



*Joseph H. Vicari, Director  
Gary Quinn, Deputy Director  
Barbara Jo Crea, Commissioner  
Virginia E. Haines, Commissioner  
John P. Kelly, Commissioner*

*Tristin J. Collins, Director, Management & Budget  
Jennifer L. Bowens, Purchasing Agent*

*County of Ocean  
Administration Building  
101 Hooper Avenue  
Toms River, NJ 08754*

***REQUEST FOR PROPOSALS  
PROFESSIONAL ENGINEERING SERVICES FOR OCEAN COUNTY  
SIGNAL OPTIMIZATION, VARIOUS MUNICIPALITIES***

***ADVERTISEMENT DATE: May 18, 2023  
OPENING: June 15, 2023, 4:00 pm***

## ***REQUEST FOR PROPOSALS***

The Ocean County Board of Commissioners is requesting proposals for the services of a firm licensed in the State of New Jersey to provide services for **Professional Engineering Services for Ocean County Signal Optimization, Various Municipalities**.

The Request for Proposal (RFP) is available on the [County's OpenGov Electronic Bid Portal \(https://procurement.opengov.com/portal/oceancounty/\)](https://procurement.opengov.com/portal/oceancounty/) or by contacting the Purchasing Department at (732) 929-2101.

All proposals must be received prior to **4:00 pm**, prevailing time on **Thursday, June 15, 2023**.

The County will not be responsible for late submissions and no proposals will be accepted after the time stipulated on this notice.

By order of the Board of Commissioners of the County of Ocean.

Signed:

**JOSEPH H. VICARI**, Director

**JENNIFER L. BOWENS**, Purchasing Agent

# ***INTRODUCTION TO PROPOSERS***

## **Summary**

The Ocean County Board of Commissioners is requesting proposals for the services of a firm licensed in the State of New Jersey to provide services for Professional Engineering Services for Ocean County Signal Optimization, Various Municipalities.

## **Contact Information**

For further information regarding these specifications, contact

**Jennifer Bowens**

Purchasing Agent

Email: [ocpurchasing@co.ocean.nj.us](mailto:ocpurchasing@co.ocean.nj.us)

Phone: [\(732\) 929-2101](tel:(732)929-2101)

**Department:**

Engineering

## **Timeline**

<b>Advertising Date</b>	May 18, 2023
<b>Question Response Deadline</b>	June 5, 2023, 12:00pm
<b>RFP Receipt Date</b>	June 15, 2023, 4:00pm Administration Building, 101 Hooper Ave., Room 119, Toms River, NJ, 08753

# ***INSTRUCTIONS TO PROPOSERS***

## **INTRODUCTION**

The County of Ocean is a County of Fifth Class as defined in N.J.S.A. 40A:6-1 et seq. Pursuant to N.J.S.A. 19:44A-20.4 et seq., the County of Ocean requests proposals from firms capable of providing Professional Engineering Services for Ocean County Signal Optimization Projects, Various Municipalities for the duration of the project.

Proposals are being solicited through a fair and open process in accordance with N.J.S.A. 19:44A-20.2, et seq., and as such, contractors are exempt from the limitations on making political contributions under the law. Further, for that reason, as well as because of a language in New Jersey's Annual Appropriations Act, refusal to disclose campaign contributions otherwise required by N.J.S.A. 19:44A-20.2 et seq. and 19:44A-20.25 et seq., will not adversely affect your consideration for award.

The successful vendor(s) must have a minimum of ten years' experience in providing Professional Engineering Services.

## **METHOD OF SUBMISSION**

The County of Ocean is accepting **only electronic proposals** for the technical proposal submission of this RFP. Submitting your technical proposal manually is cause for rejection.

In accordance with Section 8.1, cost proposals/fee schedules for this RFP shall be submitted via mail or hand delivered to the Ocean County Purchasing Department at the address below:

Ocean County Purchasing Department, Room 224  
Administration Building  
101 Hooper Avenue  
Toms River, New Jersey 08753

The Cost Proposals/Fee Schedules for each Group shall be mailed or hand delivered and must be received prior to 4:00 PM, prevailing time on Thursday, June 15, 2023

Submitting the Cost Proposals/Fee Schedules with the electronic submission **will be** cause for rejection.

**NOTE: In order to access any DocuSign forms in this solicitation, you must first click "Draft Response".**

***Instructions on how to access the forms through DocuSign are available in the Attachments. Please note that in order to view the forms as a .pdf document, you must access DocuSign first. Once you access DocuSign, the option to download, save, print and complete the forms becomes available***



## ***IMPORTANT INSTRUCTIONS FOR ELECTRONIC SUBMITTAL***

The County is accepting electronic bid submissions with Open Gov by following these instructions:

Sign up for a FREE account at <https://procurement.opengov.com/portal/oceancounty>

Once you have completed account registration, browse back to this page: [County's OpenGov Electronic Bid Portal \(https://procurement.opengov.com/portal/oceancounty/\)](https://procurement.opengov.com/portal/oceancounty/)

Click on the bid of interest, then click "Draft Response".

Follow the instructions to submit the electronic bid.

It is important to note that this process should be completed well in advance of the bid deadline / bid opening. **DO NOT WAIT UNTIL THE LAST MINUTE.** The County's electronic submission system will not allow electronic bids to be submitted once the deadline has passed, even if you've already started the process. The deadline is based on the countdown timer found on the ProcureNow bid submission page.

## ***MANDATORY EQUAL EMPLOYMENT OPPORTUNITY***

**N.J.S.A. 10:5-31 et seq. (P.L. 1975, C. 127)**

**N.J.A.C. 17:27**

### **GOODS, PROFESSIONAL SERVICE AND GENERAL SERVICE CONTRACTS**

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity 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 Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable 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 age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.

The contractor or subcontractor will send to each labor union, with which it has a collective bargaining agreement, a notice, to be provided by the agency contracting officer, advising the labor union of the contractor's commitments under this chapter and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time and the Americans with Disabilities Act.

The contractor or subcontractor agrees to make good faith efforts to meet targeted county employment goals established in accordance with N.J.A.C. 17:27-5.2.

The contractor or subcontractor agrees to inform in writing its appropriate recruitment agencies including, but not limited to, employment agencies, placement bureaus, colleges, universities, and labor unions, that it does not discriminate on the basis of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, and that it will discontinue the use of any recruitment agency which engages in direct or indirect discriminatory practices.

The contractor or subcontractor agrees to revise any of its testing procedures, if necessary, to assure that all personnel testing conforms with the principles of job-related testing, as established by the statutes and court decisions of the State of New Jersey and as established by applicable Federal law and applicable Federal court decisions.

In conforming with the targeted employment goals, the contractor or subcontractor agrees to review all procedures relating to transfer, upgrading, downgrading and layoff to ensure that all such actions are taken without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, consistent with the statutes and court decisions of the State of New Jersey, and applicable Federal law and applicable Federal court decisions.

The contractor shall submit to the public agency, after notification of award but prior to execution of a goods and services contract, one of the following three documents:

- Letter of Federal Affirmative Action Plan Approval
- Certificate of Employee Information Report
- Employee Information Report Form AA302 (electronically provided by the Division and distributed to the public agency through the Division's website at [www.state.nj.us/treasury/contract\\_compliance](http://www.state.nj.us/treasury/contract_compliance))

The contractor and its subcontractors shall furnish such reports or other documents to the Division of Purchase & Property, CCAU, EEO Monitoring Program as may be requested by the office from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Purchase & Property, CCAU, EEO Monitoring Program for conducting a compliance investigation pursuant to **Subchapter 10 of the Administrative Code at N.J.A.C. 17:27.**

## ***AMERICANS WITH DISABILITIES ACT***

### Equal Opportunity For Individuals With Disabilities

The CONTRACTOR and the COUNTY do hereby agree that the provisions of title II of the Americans with Disabilities Act of 1990 (the "Act") (42 U.S.C. 12101 et seq.), which prohibits discrimination on the basis of disability by public entities in all services, programs and activities provided or made available by public entities, and the rules and regulations promulgated pursuant thereto, are made a part of this contract. In providing any aid, benefit, or service on behalf of the COUNTY pursuant to this contract, the CONTRACTOR agrees that the performance shall be in strict compliance with the Act. In the event that the CONTRACTOR, its agents, servants, employees, or subcontractors violate or are alleged to have violated the Act during the performance of this contract, the CONTRACTOR shall defend the COUNTY in any action or administrative proceeding commenced pursuant to this Act. The CONTRACTOR shall indemnify, protect and save harmless the COUNTY, its agents, servants and employees from and against any and all suits, claims, losses, demands, or damages of whatever kind or nature arising out of or claimed to arise out of the alleged violation. The CONTRACTOR shall, at its own expense, appear, defend and pay any and all charges for legal services and any and all costs and other expenses arising from such action or administrative proceeding or incurred in connection therewith. In any and all complaints brought pursuant to the COUNTY'S grievance procedure, the CONTRACTOR agrees to abide by any decision of the COUNTY which is rendered pursuant to said grievance procedure. If any action or administrative proceeding results in an award of damages against the COUNTY or if the COUNTY incurs any expense to cure a violation of the ADA which has been brought pursuant to its grievance procedure, the CONTRACTOR shall satisfy and discharge the same at its own expense.

The COUNTY shall, as soon as practicable after a claim has been made against it, give written notice thereof to the CONTRACTOR along with full and complete particulars of the claim. If any action or administrative proceeding is brought against the COUNTY or any of its agents, servants and employees, the COUNTY shall expeditiously forward or have forwarded to the CONTRACTOR every demand, complaint, notice, summons, pleading, or other process received by the COUNTY or its representatives.

It is expressly agreed and understood that any approval by the COUNTY of the services provided by the CONTRACTOR pursuant to this contract will not relieve the CONTRACTOR of the obligation to comply with the Act and to defend, indemnify, protect and save harmless the COUNTY pursuant to this paragraph.

It is further agreed and understood that the COUNTY assumes no obligation to indemnify or save harmless the CONTRACTOR, its agents, servants, employees and subcontractors for any claim which may arise out of their performance of this Agreement. Furthermore, the CONTRACTOR expressly understands and agrees that the provision of this indemnification clause shall in no way limit the CONTRACTOR'S obligations assumed in this Agreement, nor shall they be construed to relieve the CONTRACTOR from any liability, nor preclude the COUNTY from taking any other actions available to it under any other provisions of this Agreement or otherwise at law.

## ***EVALUATION CRITERIA***

No.	Evaluation Criteria	Scoring Method	Weight (Points)
1.	<p><b>Responsiveness to the Request for Proposal</b>            Responsiveness to the Request for Proposal includes:</p> <p>1) Demonstrating thorough understanding of the project requirements (15)</p> <p>2) Technical quality and completeness of the proposal (10)</p> <p>3) Compliance with submission guidelines (10)</p>	Points Based	35 <i>(35% of Total)</i>
2.	<p><b>Experience and Knowledge of the Firm and Team Members</b></p> <p>1) Details of similar recent projects (5)</p> <p>2) Project team organization (5)</p> <p>3) Experience in Traffic Signal Optimization (15)</p> <p>4) Qualifications of the designated Team Members (5)</p> <p>5) Relevant Experience of the designated Team Members (5)</p> <p>6) Reference recommendations of the Firm and Team Members (5)</p>	Points Based	40 <i>(40% of Total)</i>
3.	<p><b>Viability of Conceptual Approach to the Project</b>            Viability of Conceptual Approach to the Project includes:</p> <p>1) Detailed approach to tasks presented in the scope of work (15)</p> <p>2) Project tasks detailed within schedule (10)</p>	Points Based	25 <i>(25% of Total)</i>

## ***SCOPE OF WORK***

### **SCOPE OF WORK**

Please refer to the PDF under "Attachments - Project Documents" to view the downloadable RFP document and Scope of Work.

# ***VENDOR QUESTIONNAIRE***

## **DOCUMENTS TO BE EXECUTED\***

Documents include:

- Signature Page
- Non Collusion Certification
- Affirmative Action Questionnaire
- **Statement of Ownership (N.J.S.A. 52:25-24.2) (Mandatory Document)**
- Prohibited Russia-Belarus Activities & Iran Investment Activities

**FAILURE TO SUBMIT ANY OF THESE DOCUMENTSMAY BE CAUSE FOR REJECTION OF YOUR PROPOSAL.**

All documents should be from this proposal package as forms change frequently and the most updated forms are provided in this specification. The forms must not be dated or executed prior to the date of advertising.

**NOTE: For detailed instructions on how to complete the forms via DocuSign, please access the "Instructions for Completing Forms in DocuSign" document available in the Attachments.**

***Please note: The County's preferred method of submission is DocuSign.***

[Click here to go to the form](#)

\*Response required

## **Certificate of Employee Information Report**

**Within seven (7) days after receipt of the notification of intent to award the contract or receipt of the contract, whichever is sooner, a Contractor should present one of the following to the County of Ocean:**

- (a) An existing federally approved or sanctioned affirmative action program.
- (b) A New Jersey Certificate of Employee Information Report Approval.
- (c) If the Contractor cannot present "a" or "b", the Contractor is required to submit a completed Employee Information Report (Form AA302). This form will be made available to the Contractor by the County of Ocean.**

QUESTIONS BELOW MUST BE ANSWERED BY ALL CONTRACTORS:

1. Do you have a Federally approved or sanctioned Affirmative Action Program?

**If yes, please upload a photocopy of such approval.**

2. Do you have a State of New Jersey "Certificate of Employee Information Report" approval?

**If yes, please upload a photocopy of such certificate.**

**Please note, the only acceptable file forms are as follows:**

**Documents (doc, docx, rtf, txt, xls, xlsx, pdf)**

**Images (jpg, png, bmp, tif)**

**Copy of New Jersey Business Registration Certificate**

A Valid BRC is required Prior to Award of Contract. Please upload your company's BRC.

Use the following link to check the status of your company's BRC:

[https://www1.state.nj.us/TYTR\\_BRC/jsp/BRCLoginJsp.jsp](https://www1.state.nj.us/TYTR_BRC/jsp/BRCLoginJsp.jsp)

NOTE: a BRC is not required at the time of submission, only prior to award of the contract.

**Please note, the only acceptable file forms are as follows:**

**Documents (doc, docx, rtf, txt, xls, xlsx, pdf)**

**Images (jpg, png, bmp, tif)**

**Mandatory Equal Employment Opportunity Statement\***

Does the PROPOSER comply with the [#Mandatory Equal Employment Opportunity Statement?](#)

Yes

No

\*Response required

**Americans with Disabilities Act Provisions\***

Does the PROPOSER comply with the [#Americans with Disabilities Act Provisions?](#)

Yes

No

\*Response required

**TECHNICAL PROPOSAL \***

Please upload your technical proposal for Professional Engineering Services for Ocean County Signal Optimization, Various Municipalities.

**Please note, the only acceptable file forms are as follows:**

**Documents (doc, docx, rtf, txt, xls, xlsx, pdf)**

**Images (jpg, png, bmp, tif)**

\*Response required

**COST PROPOSAL/FEE SCHEDULE\***

9.1 Cost Proposal/Fee Schedule



In accordance with Section 8.1, cost proposals/fee schedules for this RFP shall be submitted via mail or hand delivered to the Ocean County Purchasing Department at the address below:

Ocean County Purchasing Department, Room 224  
Administration Building  
101 Hooper Avenue  
Toms River, New Jersey 08753

The Cost Proposals/Fee Schedules for each Group shall be mailed or hand delivered and must be received prior to 4:00 PM, prevailing time on Thursday, June 15, 2023

**Submitting the Cost Proposals/Fee Schedules with the electronic submission will be cause for rejection.**

Please confirm  
\*Response required

### **REFERENCES**

Please upload your references for Professional Engineering Services for Ocean County Signal Optimization, Various Municipalities.

**Please note, the only acceptable file forms are as follows:**

**Documents (doc, docx, rtf, txt, xls, xlsx, pdf)**  
**Images (jpg, png, bmp, tif)**

### **CERTIFICATE OF INSURANCE**

Please upload your Certificate of Insurance for Professional Engineering Services for Ocean County Signal Optimization, Various Municipalities.

**Please note, the only acceptable file forms are as follows:**

**Documents (doc, docx, rtf, txt, xls, xlsx, pdf)**  
**Images (jpg, png, bmp, tif)**

### **ADDITIONAL VENDOR DOCUMENTATION**

Please use this area to include additional paperwork you wish to be considered as part of this RFP.

**Please note, the only acceptable file forms are as follows:**

**Documents (doc, docx, rtf, txt, xls, xlsx, pdf)**  
**Images (jpg, png, bmp, tif)**

### **PROPOSAL SUBMISSION ACKNOWLEDGMENT\***

The County of Ocean is accepting only electronic proposals for this RFQ. Submitting your proposal manually is cause for rejection. You may only submit one (1) proposal. DO NOT submit a hard copy of your proposal. Please confirm that you understand that the method of

submission for Labor Consultant Services is electronic ONLY and that submitting a proposal manually is automatic cause for rejection.

Please confirm

\*Response required

**SUBMISSION OF PROPOSAL FORMS\***

Proposers shall complete all documents and acknowledge all terms included with this package. All documents should be from this proposal package as forms change frequently and the most updated forms are provided in this specification. The forms must not be dated or executed prior to the date of advertising. Failure to follow these instructions is cause for rejection.

Please confirm

\*Response required



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**COUNTY OF OCEAN  
ADMINISTRATION BUILDING  
101 HOOPER AVENUE  
TOMS RIVER, NEW JERSEY 08753**

***REQUEST***

***FOR***

***PROPOSAL***

***FOR***

**MULTI-SOLICITATION FOR TWO (2) GROUPS OF  
PROFESSIONAL ENGINEERING SERVICES FOR OCEAN  
COUNTY SIGNAL OPTIMIZATION PROJECTS**

**VARIOUS MUNICIPALITIES,**

**OCEAN COUNTY**

**Two (2) Selections will be made from Proposals received.**

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## **I. INTRODUCTION / PROJECT DESCRIPTION**

### Introduction

The County of Ocean is a County of Fifth Class as defined in N.J.S.A. 40A:6-1 et seq. Pursuant to N.J.S.A. 19:44A-20.4 et seq., the County of Ocean requests proposals from firms capable of providing **Professional Engineering Services for Ocean County Signal Optimization Projects, Various Municipalities** for the duration of the project.

Proposals are being solicited through a fair and open process in accordance with N.J.S.A 19:44A-20.2, et seq., and as such, contractors are exempt from the limitations on making political contributions under the law. Further, for that reason, as well as because of a language in the New Jersey's Annual Appropriations Act, refusal to disclose campaign contributions otherwise required by N.J.S.A. 19:44A-20.2 et seq. and 19:44A-20.25 et seq., will not adversely affect your consideration for award.

The successful vendor(s) must have a minimum of ten years' experience in providing Professional Engineering Services.

### Project Description

**Project Name: Signal Optimization 2022**

**Job#: 6900339**

**Federal Project Number: D00S(728)**

Project entails the optimization of traffic signals from eighteen (18) corridors totaling 100 miles. The functional class of the corridors are a mix of Urban Local, Urban Minor Arterial, Urban Principal Arterial, Urban Minor Collector, and Urban Major Collector Roads. The ADT for the various corridors ranges from 4,000 to 40,000 vehicles due to the high density of commercial development along the various corridors. There are a total of 219 signalized intersections that are within the study areas and eleven (11) of the signalized intersections are located in multiple corridors. Twenty-six (26) are NJDOT owned and 182 are County Owned throughout the various corridors. Several of these intersections currently operate at a Level of Service (LOS) F. See Attachment A for the list of corridors and Attachment B for the list of intersections which lists County signals, duplicate intersections and NJDOT Signals within each project corridor. A map of the various corridors can be found in Attachment D.

The majority of the intersections along the corridor cannot be widened due to environmental and right of way constraints. The traffic signal equipment throughout the corridor is relatively new, in good operating condition, and does not require any major upgrades. However, several intersections have been identified as required for controller upgrades and/or the installation of GPS units. See Attachment B for which intersections will require proposed Controllers and /or GPS Units.

Ocean County proposes to retain the services of two professional consulting engineering firms to analyze the corridors and develop timing schemes to reduce congestion, decrease vehicle emissions, improve travel times and increase safety. The professional consulting engineering firms will be required to upgrade and install the necessary controllers, install the GPS units, and bench test and program all of the controllers within the project list with the final optimized timing directives.

A Categorical Exclusion Document (CED) was performed for this project and was approved by NJDOT on 12/27/2021. The CED and Construction Environmental Authorization Checklist and Inventory Form can be found in Attachment F for reference.

The total Project will be broken out into two groupings of corridors. The Groupings can be found in Attachment B and are broken out as follows.

### Group 1

Group 1 consists of six (6) corridors including Corridors A, B, F, H, I and J. The total project intersections in Group 1 will consist of one hundred and sixteen (116) intersections of which there are seven (7) duplicate intersections and eleven (11) state intersections totaling ninety-eight (98) County intersections of which forty eight (48) will require new controllers and seventy (70) will require new GPS clocks.

### Group 2

Group 2 consists of twelve (12) corridors including Corridors C, D, E, K, L, M, N, O, P, Q, S, and U. The total project intersections in Group 2 will consist of one hundred and three (103) intersections of which there are four (4) duplicate intersections and fifteen (15) state intersections totaling eighty four (84) County intersections of which twenty three (23) will require new controllers and sixty three (63) will require new GPS clocks.

### **Total Project**

The project will require a total of 71 proposed Controllers units and 133 proposed GPS units for Groups 1 and 2 combined.

## **II. SCOPE OF WORK**

### Task 1: Project Management

The consultant shall establish an effective means of coordinating and reporting its activities with the County throughout the course of the project to ensure an expeditious exchange of information. A detailed project schedule shall be submitted at the kick-off meeting for the County's review and approval, and reviewed regularly during the course of the project. This project schedule should include a break out of all the corridors to be studied and which corridors should be done in sequence to ensure the analysis models include cross coordination between corridors. See Section III – Schedule for schedule requirements.

The consultant's project manager shall be responsible for the preparation of meeting agendas, including handouts and/or electronic slideshow presentations if applicable, and minutes of meetings.

Reporting and invoicing requirements shall be in accordance with the terms of the standard contract agreement. In general, the consultant will be responsible for preparing and submitting a monthly progress report and progress schedule indicating percent of work complete that corresponds to the monthly invoice. The progress reports shall include all active and completed tasks, and shall indicate the percent of work complete (total and by task), work and submittals completed in the last month and to be performed in the next billing period, meetings, actions/decisions required by the County, and the status of the schedule and budget.

In addition, the project manager for the consultant team should be available to discuss project status on a bi-weekly basis (either in person or virtual as necessary) to ensure the project remains on track and within budget. The Task Checklist for Submission and Approval (Attachment E) shall be updated throughout the project, paying attention to the approvals required prior to commencement of certain

tasks. A minimum of twelve (12) technical meetings are anticipated for the project to discuss project milestones. These meetings will include all key personnel from the consultant team, County staff, and other interested personnel from partner agencies.

***Deliverables for Task 1:***

- A detailed project schedule is to be submitted at the kick-off meeting for the County’s review and approval.
- A minimum of twelve (12) technical meetings to be held at key decision points throughout the process.
- Ongoing communication with bi-weekly (more frequently, if necessary) updates between the County Project Manager and the consultant project manager.
- Meeting agendas (including necessary handouts/presentations) and minutes.
- Monthly progress reports, completed Task Checklist for Submission and Approval, and progress schedule updates, corresponding to the invoices.
- A final progress report and invoice with release clause to be submitted 30 days from the close of the project.

***Task 2 - Data Collection***

***2A - Field Verification of Lane Geometry and Signal Phasing***

Ocean County will provide available signal plans, timing directives and any existing Synchro models (if available) to the consultant for use on the project. However, the Consultant shall assume that new models will need to be developed for each corridor. The consultant shall verify that the lane geometry and signal phasing provided are accurate. The consultant shall provide redline mark-ups of each signal plan indicating any discrepancies which exist between the record documents and actual field conditions. The Consultant shall also verify the following:

- the existing timing is operating in accordance with the timing directive on file.
- the vehicle and pedestrian detection is operating properly.
- any existing GPS clocks are in sync.
- any existing offsets are operating in accordance with the existing timing directive.

A spreadsheet containing the results of the data collected for Task 2A shall be provided, showing that GPS clocks and vehicular and pedestrian detection operation were checked and operating accurately.

All of the above information will be needed to develop an accurate existing conditions Synchro model.

***2B – Traffic Counts***

The Consultant must submit a Data Collection Plan for approval by the County prior to start of any data collection for all of the corridors. A schedule containing dates of counts by location must be approved by the County before any field counts are initiated in order to ensure holidays are avoided and any seasonal factors that may affect the design are discussed.

The time periods and duration when traffic counts should not be conducted, unless otherwise requested by the County, are:

- Weekend before Thanksgiving through mid-January.

- Last week of June through mid-September (coinciding with the school summer vacation unless summer counts are required for a specific corridor).
- Typical vacationing periods. This period can also be an exception when looking for vacation/recreational timings (such as shore routes)
- Mondays or Fridays.
- Holidays, including the day before and after. Engineering judgments should be applied to determine which holidays significantly impact traffic patterns. Below are some common holidays:

Martin Luther King Jr. Day	Labor Day
Presidents Day	Election Day
Good Friday	Veteran’s Day
Easter Sunday	Thanksgiving
Memorial Day	Christmas
Independence Day	New Year’s Eve/Day

Consultants should also note specific holidays that may pertain to certain Townships. For example corridors located in Lakewood Township or surrounding Townships may also avoid traffic counts during the below times. Consultants shall confirm exact present year holiday schedule when preparing for data collection in these areas.

