

<b>REQUEST FOR PROPOSAL</b> DOTRFP-11 Rev. 9/15 <b>Mary Matuszak</b> <i>Fiscal Admin. Supervisor</i> (860) 594-2342 <i>Telephone Number</i> <a href="mailto:mary.matuszak@ct.gov">mary.matuszak@ct.gov</a> <i>E-Mail Address</i>	<b>STATE OF CONNECTICUT</b> <b>DEPARTMENT OF TRANSPORTATION</b> <b>PURCHASING AND MATERIALS MANAGEMENT</b> 2800 Berlin Turnpike Newington, CT 06011	<b>RFP Number:</b> 16DOT7001
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**NOTICE TO VENDORS:**

Logon to the DAS State Contracting Portal, Click on **Subscribe** (in the right-hand column) and complete the form to automatically receive notification of new Bids & RFP's and Addenda *via e-mail*.

<http://www.das.state.ct.us/cr1.aspx?page=12>

**Request for Proposal (RFP)**  
*SPECIFICATIONS & PROPOSAL DOCUMENTS ATTACHED*

**DESCRIPTION: Overhaul of P40 Locomotives for the Connecticut Department of Transportation (CTDOT)**

**DELIVERY OF PROPOSALS**

If the proposal is sent via **A COMMERCIAL EXPRESS CARRIER**, please address proposal as follows:  
 The Department of Transportation  
 Attn: Mary Matuszak  
 2800 Berlin Turnpike  
 Newington, CT 06111

If the proposal is sent via **U. S. MAIL**, please address proposal as follows:  
 The Department of Transportation  
 Attn: Mary Matuszak  
 P.O. Box 317546  
 Newington, CT 06131-7546

If the proposal is being **HAND CARRIED**, please deliver to:  
 The Department of Transportation  
 2800 Berlin Turnpike  
 Newington, CT  
 Security Desk – Ask for Mary Matuszak at extension 2342  
 (Receipt of hand delivered Proposals, prior to RFP Due Date, can be made between 8:00 a.m. and 3:00 p.m., Monday through Friday excluding State Holidays. In the event that the Proposal is delivered on the RFP Due Date, it must be received prior to 2:00 p.m., Eastern Time

Allow sufficient time if responding by mail. Mailing your response to DOT, Purchasing and Materials Management is preferred.  
 If hand-delivering your response, see above instructions. Vendors cannot enter buildings without a valid photo ID.

*NOTE: Responses cannot be accepted after specified RFP Due Date & Time*

**USE LABEL BELOW ON ALL PACKAGES WHEN RETURNING YOUR RESPONSE**

**SEALED RFP NO.: 16DOT7001**

**RFP DUE DATE/TIME: September 9, 2016 at 2:00 pm, Eastern Time**

Department of Transportation  
 Purchasing and Materials Management – Mary Matuszak  
 2800 Berlin Turnpike  
 Newington, CT. 06011

**MAILROOM: DO NOT OPEN - RFP**

Mary Matuszak  
Fiscal Admin. Supv.  
(860) 594-2342  
Telephone Number

**STATE OF CONNECTICUT**  
**DEPARTMENT OF TRANSPORTATION**  
**OFFICE OF PURCHASING**  
2800 Berlin Turnpike  
Newington, CT 06131-7546

RFP NO. 16DOT7001
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**Read & Complete**  
**Carefully**

RFP NO: 16DOT7001	RFP DUE DATE: 9 September 2016	RFP DUE TIME: 2:00 PM	RFP SURETY: 5%	DATE ISSUED: 6 May 2016
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DESCRIPTION: Overhaul of P40 locomotives for the Connecticut Department of Transportation (CTDOT)	
FOR: Department of Transportation	TERM OF CONTRACT Five (5) Years From Effective Date

**REQUEST FOR PROPOSAL:** Pursuant to the provisions of Section 13b-34 of the Connecticut General Statutes as amended, the Office of Purchasing is soliciting proposals for the Department of Transportation, at the address above for the furnishing of the subject commodities and/or services.

**IMPORTANT:** ALL pages of this form, Sections 1 through 3 must be completed, signed and returned by the Proposer as part of the proposal package. Failure to submit all pages of this form may constitute grounds for rejection of your proposal.

Section 1 of 3 - PROPOSER INFORMATION

COMPLETE PROPOSER LEGAL BUSINESS NAME:  PRINCIPAL PLACE OF BUSINESS:	Taxpayer ID # (TIN): <input type="checkbox"/> SSN <input type="checkbox"/> FEIN  Write/Type SSN/FEIN NUMBER ABOVE
BUSINESS NAME, TRADE NAME, DOING BUSINESS AS (IF DIFFERENT FROM ABOVE)  PRINCIPAL PLACE OF BUSINESS (IF DIFFERENT FROM ABOVE)	
BUSINESS ENTITY: <input type="checkbox"/> LLC <input type="checkbox"/> NON-PROFIT <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> INDIVIDUAL/SOLE PROPRIETORSHIP (ATTACH NAMES AND TITLES OF ALL PARTNERS) <input type="checkbox"/> CORPORATION TYPE OF CORPORATION: - STATE ORGANIZED IN:	
<b>NOTE:</b> IF INDIVIDUAL/SOLE PROPRIETOR, INDIVIDUAL'S NAME (AS OWNER) MUST APPEAR IN THE LEGAL BUSINESS NAME BLOCK ABOVE.	
BUSINESS TYPE: A. SALE OF COMMODITIES B. MEDICAL SERVICES C. ATTORNEY FEES D. RENTAL OF PROPERTY (REAL ESTATE & EQUIPMENT) E. OTHER (DESCRIBE IN DETAIL)	
UNDER THIS TIN, WHAT IS THE PRIMARY TYPE OF BUSINESS YOU PROVIDE TO THE STATE? (ENTER LETTER FROM ABOVE)	
UNDER THIS TIN, WHAT OTHER TYPES OF BUSINESS MIGHT YOU PROVIDE TO THE STATE? (ENTER LETTER FROM ABOVE)	
WRITTEN SIGNATURE OF PERSON AUTHORIZED TO SIGN PROPOSALS ON BEHALF OF THE ABOVE NAMED PROPOSER ← SIGN HERE	DATE EXECUTED
TYPE OR PRINT NAME OF AUTHORIZED PERSON	TITLE OF AUTHORIZED PERSON

