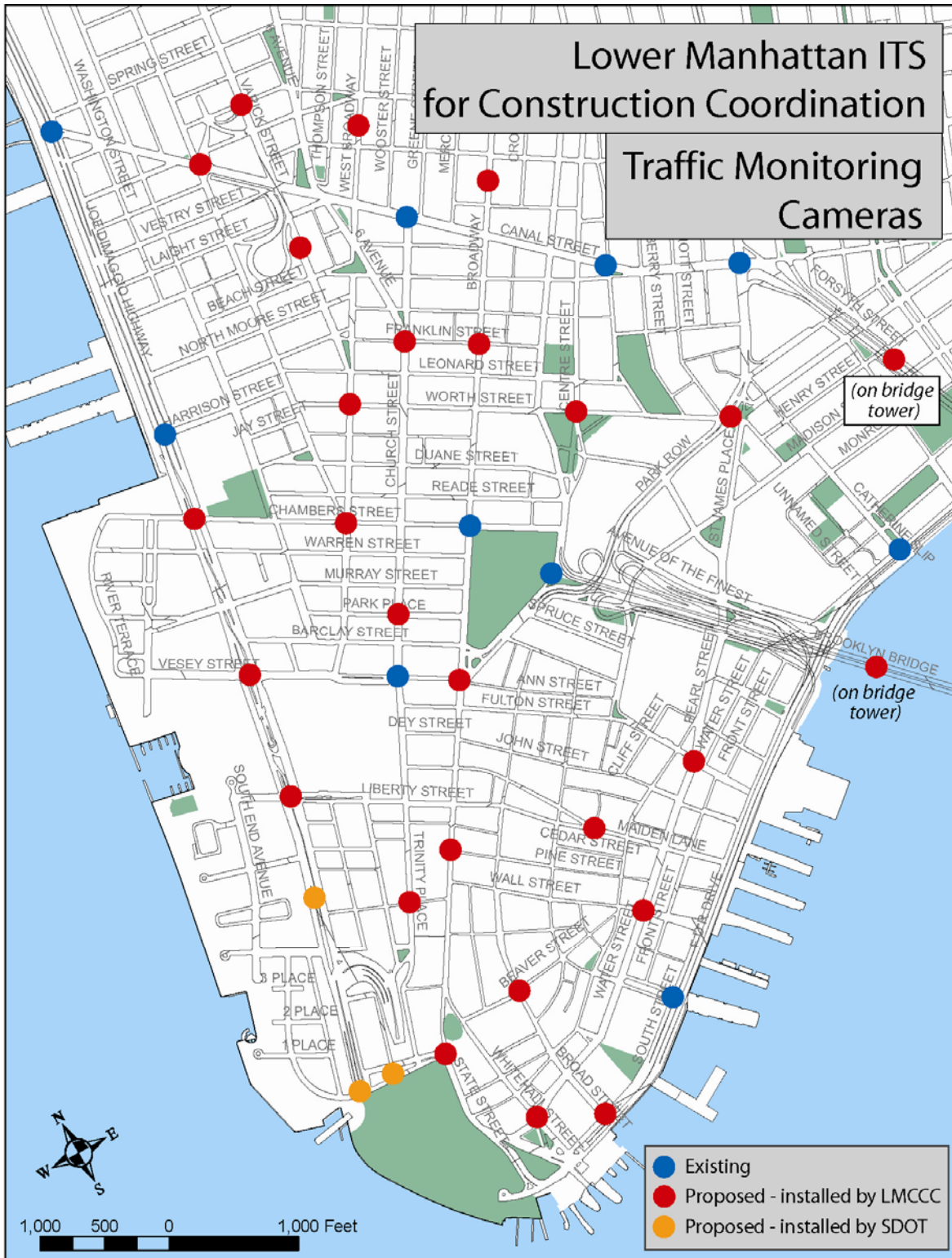
D. Nondiscrimination and Affirmative Action Policies

It is the policy of the State of New York and LMDC to comply with all federal, state and local laws, policies, orders, rules and regulations which prohibit unlawful discrimination because of race, creed, color, national origin, sex, sexual orientation, age, disability or marital status, and to take affirmative action in working with contracting parties to ensure that Minority and Women-owned Business Enterprises ("M/WBES"), Minority Group Members and women share in the economic opportunities generated by LMDC's participation in projects or initiatives, and/or the

use of LMDC funds. As a division of LMDC, LMCCC will apply ESDC's non-discrimination and affirmative action policy to any contract entered into as a result of this RFP. LMCCC has established a 20% M/WBE participation goal for each contract. The selected firm(s) shall be required to use best efforts to provide for the meaningful participation of United States M/WBE's, Minority Group Members and women in the execution of the Contracts. A copy of each Contractor's equal employment opportunity policy statement, Attachment 1 relating to the anticipated workforce to be utilized on the contract and Attachment 5 relating to the anticipated participation by M/WBEs as subcontractors, shall be included as part of the response to the RFP. The ESDC Affirmative Action Unit ("AAU") is available to assist you in identifying M/WBEs certified by the State that can provide goods and services in connection with the contract anticipated by this RFP. If you require M/WBE listings, please call the AAU at (212) 803-3224.

Appendix A

Traffic Monitoring Camera Locations



Appendix B

Targeted Streets for Traffic Sensors



Appendix C

Transponder Readers