Example of 2023 Holiday Schedule:

Purim	March 7
Passover	March 6 – April 13
Lag Baomer	May 9
Shavuot	May 26 – 27
Summer Break	July 27 – August 16
Rosh Hashanaha	Sept. 16 – 17
Yom Kippur	Sept. 25
Sukkot	Sept. 30 – Oct. 8
Chanukah	Dec. 8 – 15

- When bad weather significantly alters the existing traffic patterns. Exceptions can be made if reasonable adjustments to the count data can be made. For all traffic data collection field surveys involving pedestrian counts, inclement weather will impact the accuracy of the counts.
- During special events such as street fairs, street closures, or other local events. The Consultant should investigate if such events that would alter traffic patterns are to take place for the intersections under study.

Prior to collecting Manual Turning Movement Counts (TMC), the consultant shall place a minimum of 2 Automatic Traffic Recorders (ATR) per corridor and adjacent roadways at locations to be approved by the County for a period not less than 7 days collecting bi-directional data. Based on the corridor lengths and characteristics, the consultant must indicate in their response to this RFP the number of ATRs that will be included for each corridor. Using the ATR data collected, the consultant shall determine the appropriate times to perform TMC. A minimum of 3 hours each shall be anticipated for the AM and PM peaks and 2 hours for the mid-day peak. These time periods must be submitted and approved before any turning movement counts begin. The consultant shall also recommend if any locations may require additional peak period counts, such as weekend, school peak times, or special event times.



Once the appropriate time periods are established and approved by the County based upon the findings of the ATR count program, the consultant shall conduct manual turning movement counts at each signalized intersection during the AM, Mid-day, PM peak hours, and weekend if determined and approved. Manual turning movement counts SHALL include the following information collected in 15-minute intervals for the duration of the manual counts:

- Number of cars by movement
- Number of heavy vehicles (Trucks/Buses) by movement
- Pedestrians by crossing and direction
- Right Turns on Red by approach

Driveways controlled by a traffic signal shall be counted as an independent approach to the intersection. The consultant should also advise based on a field visit if there are any major interchanges or unsignalized driveway generators that may need to be counted also in order to achieve an accurate Existing Conditions Model.

The traffic count data is to be provided to the County in a format that can be utilized for analysis by the County. PDF documents of the data should also be provided. If raw data is provided, it must be compatible with Miovision or Jamar Petra Pro v7.1 for TMC and Trax Pro v2.9.0 for ATRs. Count data can also be provided in Microsoft Excel if Miovision, Petra Pro or Trax Pro is not available.

Based on the collected data, the Consultant shall prepare volume diagrams for all the corridors inclusive of all of the counted intersections within the project limits showing all of the peak hour volumes. These volume diagrams should be used to develop balanced flow diagrams for the corridors for the various peaks. Any major imbalances along the corridor are to be documented and explained.

#### *2C – D3 (Residual Delay - Unmet Demand) Data Collection*

The Consultant shall propose a method to the County in their response on how they will capture the component of D3 (Residual delay – Unmet demand) in their Synchro Models and if any additional field data collection will be required in order to incorporate residual delays caused by unmet demand in the Synchro models.

#### *2D – Queue Observations and Travel Time Runs*

Any additional field observations and queue lengths experienced along the corridor at the various intersections during the field studies should be documented in the field notes to incorporate into the existing models.

Travel time runs should be conducted along each corridor to help in the calibration of the existing conditions model. Speed and Travel Time runs must be collected concurrently with the traffic count program. At a minimum, the information required are the running time of traffic and stopped delay at intersections.

#### *2E – Traffic Data Collection Report.*

The deliverable summarizing the efforts of Field Data Collection as outlined in the preceding sections is expected from the Consultant. This memo shall summarize the traffic counts collected, the field observations, queue information, travel time runs and balanced flow volume diagrams for existing conditions and the design year (design year would be the year the counts were taken plus 20 years). Growth factors used to determine the design year volumes should be documented in the memo. A

separate Data Collection Memo should be prepared for all corridors and if corridors are being analyzed together this should be noted.

### ***Deliverables for Task 2:***

- Field Verification Report
  - Redline Signal Plan mark-ups
  - Spreadsheet/Checklist
  
- Data Collection Plan
  - ATR Location Map
  - Analysis of ATR data to establish peak hours for TMCs
  - Collection Method for D3
  
- Traffic Data Collection Report
  - Volume Diagrams
  - Travel Time Runs
  - Queue Length Observations

### ***Task 3 - Existing Conditions Analysis***

#### ***3A - Creation of Base Synchro Models***

The consultant shall develop a base Synchro model for the study area using the latest build of the Synchro software by Trafficware Corp. (unless otherwise specified by the County). The version of the software to be used should be discussed and approved by the County before any models are created. All appropriate model data, including but not limited to, peak hour factors (by movement), heavy vehicle percentages (by movement), right turns on red, pedestrians by crossing, lane widths and storage lengths, speed limits, lane utilization factors, parking conditions and timing and phasing parameters, etc. shall be entered into the model consistent with the data collected in Task 2. The Synchro model shall be overlaid onto the latest aerial photographs. The models shall be developed in NJ State Plane coordinates. The Synchro models should be prepared for each corridor or group of corridors with cross corridor coordination. The proposed model development must be presented to the County for their approval prior to preparation of the models. The aerial background shall be imported into Synchro at a minimum resolution of 1 foot per pixel or as approved by the County. Separate Synchro models shall be prepared for each time period to be studied (AM, PM and Mid-day). Existing timing plan information will be provided to the consultant based on the available timing directives and controller printouts. It shall be the responsibility of the consultant under Task 2A to verify that the existing timings loaded into the Synchro model reflect the timings as indicated on the controller printouts. The controller printouts will control when there is a conflict between the timing directives and the controller printouts.

All Synchro runs shall be processed through the latest build of Sim-Traffic by the consultant and must run without any fatal errors. Once the Existing Base Models are created in Synchro the results shall be discussed with the County. These models then shall be calibrated to ensure they replicate existing field conditions and submitted to the County for review. Factors such as travel times, delays, queues, parking, and lane utilization should also be considered when calibrating the existing model. Any factors that are adjusted during the calibration process must be summarized in a Calibration Memo listing the reasoning and justification for the factor adjustment(s).

### *3B - Determination of Baseline Measures of Effectiveness (MOEs).*

Using the Base Synchro Models prepared in Task 3A, the consultant shall generate a series of reports that includes the following MOEs for each study location by movement, approach and intersection:

- Average Delay
- Volume to Capacity Ratio
- Level of Service
- Average Network Speed
- Total Network Travel Time
- Total Network StopsFuel Consumption
- Greenhouse Gas Emissions (CO<sub>2</sub>, CO, NO<sub>x</sub>, VOC)

### ***Deliverables for Task 3:***

- One (1) USB with the existing and calibrated Synchro Models
- File Naming Convention Legend Sheet
- Letter Report outlining Baseline MOEs including intersection output results showing LOS and queues, a Calibration Memo and summary of any intersections experiencing failing LOS, extensive queues and oversaturated conditions

### ***Task 4 – Determination of Optimized Timings***

#### *4A – Conformance with County / MUTCD Timing Practices*

The consultant shall review the current signal timing operations with respect to conformance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). Information such as required minimum walk / don't walk times, red and yellow clearance times, and proper phasing practices shall be reviewed and deficiencies shall be noted by the consultant. The Consultant shall prepare and submit Vehicular and Pedestrian Clearance and change calculation with the current MUTCD standards for all study intersections. These values shall be used when developing the proposed synchro models. The calculations shall be included in the Optimized Timing Report.

#### *4B – Preparation of No Build Synchro Model*

The consultant shall prepare No Build Synchro models which will be developed using the Calibrated Model and updating the MUTCD compliant clearance times described in 4A. This model will be used for comparison of MOEs.

#### *4C – Coordination with Local Officials*

The County will contact the affected municipalities to solicit comments on operational problems associated with the various traffic signals to be analyzed during this project. The consultant shall take this information into account when determining the optimized timings for each traffic signal. The collected information shall be summarized in a memo for each corridor and discussed with The County prior to Optimized Synchro Models are prepared. This Memo should also be included in the Optimized Timing Report.

#### *4D – Development of Optimized Synchro Model - First Run*

Using the No Build Synchro models produced in Task 4B, the consultant will optimize the signal timings and offsets utilizing the signal optimization capabilities of Synchro combined with sound engineering

practices and compliance with the MUTCD. The existing timings shall be maintained at intersections outside County jurisdiction (such as signals maintained by NJDOT). The consultant will keep the existing NJDOT timings at the State intersections and break the progression zone at this point, or optimize the offsets and cycle length around the State Signal. These models shall be run through SimTraffic also to verify that there are no outstanding queues that are not represented in the Synchro models for the various peaks. These SimTraffic file recordings shall also be saved with the optimized models.

The County will provide information for any major proposed projects that may be implemented or constructed prior to the new timing directives being installed for inclusion in the proposed Synchro models. The Consultant should also review the signalized network of any two County corridors that cross to determine if the optimized cycle length for each corridor's zone needs to be the same and if cross-progression could be accommodated. In addition, the Consultant shall note if there any non-County owned signals that are closely adjacent (less than 1/4 mile) to the project area/corridor that may be affected by the proposed optimization. These findings shall be summarized in the Optimized Timing Report. The affected signals should not be included in the data collection and analysis tasks.

County staff will review the first run optimized models and SimTraffic results and provide comments as necessary. The model results and outputs shall be summarized in the Optimized Timing Report. Corridors shall be described and listed with the number of intersections within the corridor, master intersection and zone partitioning shown.

#### *4E – Development of Optimized Synchro Model – Second Run*

The Consultant shall revise the first run optimized timings based on the comments provided by the County, adjusting the splits and/or offsets as necessary for each intersection, and submit to the County for a second review. With the submission of the revised models and updated Optimized Timing Report, the Consultant shall submit responses to the County Comments in a Comment Resolution Memo.

#### *4F – Determination of Optimized MOEs*

Once the timings are approved by the County, the consultant shall itemize the MOEs for each intersection. These MOEs should be collected and evaluated as a means of further assessing the results of the optimization process.

The consultant shall submit an Optimized Timing Report which shall include the following information:

- Existing and optimized capacity analysis printouts for each signalized intersection.
- Vehicular and Pedestrian Clearance and Change Interval Calculations
- Time-space diagram along the study corridors.
- Corridor listing of intersections with master intersections and zone partitioning listed.
- Summary of any intersections still experiencing congestion or problematic conditions that may need to be investigated under a larger scale project for improvement.
- Reduction in queue lengths along the corridor or potential increase in side street queues due to the focus on corridor progression. Consultant shall note possible adjustments for emergency pre-emption for longer queue dissipation.

#### ***Deliverables for Task 4:***

- Optimized Timing Report.
- One (1) USB with the No Build and Optimized Synchro Models with SimTraffic Recordings.

- File Naming Convention Legend Sheet
- Clearance Calculations for Pedestrian Clearance, Pedestrian Interval, Red Clearance, and Yellow Clearance times for each signalized intersection.

### ***Task 5 – Preparation of Traffic Signal Timing Directives***

Once the optimized signal timings are approved by the County, the consultant shall prepare a series of proposed traffic signal timing directives for each signalized intersection. Timings shall be prepared in Microsoft Excel in a format to be provided by the County. Each timing plan shall include Time of Day (TOD) plans for: AM Peak, Mid-day Peak, PM Peak, free float time periods during the overnight, where appropriate, and any other suggested time periods that the analysis shows may be required due to specific corridor characteristics or conditions. Descriptions of emergency pre-emption or railroad pre-emption operations shall be included in the timing directives where appropriate. Consultant should be aware that increased Flashing Don't Walk (FDW) and Yellow & All Red Clearance values may have an impact on advance railroad pre-emption times and should take into consideration when developing timings. The calculated Vehicle Change and Clearance Intervals and Pedestrian Walk and Clearance Intervals that were completed under Task 4A and were used for the proposed Synchro models shall be input into the Proposed Timing Directives. The consultant shall summarize the changes in timing for each intersection in a table for existing versus proposed timing change updates.

The consultant shall perform an internal Quality Assurance/Quality Control (QA/QC) review of the timing directive to ensure that it complies with the MUTCD and can be reasonably implemented in the field utilizing the existing or proposed signal hardware. Upon submission, the consultant shall provide a signed and sealed certification by a NJ licensed professional engineer that the proposed timing directives have been reviewed and comply with the MUTCD standards.

#### ***Deliverables for Task 5:***

- One (1) USBs containing timing directive spreadsheets in County format.
- Timing directive MUTCD certification.
- One (1) set signed timing directives in County format.

### ***Task 6 – Implementation***

#### ***6A –Controller Upgrades and GPS Installation at Various Locations***

The consultant shall install new traffic signal controllers at forty-eight (48) specified locations and GPS units at seventy (70) locations for Group 1 and twenty-three (23) new controllers and sixty-three (63) GPS units for Group 2. The controllers shall be provided and installed per the attached specifications in Attachment C. The consultant shall submit shop drawings for the County to approve. No equipment shall be installed unless approved by the County. List of which signalized intersections will require controller upgrades and/or GPS units can be found in Attachment B.

The consultant shall contact the Ocean County Traffic Signal Maintenance Supervisor at (732) 349-8165 to schedule the installation of the controller and GPS unit two weeks prior to the date of install. The Traffic Signal Maintenance Supervisor shall be present when the controller and GPS unit are installed. The Contractor shall deliver the salvaged material to the location specified by the Ocean County Traffic Signal Maintenance Supervisor. All other material is to be properly disposed of by the Contractor.

## *6B –Timing Directive Implementation*

The consultant shall program the final timing into the controllers per the controller turn-on specification in Attachment C. Bench testing is required.

The consultant shall contact the Ocean County Traffic Signal Maintenance Supervisor at (732) 349-8165 to schedule the implementation of the timing directives two weeks prior to the date of install. The Traffic Signal Maintenance Supervisor shall be present when the timing directive is implemented.

### ***Deliverables for Task 6:***

- Shop Drawings for the following items:
  - Traffic Signal Controller
  - GPS Unit
- Certification for Controller Installation Technician
- Certification for GPS Unit Installation Technician
- Traffic Signals Programmed with the final Timing Directive

## ***Task 7 – Before and After Travel Time and Delay Study***

The consultant shall perform a travel time and delay study using an acceptable technology. Prior to the upgrade of any traffic signal timings, the consultant shall commence their pre-condition study. The Before Study shall be done under task 2D since the travel time runs will be utilized to help calibrate the existing conditions Synchro model. The post condition study shall occur when the corridor is experiencing similar traffic conditions and within 60 days of implementation of the optimized timing directives. Study duration shall be a minimum of one week.

### **7A - Before and After Study Report**

A Before and After Study Report shall be prepared for each corridor summarizing the existing versus proposed MOEs. The report shall include summaries of the before and after conditions of the MOEs in Task 3. A comparison of Delay, Levels of Service and V/C ratios should be compared and presented in a tabular form to show improvements for the various intersections within each corridor. In addition, provide a comparison of the MOEs for Average Network Speed, Total Network Travel Time and Total Network Stops for Before and After Timing Implementation conditions. This data can be summarized in tabular or graphical format

### ***Deliverables for Task 7:***

- One (1) set Before and After Travel Time and Delay Study showing comparisons.
- One (1) USB PDF copy of Before and After Travel time and Delay Study

## ***Task 8 – Report of Findings***

### ***8A –Draft and Final Report***

The consultant shall prepare a draft report of findings which details the projected improvement in MOEs for each intersection and system wide as a result of the optimized timings in a format to be approved by the County. The consultant shall anticipate a draft and final submission. This report shall address fuel

savings provided and greenhouse gases reduced as a result of the retiming effort. All technical analysis and calculations (including all Synchro files) shall be submitted to the County.

***Deliverables for Task 8:***

- One (1) set Draft Final Report
- One (1) set Final Report
- One (1) USB containing PDF copy of report and Microsoft Word (latest version) compatible format

***Task 9 – Post Implementation Investigations and Timing Tweaking and Changes***

The consultant shall perform field investigations and timing tweaking for corridors that may experience some complaints after the proposed timings are implemented. OCE to discuss and approve these locations as required. It may be assumed that 20% of the intersections may require moderate investigation and timing updates.

***Deliverables for Task 9:***

- One (1) USBs containing timing directive spreadsheets in County format.
- Timing directive MUTCD certification.
- One (1) set signed timing directives in County format.

**III. SCHEDULE**

**The project shall be completed within eighteen (18) months of Notice to Proceed.** Please note that traffic data collection may not be possible during the summer months of June, July and August, and near major holidays due to seasonal fluctuations in traffic flows unless required for certain shore routes. This shall be taken into account by the consultant when preparing a project schedule. Separate schedules must be prepared for Group 1 Corridors and Group 2 corridors. The consultant is to provide the County with their plan to obtain appropriate count data taking into consideration the items listed above, as well as any remaining residual impacts from COVID-19. In order to be efficient and progress the project on time the consultant’s schedules should include staggered submissions of deliverables of individual corridors and sub corridors to allow for County review of deliverables in a timely manner.

**IV. PROPOSAL SUBMISSION**

This project is funded in part with federal funds through an NJTPA grant of FHWA funds and is, therefore, subject to federal, state and local laws, rules and regulations and requires quarterly reporting. The DBE requirement for this project is **13.23%**. An updated Certified Firm list may be obtained from the NJDOT website:

<http://www.state.nj.us/transportation/business/procurement/ProfServ/information.shtm>

or by contacting the Office of Civil Rights/Affirmative Action at 609-963-2052. All firms to be utilized to meet the Goals should be listed in the proposer’s technical submission, as well as the Cost Proposal. Failure to make a good faith effort to meet the established goal may be cause for canceling negotiations with a selected firm and selecting a new firm.

Separate contracts will be awarded for Group 1 Corridors and Group 2 Corridors. See Project Description for details on intersections and equipment for each Group. Proposal responses will include separate schedules and fee estimates for each Group 1 and Group 2 corridors.

The County reserves the right to reject any or all proposals in accordance with N.J.S.A. 40A:11-13.2, or to waive any informalities and non-material defects in the proposals and to accept any proposal deemed in the best interest of the County.

**The proposer(s), if awarded a contract, agree(s) to protect, defend and save harmless the County and the NJTPA against any damage for payment for the use of any patented material process, article or device that may enter into the manufacture, construction or form a part of the work covered by either order or contract, and he further agrees to indemnify and save harmless the County and the NJTPA from suits or actions of every nature and description brought against it, for, or on account of injuries or damages received or sustained by any party or parties by, or from any of the acts of the contractor, his servants or agents.**

## **V. EVALUATION CRITERIA**

5.1 Proposal Evaluation: All Statements of Qualifications and Letters of Interest will be reviewed to determine if they are responsive. A committee, using the criteria set forth herein, will then evaluate responsive proposals.

**35% Responsiveness to the Request for Proposal**  
**40% Experience and Knowledge of the Firm and Team Members**  
**25% Viability of Conceptual Approach to the Project**

5.2 Responsiveness to the Request for Proposal includes:

- 1) Demonstrating thorough understanding of the project requirements (15)
- 2) Technical quality and completeness of the proposal (10)
- 3) Compliance with submission guidelines (10)

5.3 Experience and Knowledge of the Firm and Team Members includes:

- 1) Details of similar recent projects (5)
- 2) Project team organization (5)
- 3) Experience in Traffic Signal Optimization (15)
- 4) Qualifications of the designated Team Members (5)
- 5) Relevant Experience of the designated Team Members (5)
- 6) Reference recommendations of the Firm and Team Members (5)

5.4 Viability of Conceptual Approach to the Project includes:

- 1) Detailed approach to tasks presented in the scope of work (15)
- 2) Project tasks detailed within schedule (10)

5.5 Ranking:

All proposals will be reviewed for completeness and qualifications.

The top two technically ranked proposals will be determined in accordance with Federal Brooks Act and will be presented to the Consultant Selection Review Committee. Based on the results of the Consultant Selection Review Committee, the highest ranking consultant will be awarded Group 1



Corridors and the second highest ranked firm will be awarded Group 2 Corridors. Final selection will not be made based upon consideration of the Cost Proposal. The contract will be awarded after successful negotiations with the selected proposers. The fee schedule outlined in the selected proposer's Cost Proposal Sheets for each Group submitted as part of their RFP, shall be the basis for this Contract.-

## **VI. QUESTIONS**

All questions specifically regarding the Request for Proposal and required tasks must be submitted via the Ocean County Procurement Portal Website, citing the particular section and paragraph numbers where applicable. The deadline for inquiries is **Monday, June 5, 2023**. Late inquiries may not be reviewed or considered. All questions and answers will be posted on the RFP's webpage on the Ocean County Procurement Portal Website: <https://procurement.opengov.com/portal/oceancounty/>, by Monday, June 5, 2023.

From the date on which the RFP is released and during the period up to and including the date on which a notice of award is issued, prospective respondents shall contact only the individuals indicated above, in writing, with respect to this procurement. Direct or indirect attempts by a prospective firm, its employees, agents or representatives, to contact other representatives of Ocean County or its partnering agencies to obtain information, or for other purposes regarding the RFP or the procurement process, may result in disqualification of a respondent's proposal.

## **VII. BASIS FOR PROPOSAL**

### 7.1 Proposer's Experience and Qualifications

7.1.1 The proposer firm must provide an organizational chart specific to those personnel assigned to the project, as well as their qualifications. This shall include, but not be limited to, the resumes, names and phone numbers of assigned personnel, as well as descriptions of similar work and references.

7.1.2 The proposer firm's team must have a minimum of 10 years of experience providing similar services to NJDOT or Counties in New Jersey and shall include in their proposal their specific experience in providing such services. The County reserves the right to disqualify proposer firms based on experience and/or references. Proposer firms must be prepared to present the County with suitable evidence of their financial standing upon request.

7.2 Disclosure of Proposal Contents: All proposals and other material submitted become property of the County and may be returned only at the County's option. Information contained in the proposals will not be disclosed during the evaluation process. Under New Jersey's "Right to Know" laws, public records are required to be open to reasonable inspection. All proposal information, including detailed price and cost information, will be held in confidence during the evaluation process and until after the Notice of Award is issued.

### 7.3 Conflict of Interest

7.3.1 Each proposal shall include a statement indicating whether or not the firm or any individual working on the contract has a possible conflict of interest (e.g. themselves, spouse or child employed by the County of Ocean) and if so, the nature of that conflict. The County reserves the right to cancel the award if any interest disclosed from any source could either give the appearance of a conflict or cause speculation as to the objectivity of the project to be performed by the vendor. The County's determination regarding any question of conflict of interest shall be final.

- 7.3.2 The County may exclude a proposer from submitting a proposal, or may reject a proposer's proposal, after making a written determination that the proposer received payment for assistance in drafting the RFP, or obtained substantial information regarding the RFP that was not available to the public.
- 7.4 Submission of Proposal: As discussed in Section titled "Method of Submission", technical proposals must be submitted electronically via the Ocean County Procurement Portal Website and cost proposals/fee schedules shall be mailed or hand delivered to Ocean County Purchasing Department, Administration Building, Room 335, 101 Hooper Ave, Toms River, New Jersey 08753. The cost proposals/fee schedules must be labeled "MULTI-SOLICITATION FOR TWO (2) GROUPS OF PROFESSIONAL ENGINEERING SERVICES FOR OCEAN COUNTY SIGNAL OPTIMIZATION PROJECTS, VARIOUS MUNICIPALITIES, OCEAN COUNTY.
- 7.5 Understanding the Project: Proposers must provide a comprehensive narrative statement that illustrates their understanding of the requirements of the project and their proposed approach to the project that illustrates the methodology and staffing plan that will serve to accomplish the work. This should be limited to four (4) pages. Details of all the firm's services and unrelated projects should not be included in the proposal.
- 7.6 Response Format and Content: The RFP sections that should be submitted and clearly defined are:
- Cover Page
  - Table of Contents
  - Introduction, Background Statement
  - Complete proposer information and a specific point of contact if questions should arise
  - Technical Response, including Project Understanding and Approach to Project
  - Organizational Chart and Qualifications/Manpower Distribution Staff Qualifications and Resumes
  - References
  - A statement acknowledging that the proposer shall comply with all conditions outlined. An Officer of the company empowered to bind the company must sign the proposal.
  - Documentation of DBE Participation or Good Faith Efforts

Failure to include these items may cause the proposal to be determined as non-responsive and the proposal may be rejected.

## **VIII. COST PROPOSAL**

- 8.1 Cost Proposal: This is a cost plus fixed fee contract. Proposers must complete the forms for "Fee Schedule of Direct Salary Hourly Rates for Group 1 and "Fee Schedule of Direct Salary Hourly Rates for Group 2" separately in accordance with **Section 9.2- Cost Proposal/Fee Schedule**. A manning document and fee proposal must be included, with a minimum of the following information:
- Tasks and Subtasks
  - Direct Salary Hourly Rates per Title
  - Manhour estimates by Task/Subtask and Title
  - Subtotals for Each Task
  - NJDOT Approved Overhead Percentage
  - Fixed Fee Percentage

- Direct Expenses
- Percent DBE
- Total Project Cost

- 8.2 Exception/Alternate Proposals: To be considered, proposers must follow the instructions outlined in this document. Any exceptions to the terms, conditions or other requirements in any part of the RFP must be clearly stated in the proposal. Otherwise, the County will consider that all proposals offered are in strict compliance with this RFP and the successful proposer will be responsible for compliance.
- 8.3 Right to Negotiate: After the County's completion of the evaluation process, including any discussion held with proposers during the evaluation process, the County may elect to initiate contract negotiations. The option of whether or not to initiate contract negotiations rests solely on the County. If the County elects to initiate contract negotiations, these negotiations cannot involve changes in the County's requirements or the proposal submitted, which would, by their nature, affect the basis of the source selection and competition previously conducted.
- 8.4 Failure to Negotiate: If the selected proposer fails to provide information required to begin negotiation in a timely manner, if the proposer fails to negotiate in good faith, if the County and proposer cannot mutually agree to an acceptable expenditure or if the proposer and the County, after a good faith effort, simply cannot come to terms, the County may terminate negotiations with the proposer initially selected and commence negotiation with the next highest ranked proposer.
- 8.5 Intent: The County intends to award a contract to the highest ranked proposer that the County can conclude successful negotiations of a fee proposal for Group 1 Corridors; and to the second highest ranked proposed that the County can conclude successful negotiations of a fee proposal for Group 2 Corridors.
- 8.6 The contract shall remain in effect for the duration of the project.