Mary Matuszak  
Fiscal Admin. Supv.  
(860) 594-2342  
Telephone Number

**STATE OF CONNECTICUT**  
**DEPARTMENT OF TRANSPORTATION**  
**OFFICE OF PURCHASING**  
2800 Berlin Turnpike  
Newington, CT 06131-7546

RFP NO.  
16DOT7001

**Read & Complete  
Carefully**

Section 1 of 3 - PROPOSER INFORMATION (CONTINUED)

PROPOSER ADDRESS	STREET	CITY	STATE	ZIP CODE
Add Additional Business Address information on back of this form, if needed.				

PROPOSER E-MAIL ADDRESS	PROPOSER WEB SITE
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**REMITTANCE INFORMATION: INDICATE BELOW THE REMITTANCE ADDRESS OF YOUR BUSINESS.**  SAME AS PROPOSER ADDRESS ABOVE.

REMIT ADDRESS	STREET	CITY	STATE	ZIP CODE
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**Notice:** Provision pursuant to Section #31 of CTDOT 50-A, Notice, for all communications as required by Section #31 of CTDOT 50-A of 16DOT7001, provide the Proposer Contact Information below.

PROPOSER CONTACT INFORMATION: NAME (TYPE OR PRINT)

PROPOSER ADDRESS	STREET	CITY	STATE	ZIP CODE
Add Additional Proposer Contact & Address information on back of this form, if needed.				

1ST BUSINESS PHONE:	Ext. #	HOME PHONE:
2ND BUSINESS PHONE:	Ext. #	1 <sup>ST</sup> PAGER:
CELLULAR:		2 <sup>ND</sup> PAGER:
1 <sup>ST</sup> FAX NUMBER:		TOLL FREE PHONE:
2 <sup>ND</sup> FAX NUMBER:		TELEX:

IS YOUR BUSINESS CURRENTLY A DAS CERTIFIED SMALL BUSINESS ENTERPRISE?  YES (ATTACH CERTIFICATE COPY TO BID)  NO

IF YOU ARE A STATE EMPLOYEE, INDICATE YOUR POSITION, AGENCY & AGENCY ADDRESS.

**FOR PURCHASE ORDER DISTRIBUTION: 1) CHECK ONLY ONE BOX BELOW 2) INPUT E-MAIL ADDRESS OR FAX # (IF CHECKED)**

E-MAIL  FAX  USPS MAIL  EDI

**If EDI was selected, give us a person to contact in your company to set up EDI:**

NAME:	
E-MAIL ADDRESS:	
TELEPHONE NUMBER:	

**FOR REQUEST FOR QUOTATION (RFQ) DISTRIBUTION: 1) CHECK ONLY ONE BOX BELOW 2) INPUT E-MAIL ADDRESS OR FAX # (IF CHECKED)**

E-MAIL  FAX  USPS MAIL

**ADD FURTHER BUSINESS ADDRESS, E-MAIL & CONTACT INFORMATION BELOW OR ON BACK OF FORM IF NEEDED**

Mary Matuszak  
Fiscal Admin. Supv.  
(860) 594-2342  
Telephone Number

**STATE OF CONNECTICUT**  
**DEPARTMENT OF TRANSPORTATION**  
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2800 Berlin Turnpike  
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RFP NO.  
16DOT7001

**Read & Complete**  
**Carefully**

Page 3 of 3

Section 2 of 3 - PROPOSER DEBARMENT AND/OR SUSPENSION

Has the Proposer, any company official, or any subcontractor to the Proposer, received any notices of debarment and/or suspension from contracting with the State of Connecticut, the Federal Government or any governmental entity?

YES  NO

The abovesigned Proposer further affirms and declares that neither the Proposer and/or any company official nor any subcontractor to the Proposer and/or any company official has received any notices of debarment and/or suspension from contracting with other states within the United States.

YES  NO

If the abovesigned Proposer, any company official or any subcontractor to the Proposer *has* received notices of debarment and/or suspension from contracting with the State of Connecticut, the Federal Government or any governmental entity, said notices must be attached to this document when submitting this proposal.