## **IX. METHOD OF SUBMISSION**

### **9.1 Technical Proposal**

The County of Ocean is accepting **only electronic proposals** for the **technical proposal submission** of this RFP. Submitting your technical proposal manually is cause for rejection.

**DO NOT** submit a hard copy of your electronic submission with the cost proposal/fee schedule.

### **9.2 Cost Proposal/Fee Schedule**

In accordance with Section 8.1, cost proposals/fee schedules for this RFP shall be submitted via mail or hand delivered to the Ocean County Purchasing Department at the address below:

Ocean County Purchasing Department  
Administration Building  
101 Hooper Avenue  
Toms River, New Jersey 08753

The Cost Proposals/Fee Schedules for each Group shall be mailed or hand delivered and must be received prior to 4:00 PM, prevailing time on Thursday, June 15, 2023. Proposers must complete the forms for “Fee Schedule of Direct Salary Hourly Rates for Group 1 and “Fee Schedule of Direct Salary Hourly Rates for Group 2” separately. **Do not submit a copy of the cost proposals/fee schedules with the technical proposal submission.** Failure to submit the cost proposals/fee schedules in the method clearly stated in this RFP will be cause for rejection.

All cost proposals/fee schedules must be enclosed in one **(1) sealed package**. The package shall contain **two (2) sealed envelopes, one (1) containing three (3) copies of the Fee Schedule of Direct Salary Hourly Rates for Group 1 and one (1) containing three (3) copies of the Fee Schedule of Direct Salary Hourly Rates for Group 2**, identified and bearing the name and address of the proposer, the name of the proposal and the date of the opening on the outside of the envelopes. Proposers shall include a manning document without fee rates in the Technical Proposal that clearly shows man-hour distribution by task.

### **PROPOSAL SUBMISSION REQUIREMENTS**

1. All Technical responses to the Request for Proposal (“RFP”):
  - a. Must be submitted electronically and must be received prior to 4:00pm, prevailing time on the date on which they are to be unsealed.
  - b. The County will not be responsible for late submissions and no responses to this RFP will be accepted by the County if received after the time stipulated above.
2. All Cost Proposal/Fee Schedule Submissions for the Request for Proposal (“RFP”):
  - a. Must be submitted manually by mail or hand delivered and must be received prior to 4:00pm, prevailing time on the date on which they are to be received.
  - b. The County will not be responsible for late submissions and no responses to this RFP will be accepted by the County if received after the time stipulated above.

### **AWARD**

The County of Ocean shall award the contracts to the vendor or vendors that best meet the needs and interests of Ocean County. The County reserves the right to negotiate the terms and conditions of a contract with the successful vendor or vendors.

The County reserves the right to reject any or all proposals in accordance with N.J.S.A. 40A:11-13.2, or to waive any informalities and non-material defects in the proposals and to accept any proposal deemed in the best interest of the County.

It is to be understood by the proposer that their proposal is submitted on the basis of specifications prepared by the County and the fact that any proposer is not familiar with these specifications or conditions will not be accepted as an excuse.

## **INDEMNITY CLAUSE**

The proposer, if awarded a contract, agrees to protect, defend and save harmless the County against any damage for payment for the use of any patented material process, article or device that may enter into the manufacture, construction or form a part of the work covered by either order or contract, and he further agrees to indemnify and save harmless the County from suits or actions of every nature and description brought against it, for, or on account of injuries or damages received or sustained by any party or parties by, or from any of the negligent acts of the contractor, his servants or agents.

## **INSURANCE REQUIREMENTS**

The contractor shall maintain primary insurance to protect against all claims under Worker's Compensation, Comprehensive General Liability and Automobile. Except for Worker's Compensation, all coverage shall apply as primary coverage with respect to any other insurance or self-insurance program afforded to the County. There shall be no endorsement or modification of this coverage to make it excess over other available insurance/coverage; alternatively, if the CGL and umbrella, excess of reinsurance states that it is pro rata, it shall be endorsed to be primary with respect to the County. Primary coverage shall be subject to approval for adequacy of protection as per the following limits:

### Worker's Compensation

1. Limits according to Worker's compensation Laws of the State of New Jersey.
2. Contractor's Liability not less than \$100,000.

### Comprehensive General Liability

1. Bodily Injury - \$500,000 per person; \$1,000,000 per occurrence.
2. Property Damage - \$1,000,000 per occurrence.

### Comprehensive General Liability shall include the following:

1. Coverage for explosion, collapse or underground hazards.
2. Occurrence basis coverage.
3. Broad form property damage coverage.
4. Coverage for personal injury sustained by any person as a result of an offense directly or indirectly related to the employment of such person by the insured.

### Comprehensive Automobile Liability shall include the following:

Business auto liability insurance or its equivalent with a minimum limit of \$1,000,000 per accident and including coverage for all of the following:

- a. Liability arising out of the ownership, maintenance or use of any auto;
- b. Auto non-ownership and hired car coverage.
- c. Contractor's Worker's Compensation, Comprehensive General Liability and Comprehensive Automobile Liability arising out of subcontractor's operations shall be identical as that listed above.

### Professional Liability

Errors and Omissions Coverage - not less than \$1,000,000.

Copies of each insurance certificate shall be furnished to the County with proposal and must state County of Ocean is additionally insured.

## **ADDITIONAL INFORMATION**

It is to be understood by the proposer that their proposal is submitted on the basis of specifications prepared by the County and the fact that any proposer is not familiar with these specifications or conditions will not be accepted as an excuse.

Payments will be made upon the approval of vouchers submitted by the successful proposer in accordance with the requirements of the Board of Commissioners and subject to the Board of Commissioners customary procedures. The County will not pay interest or late fees regardless of language provided.

Ocean County Board of Commissioners will make award within sixty (60) days after receipt of proposals.

The County of Ocean is exempt from any State sales tax or Federal excise tax.

“All contractors must comply with the provisions of New Jersey Statute Title 40A:11-18, when applicable.”

## **CERTIFICATION OF NON-INVOLVEMENT IN PROHIBITED ACTIVITIES IN IRAN**

Pursuant to N.J.S.A. 52:32-58, the proposer must certify that neither the proposer, nor one of its parents, subsidiaries, and/or affiliates (as defined in N.J.S.A. 52:32-56(e)(3)), is listed on the Department of the Treasury's List of Persons or Entities Engaging in Prohibited Investment Activities in Iran and that neither is involved in any of the investment activities set forth in N.J.S.A. 52:32-56(f). If the proposer is unable to so certify, the proposer shall provide a detailed and precise description of such activities. Prior to contract award or authorization, the contractor shall provide the Contracting Agency with a completed Certification on Non-Involvement in Prohibited Activities in Iran.

## **CERTIFICATION OF NON-INVOLVEMENT IN PROHIBITED ACTIVITIES IN RUSSIA OR BELARUS**

Pursuant to N.J.S.A. 52:32-60.1, the “person or entity” (as defined in N.J.S.A. 52:32-60.1, et seq) seeking to enter into or renew a contract for the provision of goods or services or the purchase of bonds or other obligations shall certify that it is not “engaging in prohibited activities in Russia or Belarus” (as such term is defined in as defined in N.J.S.A. 52:32-60.1, et seq. If the person or entity is unable to certify, the person or entity shall provide a detailed and precise description of such activities. The N.J.S.A. 52:32-60.1 certification form must be completed prior to contract award and is provided in the specification documents (DocuSign).

Vendors may view the Precluded Entities List Here:  
<https://www.nj.gov/treasury/administration/pdf/RussiaBelarusEntityList.pdf>

## **TRANSITIONAL PERIOD** (excluding Professional Contracts)

In the event services are terminated by contract expiration or by voluntary termination by either the Contractor or the County of Ocean, the Contractor shall continue all terms and conditions of said contract for a period not to exceed one month, at the County’s request.

## **NEW JERSEY BUSINESS REGISTRATION CERTIFICATE**

Pursuant to N.J.S.A. 52:32-44, Ocean County (“Contracting Agency”) is prohibited from entering into a contract with an entity unless the bidder/proposer/contractor, and each subcontractor that is required by law to be named in a bid/proposal/contract has a valid Business Registration Certificate on file with the Division of Revenue and Enterprise Services within the Department of the Treasury.

Prior to contract award or authorization, the contractor shall provide the Contracting Agency with its proof of business registration and that of any named subcontractor(s).

Subcontractors named in a bid or other proposal shall provide proof of business registration to the bidder, who in turn, shall provide it to the Contracting Agency prior to the time a contract, purchase order, or other contracting document is awarded or authorized.

During the course of contract performance:

- (1) the contractor shall not enter into a contract with a subcontractor unless the subcontractor first provides the contractor with a valid proof of business registration.
- (2) the contractor shall maintain and submit to the Contracting Agency a list of subcontractors and their addresses that may be updated from time to time.
- (3) the contractor and any subcontractor providing goods or performing services under the contract, and each of their affiliates, shall collect and remit to the Director of the Division of Taxation in the Department of the Treasury, the use tax due pursuant to the Sales and Use Tax Act, (N.J.S.A. 54:32B-1 et seq.) on all sales of tangible personal property delivered into the State. Any questions in this regard can be directed to the Division of Taxation at (609)292-6400. Form NJ-REG can be filed online at [www.state.nj.us/treasury/revenue/busregcert.shtml](http://www.state.nj.us/treasury/revenue/busregcert.shtml).

Before final payment is made under the contract, the contractor shall submit to the Contracting Agency a complete and accurate list of all subcontractors used and their addresses.

Pursuant to N.J.S.A. 54:49-4.1, a business organization that fails to provide a copy of a business registration as required, or that provides false business registration information, shall be liable for a penalty of \$25 for each day of violation, not to exceed \$50,000, for each proof of business registration not properly provided under a contract with a contracting agency.

## **DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION**

This consultant contract is subject to Title 49, Part 26, Code of Federal Regulations (49 CFR 26) entitled "Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs." In order to ensure NJDOT achieves its federally mandated statewide overall DBE goal, the NJTPA and Ocean County encourage the participation of Disadvantaged Business Enterprises or Emerging Small Business Enterprises, as defined below, in the performance of agreements financed in whole or in part with federal U.S. DOT funding. For this study drawing on federal U.S. DOT funding under an NJTPA grant, the DBE goal shall be at minimum **13.23%**.

The NJTPA has a long-standing commitment to maximize business opportunities available to disadvantaged and emerging small business enterprises (DBE). The consultant's contract for this project is subject to all federal, state, and local laws, rules, and regulations, including but not limited to, non-discrimination in employment and affirmative action for equal employment opportunity. The consultant's contract obligates the consultant to aggressively pursue Disadvantaged Business Enterprises (DBEs) and Emerging Small Businesses (ESBEs) for participation in the performance of contracts and subcontracts financed in whole or in part with federal U.S. DOT funding. The consultant cannot

discriminate on the basis of race, color, national origin, or sex in the award and performance of federally assisted contracts.

### 1. Disadvantaged Business Enterprise (DBE):

A federal requirement that must be addressed is the mandated Disadvantaged Business Enterprise (DBE) participation. A Disadvantaged Business Enterprise (DBE) is defined in 49 CFR Part 26 and FTA C 4716.1A, as "a small business concern (from Section 3 of the Small Business Act), which is:

- a. at least 51 percent owned by one or more 'socially and economically disadvantaged' individuals, or in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more 'socially and economically disadvantaged' individuals, and
- b. whose management and daily business operations are controlled by one or more of the 'socially and economically disadvantaged' individuals who own it.

'Socially and economically disadvantaged' is defined as individuals who are citizens of the United States (or lawfully permanent residents) and who are: "Black Americans," "Hispanic Americans", "Native Americans," "Asian-Pacific Americans", "Asian-Indian Americans", "Women" (regardless of race, ethnicity, or origin); or "Other" (disadvantaged pursuant to Section 8 of the Small Business Act).

A database of DBEs certified under the State of New Jersey's Unified Certification Program (UCP) may be found using the following webpage link:

<http://www.njucp.net/http://www.bipincwebapps.com/nynj/biznet/>

### 2. Documentation by Consultant:

The prime consultant must document, in writing, all of the steps that led to any selection of the DBE firm/(s) in accordance with Subsection 4 below. Prior to the award of a consultant contract, the consultant must demonstrate sufficient reasonable efforts to utilize DBE firms.

If, at any time the consultant intends to subcontract or modify any portion of the work already under contract, or intend to purchase material or lease equipment not contemplated during the original preparation of their cost proposal, the consultant must document all reasonable efforts made to maintain the targeted DBE participation goal. If, as a result of any subcontract, modification, purchase order, or lease, the actual DBE participation rate for the consultant's contract is in danger of falling below the agreed upon DBE participation, then a request must be made for a modification through the County's Project Manager.

### 3. Good Faith Efforts

To demonstrate sufficient reasonable efforts to meet the DBE contract goals, a contractor shall document the steps it has taken to obtain DBE participation, including but not limited to the following:

- a. Attendance at an information meeting, if any, to inform the DBEs of prime contracting and subcontracting opportunities under a given solicitation.
- b. Advertisement in general circulation media, trade association publications, and small business publications for at least 20 days before proposals are due. If 20 days are not available, publication for a shorter reasonable time is acceptable.



- c. Written notification to DBEs s that their interest in the contract is solicited;
- d. Good faith efforts made to select portions of work proposed to be performed by DBEs s in order to increase the likelihood of achieving the stated goal;
- e. Efforts made to negotiate with DBEs s for specific proposals including at a minimum:
  - i. The names, addresses and telephone numbers of DBEs s that were contacted;
  - ii. A description of the information provided to DBEs s regarding the scope of work for the specified solicitation; and
  - iii. A statement of why additional agreements with DBEs s were not reached;
- f. Information regarding each DBE the contractor contacted and rejected as unqualified and the reasons for the contractor's conclusion;
- g. Efforts made to assist the DBE in obtaining bonding or insurance required by the contractor.

NOTE: If the County or NJTPA determines that the apparent successful contractor has failed to meet the requirements of this section, the contractor will be afforded the opportunity for an administrative reconsideration of that determination prior to the award or rejection of the contract. As part of the administrative reconsideration process, the contractor will have the opportunity to provide written documentation or argument concerning the issue of whether it met the goal or made adequate good faith efforts to do so. The County will send the contractor a written decision on reconsideration, explaining the basis for the finding that the contractor did or did not meet the goal or make adequate good faith efforts to do so.

### **COMPLETION OF DOCUMENTS**

Proposer's shall complete all documents and acknowledge all terms included with this proposal package. All documents should be from this proposal package and must not be dated or executed prior to the date of advertising. Failure to follow these instructions is cause for rejection.

## **EXHIBIT A**

### **MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE N.J.S.A. 10:5-31 et seq. (P.L. 1975, C. 127) N.J.A.C. 17:27**

#### **GOODS, PROFESSIONAL SERVICE AND GENERAL SERVICE CONTRACTS**

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity 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 Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable 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 age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.

The contractor or subcontractor will send to each labor union, with which it has a collective bargaining agreement, a notice, to be provided by the agency contracting officer, advising the labor union of the contractor's commitments under this chapter and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time and the Americans with Disabilities Act.

The contractor or subcontractor agrees to make good faith efforts to meet targeted county employment goals established in accordance with N.J.A.C. 17:27-5.2.

The contractor or subcontractor agrees to inform in writing its appropriate recruitment agencies including, but not limited to, employment agencies, placement bureaus, colleges, universities, and labor unions, that it does not discriminate on the basis of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, and that it will discontinue the use of any recruitment agency which engages in direct or indirect discriminatory practices.

The contractor or subcontractor agrees to revise any of its testing procedures, if necessary, to assure that all personnel testing conforms with the principles of job-related testing, as established by the statutes and court decisions of the State of New Jersey and as established by applicable Federal law and applicable Federal court decisions.

In conforming with the targeted employment goals, the contractor or subcontractor agrees to review all procedures relating to transfer, upgrading, downgrading and layoff to ensure that all such actions are taken without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, consistent with the statutes and court decisions of the State of New Jersey, and applicable Federal law and applicable Federal court decisions.

The contractor shall submit to the public agency, after notification of award but prior to execution of a goods and services contract, one of the following three documents:

Letter of Federal Affirmative Action Plan Approval

Certificate of Employee Information Report

Employee Information Report Form AA302 (electronically provided by the Division and distributed to the public agency through the Division's website at [www.state.nj.us/treasury/contract\\_compliance](http://www.state.nj.us/treasury/contract_compliance))

The contractor and its subcontractors shall furnish such reports or other documents to the Division of Purchase & Property, CCAU, EEO Monitoring Program as may be requested by the office from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Purchase & Property, CCAU, EEO Monitoring Program for conducting a compliance investigation pursuant to **Subchapter 10 of the Administrative Code at N.J.A.C. 17:27.**

## ***AMERICANS WITH DISABILITIES ACT***

### **Equal Opportunity for Individuals with Disabilities**

The CONTRACTOR and the COUNTY do hereby agree that the provisions of title II of the Americans with Disabilities Act of 1990 (the "Act") (42 U.S.C. 12101 et seq.), which prohibits discrimination on the basis of disability by public entities in all services, programs and activities provided or made available by public entities, and the rules and regulations promulgated pursuant thereunto, are made a part of this contract. In providing any aid, benefit, or service on behalf of the COUNTY pursuant to this contract, the CONTRACTOR agrees that the performance shall be in strict compliance with the Act. In the event that the CONTRACTOR, its agents, servants, employees, or subcontractors violate or are alleged to have violated the Act during the performance of this contract, the CONTRACTOR shall defend the COUNTY in any action or administrative proceeding commenced pursuant to this Act. The CONTRACTOR shall indemnify, protect and save harmless the COUNTY, its agents, servants and employees from and against any and all suits, claims, losses, demands, or damages of whatever kind or nature arising out of or claimed to arise out of the alleged violation. The CONTRACTOR shall, at its own expense, appear, defend and pay any and all charges for legal services and any and all costs and other expenses arising from such action or administrative proceeding or incurred in connection therewith. In any and all complaints brought pursuant to the COUNTY'S grievance procedure, the CONTRACTOR agrees to abide by any decision of the COUNTY which is rendered pursuant to said grievance procedure. If any action or administrative proceeding results in an award of damages against the COUNTY or if the COUNTY incurs any expense to cure a violation of the ADA which has been brought pursuant to its grievance procedure, the CONTRACTOR shall satisfy and discharge the same at its own expense.

The COUNTY shall, as soon as practicable after a claim has been made against it, give written notice thereof to the CONTRACTOR along with full and complete particulars of the claim. If any action or administrative proceeding is brought against the COUNTY or any of its agents, servants and employees, the COUNTY shall expeditiously forward or have forwarded to the CONTRACTOR every demand, complaint, notice, summons, pleading, or other process received by the COUNTY or its representatives.

It is expressly agreed and understood that any approval by the COUNTY of the services provided by the CONTRACTOR pursuant to this contract will not relieve the CONTRACTOR of the obligation to comply with the Act and to defend, indemnify, protect and save harmless the COUNTY pursuant to this paragraph.

It is further agreed and understood that the COUNTY assumes no obligation to indemnify or save harmless the CONTRACTOR, its agents, servants, employees and subcontractors for any claim which may arise out of their performance of this Agreement. Furthermore, the CONTRACTOR expressly understands and agrees that the provision of this indemnification clause shall in no way limit the CONTRACTOR'S obligations assumed in this Agreement, nor shall they be construed to relieve the CONTRACTOR from any liability, nor preclude the COUNTY from taking any other actions available to it under any other provisions of this Agreement or otherwise at law.

Professional Engineering Services for Ocean County Signal Optimization, Various Municipalities, Ocean County  
Evaluation Matrix

NAME	WEIGHT (%)	FIRM NAME	FIRM NAME	FIRM NAME	FIRM NAME	FIRM NAME	FIRM
		SCORE	SCORE	SCORE	SCORE	SCORE	SCORE
A. RESPONSIVENESS TO RFP (35%)		_____	_____	_____	_____	_____	_____
1. UNDERSTANDING OF PROJECT	15	_____	_____	_____	_____	_____	_____
2. TECHNICAL QUALITY	10	_____	_____	_____	_____	_____	_____
3. COMPLIANCE WITH SUBMISSION GUIDELINES	10	_____	_____	_____	_____	_____	_____
B. EXPERIENCE AND KNOWLEDGE OF FIRM AND TEAM (40%)		_____	_____	_____	_____	_____	_____
1. DETAILS OF SIMILAR RECENT PROJECTS	5	_____	_____	_____	_____	_____	_____
2. PROJECT TEAM ORGANIZATION	5	_____	_____	_____	_____	_____	_____
3. EXPERIENCE IN TRAFFIC SIGNAL OPTIMIZATION	15	_____	_____	_____	_____	_____	_____
4. QUALIFICATIONS OF DESIGNATED KEY PERSONNEL	5	_____	_____	_____	_____	_____	_____
5. EXPERIENCE OF KEY PERSONNEL	5	_____	_____	_____	_____	_____	_____
6. REFERENCES OF KEY PERSONNEL	5	_____	_____	_____	_____	_____	_____
C. VIABILITY OF CONCEPTUAL APPROACH TO THE PROJECT (25%)		_____	_____	_____	_____	_____	_____
1. DETAILED APPROACH TO TASKS PRESENTED IN THE SCOPE OF WORK	15	_____	_____	_____	_____	_____	_____
2. PROJECT TASKS DETAILED WITHIN SCHEDULE	10	_____	_____	_____	_____	_____	_____
		Score	Score	Score	Score	Score	Score
		_____	_____	_____	_____	_____	_____
<b>TOTAL WEIGHT</b>	<b>100%</b>						

**Attachement A - Corridors**

Group	Section	Corridor	CR #	Road	Start	Start MP	End	End MP	Total Number of Miles	Total Number of Intersections	Total Number of Miles
1	A	A	632	Burnt Tavern Rd / Bridge Ave	549 Lanes Mill Rd / Burrsville Rd	0.00	Community Park	4.63	4.48	15	4.48
1	A	F	526	County Line Rd	638 Jackson Mills Road	25.27	549 Lanes Mills Road	35.56	10.29		
1	A	F	638	Jackson Mills Road	526 E Commodore Blvd	4.26	Chandler Rd / Ely Harmony Rd	6.59	2.33		
1	A	F	641	New Prospect Road	641 Hyson Rd / Larsen Rd	1.84	526 W County Line Rd	4.28	2.44		
1	A	F	639	N Hope Chapel Rd	S Cooks Bridge Rd	0.41	526 W County Line Rd	2.54	2.13	49	23.17
1	A	F	6	E Kennedy Blvd	547 Squankum Rd	0.00	14th St	1.52	1.52		
1	A	F	639	N Hope Chapel Rd	528 E Veterans Hwy	0.00	Cooks Bridge Rd	0.41	0.41		
1	A	F	54	S Cooks Bridge Rd / N Cooks Bridge Rd	526 N County Line Rd	0.00	639 N Hope Chapel Rd	4.05	4.05		
1	A	J	528	W Veterans Hwy	Leesville Rd / Don Connor Blvd	21.90	527 Cedar Swamp Rd / E Veterans Hwy	22.46	0.56	7	5.38
1	A	J	636	Bennetts Mills Rd	527 Cedar Swamp Rd / E Veterans Hwy	0.00	641 N New Prospect Rd	4.82	4.82		
1	B	B	549	Hooper Ave	Yorktowne Blvd	5.93	631 Old Hooper Ave ramp	6.01	0.08		
1	B	B	631	Old Hooper Ave	549 Hooper Ave	0.00	549 Brick Blvd	3.12	3.12	22	6.64
1	B	B	549	Chambersbridge Rd / Lanes Mill Rd	549 Brick Blvd	8.69	Burnt Tavern	12.09	3.40		
1	B	B	63	Burnt Tavern Rd	Herborn Ave	0.35	Lanes Mill Rd / GSP Exit 91	0.39	0.04		
1	B	H	626	Cross St	US-9	0.00	528 E Veterans Hwy	2.88	2.88	9	4.40
1	B	H	628	Prospect St	626 Cross St	0.00	US-9	1.52	1.52		
1	B	I	528	Cedar Bridge Ave	639 S Hope Chapel Rd	27.33	US-9	30.25	2.92	14	6.60
1	B	I	528	Cedar Bridge Ave	Wedgewood Dr	34.19	Adamston Rd	37.87	3.68		
<b>Total:</b>										<b>116</b>	<b>50.67</b>
2	C	C	620	Church Rd	US-9	0.00	549 Hooper Ave	3.96	3.96	8	3.96
2	C	D	571	Fischer Blvd	NJ-37	0.00	571 Bay Ave	1.45	1.45		
2	C	D	549 S2	Fischer Blvd	571 Bay Ave	1.45	549 Hooper Ave	4.09	2.64	8	4.09
2	C	E	571	Bay Ave	549S2 / 571 Fischer Blvd	1.45	Cedar Grove Rd	3.37	1.92		
2	C	E	571	Bey Lea Rd / Indian Head Rd	623 Old Freehold Rd	5.21	527 Whitesville Rd / Gardenia Way	6.64	1.43		
2	C	E	527	Whitesville Rd	527 Whitesville Rd / Gardenia Way	4.10	527 Whitesville Rd (Boy Scouts)	4.85	0.75	15	8.81
2	C	E	571	Ridgeway Rd	527 Whitesville Rd (Boy Scouts)	7.40	547 Hope Chapel Rd	12.11	4.71		
2	C	K	623	Old Freehold Rd / New Hampshire Ave	Chestnut St	0.45	Swarthmore Ave	8.34	7.89	17	7.89
2	C	L	622	Old Freehold Rd / Cox Cro Rd	527 Whitesville	0.00	623 Old Freehold Rd / New Hampshire Ave	2.80	2.80	7	2.80
2	C	M	18	N Bay Ave	571 Bey Lea Rd	0.00	620 Church Rd	2.27	2.27	4	2.27
2	D	N	39	Mule Rd	NJ-37	0.00	Davenport Rd	1.24	1.24	7	1.24
2	D	O	527	Water St / Lakehurst Rd	Irons St	0.11	NJ-37	1.97	1.86	6	1.86
2	D	P	530	Dover Rd / S Main St	530 / 618 Pinewald Keswick Rd	27.29	NJ-166	31.21	3.92	6	3.92
2	D	Q	618	Pinewald Keswick Rd / Forest Hills Pkwy / Veterans Blvd / Serpentine Dr / Central Pkwy	619 Double Trouble Rd	6.40	US-9	9.92	3.52	6	3.52
2	E	S	554	West Bay Ave	Heritage Point Blvd	2.73	US-9	6.07	3.34		
2	E	S	8	Barnegat Blvd N	554 West Bay Ave	1.02	US-9	2.89	1.87	14	5.46
2	E	S	105	Lighthouse Dr	554 West Bay Ave	0.00	GSP SB Entrance / Exit 67A	0.25	0.25		
2	E	U	539	N Green St	US-9	0.00	GSP SB Entrance / Exit 58	3.67	3.67	5	3.67
<b>TOTAL:</b>										<b>103</b>	<b>49.49</b>
<b>Grand Total:</b>										<b>219</b>	<b>100.16</b>

## Attachment B – Proposed Signal Equipment and Signalized Intersection Table

PROPOSED SIGNAL EQUIPMENT		
CORRIDOR	CONTROLLER	GPS CLOCK
<b>GROUP 1</b>		
A	8	8
B	9	14
F	26	35
H	2	4
I	2	6
J	1	3
<b>TOTALS</b>	48	70
<b>GROUP 2</b>		
C	1	5
D	3	7
E	4	12
K	3	7
L	0	3
M	1	3
N	0	0
O	2	3
P	1	5
Q	2	4
S	6	12
U	0	2
<b>TOTALS</b>	23	63
<b>Total</b>	71	133

**Attachment B – Intersections and Equipment**

Project Group	Corridor	Sub	Order	Municipality	Signal Code	Corridor Street	Cross Street	Corr SLD	Corr MP	Other Corridor Duplicate (if applicable)	Controller	GPS Clock	Notes	Corridor	# of New	# of New
															Controllers	GPS Clock
1	A	1	A01	Brick	BRK-17	CR #63 Burnt Tavern Rd (CR 632)	CR #12 Lanes Mill Rd (CR 549) / CR #16 Burrsville Rd	CR 632	0.00		Multi	Yes		A	8	8
	A	1	A01A	Brick	BRK-57	CR #16 Burrsville Rd	GSP NB Entrance / Exit 91	BRK CR #16	1.32		ASC-3	Yes				
	A	1	A01B	Brick	BRK-58	CR #12 Lanes Mill Rd (CR 549)	GSP NB Entrance 91	CR 549	12.44		Multi	x				
	A	1	A02	Brick	BRK-24	CR #63 Burnt Tavern Rd (CR 632)	The Blvd	CR 632	0.15		820A	Yes				
	A	1	A03	Brick	BRK-23	CR #63 Burnt Tavern Rd (CR 632)	Greenbriar Blvd	CR 632	0.39		820A	No				
	A	1	A04	Brick	BRK-16	CR #63 Burnt Tavern Rd (CR 632)	CR #42 Van Zile Rd	CR 632	0.58		820A	No				
	A	1	A05	Brick	BRK-37	CR #63 Burnt Tavern Rd (CR 632)	Old Burnt Tavern Jughandle	CR 632	1.07		820A	No				
	A	1	A06	Brick	BRK-38	CR #63 Burnt Tavern Rd (CR 632)	CR #24 Maple Ave	CR 632	1.38		820A	No				
	A	1	A07	Brick	STATE	CR #63 Burnt Tavern Rd (CR 632)	NJ-70	CR 632	2.52		NA	NA				
	A	1	A08	PP	PP-4	CR #63 Bridge Ave (CR 632)	Riverwood Dr	CR 632	3.38		820A	No				
	A	1	A09	PP	STATE	CR #63 Bridge Ave (CR 632)	NJ-88	CR 632	3.50		NA	NA				
	A	1	A10	PP	PP-3	CR #63 Bridge Ave (CR 632)	Northstream Pkwy	CR 632	3.90		ASC-3	No				
	A	1	A11	PP	PP-1	CR #63 Bridge Ave (CR 632)	CR #16 River Ave	CR 632	4.21		ASC-3	No				
A	1	A12	PP	PP-2	CR #63 Bridge Ave (CR 632)	CR #65 Beaver Dam Rd (CR 630)	CR 632	4.51		820A	No					
A	1	A13P	PP	PP-5	CR #63 Bridge Ave (CR 632)	Community Park (ped)	CR 632	4.63		NA	NA					
1	B	1	B01	Brick	BRK-9	CR #50 Brick Blvd (CR 549)	Yorktowne Blvd	CR 549	5.93		Multi	x		B	9	14
	B	1	B02	Brick	BRK-40	CR #11 Hooper Ave (CR 631)	A St	CR 631	0.53		ASC-3	No				
	B	1	B03	Brick	BRK-30	CR #11 Hooper Ave (CR 631)	Beaverson Blvd Ext	CR 631	0.89		ASC-3	No				
	B	1	B04	Brick	BRK-6	CR #11 Hooper Ave (CR 631)	CR #2 Drum Point Rd (CR 624)	CR 631	2.04		Multi	Yes				
	B	1	B05	Brick	BRK-7	CR #11 Hooper Ave (CR 631)	CR #5 Cedar Bridge Ave / Mantoloking Rd (CR 528)	CR 631	2.67		ASC-3	No				
	B	1/2	B06	Brick	BRK-12	CR #9 Chambers Bridge Rd (CR 549) / CR #11 Hooper Ave (CR 631)	CR #50 Brick Blvd (CR 549)	CR 549	8.69	124	ASC-3	x				
	B	2	B07	Brick	BRK-27	CR #9 Chambers Bridge Rd (CR 549)	Brick Plaza Entrance	CR 549	8.83		ASC-3	Yes				
	B	2	B08	Brick	STATE	CR #9 Chambers Bridge Rd (CR 549)	NJ-70	CR 549	8.97		NA	NA				
	B	2	B09	Brick	BRK-4	CR #9 Chambers Bridge Rd (CR 549)	Kohl's / ShopRite Entrance	CR 549	9.15		Multi	No				
	B	2	B10	Brick	BRK-5	CR #9 Chambers Bridge Rd (CR 549)	Ovation Way	CR 549	9.29		ASC-3	No				
	B	2	B11	Brick	BRK-29	CR #9 Chambers Bridge Rd (CR 549)	Sprucewood Ave	CR 549	9.76		820A	No				
	B	2	B12P	Brick	BRK-33	CR #9 Chambers Bridge Rd (CR 549)	Library (ped)	CR 549	9.97		820A	No				
	B	2	B13	Brick	BRK-28	CR #9 Chambers Bridge Rd (CR 549)	Municipal Complex	CR 549	10.20		ASC-3	No				
	B	2	B14	Lakewood	LKWD-51	CR #9 Chambers Bridge Rd (CR 549)	GSP SB Entrance	CR 549	10.46		Multi	No				
	B	2	B15	Lakewood	STATE	CR #9 Chambers Bridge Rd / CR #9 Lanes Mill Rd (CR 549)	NJ-88	CR 549	10.69		NA	NA				
	B	2	B16	Lakewood	LKWD-41	CR #9 Lanes Mill Rd (CR 549)	CR #30 Joe Parker Rd	CR 549	10.97		ASC-3	No				
	B	2	B17	Lakewood	LKWD-10	CR #9 Lanes Mill Rd (CR 549)	CR #9 Lanes Mill Rd (CR 526)	CR 549	11.45		820A	No				
B	2	B18	Brick	BRK-44	CR #12 Lanes Mill Rd (CR 549)	Burke Ln / Larchmont Ave	CR 549	11.74	F01	ASC-3	No					
B	2	B19	Brick	BRK-59	CR #12 Lanes Mill Rd (CR 549)	Stephan Rd	CR 549	11.69		ASC-3	Yes					
B	2	B20	Brick	BRK-21	CR #12 Lanes Mill Rd (CR 549)	Herborn Ave	CR 549	12.00		Multi	Yes					
B	2	B21	Brick	BRK-18	CR #63 Burnt Tavern Rd (CR 549)	CR #12 Lanes Mill Rd (CR 549) / GSP SB Exit 91	CR 549	12.09		Multi	Yes					
B	2	B21A	Brick	BRK-60	CR #63 Burnt Tavern Rd	Herborn Ave	BRK CR #63	0.35		ASC-3	Yes					
2	C	1	C01	Toms River	STATE	CR #14 Church Rd (CR 620)	US-9	CR 620	0.00		NA	NA		C	1	5
	C	1	C02	Toms River	DVR-25	CR #14 Church Rd (CR 620)	CR #16 Old Freehold Rd (CR 622)	CR 620	0.78	L01	ASC-3	Yes				
	C	1	C03	Toms River	DVR-28	CR #14 Church Rd (CR 620)	CR #93 New Hampshire Ave (CR 623)	CR 620	1.09	K07	ASC-3	Yes				
	C	1	C04	Toms River	DVR-76	CR #14 Church Rd (CR 620)	CR #78 Todd Rd	CR 620	1.62		ASC-3	No				
	C	1	C05	Toms River	DVR-26	CR #14 Church Rd (CR 620)	CR #18 North Bay Ave	CR 620	1.79	M04	ASC-3	No				
	C	1	C06	Toms River	DVR-49	CR #14 Church Rd (CR 620)	Mt Carmel Blvd	CR 620	2.74		ASC-3	No				
	C	1	C07	Toms River	DVR-27	CR #14 Church Rd (CR 620)	CR #36 Buckwald Dr	CR 620	3.19		ASC-3	No				
	C	1	C08	Toms River	DVR-11	CR #14 Church Rd (CR 620)	CR #11 Hooper Ave (CR 549)	CR 620	3.96		Multi	No				
2	D	1	D01	Toms River	STATE	CR #54 Fischer Blvd (CR 571)	NJ-37	CR 571	0.00		NA	NA		D	3	7
	D	1	D02	Toms River	DVR-45	CR #54 Fischer Blvd (CR 571)	Windsor Ave	CR 571	0.50		ASC-3	No				
	D	1/2	D03	Toms River	DVR-33	CR #54 Fischer Blvd (CR 571) / CR #54 Fischer Blvd (CR 549 S2)	CR #27 Bay Ave (CR 571)	CR 571	1.45	E01	820A	No	x			
	D	2	D04	Toms River	DVR-60	CR #54 Fischer Blvd (CR 549 S2)	Overlook Dr	CR 549S2	1.78		ASC-3	No				
	D	2	D05	Toms River	DVR-43	CR #54 Fischer Blvd (CR 549 S2)	Cattus Island Blvd	CR 549S2	2.13		Multi	No				
	D	2	D06	Toms River	DVR-44	CR #54 Fischer Blvd (CR 549 S2)	Yellowbank Rd	CR 549S2	2.65		ASC-3	No				
	D	2	D07	Toms River	DVR-63	CR #54 Fischer Blvd (CR 549 S2)	Shore Blvd	CR 549S2	3.00		ASC-3	No				
	D	2	D08	Toms River	DVR-15	CR #54 Fischer Blvd (CR 549 S2)	CR #11 Hooper Ave (CR 549)	CR 549S2	4.09		Multi	No				
2	E	1	E01	Toms River	DVR-33	CR #27 Bay Ave (CR 571)	CR #54 Fischer Blvd (CR 571) / CR #54 Fischer Blvd (CR 549 S2)	CR 571	1.45	D03-	820A	No	Counted in D	E	4	12
	E	1	E02	Toms River	DVR-51	CR #27 Bay Ave (CR 571)	CR #70 Coolidge Ave	CR 571	1.73		ASC-3	No				
	E	1	E03	Toms River	DVR-34	CR #27 Bay Ave (CR 571)	Dunedin St	CR 571	2.06		820A	No				
	E	1	E04	Toms River	DVR-32	CR #27 Bay Ave (CR 571)	CR #41 Vaughn Ave (CR 627)	CR 571	2.38		ASC-3	No				
	E	2	E13	Toms River	DVR-77	CR #27 Bay Ave / CR #27 Indian Head Rd (CR 571)	CR #98 Lomell Ave / Intermediate North Way	CR 571	5.73		ASC-3	No				
	E	2	E14	Toms River	STATE	CR #27 Indian Head Rd (CR 571)	US-9	CR 571	6.19		NA	NA				
	E	2	E15	Toms River	DVR-40	CR #27 Indian Head Rd (CR 571)	Green Dr / Indian Head Shopping Center	CR 571	6.34		820A	No				
	E	2/3	E16	Toms River	DVR-39	CR #27 Indian Head Rd (CR 571) / CR #27 Whitesville Rd (CR 527/571)	CR #40 Whitesville Rd (CR 527) / Gardenia Way	CR 571	6.64		ASC-3	No				
	E	3	E17	Toms River	DVR-59	CR #27 Whitesville Rd (CR 527/571)	Leewood Ave	CR 527	4.30		ASC-3	No				
	E	3/4	E18	Toms River	DVR-38	CR #27 Whitesville Rd (CR 527/571) / CR #27 Ridgeway Rd (CR 571)	CR #17 Whitesville Rd (CR 527)	CR 571	7.40		ASC-3	No				
	E	4	E19	Manchester	MAN-7	CR #27 Ridgeway Rd (CR 571)	CR #8 Commonwealth Blvd	CR 571	8.20		ASC-2	No				
	E	4	E20	Manchester	STATE	CR #27 Ridgeway Rd (CR 571)	NJ-70	CR 571	10.07		NA	NA				
	E	4	E21	Manchester	MAN-9	CR #27 Ridgeway Rd (CR 571)	Renaissance Dr	CR 571	10.43		820A	No				
	E	4	E22	Manchester	MAN-17	CR #27 Ridgeway Rd (CR 571)	CR #6 Ridgeway Blvd	CR 571	11.57		ASC-3	No				
	E	4	E23	Manchester	MAN-2	CR #27 Ridgeway Rd (CR 571)	CR #3 South Hope Chapel Rd (CR 547)	CR 571	12.11		ASC-3	No				



**Attachment B – Intersections and Equipment**

Project Group	Corridor	Sub	Order	Municipality	Signal Code	Corridor Street	Cross Street	Corr SLD	Corr MP	Other Corridor Duplicate (if applicable)	Controller	GPS Clock	Notes	Corridor	# of New	# of New
															Controllers	GPS Clock
1	F	1	F01	Lakewood	LKWD-10	CR #9 Lanes Mill Rd (CR 526)	CR #9 Lanes Mill Rd / Lanes Mill Rd (CR 549)	CR 526	35.56	B17-	820-A	No	Counted in B			
	F	1	F02	Lakewood	LKWD-39	CR #9 Lanes Mill Rd (CR 526)	CR #30 Joe Parker Rd	CR 526	34.45		ASC-3	No				
	F	1	F03	Lakewood	LKWD-7	CR #9 Lanes Mill Rd / County Line Rd (CR 526)	CR #24 Ridge Ave	CR 526	34.32		Multi	No				
	F	1	F04	Lakewood	LKWD-8	CR #9 County Line Rd (CR 526)	CR #26 Brook Rd	CR 526	33.45		Multi	No				
	F	1	F05	Lakewood	LKWD-40	CR #9 County Line Rd (CR 526)	Somerset Ave	CR 526	33.03		Multi	No				
	F	1	F06	Lakewood	LKWD-34	CR #9 County Line Rd (CR 526)	East End Ave / Twin Oaks Dr	CR 526	32.77		ASC-3	Yes				
	F	1	F07	Lakewood	LKWD-9	CR #9 County Line Rd (CR 526)	CR #2 Squankum Rd (CR 547)	CR 526	32.49		ASC-2	No				
	F	1	F08	Lakewood	LKWD-31	CR #9 County Line Rd (CR 526)	Princeton Ave	CR 526	32.20		ASC-2	No				
	F	1	F09	Lakewood	LKWD-11	CR #9 County Line Rd (CR 526)	Clifton Ave	CR 526	31.84		ASC-2	No				
	F	1	F10	Lakewood	LKWD-13	CR #9 County Line Rd (CR 526)	Forest Ave	CR 526	31.62		ASC-3	No				
	F	1	F11	Lakewood	STATE	CR #9 County Line Rd (CR 526)	US-9	CR 526	31.73		NA	NA				
	F	1/5	F12	Lakewood	LKWD-12	CR #9 County Line Rd (CR 526)	CR #6 Laurelwood Ave	CR 526	31.27		820-A	Yes				
	F	1	F13	Lakewood	LKWD-20	CR #9 County Line Rd (CR 526)	CR #8 Kent Rd / Pine Park Ave	CR 526	30.76		820-A	Yes				
	F	1/4	F14	Lakewood	LKWD-1	CR #9 County Line Rd (CR 526)	CR #3 Hope Chapel Rd (CR 639)	CR 526	30.60		820-A	No				
	F	1/3	F15	Jackson	JK-7	CR #9 County Line Rd (CR 526)	CR #12 South New Prospect Rd (CR 641)	CR 526	29.72		820-A	Yes				
	F	1	F16	Jackson	JK-9	CR #9 County Line Rd (CR 526)	Brewers Bridge Rd	CR 526	29.23		ASC-3	Yes				
	F	1	F17	Jackson	JK-10	CR #9 County Line Rd (CR 526)	Villanova Dr	CR 526	28.71		ASC-3	Yes				
	F	1	F18	Jackson	JK-18	CR #9 County Line Rd (CR 526)	Bennetts Mills Plaza (Stop & Shop)	CR 526	28.51		ASC-3	Yes				
	F	1	F19	Jackson	JK-6	CR #9 County Line Rd (CR 526)	CR #10 Bennetts Mills Rd (CR 636)	CR 526	28.31	106	ASC-3	Yes	x			
	F	1	F20	Jackson	JK-30	CR #9 County Line Rd (CR 526)	CR #16 Bartley Rd	CR 526	27.74		ASC-2	No				
	F	1	F21	Jackson	JK-31	CR #9 County Line Rd (CR 526)	Jughandle D	CR 526	27.22		ASC-2	No				
	F	1	F22	Jackson	JK-15	CR #9 County Line Rd (CR 526)	CR #18 Harmony Rd / CR #54 North Cooks Bridge Rd	CR 526	26.80		ASC-3	No				
	F	1	F23	Jackson	JK-33	CR #9 County Line Rd (CR 526)	Huntington Dr	CR 526	26.34		ASC-3	No				
	F	1	F24	Jackson	JK-29	CR #9 County Line Rd (CR 526)	Jughandle A	CR 526	26.10		ASC-2	No				
	F	1/2	F25	Jackson	JK-23	CR #9 County Line Rd (CR 526)	CR #22 Jackson Mills Rd (CR 526/638) / CR #22 Jackson Mills Rd (CR 638)	CR 526	25.47		820-A	No				
	F	2	F26	Jackson	JK-24	CR #22 Jackson Mills Rd (CR 526/638) / CR #22 Jackson Mills Rd (CR 638)	CR #9 East Commodore Blvd (CR 526)	CR 526	25.27		820-A	No				
	F	2	F27	Jackson	JK-37	CR #22 Jackson Mills Rd (CR 638)	CR #12 Hyson Rd (CR 641) / Smithburg Ct	CR 638	5.13		ASC-3	No				
	F	2	F28	Jackson	JK-28	CR #22 Jackson Mills Rd (CR 638)	CR #18 Harmony Rd	CR 638	5.80		ASC-3	No				
	F	2	F29	Jackson	JK-27	CR #22 Jackson Mills Rd (CR 638)	Chandler Rd / Ely Harmony Rd	CR 638	6.36		820-A	No				
	F	3	F30	Jackson	JK-22	CR #12 North New Prospect Rd / CR #44 North New Prospect Rd (CR 641)	CR #12 Hyson Rd (CR 641) / CR #14 Larsen Rd	CR 641	1.84		820-A	No				
	F	3	F31	Jackson	JK-11	CR #12 New Prospect Rd (CR 641)	CR #10 Aldrich Rd / Bennetts Mills Rd (CR 636)	CR 641	2.42	107	ASC-3	No	x			
	F	3	F32	Jackson	JK-12	C.R.#12 (New Prospect Rd)	Woodlane Rd	CR 641	3.05		ASC-3	No				
	F	3	F33	Jackson	JK-13	CR #12 South New Prospect Rd (CR 641)	Brewers Bridge Rd / Bethel Church Rd	CR 641	3.59		820-A	No				
	F	4/6/7	F34	Jackson	JK-16	CR #3 North Hope Chapel Rd (CR 639)	CR #54 Cooks Bridge Rd	CR 639	0.41		ASC-3	No				
	F	4	F35	Jackson	JK-44	CR #3 North Hope Chapel Rd (CR 639)	CR #31 New Central Ave	CR 639	0.80		Cobalt	No				
	F	4	F36	Lakewood	LKWD-57	CR #3 Hope Chapel Rd (CR 639)	CR #44 Miller Rd	CR 639	1.82		820-A	No				
	F	4	F37	Lakewood	LKWD-49	CR #3 Hope Chapel Rd (CR 639)	South Lake Dr	CR 639	1.93		ASC-3	No				
	F	4	F38	Lakewood	LKWD-36	CR #3 Hope Chapel Rd (CR 639)	North Lake Dr	CR 639	2.02		ASC-3	No				
	F	4	F39	Lakewood	LKWD-65	CR #3 Hope Chapel Rd (CR 639)	14th St	CR 639	2.19		Cobalt	Yes				
	F	5	F40	Lakewood	LKWD-37	CR #6 East Kennedy Blvd	CR #2 Squankum Rd (CR 547)	LKWD CR #6	0.00		ASC-2	No				
	F	5	F41	Lakewood	LKWD-30	CR #6 East Kennedy Blvd	Princeton Ave	LKWD CR #6	0.31		ASC-2	Yes				
	F	5	F42	Lakewood	LKWD-6	CR #6 East Kennedy Blvd	Clifton Ave	LKWD CR #6	0.68		ASC-2	No				
	F	5	F43	Lakewood	STATE	CR #6 Kennedy Blvd	US-9	LKWD CR #6	0.79		NA	NA				
	F	5	F44	Lakewood	LKWD-27	CR #6 West Kennedy Blvd	Forest Ave	LKWD CR #6	0.89		820-A	No				
	F	6	F45	Jackson	JK-2	CR #3 North Hope Chapel Rd (CR 639)	CR #5 East Veterans Hwy (CR 528/547) / CR #5 East Veterans Hwy (CR 639)	CR 639	0.00	101	ASC-2	No	x			
	F	7	F46	Jackson	JK-36	CR #54 South Cooks Bridge Rd	Brewers Bridge Rd	JK CR #54	3.65		ASC-2	No				
	F	7	F47	Jackson	JK-32	CR #54 South Cooks Bridge Rd	Westlake Blvd / Thatcher Blvd	JK CR #54	2.54		ASC-2	No				
	F	7	F48	Jackson	JK-20	CR #54 South Cooks Bridge Rd	Manhattan St / Kierych Memorial Dr	JK CR #54	2.08		ASC-3	No				
	F	7	F49	Jackson	JK-19	CR #54 Cooks Bridge Rd	CR #10 Bennetts Mills Rd (CR 636)	JK CR #54	1.43	104	ASC-3	No	x		F	26
1	H	1	H01	Lakewood	STATE	CR #10 Prospect St (CR 628)	US-9	CR 628	1.52		NA	NA				
	H	1	H02P	Lakewood	LKWD-47	CR #10 Prospect St (CR 628)	Hospital (ped)	CR 628	1.42		NA	NA				
	H	1	H03	Lakewood	LKWD-50	CR #10 Prospect St (CR 628)	Williams St	CR 628	1.29		ASC-3	No				
	H	1	H04	Lakewood	LKWD-52	CR #10 Prospect St (CR 628)	CR #81 Massachusetts Ave (CR 637)	CR 628	1.00		NA	NA	In Design			
	H	1/2	H05	Lakewood	LKWD-61	CR #10 Prospect St (CR 628)	CR #57 Cross St (CR 626)	CR 628	0.00		NA	NA	In Construction			
	H	2	H06	Lakewood	STATE	CR #57 Cross St (CR 626)	US-9	CR 626	0.00		NA	NA				
	H	2	H07	Lakewood	LKWD-29	CR #57 Cross St (CR 626)	CR #81 Massachusetts Ave (CR 637)	CR 626	0.62		ASC-3	No				
	H	2	H08	Lakewood	LKWD-42	CR #57 Cross St (CR 626)	CR #32 James St / Franklin Blvd	CR 626	2.00		ASC-2	No				
H	2	H09	Jackson	JK-4	CR #57 Cross St (CR 626)	CR #5 East Veterans Hwy (CR 528/547)	CR 626	2.88	102	ASC-2	No			H	2	4
1	I	1	I01	Jackson	JK-2	CR #5 East Veterans Hwy (CR 528/547)	CR #3 North Hope Chapel Rd (CR 639)	CR 528	27.33	F45-	ASC-2	No	Counted in F			
	I	1	I02	Jackson	JK-4	CR #5 East Veterans Hwy (CR 528/547)	CR #57 Cross St (CR 626)	CR 528	27.81	H09-	ASC-2	No	Counted in H			
	I	1	I03	Lakewood	LKWD-54	CR #5 New Egypt Rd (CR 528)	Hillside Blvd / Cory Ct	CR 528	28.05		ASC-3	No				
	I	1	I04	Lakewood	LKWD-48	CR #5 New Egypt Rd / Central Ave (CR 528)	CR #31 New Central Ave	CR 528	28.97		ASC-3	No				
	I	1	I05	Lakewood	LKWD-35	CR #5 Central Ave (CR 528)	CR #34 Sunset Rd	CR 528	29.84		ASC-3	No				
	I	1	I06	Lakewood	STATE	CR #5 Central Ave / Hurley Ave (CR 528)	US-9	CR 528	30.25		NA	NA				
	I	2	I19	Brick	BRK-31	CR #5 Cedar Bridge Ave (CR 528)	Wedgewood Dr	CR 528	34.19		ASC-3	No				
	I	2	I20	Brick	STATE	CR #5 Cedar Bridge Ave (CR 528)	NI-70 Jughandle	CR 528	34.43		NA	NA				
	I	2	I21	Brick	STATE	CR #5 Cedar Bridge Ave (CR 528)	NI-70	CR 528	34.54		NA	NA				
	I	2	I22	Brick	BRK-32	CR #5 Cedar Bridge Ave (CR 528)	Aurora Pl	CR 528	34.77		ASC-3	Yes				
	I	2	I23	Brick	BRK-11	CR #5 Cedar Bridge Ave (CR 528)	CR #50 Brick Blvd (CR 549)	CR 528	34.94		Multi	Yes				
	I	2	I24	Brick	BRK-7	CR #5 Cedar Bridge Ave / Mantoloking Rd (CR 528)	CR #11 Hooper Ave (CR 631)	CR 528	35.35	B05-	ASC-3	No	Counted in B			