Number of notices attached \_\_\_\_\_

Section 3 of 3 -- OTHER INFORMATION

Refer to "Guide to the Code of Ethics for Current or Potential State Contractors" at:  
[http://www.ct.gov/ethics/lib/ethics/2006\\_guide\\_for\\_contractors.pdf](http://www.ct.gov/ethics/lib/ethics/2006_guide_for_contractors.pdf)

# STATE OF CONNECTICUT

## PROPOSER'S STATEMENT OF QUALIFICATIONS

RFP Number:  
16DOT7001

THIS FORM WILL BE USED IN ASSESSING QUALIFICATIONS. ATTACH ADDITIONAL SHEETS IF NECESSARY.

COMPANY NAME: \_\_\_\_\_

&  
ADDRESS: \_\_\_\_\_

NUMBER OF YEARS COMPANY HAS BEEN ENGAGED IN BUSINESS UNDER THIS NAME: \_\_\_\_\_ YEARS

LIST OTHER NAMES YOUR COMPANY DOES BUSINESS AS: \_\_\_\_\_

LIST PREVIOUS COMPANY NAME(S): \_\_\_\_\_

IF APPLICABLE, LIST ANY CONTRACT AWARDS TO YOUR COMPANY BY THE STATE OF CONNECTICUT WITHIN THE LAST THREE (3) YEARS **THAT YOU ACTUALLY PERFORMED SERVICE AGAINST**. INDICATE WHICH STATE AGENCY, AND PROVIDE CONTRACT NAME AND NUMBER, AND THE NAME AND TELEPHONE NUMBER OF THE PURCHASING AGENT ADMINISTERING THE CONTRACT.

<u>CONTRACT NO.</u>	<u>CONTRACT NAME</u>	<u>STATE AGENCY</u>	<u>PURCHASING AGENT</u>	<u>TEL. NO.</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

LIST ANY OTHER CONTRACT AWARDS TO YOUR COMPANY BY THE STATE OF CONNECTICUT WITHIN THE LAST THREE (3) YEARS **THAT YOUR COMPANY DID NOT PERFORM ANY SERVICE AGAINST**. INDICATE WHICH STATE AGENCY, AND PROVIDE CONTRACT NAME AND NUMBER, AND THE NAME AND TELEPHONE NUMBER OF THE PURCHASING AGENT ADMINISTERING THE CONTRACT.

<u>CONTRACT NO.</u>	<u>CONTRACT NAME</u>	<u>STATE AGENCY</u>	<u>PURCHASING AGENT</u>	<u>TEL. NO.</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

LIST AT LEAST THREE (3) COMPLETED PROJECTS SIMILAR IN NATURE TO THIS **REQUEST FOR PROPOSAL** WHICH DEMONSTRATES YOUR COMPANY'S ABILITY TO PERFORM THE REQUIRED SERVICES.

<u>Company Name and Address</u>	<u>Telephone No.:</u>	<u>Dollar Value:</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

# STATE OF CONNECTICUT

## PROPOSER'S STATEMENT OF QUALIFICATIONS

RFP Number:  
16DOT7001

COMPANY NAME: \_\_\_\_\_

**REFERENCES:**

LIST AT LEAST THREE (3) COMPLETED PROJECTS SIMILAR IN NATURE TO THIS SOLICITATION WHICH DEMONSTRATES YOUR COMPANY'S ABILITY TO PERFORM THE REQUIRED SERVICES.

<u>COMPANY NAME AND ADDRESS</u>	<u>CONTACT PERSON NAME AND TELEPHONE NO.:</u>	<u>DOLLAR VALUE</u>
_____	_____	_____
_____	_____	_____

DETAILED CONTRACT/PROJECT DESCRIPTION: \_\_\_\_\_

\_\_\_\_\_  
(Attach additional sheets if necessary)

<u>COMPANY NAME AND ADDRESS</u>	<u>CONTACT PERSON NAME AND TELEPHONE NO.:</u>	<u>DOLLAR VALUE</u>
_____	_____	_____
_____	_____	_____

DETAILED CONTRACT/PROJECT DESCRIPTION: \_\_\_\_\_

\_\_\_\_\_  
(Attach additional sheets if necessary)

<u>COMPANY NAME AND ADDRESS</u>	<u>CONTACT PERSON NAME AND TELEPHONE NO.:</u>	<u>DOLLAR VALUE</u>
_____	_____	_____
_____	_____	_____

DETAILED CONTRACT/PROJECT DESCRIPTION: \_\_\_\_\_

\_\_\_\_\_  
(Attach additional sheets if necessary)

**STATE OF CONNECTICUT**  
**PROPOSER'S STATEMENT OF QUALIFICATIONS**

RFP Number:  
16DOT7001

COMPANY NAME: \_\_\_\_\_

COMPANY VALUE: \_\_\_\_\_ EQUIPMENT ASSETS: \_\_\_\_\_ TOTAL ASSETS: \_\_\_\_\_

LIST OF EQUIPMENT TO BE USED FOR THIS SERVICE, IF APPLICABLE (Attach additional sheets if necessary):  
(i.e., MODEL, YEAR & MANUFACTURER AND/OR AS SPECIFIED IN SOLICITATION DOCUMENTS, IF APPLICABLE):

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LIST ANY RELEVANT CERTIFICATIONS, LICENSES, REGISTRATIONS, ETC. WHICH QUALIFY YOUR COMPANY TO MEET THE  
REQUIREMENTS OF THIS SOLICITATION, IF APPLICABLE.