**Attachment B – Intersections and Equipment**

Project Group	Corridor	Sub	Order	Municipality	Signal Code	Corridor Street	Cross Street	Corr SLD	Corr MP	Other Corridor Duplicate (if applicable)	Controller	GPS Clock	Notes	Corridor	# of New	# of New
															Controllers	GPS Clock
	I	2	I25	Brick	BRK-42	CR #5 Cedar Bridge Ave / Mantoloking Rd (CR 528)	CR #52 Church Rd	CR 528	36.73		Multi	No		I	2	6
	I	2	I26	Brick	BRK-52	CR #5 Cedar Bridge Ave / Mantoloking Rd (CR 528)	CR #4 Adamston Rd (CR 624)	CR 528	37.87		ASC-3	No				
1	J	1	J01	Jackson	JK-14	CR #5 West Veterans Hwy (CR 528)	CR #34 Leesville Rd / Don Connor Blvd	CR 528	21.90		ASC-3	No		J	1	3
	J	1	J02	Jackson	JK-5	CR #5 West Veterans Hwy (CR 528) / CR #10 Bennetts Mills Rd (CR 636)	CR #5 East Veterans Hwy (CR 527/528) / CR #24 Cedar Swamp Rd (CR 528)	CR 528	22.46		820-A	No				
	J	1	J03	Jackson	JK-40	CR #10 Bennetts Mills Rd (CR 636)	CR #8 Butterfly Rd / Frank Applegate Rd	CR 636	1.92		NA	NA				
	J	1	J04	Jackson	JK-19	CR #10 Bennetts Mills Rd (CR 636)	CR #54 Cooks Bridge Rd	CR 636	2.94	F49-	ASC-3	No	Counted in F			
	J	1	J05	Jackson	JK-17	CR #10 Bennetts Mills Rd (CR 636)	Manhattan St	CR 636	3.24		ASC-3	No				
	J	1	J06	Jackson	JK-6	CR #10 Bennetts Mills Rd (CR 636)	CR #9 County Line Rd (CR 526)	CR 636	3.88	F19-	ASC-3	Yes	Counted in F			
	J	1	J07	Jackson	JK-11	CR #10 Bennetts Mills Rd (CR 636)	CR #12 New Prospect Rd (CR 641)	CR 636	4.82	F31-	ASC-3	No	Counted in F			
2	K	1	K01	Toms River	DVR-48	CR #16 Old Freehold Rd (CR 623)	CR #72 Chestnut St	CR 623	0.45		820-A	No		K	3	7
	K	1	K02	Toms River	DVR-47	CR #16 Old Freehold Rd (CR 623)	CR #34 Mapletree Rd	CR 623	0.77		ASC-3	No				
	K	1	K03	Toms River	DVR-37	CR #16 Old Freehold Rd (CR 623)	CR #27 Bey Lea Rd (CR 571)	CR 623	1.38		820-A	No				
	K	1	K04	Toms River	DVR-75	CR #16 Old Freehold Rd (CR 623)	Intermediate North Way	CR 623	1.67		ASC-3	No				
	K	1	K05	Toms River	DVR-53E	CR #16 Old Freehold Rd (CR 623)	Whitty Rd	CR 623	2.54		ASC-3	Yes				
	K	1	K06	Toms River	DVR-53W	CR #16 Old Freehold Rd (CR 623)	West Whitty Rd	CR 623	2.66		ASC-3	No				
	K	1	K07	Toms River	DVR-28	CR #93 New Hampshire Ave (CR 623)	CR #14 Church Rd (CR 620)	CR 623	3.64	C03-	ASC-3	Yes	Counted in C			
	K	1	K08	Toms River	DVR-46	CR #93 New Hampshire Ave (CR 623)	Hampshire Hills Blvd / Bridport Dr	CR 623	4.83		ASC-3	No				
	K	1	K09	Lakewood	LKWD-28	CR #93 New Hampshire Ave (CR 623)	CR #83 Locust St	CR 623	5.69		ASC-3	Yes				
	K	1	K10	Lakewood	STATE	CR #93 New Hampshire Ave (CR 623)	NJ-70	CR 623	6.02		NA	NA				
	K	1	K11	Lakewood	STATE	CR #93 New Hampshire Ave (CR 623)	CR #40 Chestnut St	CR 623	6.11		NA	NA				
	K	1	K12	Lakewood	LKWD-22	CR #93 New Hampshire Ave (CR 623)	Oak St	CR 623	6.71		ASC-3	Yes				
	K	1	K13	Lakewood	LKWD-15	CR #93 New Hampshire Ave (CR 623)	Pine St / Oberlin Ave South	CR 623	7.35		ASC-3	Yes				
	K	1	K14	Lakewood	LKWD-2	CR #93 New Hampshire Ave (CR 623)	CR #5 Cedar Bridge Ave (CR 528)	CR 623	7.92		ASC-3	Yes				
	K	1	K15	Lakewood	LKWD-63	CR #93 New Hampshire Ave (CR 623)	America Ave	CR 623	8.21		ASC-3	Yes				
	K	1	K16	Lakewood	LKWD-16	CR #93 New Hampshire Ave (CR 623)	Swarthmore Ave	CR 623	8.34		820-A	No				
	K	1	K17	Lakewood	STATE	CR #93 New Hampshire Ave (CR 623)	NJ-88	CR 623	8.71		NA	NA				
2	L	1	L01	Toms River	DVR-25	CR #16 Old Freehold Rd (CR 622)	CR #14 Church Rd (CR 620)	CR 622	2.59	C02-	ASC-3	Yes	Counted in C	L	0	3
	L	1	L02	Toms River	DVR-58	CR #16 Old Freehold Rd (CR 622)	CR #32 Silvertown Rd	CR 622	2.33		ASC-3	Yes				
	L	1	L03	Toms River	DVR-67	CR #16 Cox Cro Rd (CR 622)	CR #86 Vermont Ave	CR 622	1.65		ASC-3	No				
	L	1	L04	Toms River	STATE	CR #16 Cox Cro Rd (CR 622)	US-9	CR 622	1.01		NA	NA				
	L	1	L05	Toms River	DVR-82	CR #16 Cox Cro Rd (CR 622)	Ticonderoga Dr / Rio Grande Dr	CR 622	0.83		ASC-3	No				
	L	1	L06	Toms River	DVR-62	CR #16 Cox Cro Rd (CR 622)	CR #81 Massachusetts Ave (CR 637)	CR 622	0.44		ASC-3	No				
	L	1	L07	Toms River	DVR-61	CR #16 Cox Cro Rd (CR 622)	CR #17 Whitesville Rd (CR 527)	CR 622	0.00		ASC-3	Yes				
2	M	1	M01	Toms River	DVR-29	CR #18 North Bay Ave	CR #27 Bey Lea Rd (CR 571)	DVR CR #18	0.00		820-A	No		M	1	3
	M	1	M02	Toms River	DVR-36	CR #18 North Bay Ave	CR #94 Oak Ave	DVR CR #18	0.30		ASC-3	No				
	M	1	M03	Toms River	DVR-79	CR #18 North Bay Ave	College Dr West	DVR CR #18	1.99		ASC-3	No				
	M	1	M04	Toms River	DVR-26	CR #18 North Bay Ave	CR #14 Church Rd (CR 620)	DVR CR #18	2.27	C05-	ASC-3	No	Counted in C			
2	N	1	N01	Toms River	STATE	CR #39 Mule Rd (CR 642)	NJ-37	OC CR #39 II	0.00		NA	NA		N	0	0
	N	1	N02	Berkeley	BRKLY-9	CR #39 Mule Rd	Plaza Dr	OC CR #39 II	0.33		ASC-3	Yes				
	N	1	N03	Berkeley	BRKLY-3	CR #39 Mule Rd	Charlotteville Dr South	OC CR #39 II	0.43		ASC-3	Yes				
	N	1	N04	Berkeley	BRKLY-4	CR #39 Mule Rd	Edgebrook Dr North / Fort de France Ave	OC CR #39 II	0.63		ASC-3	Yes				
	N	1	N05	Berkeley	BRKLY-5	CR #39 Mule Rd	Edgebrook Dr South / Westbrook Dr	OC CR #39 II	0.86		ASC-3	Yes				
	N	1	N06	Berkeley	BRKLY-10	CR #39 Mule Rd	Santiago Dr	OC CR #39 II	0.97		ASC-3	Yes				
	N	1	N07	Berkeley	BRKLY-7	CR #39 Mule Rd	Davenport Rd	OC CR #39 II	1.24		ASC-3	Yes				
2	O	1	O01	Toms River	STATE	CR #2 Lakehurst Rd (CR 527)	NJ-37	CR 527	1.97		NA	NA		O	2	3
	O	1	O02	Toms River	DVR-1	CR #2 Lakehurst Rd (CR 527)	Hospital Dr / Williamsburg Dr	CR 527	1.25		ASC-2	No				
	O	1	O03	Toms River	DVR-2	CR #2 Lakehurst Rd (CR 527)	Stockton Dr	CR 527	1.01		ASC-3	No				
	O	1	O04	Toms River	DVR-56	CR #2 Water St (CR 527)	GSP SB Entrance / Exit 81	CR 527	0.63		ASC-3	No				
	O	1	O05	Toms River	DVR-55	CR #2 Water St (CR 527)	CR #96 Highland Pkwy	CR 527	0.39		820A	Yes				
	O	1	O06	Toms River	DVR-3	CR #2 Water St (CR 527)	Irons St	CR 527	0.11		ASC-3	Yes				
2	P	1	P01	Berkeley	BRKLY-2	CR #19 Dover Rd (CR 530)	CR #55 Pinewald Keswick Rd (CR 530/618)	CR 530	27.29		ASC-3	No		P	1	5
	P	1	P02	Berkeley	BRKLY-1	CR #19 Dover Rd (CR 530)	Davenport Rd	CR 530	29.09		ASC-3	No				
	P	1	P03	South Toms River	STR-1	CR #19 Dover Rd (CR 530)	CR #15 Double Trouble Rd (CR 619)	CR 530	30.25		ASC-3	No				
	P	1	P04	South Toms River	STATE	CR #19 Dover Rd (CR 530)	US-9	CR 530	30.43		NA	NA				
	P	1	P05	South Toms River	STR-2	CR #19 Dover Rd (CR 530)	CR #4 South Main St (CR 530)	CR 530	30.67		ASC-3	No				
	P	1	P06	South Toms River	STR-3	CR #4 South Main St (CR 530)	CR #113 Herfficker Blvd	CR 530	31.16		ASC-2	No				
2	Q	1	Q01	Berkeley	BRKLY-14	CR #55 Pinewald Keswick Rd (CR 618)	CR #15 Double Trouble Rd (CR 619)	CR 618	6.40		820A	No		Q	2	4
	Q	1	Q02	Berkeley	BRKLY-13	CR #55 Forest Hills Pkwy (CR 618)	GSP NB Entrance / Exit 77	CR 618	7.06		820A	No				
	Q	1	Q03	Berkeley	BRKLY-8	CR #55 Forest Hills Pkwy (CR 618)	CR #91 Grand Central Pkwy (CR 621) / Central Regional HS	CR 618	7.34		ASC-3	No				
	Q	1	Q04	Berkeley	BRKLY-15	CR #55 Veterans Blvd (CR 618)	CR #85 Western Blvd	CR 618	8.20		ASC-3	No				
	Q	1	Q05P	Berkeley	BRKLY-18	CR #55 Serpentine Dr (CR 618)	Barneget Branch Trail (ped)	CR 618	9.20		NA	NA				
	Q	1	Q06	Berkeley	STATE	CR #55 Central Pkwy (CR 618)	US-9	CR 618	9.92		NA	NA				
	S	1	S01	Barnegat	BRNT-5	CR #2 West Bay Ave (CR 554)	Mirage Blvd	CR 554	3.50		ASC-2	No				
	S	1	S02	Barnegat	BRNT-7	CR #2 West Bay Ave (CR 554)	CR #111 Nautilus Dr	CR 554	3.94		ASC-3	No				
	S	1/3	S03	Barnegat	BRNT-9	1	CR #105 Lighthouse Dr / 1st St	CR 554	4.34		ASC-3	No				
	S	1	S04	Barnegat	BRNT-2	CR #2 West Bay Ave (CR 554)	GSP NB Entrance / Exit 67	CR 554	4.62		820A	No				
	S	1	S05	Barnegat	BRNT-4	CR #2 West Bay Ave (CR 554)	Sandpiper Rd / Barnegat Village Shopping Center	CR 554	4.74		ASC-3	No				

**Attachment B – Intersections and Equipment**

Project Group	Corridor	Sub	Order	Municipality	Signal Code	Corridor Street	Cross Street	Corr SLD	Corr MP	Other Corridor Duplicate (if applicable)	Controller	GPS Clock	Notes	Corridor	# of New	# of New	
															Controllers	GPS Clock	
2	S	1/2	S06	Barnegat	BRNT-1	CR #2 West Bay Ave (CR 554)	CR #8 Barnegat Blvd	CR 554	4.95		ASC-3	Yes		R	6	12	
	S	1	S07	Barnegat	BRNT-3	CR #2 West Bay Ave (CR 554)	CR #10 Gunning River Rd	CR 554	5.27		ASC-3	Yes					
	S	1	S08	Barnegat	STATE	CR #2 West Bay Ave (CR 554)	US-9	CR 554	6.07		NA	No					
	S	2	S09	Barnegat	BRNT-6	CR #8 Barnegat Blvd N	Ravenwood Blvd	BRNT CR #8	1.29		820A	No					
	S	2	S10	Barnegat	BRNT-8	CR #8 Barnegat Blvd N	Rose Hill Rd / Bengal Blvd	BRNT CR #8	2.02		ASC-2	No					
	S	2	S11	Barnegat	BRNT-12	CR #8 Barnegat Blvd N	Barnegat Branch Trail (ped)	BRNT CR #8	2.79		NA	No					
	S	2	S12	Barnegat	STATE	CR #8 Barnegat Blvd N	US-9	BRNT CR #8	2.89		NA	No					
	S	3	S13	Barnegat	BRNT-11	CR #105 Lighthouse Dr	Wawa Entrance / Barnegat67 Shopping Center	OC CR #105	0.13		ASC-2	No					
	S	3	S14	Barnegat	BRNT-10	CR #105 Lighthouse Dr	GSP SB Entrance / Exit 67	OC CR #105	0.25		820A	No					
	2	U	1	U01	Tuckerton	STATE	CR #1 North Green St (CR 539)	US-9	CR 539	0.00		NA	NA				
		U	1	U02	Tuckerton	TUCK-1	CR #1 North Green St (CR 539)	CR #8 (Nugentown Rd / 4th St)	CR 539	0.46		ASC-3	No				
		U	1	U03	Little Egg Harbor	LEH-6	CR #1 North Green St (CR 539)	Frog Pond Rd	CR 539	1.51		ASC-3	No				
		U	1	U04	Little Egg Harbor	LEH-11	CR #1 North Green St (CR 539)	GSP NB Entrance / Exit 58	CR 539	3.43		ASC-3	Yes				
		U	1	U05	Little Egg Harbor	LEH-7	CR #1 North Green St (CR 539)	GSP SB Entrance / Exit 58	CR 539	3.63		ASC-3	Yes				
<b>TOTALS</b>															<b>71</b>	<b>133</b>	

## Attachment C – Specifications

### 702.03.01 Controller.

Before delivery of a controller to the Project, bench test the controller as a complete unit according to the timing schedule for each location. At least 20 days before the bench testing, notify the Department for approval of the bench testing location. The Department may choose to witness part of the bench test. The Department will approve the controller only after 168 hours of continuous trouble-free operation. If unsatisfactory performance of the controller occurs, correct the problem and repeat the entire bench test. Provide the certified results of bench testing at the time of delivery on forms provided by the Department.

Securely bolt the controller cabinet to the foundation in a vertical position using stainless steel hardware. If temporarily installing a controller cabinet on top of a meter cabinet, fasten it in a vertical position using stainless steel hardware. Seal the joint between the cabinets with a neoprene gasket and seal the wireway with sealing compound.

The controller to be supplied under this contract shall be an Econolite Cobalt or approved equal.

### Assumption of Maintenance.

The traffic signal system inspection shall be performed the day of the controller, d-panel, GPS unit, and timing directive installation. This procedure shall be repeated until all required items are completed. Maintenance acceptance will be considered only after all testing has been completed, defects corrected, controller fully operational and performing all timing functions required and all other items of work associated with the signal are completed. One month after the completion of the traffic signal system the County will assume maintenance of said traffic signal system.

### 702.03.12 Controller Turn-On.

Controller turn-on consists of supplying a technician authorized by the controller manufacturer at the work site when each controller is placed into flash mode and into final operation. Provide the RE a letter, from the controller manufacturer, stating the technician is authorized and qualified to perform the work. Ensure that the technician is available at all times during flash mode testing. Ensure that traffic signals complete a successful flash period for 3 consecutive days as part of the required testing.

The activation of the traffic signal system shall be performed in accordance with the following County procedure:

#### **II. Replacement of /Modifications to Existing Traffic Signal System.**

##### Phase 1 - Inspection

1. All testing shall be completed and successful, all defects and deficiencies corrected, all indications operational and properly aimed, cables tagged, all other items of work associated with the signal completed, and all signs and pavement markings properly installed at least six working days before the scheduled activation of the signal.

##### Phase 2 - Normal Operation

1. The consultant shall provide As-Built Traffic Signal Operational and Electrical plans to the County prior to scheduled activation.
2. Actual activation shall consist of the following steps:
  - a. required personnel - representatives of the General Contractor, Electrical Contractor with appropriate equipment, representative(s) of the Ocean County Engineer's Office and the manufacturer of traffic signal control components
  - b. installation of all required equipment in the controller cabinet by the representative of the manufacturer of traffic signal control components

- c. testing of installed equipment (timings, conflicts, push buttons, other detection, etc.)
  - d. final testing of controller equipment under normal operation conditions by the representative of the controller manufacturer
  - e. removal of the existing controller if replaced
3. Observation of signal operation and traffic flow.

The consultant shall contact the Ocean County Traffic Signal Maintenance Supervisor at (732) 349-8165 to schedule the installation of the controller and GPS unit two weeks prior to the date of install.

4. Fine-tuning and modifications of the traffic control devices as directed.

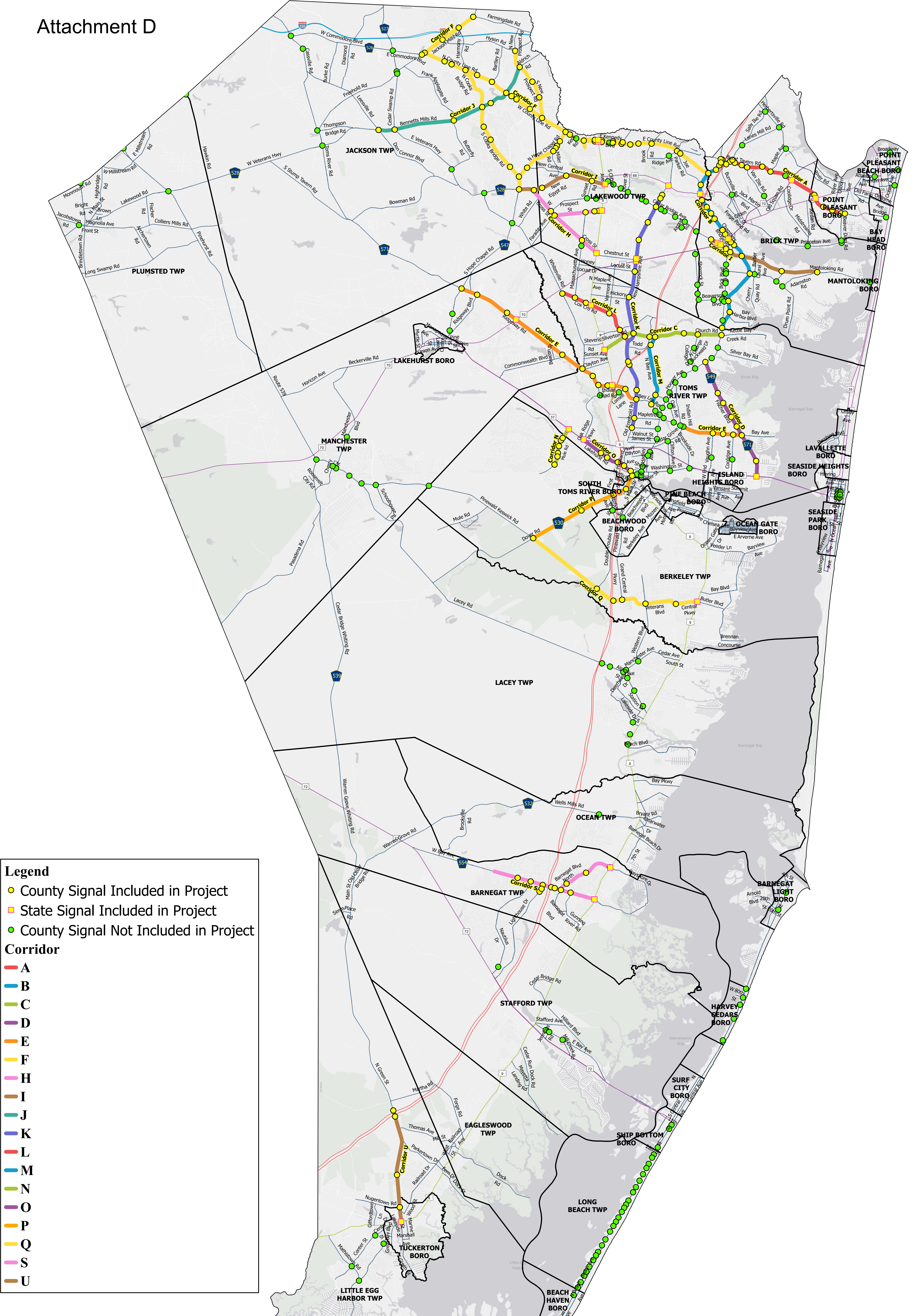
No traffic signal system activation shall be scheduled for Mondays, Fridays, holidays or days right before or after holidays.

#### 918.18 GPS Unit.

The GPS Unit consists of supplying a Garmin GPS with 16x w/DB25 Cable or approved equal, a technician authorized by the manufacturer at the work site to install and program the GPS Unit. The GPS Unit shall be capable of being directly wired to the controller. Provide the RE a letter, from the GPS Unit manufacturer, stating the technician is authorized and qualified to perform the work. Ensure that the technician is available at all times during flash mode testing.



# Attachment D



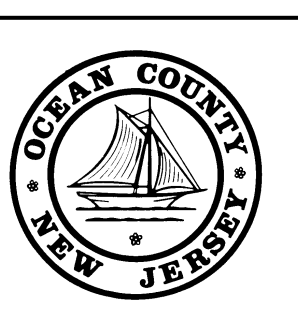
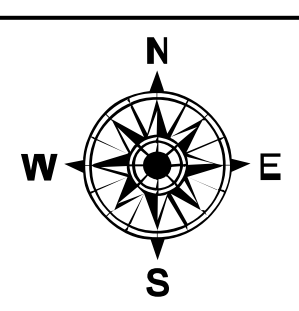
**Legend**

- County Signal Included in Project
- State Signal Included in Project
- County Signal Not Included in Project

**Corridor**

- A
- B
- C
- D
- E
- F
- H
- I
- J
- K
- L
- M
- N
- O
- P
- Q
- S
- U

**FY 2018-2020 REGIONAL/LOCAL  
CMAQ INITIATIVES PROGRAM  
OCEAN COUNTY SIGNAL OPTIMIZATION  
VARIOUS TOWNSHIPS**





# Attachment E

## OCEAN COUNTY SIGNAL OPTIMIZATION, VARIOUS MUNICIPALITIES TASK CHECKLIST FOR SUBMISSION AND APPROVAL

TASK #	TASK	RESPONSIBILITY	REQUIRED ITEMS	NEED APPROVAL	SUBMISSION	SUBMISSION DATE	OCE APPROVAL DATE
1	Project Management	Consultant	Project Schedule	County to Approve before finalized	Submit at Kick Off Meeting		
		Consultant	Meeting Agendas		Submit 1 day prior to meeting		
		Consultant	Meeting Minutes	County to Approve before finalized	Submit 2 days after meeting		
		Consultant	Monthly Progress Reports		Submit with invoice		
2	Data Collection	OCE	Existing Timing Directives and Plans To Be Field Verified		OCE to provide before Data Collection Begins		
2A.		Consultant	Field Verification of Lane Geometry and Signal Phasing	Field verification of signal plans and timings. Including timing, phasing, detection ( vehicular and pedestrian), offsets, GPS clock sync, etc.	Redline markups as part of the Data Collection Report (DCR)		
2B.			Data Collection Plan (DCP)	County to Approve DCP before Data Collection Starts	Submit DCP with DCP Schedule for Approval inclusive of TMC and ATR locations. ATR data collected prior to TMC Data.		
		Consultant	ATR Counts	Locations approved as part of the DCP	Collect data for a minimum of 7 days and review to determine time periods of the TMC Counts. Consultant to provide raw data output files as part of TMC hour determination		
		Consultant	Turning Movement Counts (TMC)	Locations approved as part of the DCP	Using the ATR data collected determine the appropriate times to perform TMC. A minimum of 3 hours each shall be anticipated for the AM and PM peaks and 2 hours for the mid-day peak. Consultant to provide raw data output files included in the Data Collection Report (DCR).		
2C.		Consultant	D3 (Residual Delay - Unmet Demand)	Consultant shall propose a methodology of how D3 will be incorporated and if data collection is needed.	OCE to approve methodology and any data collection methods before data collection initiates. Results to be summarized in DCR and incorporated into Synchro Models.		
2D.		Consultant	Queue Observations and Travel Time Runs	Filed Observations of Queue Lengths - locations to be included in DCP. Corridor Travel time Runs.	Collected data to be summarized in DCR and utilized for the Synchro Models. Travel time runs used to calibrate existing synchro models and as part of Before and After Study.		
2E.		Consultant	Traffic Data Collection Report	Memo summarizing the traffic counts collected, the field observations, queue information, travel time runs and balanced flow volume diagrams for existing conditions and the design year (design year would be the year the counts were taken plus 20 years). Memo should also include growth factors used to determine the design year volumes .	A separate Data Collection Memo should be prepared and submitted to OCE for review for all corridors and if corridors are being analyzed together this should be noted.		
3	Existing Conditions Analysis						
3A.		Consultant	Creation of Base Synchro Models	The version of the software to be used should be discussed and approved by the County before any models are created.  Consultant must receive approval on base models before calibration is performed and before No Build Synchro Models are prepared	Once the Existing Base Models are created in Synchro the results shall be discussed with the County. These models then shall be calibrated to ensure they replicate existing field conditions. Factors such as travel times, delays, queues, parking, and lane utilization should also be considered when calibrating the existing model.  File Name convention Legend Sheet		
		Consultant	Calibration Memo	County to Approve Calibration Memo before No Build Synchro Models are prepared	Any factors that are adjusted during the calibration process must be summarized in a Calibration Memo listing the reasoning and justification for the factor adjustment(s).		
3B.		Consultant	Determination of Baseline Measures of Effectiveness (MOEs).		Using the Base Synchro Models prepared in Task 3A, the consultant shall generate a Letter Report outlining Baseline MOEs listed in the RFP Task 3B for each study location by movement, approach and intersection.		

# Attachment E

## OCEAN COUNTY SIGNAL OPTIMIZATION, VARIOUS MUNICIPALITIES TASK CHECKLIST FOR SUBMISSION AND APPROVAL

TASK #	TASK	RESPONSIBILITY	REQUIRED ITEMS	NEED APPROVAL	SUBMISSION	SUBMISSION DATE	OCE APPROVAL DATE
4	<b>Determination of Optimized Timings</b>						
4A.		Consultant	Conformance with County / MUTUSB Timing Practices	Consultant must submit for OCE review and approval Vehicular and Pedestrian Clearance and change calculations prior to No Build Synchro models being initiated. Once approved these values shall be used when developing the No Build and Optimized synchro models. The calculations shall be included in the Optimized Timing Report.	Consultant shall review the current signal timing operations with respect to conformance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTUSB). Consultant shall prepare and submit Vehicular and Pedestrian Clearance and change calculation with the current MUTUSB standards for all study intersections.		
4B.		Consultant	Preparation of No Build Synchro Model	<i>To commence when calibrated models are approved.</i>  Calibrated Models shall be submitted to OCE for approval before Optimized Models development are initiated.	Consultant shall prepare No Build Synchro models which will be developed using the Calibrated Model and updating the MUTUSB compliant clearance times described in 4A. This model will be used for comparison of MOEs.		
4C.		OCE/ Consultant	Coordination with Local Officials		County will contact the affected municipalities to solicit comments on operational problems associated with the various traffic signals to be analyzed.  Consultant shall take this information into account when determining the optimized timings for each traffic signal. The collected information shall be summarized in a memo for each corridor and included in the Optimized Timing Report.		
4D.		Consultant	Development of Optimized Synchro Model - First Run	<i>To commence when No Build Models are approved.</i>  Optimized Models - First Run shall be submitted to OCE for approval before Optimized Models - Second Run development are initiated and finalized.	Using the No Build Synchro models produced in Task 4B, the consultant will optimize the signal timings and offsets utilizing the signal optimization capabilities of Synchro . Existing timings shall be maintained at iNon-County intersections (Eg. NJDOT).  Models shall be run through SimTraffic to verify there are no outstanding queues that are not represented in the Synchro models for the various peaks. These SimTraffic file recordings shall also be saved with the optimized models.		
4E.		Consultant	Development of Optimized Synchro Model – Second Run	<i>To commence when Optimized Models - First Run are approved.</i>  Optimized Models - Second Run shall be submitted to OCE for approval before Timing Directive development is initiated.	The Consultant shall revise the first run optimized timings based on the comments provided by the County, adjusting the splits and/or offsets as necessary for each intersection, and submit to the County for a second review.  With the submission of the revised models and updated Optimized Timing Report, the Consultant shall submit responses to the County Comments in a Comment Resolution Memo.		
4F.		Consultant	Determination of Optimized MOEs	<i>To commence when Optimized Models - Second Run are approved and timings finalized.</i>	Once the timings are approved by the County, the consultant shall itemize the MOEs for each intersection. These MOEs should be collected and evaluated as a means of further assessing the results of the optimization process.  An Optimized Timing Report shall be submitted including the information included in the TFP Task 4F.		



# Attachment E

## OCEAN COUNTY SIGNAL OPTIMIZATION, VARIOUS MUNICIPALITIES TASK CHECKLIST FOR SUBMISSION AND APPROVAL

TASK #	TASK	RESPONSIBILITY	REQUIRED ITEMS	NEED APPROVAL	SUBMISSION	SUBMISSION DATE	OCE APPROVAL DATE
5	Preparation of Traffic Signal Timing Directives	Consultant		<p><i>To commence when Optimized Models - Second Run are approved and timings finalized.</i></p> <p>OCE must review and approve these directives before Bench Testing and Implementation can commence.</p>	<p>The consultant shall prepare a series of proposed traffic signal timing directives for each signalized intersection. Submitted as each corridor is complete.</p> <p>Each timing plan shall include Time of Day (TOD) plans for: AM Peak, Mid-day Peak, PM Peak, free float time periods during the overnight, where appropriate, and any other suggested time periods that the analysis shows may be required due to specific corridor characteristics or conditions. Emergency pre-emption or railroad pre-emption operations shall be included in the timing directives where appropriate.</p> <p>Calculated Vehicle Change and Clearance Intervals and Pedestrian Walk and Clearance Intervals that were completed under Task 4A and were used for the proposed Synchro models shall be input into the Proposed Timing Directives.</p> <p>The consultant shall summarize the changes in timing for each intersection in a table for existing versus proposed timing change updates.</p>		
6	<b>Implementation</b>						
6A.			Controller Upgrades and GPS Installation at Various Locations	<p><i>The consultant shall submit shop drawings for the County to approve. No equipment shall be installed unless approved by the County</i></p> <p><i>The consultant must provide for County approval:</i></p> <ul style="list-style-type: none"> <li>• <i>Certification for Controller Installation Technician</i></li> <li>• <i>Certification for GPS Unit Installation Technician</i></li> </ul>	<p>The consultant shall install a new traffic signal controller at seventy-one (71) specified locations and a GPS unit at one-hundred thirty-three (133) locations.</p> <p>The controllers shall be provided and installed per the attached specifications in Attachment C. The consultant shall submit shop drawings for the County to approve. No equipment shall be installed unless approved by the County</p> <p>List of which signalized intersections will require controller upgrades and/or GPS units can be found in Attachment B.</p> <p><i>The consultant shall contact the Ocean County Traffic Signal Maintenance Supervisor at (732) 349-8165 to schedule the installation of the controller and GPS unit two weeks prior to the date of install. The Traffic Signal Maintenance Supervisor shall be present when the controller and GPS unit are installed.</i></p>		
6B.			Timing Directive Implementation	<p><i>The consultant must provide for County approval:</i></p> <ul style="list-style-type: none"> <li>• <i>Certification for Controller Bench Testing</i></li> </ul>	<p>The consultant shall program the final timing into the controllers per the controller turn-on specification in Appendix C. Bench testing is required.</p> <p><i>The consultant shall contact the Ocean County Traffic Signal Maintenance Supervisor at (732) 349-8165 to schedule the implementation of the timing directives two weeks prior to the date of install. The Traffic Signal Maintenance Supervisor shall be present when the timing directive is implemented</i></p>		

# Attachment E

## OCEAN COUNTY SIGNAL OPTIMIZATION, VARIOUS MUNICIPALITIES TASK CHECKLIST FOR SUBMISSION AND APPROVAL

TASK #	TASK	RESPONSIBILITY	REQUIRED ITEMS	NEED APPROVAL	SUBMISSION	SUBMISSION DATE	OCE APPROVAL DATE
7	Before and After Travel Time and Delay Study		Before and After Study Report	<p><i>To commence 60 days after Implementation of approved timing directive.</i></p> <p>OCE to review and approve Before and After Study Report.</p>	<p>Consultant shall perform a travel time and delay study using an acceptable technology.</p> <p>Prior to the upgrade of any traffic signal timings, the consultant shall commence their pre-condition study. The Before Study shall be done under task 2D since the travel time runs will be utilized to help calibrate the existing conditions Synchro model.</p> <p>The post condition study shall occur when the corridor is experiencing similar traffic conditions and within 60 days of implementation of the optimized timing directives.</p> <p>Study duration shall be a minimum of one week.</p> <p>A Before and After Study Report shall be prepared for each corridor summarizing the existing versus proposed MOEs. The report shall include summaries of the before and after conditions of the MOEs in Task 3.</p>		
8	Report of Findings		Draft and Final Report		<p>Consultant shall prepare a draft report of findings which details the projected improvement in MOEs for each intersection and system wide as a result of the optimized timings in a format to be approved by the County. Consultant shall participate a draft and final submission.</p> <p>This report shall address fuel savings provided and greenhouse gases reduced as a result of the retiming effort.</p> <p>All technical analysis and calculations (including all Synchro files) shall be submitted to the County.</p>		



# Attachment F

**NEW JERSEY DEPARTMENT OF TRANSPORTATION**

**CATEGORICAL EXCLUSION DOCUMENTATION**

CED Form Updated February 24, 2014

I. GENERAL INFORMATION			
DOT Job Code No.		Federal Project No.	
Project Management Team		UPC No.	
Route & Section	Various Locations	Structure No.	NA
Local Road Name	Ocean County Traffic Signal Timing Optimization		
Municipality(ies)	Multiple – see attached table	County(ies)	Ocean County
Type of Project	Traffic Signal Timing Optimization	Length	100 centerline miles
From Milepost	Multiple see attached table	To Milepost	Multiple see attached table
Congressional District	2,3,4	Legislative District	10
ROW Cost	\$0	Construction Cost	\$0

EXISTING FACILITY			
ROW Width	varies		
No. Lanes & Width	varies		
Shoulder Width	varies	Median	varies
Overall Roadway Width	varies		

PROPOSED FACILITY			
ROW Width	Same as existing		
No. Lanes & Width	Same as existing		
Shoulder Width	Same as existing	Median	Same as existing
Overall Roadway Width	Same as existing		

II. PROJECT DESCRIPTION (attach location map—USGS map suggested)
<p><b>A. Project Need</b> (briefly explain why the project is needed):</p> <p>Ocean County's Proposed Project is for Traffic Signal optimization to re-time existing traffic signals within the County for coordinated traffic flow. The project area consists of eighteen (18) corridors with two hundred nineteen (219) intersections along or adjacent to these corridors including one hundred (100) centerline miles of roadway within various municipalities in Ocean County. Of the two hundred nineteen (219) intersections within the Project Corridor Lists there are one hundred eighty-two (182) County intersections, after removal of eleven (11) duplicate intersections from corridors crossings, that are to be optimized and retimed and twenty-six (26) state intersections (with no work anticipated as the County plans on breaking the optimization zone at the state intersections).</p>
<p><b>B. Proposed Improvements</b> (briefly describe the proposed improvements):</p> <p>The need for this project is to retime outdated signal timing plans for various intersections within the County to:</p> <ul style="list-style-type: none"> <li>• To adjust signal timing to account for changes in traffic patterns due to new developments and traffic growth.</li> <li>• To reduce motorist frustration and unsafe driving by cutting down stops and delays.</li> <li>• To improve traffic flow through a group of signals, which reduces emissions and fuel consumption.</li> <li>• To postpone the need for costly long-term road capacity improvement by improving traffic flow with existing resources.</li> </ul> <p>The goals of this project are to provide safe and efficient traffic signal operations by adjusting signal timing based on updated traffic volume data and signal optimization analysis that will serve various traffic demand scenarios as well as upgrading some outdated traffic signal controllers and controller cabinet equipment for various corridors within the County where timing changes have not been made in recent years. All work will be done in existing cabinets; no new cabinets or foundations will be constructed, and no ground disturbance is anticipated.</p>

## Attachment F

<b>C. Right-of-Way Taking</b>			
Total area needed: none	Est. No. parcels: 0	In fee -0	Easements - 0
Est. No. relocations: 0	Residences 0	businesses-0	parking spaces -0
Community Facilities Affected: 0			
Area of public recreation land taken: 0 (acres)		Out of a total area of: 0 (acres)	
<input type="checkbox"/>	Green Acres/State-owned Land Involvement		
<input type="checkbox"/>	Federally Owned/Federally Funded Land Involvement		
<b>Comments:</b> No ROW or easements will be acquired with the proposed project. All work will occur within existing roadway ROW boundaries.			

<b>III. ENVIRONMENTAL CONSIDERATIONS</b>	
<b>A. Noise</b>	
<input checked="" type="checkbox"/>	Sensitive receptors exist within 200 feet for two lanes or 400 feet for four lanes.
<input type="checkbox"/>	Project substantially changes the vertical or horizontal alignment of the roadway.
<input type="checkbox"/>	Traffic volumes or speeds substantially increase.
<b>Conclusion:</b> Due to the type of work and location, numerous sensitive receptors will be within proximity of the multiple locations of the project.	
<input checked="" type="checkbox"/>	Noise study not required because the project is a Type III project.
<input type="checkbox"/>	Potential noise impacts were studied and are discussed in comments. Project still meets CE criteria.
<b>Comments:</b> Since the proposed project is a Type III project no noise studies are required.	
<b>B. Air Quality: CONFORMITY WITH THE CLEAN AIR ACT AMENDMENTS (CAAA) OF 1990</b>	
<b>Section 1: Regional Emissions Analysis (STIP or MPO's conforming transportation plan)</b>	
<input type="checkbox"/>	Project is included in the current approved State Transportation Improvement Plan (STIP).
<input checked="" type="checkbox"/>	Project is not listed in the current approved STIP but is included in the MPO's conforming transportation plan.
<input type="checkbox"/>	Project is not included in either the approved STIP or the MPO's conforming transportation plan.
<b>Section 2: Based on its scope, the project is categorized by the Transportation Conformity Rule (TCR) as:</b>	
<input checked="" type="checkbox"/>	A project type listed in <b>Table 2</b> of the TCR, i.e., <b>Exempt</b> from the conformity requirements of the CAAA (i.e., exempt from regional emissions analysis, Carbon Monoxide (CO) analysis, and Particulate Matter PM2.5 and PM10 analyses requirements) and may proceed towards implementation even in the absence of a conforming transportation plan and TIP.
<input type="checkbox"/>	A project listed in <b>Table 3</b> of the TCR, i.e., <b>Exempt</b> from regional emissions analysis requirement, but local effects of this project with respect to CO, PM2.5 and PM10 concentrations must be considered to determine if a hot-spot analysis is required. <i>Complete Section 2a below.</i>
<input type="checkbox"/>	A project type <b>not listed in Table 2 or Table 3</b> of the TCR, i.e., must be part of a conforming STIP and/or a MPO's conforming transportation plan and requires CO, PM2.5 and PM10 hot-spot analyses. <i>Complete Section 2a below.</i>

<b>Section 2a(1): Project type listed in Table 3 of the TCR for CO analysis</b>	
<b>Project type not listed in either Table 2 or Table 3 of the TCR for CO analysis</b>	
<input type="checkbox"/>	Project located in <b>CO Attainment Area</b> . CO analysis not required. Project may proceed to the project development process.
<input type="checkbox"/>	The total eight-hour Carbon Monoxide levels are expected to be reasonably below the NAAQS of 9 ppm. This is based on LOS data for the intersection(s) and the total highest traffic volumes at this (those) intersection(s) and the distance of the sensitive receptors to the roadway. No quantitative analysis is required. Project may proceed to the project development process even in the absence of a conforming transportation plan and TIP.
<input type="checkbox"/>	Project located in a Carbon Monoxide <b>Non-Attainment/Maintenance Area</b> and requires a Carbon Monoxide hot-spot analysis. A CO Analysis was completed at the following intersection(s): _____
	And the results are: _____

# Attachment F

<b>Section 2a(2): Project type listed in Table 3 of the TCR for PM2.5 analysis</b>	
<b>Project type not listed in Table 2 or Table 3 of the TCR for PM2.5 analysis</b>	
<input type="checkbox"/>	The project is located in PM2.5 <b>Attainment Area</b> . PM2.5 hot-spot analysis is not required. Project may proceed to the project development process.
<input type="checkbox"/>	The project is located in a PM2.5 <b>Non-Attainment/Maintenance Area</b> and the project is <b>not an air quality concern</b> under 40CFR 93.123(b) (1). Quantitative/qualitative analysis is not required. Project may proceed to the project development process.
<input type="checkbox"/>	The project is located in a PM2.5 <b>Non-Attainment/Maintenance Area</b> and the project is <b>an air quality concern</b> under 40CFR 93.123(b) (1). A PM2.5 hot-spot analysis was completed at the following location(s): _____ And the results are: _____

<b>Section 2a(3): Project type listed in Table 3 of the TCR for PM10 analysis</b>	
<b>Project type not listed in Table 2 or Table 3 of the TCR for PM10 analysis</b>	
<input type="checkbox"/>	The project is located in PM10 <b>Attainment Area</b> . PM10 hot-spot analysis is not required. Project may proceed to the project development process.
<input type="checkbox"/>	The project is located in a PM10 <b>Non-Attainment/Maintenance Area</b> and the project is <b>not an air quality concern</b> under 40CFR 93.123(b) (1). Quantitative/qualitative analysis is not required. Project may proceed to the project development process.
<input type="checkbox"/>	The project is located in a PM10 <b>Non-Attainment/Maintenance Area</b> and the project is <b>an air quality concern</b> under 40CFR 93.123(b) (1). A PM10 hot-spot analysis was completed at the following location(s): _____ And the results are: _____
<b>Comments</b> (include LOS, if appropriate): Since the proposed project is included in Table 2 of the TCR, no air quality studies are required.	

<b>C. Potential Ecological Constraints</b> (check those that apply)			
<input type="checkbox"/>	Floodplains	<input type="checkbox"/>	Shellfish Habitat
<input type="checkbox"/>	Wetlands	<input type="checkbox"/>	Acid Producing Soils
<input type="checkbox"/>	Vernal Pools	<input type="checkbox"/>	Submerged Aquatic Vegetation
<input type="checkbox"/>	Waterbody:	<input type="checkbox"/>	Sole Source Aquifer
	<input type="checkbox"/> Category One	<input type="checkbox"/>	Forested Areas
	<input type="checkbox"/> Trout Production	<input checked="" type="checkbox"/>	Threatened and Endangered Species:
	<input type="checkbox"/> Trout Maintenance		<input type="checkbox"/> State-listed species
	<input type="checkbox"/> Non-Trout		<input checked="" type="checkbox"/> Federally listed species
<input type="checkbox"/>	Wild and Scenic River	<input type="checkbox"/>	Other (specify):
<input type="checkbox"/>	Essential Fish Habitat		

<b>Federally Listed Threatened &amp; Endangered Species Checklist:</b>	
[See <a href="http://www.fws.gov/northeast/njfieldoffice/Endangered/consultation.html">http://www.fws.gov/northeast/njfieldoffice/Endangered/consultation.html</a> for guidance on the current US Fish and Wildlife Service (USFWS) Consultation Procedures.]	
<b>No Effect:</b>	
<input type="checkbox"/>	USFWS's Information, Planning and Conservation System (IPAC) revealed <i>no federally listed species</i> potentially present in the project's <i>action area</i> (see USFWS website). Therefore, the proposed activities will have no effect on federally listed species. Relevant general recommendations to protect other wildlife resources will be addressed in the project design. No further action is required under the Endangered Species Act.
<b>Potential Effect:</b>	
<input type="checkbox"/>	USFWS's IPAC revealed no federally listed species potentially present in the project's <i>action area</i> . However, <i>USFWS general recommendations to protect other wildlife species could not be implemented</i> . Consultation with the USFWS required.
<input checked="" type="checkbox"/>	USFWS's IPAC revealed <i>one (1) or more federally listed species</i> as potentially present in the project's <i>action area</i> . Section 7 Consultation required.

# Attachment F

<b>USFWS Consultation:</b>	
<input type="checkbox"/>	The project requires authorization under the Freshwater Wetlands Protection Act. USFWS consultation will be coordinated with the NJ Division of Land Use Regulation during permit time. <b>NOTE: Depending on the potential level of impact, consultation may be initiated prior to permit application. (Explain in comments below.)</b>
<input checked="" type="checkbox"/>	The project is not anticipated to require authorization under the Freshwater Wetlands Protection Act. Consultation has been initiated with the USFWS NJ Field office. Correspondence attached.