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**EMPLOYMENT INFORMATION FORM (DOT-45)**

**STATE OF CONNECTICUT COMMISSION ON HUMAN RIGHTS AND OPPORTUNITIES (CHRO) WORKPLACE ANALYSIS AFFIRMATIVE ACTION REPORT EMPLOYMENT INFORMATION**

**RFP NUMBER: 16DOT7001**

REV 1/09

Company Name	Contract Person	Phone Number	Date
Street Address			
City			
State			

Report all permanent full-time or part-time employees, including apprentice and on-the-job trainees. Enter the number on all lines and in all columns.

JOB CATEGORY	A OVERALL TOTALS (Sum of all columns, A-F Male & Female)		B WHITE (NOT OF HISPANIC ORIGIN)		C BLACK (NOT OF HISPANIC ORIGIN)		D HISPANIC		E ASIAN/PACIFIC ISLANDER		F AMERICAN INDIAN OR ALASKAN NATIVE	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Official/Managers												
Professionals												
Technicians												
Sales Workers												
Office/Clerical												
Craft Workers (Skilled)												
Operatives (Semi-skilled)												
Laborers (Unskilled)												
Service Workers												
TOTALS ABOVE												

Do you use minority business as subcontractors or suppliers?  
 Yes  No Explain:

Do you use an Affirmative Action Plan?  
 Yes  No Explain:

Describe your recruitment, hiring, training and promotion anti-discrimination practices.







**Note.** If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

**Definition of a U.S. person.** For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- An estate (other than a foreign estate); or
- A domestic trust (as defined in Regulations section 301.7701-7).

**Special rules for partnerships.** Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States:

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

**Foreign person.** If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

**Nonresident alien who becomes a resident alien.** Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

**Example.** Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

## Backup Withholding

**What is backup withholding?** Persons making certain payments to you must under certain conditions withhold and pay to the IRS 28% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

**Payments you receive will be subject to backup withholding if:**

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),

3. The IRS tells the requester that you furnished an incorrect TIN,

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or

5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code* on page 3 and the separate Instructions for the Requester of Form W-9 for more information.

Also see *Special rules for partnerships* above.

## What is FATCA reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code* on page 3 and the Instructions for the Requester of Form W-9 for more information.

## Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

## Penalties

**Failure to furnish TIN.** If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

**Civil penalty for false information with respect to withholding.** If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

**Criminal penalty for falsifying information.** Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

**Misuse of TINs.** If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

## Specific Instructions

### Line 1

You must enter one of the following on this line; do not leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account, list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

**Note. ITIN applicant:** Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.

c. **Partnership, LLC that is not a single-member LLC, C Corporation, or S Corporation.** Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2. "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

**Line 2**

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

**Line 3**

Check the appropriate box in line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box in line 3.

**Limited Liability Company (LLC).** If the name on line 1 is an LLC treated as a partnership for U.S. federal tax purposes, check the "Limited Liability Company" box and enter "P" in the space provided. If the LLC has filed Form 8832 or 2553 to be taxed as a corporation, check the "Limited Liability Company" box and in the space provided enter "C" for C corporation or "S" for S corporation. If it is a single-member LLC that is a disregarded entity, do not check the "Limited Liability Company" box; instead check the first box in line 3 "Individual/sole proprietor or single-member LLC."

**Line 4, Exemptions**

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space in line 4 any code(s) that may apply to you.

**Exempt payee code.**

- Generally, individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

- 1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)
- 2—The United States or any of its agencies or instrumentalities
- 3—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- 4—A foreign government or any of its political subdivisions, agencies, or instrumentalities
- 5—A corporation
- 6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession
- 7—A futures commission merchant registered with the Commodity Futures Trading Commission
- 8—A real estate investment trust
- 9—An entity registered at all times during the tax year under the Investment Company Act of 1940
- 10—A common trust fund operated by a bank under section 584(a)
- 11—A financial institution
- 12—A middleman known in the investment community as a nominee or custodian
- 13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 <sup>1</sup>	Generally, exempt payees 1 through 5 <sup>2</sup>
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

<sup>1</sup> See Form 1099-MISC, Miscellaneous Income, and its instructions.

<sup>2</sup> However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

**Exemption from FATCA reporting code.** The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

- A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)
- B—The United States or any of its agencies or instrumentalities
- C—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)
- E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)
- F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state
- G—A real estate investment trust
- H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940
  - I—A common trust fund as defined in section 584(a)
  - J—A bank as defined in section 581
  - K—A broker
  - L—A trust exempt from tax under section 664 or described in section 4947(a)(1)
  - M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

**Note.** You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

**Line 5**

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns.

**Line 6**

Enter your city, state, and ZIP code.

**Part I. Taxpayer Identification Number (TIN)**

**Enter your TIN in the appropriate box.** If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited Liability Company (LLC)* on this page), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

**Note.** See the chart on page 4 for further clarification of name and TIN combinations.

**How to get a TIN.** If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at [www.ssa.gov](http://www.ssa.gov). You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at [www.irs.gov/businesses](http://www.irs.gov/businesses) and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting [IRS.gov](http://IRS.gov) or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

**Note.** Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

**Caution:** A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

**Part II. Certification**

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if items 1, 4, or 5 below indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code* earlier.

**Signature requirements.** Complete the certification as indicated in items 1 through 5 below.

1. **Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983.** You must give your correct TIN, but you do not have to sign the certification.
2. **Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983.** You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.
3. **Real estate transactions.** You must sign the certification. You may cross out item 2 of the certification.
4. **Other payments.** You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).
5. **Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions.** You must give your correct TIN, but you do not have to sign the certification.