<b>Conclusion:</b>	
<input checked="" type="checkbox"/>	No significant impact anticipated
<input type="checkbox"/>	Further studies are needed to obtain permits. Project still satisfies CE criteria.
<p><b>Comments</b> (briefly describe all potential ecological constraints): After reviewing the USFWS I-PaC mapping data for the county there are several Federally listed species that may have the potential to be withing the project action area. These species are:</p> <ul style="list-style-type: none"> <li>• Northern Long-eared Bat (<i>Myotis septentrionalis</i>, Threatened)</li> <li>• Eastern Black Rail (<i>Laterallus jamaicensis ssp. Jamaicensis</i>, Threatened)</li> <li>• Piping Plover (<i>Charadrius melodus</i>, Threatened)</li> <li>• Red Knot (<i>Calidris canutus rufa</i>, Threatened)</li> <li>• Bog Turtle (<i>Clemmys muhlenbergii</i>, Threatened)</li> <li>• Monarch Butterfly (<i>Danaus plexippus</i>, Candidate)</li> <li>• American Chaffseed (<i>Schwalbea americana</i>, Endangered)</li> <li>• Knieskern's Beaked-rush (<i>Rhynchospora knieskernii</i>, Threatened)</li> <li>• Seabeach Amaranth (<i>Amaranthus pumilus</i>, Threatened)</li> <li>• Sensitive Joint-vetch (<i>Aeschynomene virginica</i>, Threatened)</li> <li>• Swamp Pink (<i>Helonias bullata</i>, Threatened)</li> </ul> <p>Regarding Northern Long-eared Bat, a determination of No Effect was made due to the nature and location of the proposed project under the 4(d) rule for the species.</p> <p>Regarding Bog Turtle, there is a programmatic agreement between USFWS and NJDOT regarding the species. Under this programmatic agreement the proposed project is outside the action area for the species, confined to the roadway cabinets, and no further coordination is needed.</p> <p>For all other Federally listed species, the USFWS Project Screening chart for NJDOT projects was used and a determination of No effect or Not Likely to Adversely Affect (NLAA) can be made. With respect to the candidate species, Monarch Butterfly, according to the USFWS, the Monarch Butterfly is not yet listed or proposed for listing under the Endangered Species Act but is considered a "candidate species." Candidate species are species that appear to warrant listing, but listing is currently precluded by higher priority actions. Although these species receive no substantive or procedural protection under the Endangered Species Act, Federal agencies and others are encouraged to consider these species in environmental planning. The proposed signal timing optimization project will be restricted to existing disturbed roadway right-of-way and will not impact potential habitat for the species. Documentation is enclosed.</p>	

## Attachment F

<b>D. Anticipated Environmental Permits/Approvals/Coordination</b> (check those that apply)			
<input type="checkbox"/>	US Coast Guard	<input type="checkbox"/>	NJDEP Pollutant Discharge
<input type="checkbox"/>	USACOE Section 10 (Navigable Waters)	<input type="checkbox"/>	NJDEP Dam Safety
<input type="checkbox"/>	USACOE Section 404 (Nationwide)	<input type="checkbox"/>	NJDEP Remediation Approval
<input type="checkbox"/>	USACOE Section 404 (Individual)	<input type="checkbox"/>	NJDEP Tidelands Conveyance
<input type="checkbox"/>	USEPA Sole Source Aquifer	<input type="checkbox"/>	EO 11990 Wetlands
<input type="checkbox"/>	NJDEP Freshwater Wetlands—GP	<input type="checkbox"/>	EO 11988 Floodplains
<input type="checkbox"/>	NJDEP Freshwater Wetlands—IP	<input type="checkbox"/>	NJDEP Highlands Preservation Area: <input type="checkbox"/> Exempt <input type="checkbox"/> Highlands Applicability Determination <input type="checkbox"/> Highlands Preservation Area Approval
<input type="checkbox"/>	NJDEP Transition Area Waiver		
<input type="checkbox"/>	NJDEP Coastal Wetlands		
<input type="checkbox"/>	NJDEP Waterfront Development		
<input type="checkbox"/>	NJDEP CAFRA	<input type="checkbox"/>	USDA-Farmland Conversion (Form AD 1006)
<input type="checkbox"/>	NJDEP Flood Hazard Area Permit—GP	<input type="checkbox"/>	NJ Agriculture Development Area
<input type="checkbox"/>	NJDEP Flood Hazard Area Permit—IP	<input type="checkbox"/>	NJDEP Green Acres Program/State House Comm.
<input type="checkbox"/>	NJDEP Stormwater Management: <input type="checkbox"/> ≥ 0.25 acre additional net impervious surface <input type="checkbox"/> ≥ 1.0 acre disturbance <input type="checkbox"/> Unknown at this time	<input type="checkbox"/>	National Marine Fisheries Service
		<input type="checkbox"/>	NJDEP Parks & Forestry (PL 2001 Chapter 10 Reforestation)
		<input type="checkbox"/>	D&R Canal Commission
		<input type="checkbox"/>	Meadowlands Commission
<input type="checkbox"/>	Approval through NJDEP LURP Permit (or) <input type="checkbox"/> NJDOT self-certification	<input type="checkbox"/>	Pinelands Commission
		<input type="checkbox"/>	Endangered Species Act Section 7 Consultation
<input type="checkbox"/>	NJPDES Construction Activity Stormwater GP (RFA)	<input type="checkbox"/>	NJDEP Threatened & Endangered Species Coordination
<input type="checkbox"/>	NJDEP Water Quality Certificate	<input type="checkbox"/>	Other (specify):
<b>Comments:</b> No permits, approvals or coordination are anticipated for this project. If there are changes to the proposed activities, consultation with NJDOT BEPR should occur.			

<b>E. Cultural Resources</b>	
	<b>Technical Findings:</b>
<input type="checkbox"/>	Project is not an undertaking for Section 106 purposes; concurrence has been received from FHWA.
<input checked="" type="checkbox"/>	No Effect per DOT/SHPO Agreement of 05/14/09; subject to conditions identified in the Agreement.
<input type="checkbox"/>	No Section 106 Consultation per 5/25/01 SHPO concurrence with <i>Section 106 Compliance Procedures, Federally Funded Drainage Improvement Program</i> ; subject to conditions identified in the Agreement.
<input type="checkbox"/>	No Effect to significant properties if they exist in Area of Potential Effects (APE) per 36CFR800.3(a)(1) with SHPO concurrence. (Because the Section 106 regulations allow for a level of effort for conducting and evaluating cultural resources to be commensurate with the undertaking, this category of finding was developed to be used for certain projects when no cultural resources survey has been conducted; and self-imposed conditions, if applicable, are presented as part of the undertaking, e.g., Pipeline 3 or other small-scale projects.)
<input type="checkbox"/>	No National Register (NR) listed or eligible properties in APE (Section 106 Findings = No Historic Properties Affected).
<input type="checkbox"/>	New Jersey Register <i>listed</i> properties in APE (see comments and K. Environmental Commitments below).
<input type="checkbox"/>	National Register listed/eligible properties exist within APE (see consultation summary below).

Archaeology	Architecture				Section 106 Finding
	Bridge	Building	District	Other	
					NR listed/eligible property(ies)— No Historic Properties Affected
					NR listed/eligible property(ies)— No Adverse Effect (NAE)



## Attachment F

					NR listed/eligible property(ies)— NAE with conditions
					NR listed/eligible property(ies)— Adverse Effect

	<b>Section 106 Consultation Summary</b>	Date
<input type="checkbox"/>	FHWA concurred with Adverse Effect Finding	
<input type="checkbox"/>	SHPO provided Section 106 consultation comments	
<input type="checkbox"/>	FHWA concurred with No Adverse Effect with Conditions	
<input type="checkbox"/>	ACHP notified of Adverse Effect	
<input type="checkbox"/>	ACHP responded to notification (check one/enter date): <input type="checkbox"/> ACHP will participate in consultation <input type="checkbox"/> ACHP declined to participate in consultation	
<input type="checkbox"/>	MOA executed by FHWA (check one/enter date): <input type="checkbox"/> MOA filed with ACHP <input type="checkbox"/> ACHP accepted/signed MOA	
<p><b>Comments</b> (include MOA stipulations or other conditions, if applicable): The proposed project activities are covered under the agreement with NJDOT and NJSHPO:            (State) #37, (Federal) #50: Installation of computer links to monitor and control traffic volumes throughout the roadway system.            If there are changes to the proposed activities, additional consultation with SHPO may be required</p>		

<b>F. Section 4(f) Involvement</b>	
<b>Section 1: Historic Sites</b>	
<input checked="" type="checkbox"/>	No Section 4(f) Involvement
<input type="checkbox"/>	Project results in a "constructive use" of Section 4(f) property.
<input type="checkbox"/>	Project results in a use of Historic site(s) on or eligible for the National Register of Historic Places (check one below):
<input type="checkbox"/>	Section 4(f) Involvement. Project is covered under <i>de minimis</i> Evaluation of Impacts and all applicability criteria have been met, including concurrence <i>first</i> by the FHWA that the project meets the applicability criteria, and <i>then</i> concurrence by SHPO with the "No Effect" or "No Adverse Effect" determination <i>after</i> they are notified of the intent to use a <i>de minimis</i> finding.
<input type="checkbox"/>	Section 4(f) Involvement. Project is covered under the <b>Nationwide Section 4(f) Programmatic Evaluation for minor involvement</b> and all applicability criteria have been met, including concurrence by the SHPO (or ACHP) with the "No Effect" or "No Adverse Effect" determination.
<input type="checkbox"/>	Section 4(f) Involvement. Project is covered under the <b>Nationwide Section 4(f) Programmatic Evaluation for Net Benefits</b> and all applicability criteria have been met, including notification to and concurrence by the FHWA with the determination.
<input type="checkbox"/>	Section 4(f) Involvement. Project has an "Adverse Effect" determination. <b>Individual Section 4(f)</b> was prepared.
<p><b>Comments:</b> Since the proposed project seeks to work within existing traffic control cabinets, there will be no encroachment upon Section 4(f) Historic Site and no Section 4(f) involvement.</p>	

<b>Section 2: Historic Bridges</b>	
<input checked="" type="checkbox"/>	No Section 4(f) Involvement
<input type="checkbox"/>	Section 4(f) Involvement. Project is covered under the <b>Nationwide Section 4(f) Programmatic Evaluation for Historic Bridges</b> .
<p><b>Comments:</b> Since the proposed project seeks to work within existing traffic control cabinets, there will be no encroachment upon Section 4(f) Historic Bridges and no Section 4(f) involvement.</p>	

<b>Section 3: Publicly Owned Park, Recreation Area, Wildlife or Waterfowl Refuge</b>	
<input checked="" type="checkbox"/>	No Section 4(f) Involvement
<input type="checkbox"/>	Project results in a "Constructive Use" of Section 4(f) property (fill out Site Information below)

# Attachment F

<input type="checkbox"/>	Project requires acquisition from publicly owned recreation land (fill out Site Information below):
<input type="checkbox"/>	Section 4(f) Involvement. Project is covered under <i>de minimis</i> Evaluation of Impacts and all applicability criteria and conditions have been met, including concurrence <i>first</i> by the FHWA that the project meets the applicability criteria, and <i>then</i> notification to the officials with jurisdiction of the intent to use a <i>de minimis</i> finding.
<input type="checkbox"/>	Section 4(f) Involvement. Project is covered under <b>Nationwide Section 4(f) Programmatic Evaluation for minor involvement</b> and all applicability criteria and conditions have been met, including concurrence by the officials having jurisdiction over the property.
<input type="checkbox"/>	Section 4(f) Involvement. Project is covered under the <b>Nationwide Section 4(f) Programmatic Evaluation for Net Benefits</b> and all applicability criteria have been met, including notification to and concurrence by the FHWA with the determination.
<input type="checkbox"/>	Section 4(f) Involvement. Nationwide Section 4(f) Programmatic applicability criteria were not met; <b>Individual Section 4(f) Evaluation</b> was prepared.
<b>Site Information</b> (for projects involving "Constructive Use" or acquisition from publicly owned recreation land, wildlife or waterfowl refuge):	
Name of Site (use local name): _____	
Lot and Block: _____	
Total acreage of site: _____	
Acreage of site affected (acquisition and permanent easements): _____	
<input type="checkbox"/>	Federal encumbrances involved (e.g., Wild and Scenic Rivers Act, Land and Water Conservation Fund Act, Rivers and Harbors Act).
<b>Comments:</b> Since the proposed project seeks to work within existing traffic control cabinets, there will be no encroachment upon Section 4(f) Publicly Owned Park, Recreation Area, Wildlife or Waterfowl Refuge and no Section 4(f) involvement.	

<b>Section 4: Independent Walkway &amp; Bikeway Construction Projects</b>	
<input checked="" type="checkbox"/>	No Section 4(f) Involvement
<input type="checkbox"/>	Section 4(f) Involvement. Project is covered under the <b>Nationwide Section 4(f) Programmatic Evaluation</b> . Project requires use of recreation and park areas established and maintained primarily for active recreation, open space, or similar purposes. All applicability criteria have been met, including approval in writing by the official with jurisdiction over the property that the project is acceptable and consistent with the designated use of the property and that all possible planning to minimize harm has been accomplished in the location and design of the bikeway or walkway facility.
<b>Comments:</b> No Section 4(f) Independent Walkway& Bikeways will be constructed as part of the proposed project, therefore there will be no Section 4(f) involvement.	

<b>G. Hazardous Materials and Landfills</b>	
<input type="checkbox"/>	Known or suspected contaminated site within project limits.
<input type="checkbox"/>	Underground storage tanks within project limits.
<input checked="" type="checkbox"/>	Questionable fill material within project limits.
<b>Conclusion:</b> Due to the nature of the proposed project and the locations where work will occur there will be known Historic Fill associated with roadway construction.	
<input checked="" type="checkbox"/>	Low potential for involvement with contamination; no further investigation required.
<input type="checkbox"/>	Low potential for involvement with contamination; verification required based upon plan review.
<input type="checkbox"/>	Further investigation and/or sampling required to determine extent of involvement with contamination. Project still meets FHWA criteria for a CE.
<b>Comments:</b> Since the proposed project seeks to upgrade existing signal timing and traffic control equipment within existing cabinets, the potential for encountering contamination is low.	

<b>H. Socioeconomics</b>	
<input checked="" type="checkbox"/>	The project will <b>not</b> result in any significant socioeconomic impacts.
<b>Comments:</b> The project area is defined as intersections along existing county and municipal roadways in various suburban or rural route corridors. The project seeks to improve signal timing and equipment in existing roadway signal cabinets and will not impact communities.	

## Attachment F

<b>I. Environmental Justice</b>																	
<input checked="" type="checkbox"/>	Project will have <b>no</b> disproportionately high or adverse effects on low income and/or minority communities.																
<input type="checkbox"/>	Project will have disproportionately high and adverse effects on low income and/or minority communities.																
<p><b>Conclusion:</b> After reviewing US Census data from the US Environmental Protection Agency (EPA) EJSCREEN mapping tool, the characteristics of communities located within Ocean County, since the project will encompass much of this region. The overall population within the project area is 591,939 persons. The percentage of population classified as low-income is at 25 percent, slightly above the State average. The percentage of this population that can be classified as people of color is quantified as 15 percent, below the State average. There are 2% linguistically isolated populations within the region. The proposed work activities will upgrade existing signal timing and equipment within existing cabinets and will not disproportionately impact protected communities.</p>																	
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Category</th> <th style="width: 35%;">Numerical Value or Percentile in project area of Ocean County</th> <th style="width: 30%;">State Average</th> </tr> </thead> <tbody> <tr> <td>People of Color</td> <td style="text-align: center;">15%</td> <td style="text-align: center;">44%</td> </tr> <tr> <td>Low Income</td> <td style="text-align: center;">25%</td> <td style="text-align: center;">24%</td> </tr> <tr> <td>Linguistically Isolated Population</td> <td style="text-align: center;">2%</td> <td style="text-align: center;">7%</td> </tr> <tr> <td>Population</td> <td style="text-align: center;">591,939</td> <td style="text-align: center;">-----</td> </tr> </tbody> </table>			Category	Numerical Value or Percentile in project area of Ocean County	State Average	People of Color	15%	44%	Low Income	25%	24%	Linguistically Isolated Population	2%	7%	Population	591,939	-----
Category	Numerical Value or Percentile in project area of Ocean County	State Average															
People of Color	15%	44%															
Low Income	25%	24%															
Linguistically Isolated Population	2%	7%															
Population	591,939	-----															
<input checked="" type="checkbox"/>	Project is in compliance with the goals of Executive Order 12898 and the requirements of the Civil Rights Act of 1964.																
<input type="checkbox"/>	Project is in compliance with the goals of Executive Order 12898 and the requirements of the Civil Rights Act of 1964, through the identification of measures to address disproportionate effects, including actions to avoid or mitigate them. Project satisfies CE criteria.																
<p><b>Comments:</b> The proposed work will not isolate any residential neighborhoods or adversely impact community cohesion in the project area. The proposed project will not require the acquisition or relocation of any residential, business or commercial properties. The proposed project will not involve the relocation of any residents living within the study area. No residences, community facilities or existing land use patterns will be adversely impacted by the project. The project will improve existing roadway features to address congestion, traffic volumes and prevent roadway idling. Therefore, the proposed project activities will produce a net benefit for the community within the project area. See attached EJSCREEN report document. Access to public transportation where it exists and safe bicycle and pedestrian access throughout the project area should be maintained during construction to the degree feasible.</p>																	

<p><b>J. Public Reaction</b> (briefly describe input from the Office of Community Relations or current status of public reaction): Public reaction is reportedly favorable to the proposed project.</p>
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## Attachment F

**K. Environmental Commitments** (refer to MOA stipulations or other conditions noted in Section D, if applicable; permit conditions, etc.):

1. Best Management Practices will be utilized for this project.
2. Construction staging activities (including the storage of equipment/vehicles/ materials) are prohibited in environmentally sensitive areas. If the contractor wishes to use these areas or access these areas for any reason, all appropriate permits and approvals must be obtained prior to such use.
3. If the proposed activities include direct contact with inlets, they must be retrofitted to meet the New Jersey Pollutant Discharge Elimination System (NJPDES) stormwater requirements.
4. **If there are any changes to the proposed activities, the changes must be reevaluated by BEPR to determine the need for additional regulatory compliance.**

# Attachment F

## DETERMINATION OF CATEGORICAL EXCLUSION

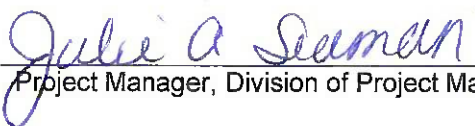
**Project name and location:** Ocean County Traffic Signal Timing Optimization, Ocean County, New Jersey

**CE #:** 23 CFR 771.117 (c)(21) – Deployment of electronics, photonics, communications, or information processing used singly or in combination, or as components of a fully integrated system, to improve the efficiency or safety of a surface transportation stems or to enhance security or passenger convenience. It also comes under the Programmatic Agreement between the FHWA and the NJDOT for Approval of certain Categorical Exclusions - #21

The proposed project satisfies the Categorical Exclusion definition outlined in 23 CFR 771.117 (a) and will not result in significant environmental impacts.

Prepared/Reviewed by: John Riggi (Approved Electronically) 12/27/2021  
Environmental Coordinator Date

Recommended by:  12/27/21  
Environmental Supervisor Date

 12/27/2021  
Project Manager, Division of Project Management Date

Certified   
(or)  
Approved

 12/27/21  
Manager, Bureau of Environmental Program Resources Date

Concurrence  
(non-self certified CEs) Division Administrator, Federal Highway Administration Date

enclosures (please include any correspondence referenced in the CED):

- Project Location Map
- NJ Natural Heritage Program letter
- USFWS coordination letter(s) (e.g., IPAC Species List, Effects/No Effects Determination, etc.)
- NMFS coordination letter
- SHPO Eligibility & Effects concurrence letter
- Signed MOA
- Final Nationwide Section 4(f) Programmatic Evaluation for:
  - Minor Involvement with Historic Sites
  - Use of Historic Bridges
  - Minor Involvement with Publicly Owned Park, Recreation Area, Wildlife or Waterfowl Refuge
  - Independent Walkway and Bikeway Construction Projects
  - Net Benefits
  - De minimis* Evaluation of Impacts documentation (i.e., notice to SHPO, *de minimis* template)
- Final Individual Section 4(f)
- Resolution of Support from Municipality/County

# Attachment F

Corridor	CR #	Road	Start	Start MP	End	End MP	Total Number of Miles	Total Number of Intersections	Total Number of Miles
A	632	Burnt Tavern Rd / Bridge Ave	549 Lanes Mill Rd / Burrsville Rd	0.00	Community Park	4.63	4.48	15	4.48
B	549	Hooper Ave	Yorktowne Blvd	5.93	631 Old Hooper Ave ramp	6.01	0.08	22	6.64
B	631	Old Hooper Ave	549 Hooper Ave	0.00	549 Brick Blvd	3.12	3.12		
B	549	Chambersbridge Rd / Lanes Mill Rd	549 Brick Blvd	8.69	Burnt Tavern	12.09	3.40		
B	63	Burnt Tavern Rd	Herborn Ave	0.35	Lanes Mill Rd / GSP Exit 91	0.39	0.04		
C	620	Church Rd	US-9	0.00	549 Hooper Ave	3.96	3.96	8	3.96
D	571	Fischer Blvd	NJ-37	0.00	571 Bay Ave	1.45	1.45	8	4.09
D	549 S2	Fischer Blvd	571 Bay Ave	1.45	549 Hooper Ave	4.09	2.64		
E	571	Bay Ave	54952 / 571 Fischer Blvd	1.45	Cedar Grove Rd	3.37	1.92	15	8.81
E	571	Bey Lea Rd / Indian Head Rd	623 Old Freehold Rd	5.21	527 Whitesville Rd / Gardenia Way	6.64	1.43		
E	527	Whitesville Rd	527 Whitesville Rd / Gardenia Way	4.10	527 Whitesville Rd (Boy Scouts)	4.85	0.75		
E	571	Ridgeway Rd	527 Whitesville Rd (Boy Scouts)	7.40	547 Hope Chapel Rd	12.11	4.71		
F	526	County Line Rd	638 Jackson Mills Road	25.27	549 Lanes Mills Road	35.56	10.29	49	23.17
F	638	Jackson Mills Road	526 E Commodore Blvd	4.26	Chandler Rd / Ely Harmony Rd	6.59	2.33		
F	641	New Prospect Road	641 Hysen Rd / Larsen Rd	1.84	526 W County Line Rd	4.28	2.44		
F	639	N Hope Chapel Rd	S Cooks Bridge Rd	0.41	526 W County Line Rd	2.54	2.13		
F	6	E Kennedy Blvd	547 Squankum Rd	0.00	14th St	1.52	1.52		
F	639	N Hope Chapel Rd	528 E Veterans Hwy	0.00	Cooks Bridge Rd	0.41	0.41		
F	54	S Cooks Bridge Rd / N Cooks Bridge Rd	526 N County Line Rd	0.00	639 N Hope Chapel Rd	4.05	4.05		
H	626	Cross St	US-9	0.00	528 E Veterans Hwy	2.88	2.88	9	4.40
H	628	Prospect St	626 Cross St	0.00	US-9	1.52	1.52		
I	528	Cedar Bridge Ave	639 S Hope Chapel Rd	27.33	US-9	30.25	2.92	14	6.60
I	528	Cedar Bridge Ave	Wedgewood Dr	34.19	Adamston Rd	37.87	3.68		
J	528	W Veterans Hwy	Leesville Rd / Don Connor Blvd	21.90	527 Cedar Swamp Rd / E Veterans Hwy	22.46	0.56	7	5.38
J	636	Bennetts Mills Rd	527 Cedar Swamp Rd / E Veterans Hwy	0.00	641 N New Prospect Rd	4.82	4.82		
K	623	Old Freehold Rd / New Hampshire Ave	Chestnut St	0.45	Swarthmore Ave	8.34	7.89	17	7.89
L	622	Old Freehold Rd / Cox Cro Rd	527 Whitesville	0.00	623 Old Freehold Rd / New Hampshire Ave	2.80	2.80	7	2.80
M	18	N Bay Ave	571 Bey Lea Rd	0.00	620 Church Rd	2.27	2.27	4	2.27
N	39	Mule Rd	NJ-37	0.00	Davenport Rd	1.24	1.24	7	1.24
O	527	Water St / Lakehurst Rd	Irons St	0.11	NJ-37	1.97	1.86	6	1.86
P	530	Dover Rd / S Main St	530 / 618 Pinewald Keswick Rd	27.29	NJ-166	31.21	3.92	6	3.92
Q	618	Pinewald Keswick Rd / Forest Hills Pkwy / Veterans Blvd / Serpentine Dr / Central Pkwy	619 Double Trouble Rd	6.40	US-9	9.92	3.52	6	3.52
S	554	West Bay Ave	Heritage Point Blvd	2.73	US-9	6.07	3.34	14	5.46
S	8	Barnegat Blvd N	554 West Bay Ave	1.02	US-9	2.89	1.87		
S	105	Lighthouse Dr	554 West Bay Ave	0.00	GSP SB Entrance / Exit 67A	0.25	0.25		
U	539	N Green St	US-9	0.00	GSP SB Entrance / Exit 58	3.67	3.67	5	3.67
<b>TOTAL:</b>								219	100.16

## Attachment F

Recommended Corridors to Move from the CD to FD Phase of Design			
Corridor	CR #	Road	Total Number of Intersections
A	632	County Route 632 - Burnt Tavern Road / Bridge Avenue	15
B	631 549 63	County Route 549- Hooper Avenue, County Route 631 - Old Hooper Avenue, County Route 549 - Chambersbridge Road / Lanes Mills Road County Route 63 -Burnt Tavern Road	22
C	620	Church Rd	8
D	571	County Route 571 - Fisher Boulevard / County Route 549 – Fisher Boulevard	8
E	571	County Route 571 - Bay Avenue/Bay Lea Road / Indian Head Road , County Route 527 - Whitesville Road and County Route 571 – Ridgeway Road	15
F	526 638 641 639 6 54	CR 526 - County Line Road Jackson Mills Road New Prospect Road W County Line Road N Hope Chapel Road W County Line Road E Kennedy Boulevard N Hope Chapel Road S Cooks Bridge Road / N Cooks Bridge Road	49
H	626 628	Cross St Prospect St	9
I	528	Cedar Bridge Ave	14
J	528 636	W Veterans Hwy Bennetts Mills Rd	7
K	623	Old Freehold Rd / New Hampshire Ave	17
L	622	Old Freehold Rd / Cox Cro Rd	7
M	18	N Bay Ave	4
N	39	Mule Rd	7
O	527	Water St / Lakehurst Rd	6
P	530	Dover Rd / S Main St	6
Q	618	Pinewald Keswick Rd / Forest Hills Pkwy / Veterans Blvd / Serpentine Dr / Central Pkwy	6
S	554 8 105	West Bay Ave Barnegat Blvd N Lighthouse Dr	14
U	539	N Green St	5
Totals Number of Corridor Signals			219
Duplicates on intersection corridors			-11
State Signals			-26
<b>Total</b>			<b>182</b>



# Attachment F



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
New Jersey Field Office  
4 E. Jimmie Leeds Road, Suite 4  
Galloway, New Jersey 08205  
Tel: 609/646-9310  
[www.fws.gov/northeast/njfieldoffice/](http://www.fws.gov/northeast/njfieldoffice/)

IN REPLY REFER TO:  
2018-I-1370

JUL 12 2018

Lauralee Rappleye, Acting Manager  
Bureau of Environmental Program Resources  
New Jersey Department of Transportation  
P.O. Box 600  
Trenton, New Jersey 08625-0600  
Email: [Lauralee.Rappleye@dot.nj.gov](mailto:Lauralee.Rappleye@dot.nj.gov)

Joe Sweger, Manager  
Bureau of Landscape Architecture and Environmental Solutions  
New Jersey Department of Transportation  
P.O. Box 600  
Trenton, New Jersey 08625-0600  
Email: [Joseph.Sweger@dot.nj.gov](mailto:Joseph.Sweger@dot.nj.gov)

Dear Ms. Rappleye and Mr. Sweger:

The U.S. Fish and Wildlife Service (Service) provides the following comments in accordance with Section 7 of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) (ESA). The Service's New Jersey Field Office (NJFO) recognizes that the informal ESA consultation process can be streamlined and that individual project review by the Service is not required under certain circumstances. The NJFO has worked in collaboration with the New Jersey Department of Transportation (NJDOT) to develop a NJDOT-specific project screening chart (henceforth known as screening chart) to streamline the consultation process for routine and limited-scope transportation projects. The screening chart facilitates the NJDOT reaching "no effect" determinations, for which no consultation with the Service is required. The screening chart also provides several standard conservation measures to reach "may affect, not likely to adversely affect" determinations, for which this letter provides blanket Service concurrence. Additionally, the screening chart identifies activities that are complex and/or "may affect" a federally-listed species, which warrant individual project review by the Service.