**What Name and Number To Give the Requester**

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account)	The actual owner of the account or, if combined funds, the first individual on the account <sup>1</sup>
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor <sup>2</sup>
4. a. The usual revocable savings trust (grantor is also trustee) b. So-called trust account that is not a legal or valid trust under state law	The grantor-trustee <sup>1</sup>  The actual owner <sup>1</sup>
5. Sole proprietorship or disregarded entity owned by an individual	The owner <sup>3</sup>
6. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A))	The grantor <sup>4</sup>
For this type of account:	Give name and EIN of:
7. Disregarded entity not owned by an individual	The owner
8. A valid trust, estate, or pension trust	Legal entity <sup>1</sup>
9. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
10. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
11. Partnership or multi-member LLC	The partnership
12. A broker or registered nominee	The broker or nominee
13. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
14. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B))	The trust

<sup>1</sup> List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.  
<sup>2</sup> Circle the minor's name and furnish the minor's SSN.

<sup>3</sup> You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

<sup>4</sup> List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships* on page 2.

\*Note. Grantor also must provide a Form W-9 to trustee of trust.

Note. If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

**Secure Your Tax Records from Identity Theft**

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Publication 4535, Identity Theft Prevention and Victim Assistance.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

**Protect yourself from suspicious emails or phishing schemes.** Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to [phishing@irs.gov](mailto:phishing@irs.gov). You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at: [spam@uce.gov](mailto:spam@uce.gov) or contact them at [www.ftc.gov/idtheft](http://www.ftc.gov/idtheft) or 1-877-IDTHEFT (1-877-438-4338).

Visit [IRS.gov](http://IRS.gov) to learn more about identity theft and how to reduce your risk.

**Privacy Act Notice**

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

# STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION

RFP Number:  
16DOT7001

2800 Berlin Turnpike  
Newington, CT 06111

## Certificate of Compliance with Connecticut General Statute Section 31 – 57b

I hereby certify that all of the statements herein contained below have been examined by me and, to the best of my knowledge and belief, are true and correct.

The \_\_\_\_\_ **HAS / HAS NOT**  
*Company Name* (Cross-out non-applicable)

been cited for three (3) or more willful or serious violations of any Occupational Safety and Health Act (OSHA) or of an standard, order, or regulation promulgated pursuant to such act, during the three-year period preceding the RFP, provided such violations were cited in accordance with the provisions of any State Occupational Safety and Health Act of 1970, and not abated within the time fixed by the citation and such citation has not been set aside following appeal to the appropriate agency of court having jurisdiction or **HAS / HAS NOT** (Cross out non-applicable) received one or more criminal convictions related to the injury or death of any employee in the three-year period preceding the RFP.

The list of violations (if applicable) is attached.

**Signed:** \_\_\_\_\_  
*Name of Firm, Organization or Corporation*

\_\_\_\_\_ **(Corporation Seal)**  
*Written Signature*

\_\_\_\_\_ **(Corporation Seal)**  
*Name (typed)*

**Title:** \_\_\_\_\_  
*Title of Above Person, typed*

**Dated:** \_\_\_\_\_

*State of* \_\_\_\_\_ )  
*County of* \_\_\_\_\_ ) **ss:** \_\_\_\_\_ *A.D., 20* \_\_\_\_\_ )

Sworn to and personally appeared before me for the above, \_\_\_\_\_  
*Name of Firm, Organization, Corporation*

Signer and Sealer of the foregoing instrument of and acknowledged the same to be the free act and deed of \_\_\_\_\_, and his/her free act and deed as  
*Name of Person appearing in front of Notary or Clerk*

\_\_\_\_\_ **(Seal)**  
*Title of Person appearing in front of Notary or Clerk*

My Commission Expires: \_\_\_\_\_  
*Notary Public*

**CONNECTICUT DEPARTMENT OF TRANSPORTATION  
RFP REQUEST FOR APPROVAL, EXCEPTION, OR CLARIFICATION**

**RFP No.:** 16DOT7001

**Project Description:**

Overhaul of GP40 Locomotives for the Connecticut Department of Transportation (CTDOT)

**SPECIFICATION SECTION:** \_\_\_\_\_

**SPECIFICATION PAGE NUMBER:** \_\_\_\_\_

**PROPOSER'S REQUEST:**

**ConnDOT's RESPONSE:**

**A. APPROVED:** \_\_\_\_\_

**B. APPROVED AS MODIFIED:**

**C. DENIED:** \_\_\_\_\_

**D. ADDITIONAL INFORMATION REQUIRED:**

**ConnDOT's COMMENTS (if applicable):**

**SIGNATURE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**ACKNOWLEDGMENT OF ADDENDA**

The following form shall be completed and included in the Proposal.

Failure to acknowledge receipt of all addenda may cause the bid to be considered non-responsive to the solicitation. Acknowledged receipt of each addendum must be clearly established and included with the proposal.

**ACKNOWLEDGMENT OF ADDENDA**

The undersigned acknowledges receipt of the following addenda to the documents:

Addendum No. _____,	Dated _____
Addendum No. _____,	Dated _____
Addendum No. _____,	Dated _____
Addendum No. _____,	Dated _____
Addendum No. _____,	Dated _____
Addendum No. _____,	Dated _____
Addendum No. _____,	Dated _____
Addendum No. _____,	Dated _____

Proposer:

\_\_\_\_\_  
Name

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
City, State Zip

\_\_\_\_\_  
Signature of Authorized Signer

\_\_\_\_\_  
Title

\_\_\_\_\_  
Phone



**EXHIBIT A**

DESCRIPTION OF GOODS AND SERVICES

(ATTACHMENT 1)  
**AGREEMENT**

Between

**THE STATE OF CONNECTICUT**

Acting by its

**DEPARTMENT OF TRANSPORTATION**

**AND**

---

**OVERHAUL OF P40 LOCOMOTIVES**  
**FOR**  
**THE CONNECTICUT DEPARTMENT OF TRANSPORTATION (CTDOT)**

\_\_\_\_\_, 2016  
Agreement Award Date

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This agreement (the "Agreement") is made as of the Effective Date by and between \_\_\_\_\_ (the "Contractor"), with a principal place of business at \_\_\_\_\_, acting by \_\_\_\_\_, its \_\_\_\_\_, and the State of Connecticut, Department of Transportation (the "Department"), with a principal place of business at 2800 Berlin Turnpike, Newington, Connecticut, acting by Richard Andreski, its Bureau Chief, Bureau of Public Transportation, in accordance with § 13b-34 of the Connecticut General Statutes.

**WHEREAS**, the Department is the owner of six (6) locomotives;

**WHEREAS**, such locomotives need to be overhauled; and

**WHEREAS**, the Contractor desires to perform the overhaul services and the Department wishes to engage the Contractor to overhaul such locomotives.

**Now therefore**, in consideration of these presents, and for other good and valuable consideration, the receipt and sufficiency of which the parties acknowledge, the Contractor and the Department agree as follows:

**1. Definitions.** Unless otherwise indicated, the following terms shall have the following corresponding definitions:

(a) **Acts** is defined in section 15(a) of this Agreement.

(b) **Agents** is defined in section 5(a)(5) of this Agreement.

(c) **Agreement** is defined in the opening paragraph.

(d) **Day(s)** means calendar days, unless otherwise designated.

(e) **Claims** means all actions, suits, claims, demands, investigations and proceedings of any kind, open, pending or threatened, whether mature, unmatured, contingent, known or unknown, at law or in equity, in any forum.

(f) **Contractor** is defined in the first paragraph.

(h) **Contractor Parties:** A Contractor's members, directors, officers, shareholders, partners, managers, principal officers, representatives, agents, servants, consultants, employees or any one of them or any other person or entity with whom the Contractor is in privity of oral or written contract and the Contractor intends for such other person or entity to Perform under the Contract in any capacity. Contractor Parties does not include vendors and suppliers of goods, materials or supplies.

(i) **Contractor Property** is defined in section 5 of this Agreement.

(j) **Effective Date** means the date that this Agreement has been executed by the parties and approved by the Connecticut Office of the Attorney General.

(k) **Force Majeure** means events that materially affect the performance of any of the terms, covenants or conditions of this Agreement due to causes beyond the control of the party asserting that such an event has occurred, including, without limitation, strikes; boycotts; labor troubles or disputes; embargoes; shortage of materials; extraordinary weather conditions; riots;

rebellion; sabotages; acts of God, acts of the public enemy; floods, insurrection or war; or any other circumstances for which such party is not responsible or which is not in its power to control. (l) **Items** is defined in section 5(a).

(m) **Perform** and **Performance** mean to perform as set forth in Exhibit A.

(n) **Price Schedule** means the schedule set forth in Exhibit B.

(o) **Records** means all working papers and such other information and materials as may have been accumulated by the Contractor in performing the Agreement, including but not limited to, documents, data, plans, books, computations, drawings, specifications, notes, reports, records, estimates, summaries and correspondence, kept or stored in any form.

(p) **Rejected Items** is defined in section 5 of this Agreement.

(q) **Services** means the performance of labor or work, as specified in in this Agreement.

(s) **Solicitation** means the Request for Proposal (RFP) issued by the Department pursuant to § 13b-34 of the Connecticut General Statutes for the overhaul of locomotives.

(r) **State** means the State of Connecticut, including the Department and any office, department, board, council, commission, institution or other agency of the State.

(s) **Termination** means an end to the Agreement prior to the end of its term (or extension term) whether effected pursuant to a right which the Agreement creates or for a breach.

(t) **Title** is defined in section 5(a)(1) of this Agreement.

2. Term of Contract. The Agreement will be in effect from the Effective Date through five (5) years from the Effective Date. The Department, in its sole discretion, may extend this Agreement for additional terms beyond the original term, prior to Termination or expiration of this Agreement.

3. Description of Services and Additional Terms and Conditions. The Contractor shall perform as set forth in Exhibit A and Exhibit A.1 to this Agreement.

4. Price Schedule, Payment Terms and Billing.

(a) Payment terms under this Agreement are set forth in Exhibit B. Payment shall be made only after the Department receives and accepts Contractor's Performance as required by this Agreement and after it receives a properly completed invoice. Any late payment charges shall be calculated in accordance with § 4a-17 of the Connecticut General Statutes.

(b) Price Adjustment: In the event the Department elects to add additional locomotives to this Agreement, the parties shall develop, subject to final approval by the Department, a new price schedule and delivery schedule for such additional locomotives and will amend this Agreement (including Exhibits A and B) accordingly.