### NJDOT PROJECT SCREENING

The NJDOT must review all applicable species columns of the screening chart based on the project-specific species list obtained from the Service's Information, Planning, and Consultation (IPAC) System. The screening chart addresses the bog turtle (*Clemmys [Glyptemys] muhlenbergii*, threatened), dwarf wedgemussel (*Alasmidonta heterodon*, endangered), Indiana bat (*Myotis sodalis*, endangered), northern long-eared bat (*Myotis septentrionalis*, threatened), piping plover (*Charadrius melodus*, threatened), rufa red knot (*Calidris canutus rufa*, threatened), swamp pink (*Helonias bullata*, threatened), Knieskern's beaked-rush (*Rhynchospora knieskernii*, threatened), small whorled pogonia (*Isotria medeoloides*, threatened), American chaffseed (*Schwalbea americana*, endangered), sensitive joint-vetch (*Aeschynomene virginica*, threatened) and seabeach amaranth (*Amaranthus pumilus*, threatened). Please note that the screening chart does not address the northeastern beach tiger beetle (*Cicindela dorsalis dorsalis*, threatened);



## Attachment F

individual project review by a Service biologist is required for projects that may affect this species, though few projects should encounter it on their species list.

### **NJDOT PROGRAMMATIC INFORMAL CONSULTATION**

The Service understands that the NJDOT has committed to incorporate all applicable conservation measures as outlined in the most recent version of the screening chart. Based on this information, the Service hereby concurs that all projects meeting the criteria listed in the screening chart –including the conservation measures– are either no effect or not likely to adversely affect federally listed species under Service jurisdiction. No individual Service review of such projects is needed. The NJDOT's commitment to all applicable conservation measures must be documented in writing and maintained in the NJDOT's project files. If the NJDOT is directed to submit the project information to the NJFO at any step of the screening chart, separate consultation with a Service biologist is required *for that species*. Individual consultation is also necessary for any project that cannot implement all applicable conservation measures as written. If project plans change, the NJDOT must conduct a re-evaluation of the project under the screening chart. The screening chart itself should be re-evaluated at least once a year to ensure that it continues to reflect current information about federally listed species.

Please refer to the NJFO's website at <http://www.fws.gov/northeast/njfieldoffice/Endangered/> for further information about federally-listed species, the National Bald Eagle Management Guidelines, and contacts for obtaining information from the New Jersey Natural Heritage Program and New Jersey Endangered and Nongame Species Program regarding State-listed and other species of concern.

Please contact Alicia Protus at (609) 382-5266 or [Alicia\\_Protus@fws.gov](mailto:Alicia_Protus@fws.gov) if you have any questions or require further assistance regarding federally listed threatened or endangered species.

Sincerely,



*for* Eric Schradling  
Field Supervisor

Enclosure

NJDOT-specific Project Screening Chart Version 5 (dated July 11, 2018)  
NJDOT Project Consultation Worksheet



## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
New Jersey Ecological Services Field Office  
4 E. Jimmie Leeds Road, Suite 4  
Galloway, NJ 08205

Phone: (609) 646-9310 Fax: (609) 646-0352  
<http://www.fws.gov/northeast/njfieldoffice/Endangered/consultation.html>



## In Reply Refer To:

December 21, 2021

Consultation Code: 05E2NJ00-2022-SLI-0437

Event Code: 05E2NJ00-2022-E-01190

Project Name: Ocean County Traffic Signal Timing Optimization

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

## To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species that may occur in your proposed action area and/or may be affected by your proposed project. This species list fulfills the requirements of the U. S. Fish and Wildlife Service (Service) under Section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*)

If the enclosed list indicates that any listed species may be present in your action area, please visit the New Jersey Field Office consultation web page as the next step in evaluating potential project impacts: <http://www.fws.gov/northeast/njfieldoffice/Endangered/consultation.html>

On the New Jersey Field Office consultation web page you will find:

- habitat descriptions, survey protocols, and recommended best management practices for listed species;
- recommended procedures for submitting information to this office; and
- links to other Federal and State agencies, the Section 7 Consultation Handbook, the Service's wind energy guidelines, communication tower recommendations, the National Bald Eagle Management Guidelines, and other resources and recommendations for protecting wildlife resources.

The enclosed list may change as new information about listed species becomes available. As per Federal regulations at 50 CFR 402.12(e), the enclosed list is only valid for 90 days. Please return to the ECOS-IPaC website at regular intervals during project planning and implementation to obtain an updated species list. When using ECOS-IPaC, be careful about drawing the boundary of your Project Location. Remember that your action area under the ESA is not limited to just the footprint of the project. The action area also includes all areas that may be indirectly affected

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## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New Jersey Ecological Services Field Office  
4 E. Jimmie Leeds Road, Suite 4  
Galloway, NJ 08205  
(609) 646-9310

through impacts such as noise, visual disturbance, erosion, sedimentation, hydrologic change, chemical exposure, reduced availability or access to food resources, barriers to movement, increased human intrusions or access, and all areas affected by reasonably foreseeable future that would not occur without ("but for") the project that is currently being proposed.

We appreciate your concern for threatened and endangered species. The Service encourages Federal and non-Federal project proponents to consider listed, proposed, and candidate species early in the planning process. Feel free to contact this office if you would like more information or assistance evaluating potential project impacts to federally listed species or other wildlife resources. Please include the Consultation Tracking Number in the header of this letter with any correspondence about your project.

## Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

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Event Code: 05E2NJ00-2022-E-01190

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## Project Summary

Consultation Code: 05E2NJ00-2022-SLI-0437

Event Code: Some(05E2NJ00-2022-E-01190)

Project Name: Ocean County Traffic Signal Timing Optimization

Project Type: TRANSPORTATION

Project Description: The need for this project is to retune outdated signal timing plans for various intersections within the County to:

- To adjust signal timing to account for changes in traffic patterns due to new developments and traffic growth.
- To reduce motorist frustration and unsafe driving by cutting down stops and delays.
- To improve traffic flow through a group of signals, which reduces emissions and fuel consumption.
- To postpone the need for costly long-term road capacity improvement by improving traffic flow with existing resources.

The goals of this project are to provide safe and efficient traffic signal operations by adjusting signal timing based on updated traffic volume data and signal optimization analysis that will serve various traffic demand scenarios as well as upgrading some outdated traffic signal controllers and controller cabinet equipment for various corridors within the County where timing changes have not been made in recent years.

## Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@39.8237355,-74.22145481327276,14z>



Counties: Ocean County, New Jersey

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## Endangered Species Act Species

There is a total of 11 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 2 of these species should be considered only under certain conditions.

TPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> <li>The specified area occurs within the range of the northern long-eared bat.</li> <li>The specified area may occur within 150 feet of a known northern long-eared bat maternity roost. As described in the 4(d) rule, restrictions on incidental take may apply to this area.</li> </ul> Contact the USFWS New Jersey Field Office for further coordination. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

## Birds

NAME	STATUS
Eastern Black Rail <i>Laterallus jamaicensis ssp. jamaicensis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/10477">https://ecos.fws.gov/ecp/species/10477</a>	Threatened
Piping Plover <i>Charadrius melodus</i> Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/6039">https://ecos.fws.gov/ecp/species/6039</a>	Threatened
Red Knot <i>Calidris canutus rufa</i> There is proposed critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/1864">https://ecos.fws.gov/ecp/species/1864</a>	Threatened

## Reptiles

NAME	STATUS
Bog Turtle <i>Clemmys muhlenbergii</i> Population: Wherever found, except GA, NC, SC, TN, VA No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6862">https://ecos.fws.gov/ecp/species/6862</a>	Threatened

## Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> <li>The monarch is a candidate species and not yet listed or proposed for listing. There are generally no section 7 requirements for candidate species (FAQ found here: <a href="https://www.fws.gov/savethemonarch/FAQ-Section7.html">https://www.fws.gov/savethemonarch/FAQ-Section7.html</a>).</li> </ul> Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

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## Flowering Plants

NAME	STATUS
American Chaffseed <i>Schwalbea americana</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1286">https://ecos.fws.gov/ecp/species/1286</a>	Endangered
Kniiskern's Beaked-rush <i>Rhynchospora kniskernii</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/2280">https://ecos.fws.gov/ecp/species/2280</a>	Threatened
Seabeach Amaranth <i>Amaranthus pumilus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8549">https://ecos.fws.gov/ecp/species/8549</a>	Threatened
Sensitive Joint-vetch <i>Aeschynomene virginica</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/855">https://ecos.fws.gov/ecp/species/855</a>	Threatened
Swamp Pink <i>Helonias bullata</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/4333">https://ecos.fws.gov/ecp/species/4333</a>	Threatened

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

## USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a "Compatibility Determination" conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

The following FWS National Wildlife Refuge Lands and Fish Hatcheries lie fully or partially within your project area:

FACILITY NAME	ACRES
EDWIN B. FORSYTHE NATIONAL WILDLIFE REFUGE <a href="https://www.fws.gov/refuges/profiles/index.cfm?id=52510">https://www.fws.gov/refuges/profiles/index.cfm?id=52510</a>	44,208.624

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Event Code: 05E2NJ00-2022-E-01190

1

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Event Code: 05E2NJ00-2022-E-01190

2

## Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the [FAQ below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the [PROBABILITY OF PRESENCE SUMMARY](#) at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
<b>American Oystercatcher <i>Haematopus palliatus</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9935">https://ecos.fws.gov/ecp/species/9935</a>	Breeds Apr 15 to Aug 31
<b>Audubon's Shearwater <i>Puffinus thermi</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Aug 5

NAME	BREEDING SEASON
<b>Bald Eagle <i>Haliaeetus leucocephalus</i></b> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. <a href="https://ecos.fws.gov/ecp/species/1626">https://ecos.fws.gov/ecp/species/1626</a>	Breeds Oct 15 to Aug 31
<b>Black Guillemot <i>Cephus grylle</i></b> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds May 15 to Sep 10
<b>Black Scoter <i>Melanitta nigra</i></b> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds elsewhere
<b>Black Skimmer <i>Rynchops niger</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/5734">https://ecos.fws.gov/ecp/species/5734</a>	Breeds May 20 to Sep 15
<b>Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9389">https://ecos.fws.gov/ecp/species/9389</a>	Breeds May 15 to Oct 10
<b>Black-legged Kittiwake <i>Rissa tridactyla</i></b> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds elsewhere
<b>Blue-winged Warbler <i>Vermivora pinus</i></b> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 1 to Jun 30
<b>Bobolink <i>Dolichonyx oryzivorus</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Jul 31
<b>Brown Pelican <i>Pelecanus occidentalis</i></b> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 15 to Sep 30
<b>Canada Warbler <i>Cardellina canadensis</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Aug 10

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NAME	BREEDING SEASON
<b>Cerulean Warbler <i>Dendroica cerulea</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/2974">https://ecos.fws.gov/ecp/species/2974</a>	Breeds Apr 29 to Jul 20
<b>Common Eider <i>Somateria mollissima</i></b> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jun 1 to Sep 30
<b>Common Loon <i>Gavia immer</i></b> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. <a href="https://ecos.fws.gov/ecp/species/4464">https://ecos.fws.gov/ecp/species/4464</a>	Breeds Apr 15 to Oct 31
<b>Common Murre <i>Uria aalge</i></b> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Apr 15 to Aug 15
<b>Cory's Shearwater <i>Calonectris diomedea</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
<b>Double-crested Cormorant <i>Phalacrocorax auritus</i></b> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. <a href="https://ecos.fws.gov/ecp/species/2478">https://ecos.fws.gov/ecp/species/2478</a>	Breeds Apr 20 to Aug 31
<b>Dovekie <i>Alle alle</i></b> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. <a href="https://ecos.fws.gov/ecp/species/6041">https://ecos.fws.gov/ecp/species/6041</a>	Breeds elsewhere
<b>Eastern Whip-poor-will <i>Antrastanus vociferus</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Aug 20
<b>Golden Eagle <i>Aquila chrysaetos</i></b> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. <a href="https://ecos.fws.gov/ecp/species/1690">https://ecos.fws.gov/ecp/species/1690</a>	Breeds elsewhere
<b>Great Shearwater <i>Puffinus gravis</i></b> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds elsewhere

12/21/2021

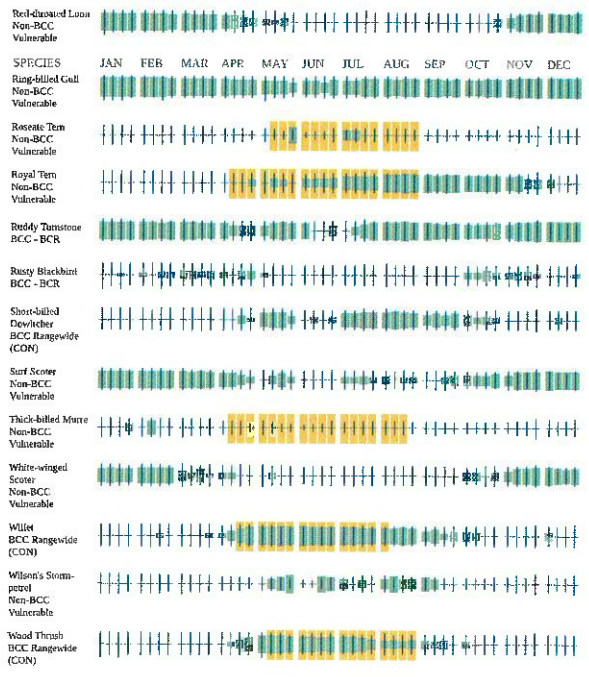
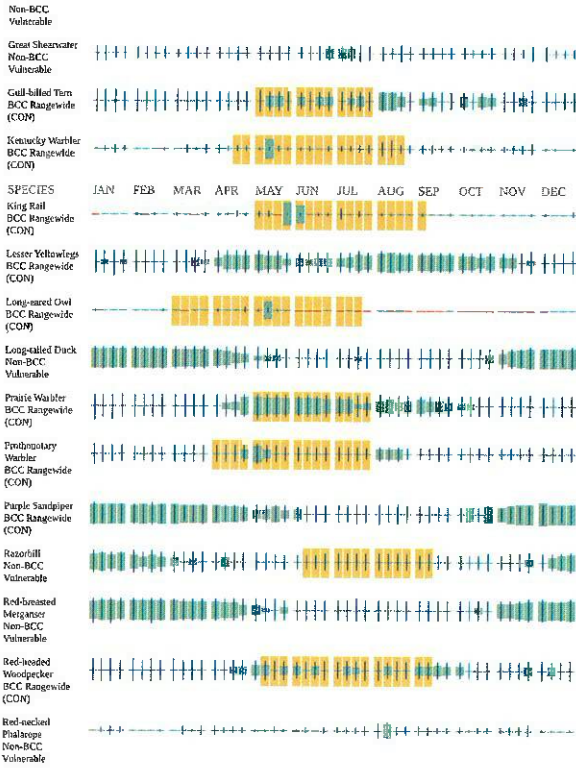
Event Code: 05E2NJ00-2022-E-01190

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NAME	BREEDING SEASON
<b>Gull-billed Tern <i>Gelochelidon nilotica</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9501">https://ecos.fws.gov/ecp/species/9501</a>	Breeds May 1 to Jul 31
<b>Kentucky Warbler <i>Oporornis formosus</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 20
<b>King Rail <i>Rallus elegans</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/8936">https://ecos.fws.gov/ecp/species/8936</a>	Breeds May 1 to Sep 5
<b>Lesser Yellowlegs <i>Tringa flavipes</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9679">https://ecos.fws.gov/ecp/species/9679</a>	Breeds elsewhere
<b>Long-eared Owl <i>Nyctioonyx asio otus</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/2631">https://ecos.fws.gov/ecp/species/2631</a>	Breeds Mar 1 to Jul 15
<b>Long-tailed Duck <i>Clangula hyemalis</i></b> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. <a href="https://ecos.fws.gov/ecp/species/7738">https://ecos.fws.gov/ecp/species/7738</a>	Breeds elsewhere
<b>Prairie Warbler <i>Dendroica discolor</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
<b>Prothonotary Warbler <i>Protonotaria citrea</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31
<b>Purple Sandpiper <i>Calidris maritima</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
<b>Razorbill <i>Alca torda</i></b> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jun 15 to Sep 10
<b>Red-breasted Merganser <i>Mergus serrator</i></b> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds elsewhere







Additional information can be found using the following links:  
 • Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>

- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

**Migratory Birds FAQ**  
**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the migratory birds potentially occurring in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds identified as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

**What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

**How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

**What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern \(BCC\)](#) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

**Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [pilot studies](#) or contact [Caleb Spiesgl](#) or [Pam Loring](#).

**What if I have eagles on my list?**  
 If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

**Proper Interpretation and Use of Your Migratory Bird Report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

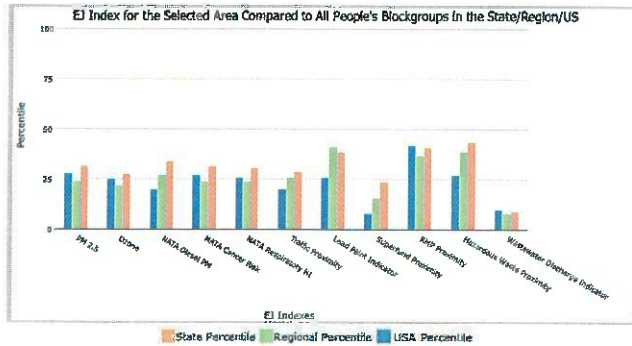
Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE VISIT [HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML](https://www.fws.gov/wetlands/data/mapper.html), OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.



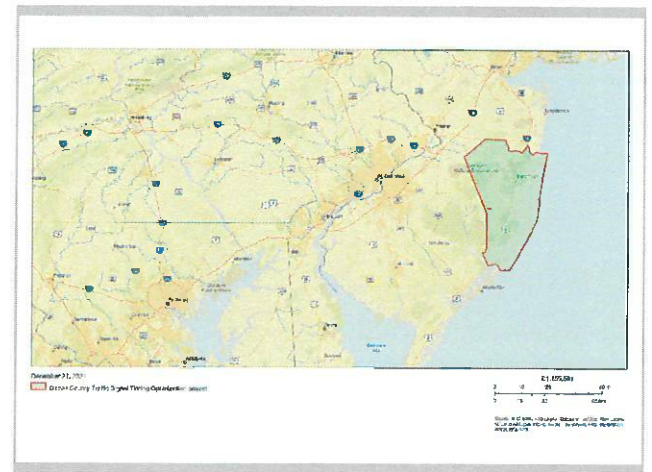
by Traffic Signal Timing Optimization project (The study area contains 12 blockgroup(s) with zero

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
<b>EJ Indexes</b>			
EJ Index for PM2.5	32	24	28
EJ Index for Ozone	28	32	25
EJ Index for NATA Diesel PM	34	27	20
EJ Index for NATA Air Toxics Cancer Risk	32	24	27
EJ Index for NATA Respiratory Hazard Index	31	24	26
EJ Index for Traffic Proximity and Volume	29	26	29
EJ Index for Lead Paint Indicator	39	41	26
EJ Index for Superfund Proximity	24	16	9
EJ Index for RMP Proximity	41	37	42
EJ Index for Hazardous Waste Proximity	44	39	27
EJ Index for Wastewater Discharge Indicator	9	8	10



This report shows the values for environmental and demographic indicators and EISCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationally, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EISCREEN documentation for discussion of these issues before using reports.

by Traffic Signal Timing Optimization project (The study area contains 12 blockgroup(s) with zero



Sites reporting to EPA	
Superfund NPL	5
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	31

by Traffic Signal Timing Optimization project (The study area contains 12 blockgroup(s) with zero

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
<b>Environmental Indicators</b>							
Particulate Matter (PM2.5 in $\mu\text{g}/\text{m}^3$ )	7.29	8.3	6	7.76	31	8.55	16
Ozone (ppb)	42.4	41.6	71	40.8	79	42.9	48
NATA Diesel PM ( $\mu\text{g}/\text{m}^3$ )	0.439	0.695	25	0.938	<50th	0.478	80-90th
NATA Cancer Risk (lifetime risk per million)	26	31	12	32	<50th	32	<50th
NATA Respiratory Hazard Index	0.36	0.43	20	0.47	<50th	0.44	<50th
Traffic Proximity and Volume (daily traffic count/distance to road)	310	850	45	1400	39	750	58
Lead Paint Indicator (% Pre-1960 Housing)	0.17	0.41	26	0.51	16	0.28	49
Superfund Proximity (site count/km distance)	0.21	0.44	51	0.29	65	0.13	86
RMP Proximity (facility count/km distance)	0.26	0.76	52	0.58	51	0.74	45
Hazardous Waste Proximity (facility count/km distance)	1.3	7.2	31	3.8	26	5	55
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0.0069	0.19	71	1.3	79	9.4	77
<b>Demographic Indicators</b>							
Demographic Index	20%	34%	37	36%	35	36%	31
People of Color Population	15%	44%	21	44%	27	39%	30
Low Income Population	25%	24%	64	29%	53	33%	44
Linguistically Isolated Population	2%	7%	40	8%	43	4%	67
Population With Less Than High School Education	8%	10%	54	13%	45	13%	46
Population Under 5 years of age	7%	6%	67	6%	66	6%	63
Population over 64 years of age	22%	16%	84	16%	82	15%	82

\* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: <https://www.epa.gov/national-air-toxics-assessment>.

For additional information, see: [www.epa.gov/environmentaljustice](http://www.epa.gov/environmentaljustice)

EISCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EISCREEN documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EISCREEN outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.



**Ocean County Signal Optimization, Various Municipalities, Ocean County**  
**Group 1**

FIRM NAME \_\_\_\_\_

**FEE SCHEDULE OF DIRECT SALARY HOURLY RATES**

<b>TITLE</b>	<b>NAME (A)</b>	<b>ASCE GRADE</b>	<b>DIRECT LABOR WAGE</b>	<b>APPROVED OVERHEAD RATE (____%)</b>	<b>FIXED FEE (____%)</b>	<b>ESCALATION (OPTIONAL) (____%)</b>
PRINCIPAL						
PROJECT MANAGER						

**FIXED FEES: LIST**

Billing = (Direct Labor + Approved Overhead %) X Fixed Fee % X Escalation

No additional charges will be accepted and blank information will assume zero.

Fixed Fee should not exceed 10%.

One (1) signed and sealed copy of each timing directive and a USB with electronic file in Excel and PDF format will be required for the fixed fee of \$90.00/per project. No other charges will be permitted.

**NOTE TO PROPOSER:**

**This form must be completed, including factor percentages used to calculate the hourly billing rates. Additional titles may be added. Services provided by titles not provided in this schedule cannot be billed.**

State your NJDOT Approved Overhead Percentage = \_\_\_\_\_%

State your Fixed Fee Percentage = \_\_\_\_\_%

State Escalation (Optional) Percentage = \_\_\_\_\_%

(A) An average hourly rate not to exceed may be used. Average should be entered instead of an employee name.

**Ocean County Signal Optimization, Various Municipalities, Ocean County**  
**Group 2**

FIRM NAME \_\_\_\_\_

**FEE SCHEDULE OF DIRECT SALARY HOURLY RATES**

TITLE	NAME (A)	ASCE GRADE	DIRECT LABOR WAGE	APPROVED OVERHEAD RATE (____%)	FIXED FEE (____%)	ESCALATION (OPTIONAL) (____%)
PRINCIPAL						
PROJECT MANAGER						

**FIXED FEES: LIST**

Billing = (Direct Labor + Approved Overhead %) X Fixed Fee % X Escalation

No additional charges will be accepted and blank information will assume zero.

Fixed Fee should not exceed 10%.

One (1) signed and sealed copy of each timing directive and a USB with electronic file in Excel and PDF format will be required for the fixed fee of \$90.00/per project. No other charges will be permitted.

**NOTE TO PROPOSER:**

**This form must be completed, including factor percentages used to calculate the hourly billing rates. Additional titles may be added. Services provided by titles not provided in this schedule cannot be billed.**

State your NJDOT Approved Overhead Percentage = \_\_\_\_\_%

State your Fixed Fee Percentage = \_\_\_\_\_%

State Escalation (Optional) Percentage = \_\_\_\_\_%

**(A) An average hourly rate not to exceed may be used. Average should be entered instead of an employee name.**