(c) If the Department objects to any invoice or portion thereof, it shall pay the undisputed amount and provide a written statement to the Contractor as to its objection no later than the date upon which payment is due. Within thirty (30) Days thereafter, the Contractor shall provide the Department with additional documentation to demonstrate the accuracy of the invoice or it will correct the invoice. The objection will be considered resolved unless the Department provides

additional written objection to be Contractor within thirty (30) Days of receipt of the Contractor's additional documentation or revised invoice.

5. Rejected Items; Abandonment.

- (a) The Contractor may deliver, cause to be delivered, or, in any other way, bring or cause to be brought, to any State premises or other destination supplies, materials, equipment, parts, or other tangible personal property (collectively "Items"). The State may, by written notice and in accordance with the terms and conditions of the Agreement, direct the Contractor to remove any or all such Items ("the "Rejected Items") and any or all other supplies, materials, equipment or other tangible personal property (collectively, the "Contractor Property") from and out of State premises and any other location which the Department or State manages, leases or controls. The Contractor shall remove the Rejected Items and the Contractor Property in accordance with the terms and conditions of the written notice. Failure to remove the Rejected Items or the Contractor Property in accordance with the terms and conditions of the written notice shall mean, for itself and all Contractor Parties, that:
- (1) they have voluntarily, intentionally, unconditionally, unequivocally and absolutely abandoned and left unclaimed the Rejected Items and Contractor Property and relinquished all ownership, title, licenses, rights, possession and interest of, in and to (collectively, "Title") the Rejected Items and Contractor Property with the specific and express intent of (A) terminating all of their Title to the Rejected Items and Contractor Property, (B) vesting Title to the Rejected Items and Contractor Property in the State of Connecticut and (C) not ever reclaiming Title or any future rights of any type in and to the Rejected Items and Contractor Property;
  - (2) there is no ignorance, inadvertence or unawareness to mitigate against the intent to abandon the Rejected Items or Contractor Property;
  - (3) they vest authority, without any further act required on their part or the Department's part, in the Department and the State to use or dispose of the Rejected Items and Contractor Property, in the Department's sole discretion, as if the Rejected Items and Contractor Property were the Department's or State's own property and in accordance with law, without incurring any liability or obligation to the Contractor or any other party;
  - (4) if the Department or State incur any costs or expenses in connection with disposing of the Rejected Items and Contractor Property, including, but not limited to, advertising, moving or storing the Rejected Items and Contractor Property, auction and other activities, the Department shall invoice the Contractor for all such cost and expenses and the Contractor shall reimburse the State no later than thirty (30) Days after the date of invoice, and the Contractor shall pay such amount to the Department within sixty (60) Days; and
  - (5) they do remise, release and forever discharge the Department, the State, and all State employees, departments, commissions, boards, bureaus, agencies, instrumentalities or political subdivisions and their respective successors, heirs, executors and assigns (collectively "Agents") of and from all Claims which they and their respective successors or assigns, jointly or severally, ever had, now have or will have against the Department, the State, and the State Agents arising from the use or disposition of the Rejected items and Contractor Property.
- (b) The Contractor shall secure from each Contractor Party, as appropriate, such document or instrument as necessary or appropriate as will vest in the Contractor plenary authority to bind the Contractor Parties to the full extent necessary or appropriate to give full effect to all of the terms and conditions of this section. The Contractor shall provide, no later than fifteen (15) days after receiving a request from the Department, such information as the Department may require to evidence, in the Department's sole determination, compliance with this section.

(c) This section 5 shall survive the expiration or Termination of this Agreement.

6. Contract Amendments. No amendment to or modification or other alteration of the Agreement shall be valid or binding upon the parties unless made in writing, signed by both parties and, if applicable, approved by the Connecticut Attorney General.

7. Assignment. The Contractor shall not assign any of its rights or obligations under the Agreement, voluntarily or otherwise, in any manner without the prior written consent of the Department, which consent shall not be unreasonably withheld. The Department may void any purported assignment in violation of this section and declare the Contractor in breach of the Agreement. Any Termination by the Department for a breach is without prejudice to the Department's or the State's rights or possible Claims.

8. Termination.

(a) Notwithstanding any provisions in this Agreement, the Department, through a duly authorized employee, may Terminate the Agreement whenever the Department makes a written determination that such Termination is in the best interests of the State. The Department shall notify the Contractor in writing of Termination pursuant to this section, which notice shall specify the effective date of Termination and the extent to which the Contractor must complete its Performance under the Agreement prior to such date.

(b) Notwithstanding any provisions in this Agreement, the Department, through a duly authorized employee, may, after making a written determination that the Contractor has breached the Agreement, Terminate the Agreement in accordance with the provisions in the Breach section of this Agreement.

(c) The Department shall send the notice of Termination via certified mail, return receipt requested, to the Contractor at the most current address which the Contractor has furnished to the Department for purposes of correspondence, or by hand delivery. Upon receiving the notice from the Department, the Contractor shall immediately discontinue all services affected in accordance with the notice, undertake all commercially reasonable efforts to mitigate any losses or damages, and deliver to the Department all Records. The Records are deemed to be the property of the Department and the Contractor shall deliver them to the Department no later than thirty (30) days after the Termination of the Contract or fifteen (15) days after the Contractor receives a written request from the Department for the Records. The Contractor shall deliver those Records that exist in electronic, magnetic or other intangible form in a non-proprietary format, such as, but not limited to, ASCII or .TXT.

(d) Upon receipt of a written notice of Termination from the Department, the Contractor shall conclude and cease Performance as the Department directs in the notice, and take all actions that are necessary or appropriate, or that the Department may reasonably direct, for the protection, and preservation of the Items and any other property. Except for any work which the Department directs the Contractor to Perform in the notice prior to the effective date of Termination, and except as otherwise provided in the notice, the Contractor shall terminate or conclude all existing subcontracts and purchase orders and shall not enter into any further subcontracts, purchase orders or commitments.

(e) The Department shall, within forty-five (45) Days of the effective date of Termination, reimburse the Contractor for its Performance rendered and accepted by the Department in accordance with Exhibit A, in addition to all actual and reasonable costs incurred after Termination in completing those portions of the Performance which the notice required the Contractor to complete. However,

the Contractor is not entitled to receive and the Department is not obligated to tender to the Contractor any payments for anticipated or lost profits. Upon request by the Department, the Contractor shall assign to the Department, or any replacement contractor which the Department designates, all subcontracts, purchase orders and other commitments, deliver to the Department all Records and other information pertaining to its Performance, and remove from State premises, whether leased or owned, all of Contractor's property, equipment, waste material and rubbish related to its Performance, all as the Department may request.

- (f) For breach or violation of any of the provisions in the section concerning Representations and Warranties, the Department may Terminate the Agreement in accordance with its terms and revoke any consents to assignments given as if the assignments had never been requested or consented to, without liability to the Contractor or Contractor Parties or any third party.
- (g) Upon Termination of the Agreement, all rights and obligations shall be null and void, so that no party shall have any further rights or obligations to any other party, except with respect to the sections which survive Termination. All representations, warranties, agreements and rights of the parties under the Agreement shall survive such Termination to the extent not otherwise limited in the Agreement and without each one of them having to be specifically mentioned in the Agreement.
- (h) Termination of the Agreement pursuant to this section shall not be deemed to be a breach of contract by the Department.

#### 9. Cost Modifications.

- (a) The Department reserves the right to reduce the number of locomotives to be overhauled in accordance with the Agreement. Should the Department make such determination, the Contractor will be entitled to actual costs incurred relative to its Performance.
- (b) The Department reserves the right to increase the number of locomotives to be overhauled in accordance with the Agreement. Should the Department make such determination, the cost modification will be calculated in accordance with section 4(b).

#### 10. Breach.

- (a) If either party breaches the Agreement in any material respect, the non-breaching party shall provide written notice, including a description, of such breach to the breaching party and afford the breaching party an opportunity to cure the breach within forty-five (45) Days from the date that the breaching party receives such notice, or such longer period as may be set forth in such notice. Such right to cure period shall be extended if the non-breaching party is satisfied that the breaching party is making a good faith effort to cure but the nature of the breach is such that it cannot be cured within the right to cure period.
- (b) The notice may include an effective Agreement Termination date if the breach is not cured by the stated date and, unless otherwise modified by the non-breaching party in writing prior to the Termination date, no further action shall be required of any party to effect the Termination as of the stated date. If the notice does not set forth an effective Agreement Termination date, then after the conclusion of the cure period, the non-breaching party may Terminate the Agreement by giving the breaching party no less than twenty four (24) hours' prior written notice.
- (c) The Department may withhold payment in whole or in part pending resolution of the Contractor breach, provided that the Department notifies the Contractor in writing prior to the date that the payment would have been due.



11. Waiver.

- (a) No waiver of any breach of the Agreement shall be interpreted or deemed to be a waiver of any other or subsequent breach. All remedies afforded in the Agreement shall be taken and construed as cumulative, that is, in addition to every other remedy provided in the Agreement or at law or in equity.
- (b) A party's failure to insist on strict performance of any provision of the Agreement shall only be deemed to be a waiver of rights and remedies concerning that specific instance of Performance and shall not be deemed to be a waiver of any subsequent rights, remedies or breach.

12. Purchase Orders.

- (a) The Agreement, itself, is not an authorization for the Contractor to begin Performance in any way. The Contractor may begin Performance only after it has received a duly issued purchase order against the Agreement for Performance.
- (b) The Department shall issue a purchase order against the Agreement directly to the Contractor.
- (c) All purchase orders shall be in written or electronic form, bear the Agreement number (if any) and comply with all other State and Department requirements, particularly the Department's requirements concerning procurement. Purchase orders issued in compliance with such requirements shall be deemed to be duly issued.
- (d) A Contractor making delivery without a duly issued purchase order in accordance with this section does so at the Contractor's own risk.
- (e) The Department may, in its sole discretion, deliver to the Contractor any or all duly issued purchase orders via electronic means only, such that the Department shall not have any additional obligation to deliver to the Contractor a "hard copy" of the purchase order or a copy bearing any hand-written signature or other "original" marking.

13. Indemnification.

- (a) The Contractor shall indemnify, defend and hold harmless the State and its officers, representatives, agents, servants, employees, successors and assigns from and against any and all (1) Claims arising, directly or indirectly, in connection with the Agreement, including the acts of commission or omission (collectively, the "Acts") of the Contractor or Contractor Parties; and (2) liabilities, damages, losses, costs and expenses, including, but not limited to, attorneys' and other professionals' fees, arising, directly or indirectly, in connection with Claims, Acts or the Agreement. The Contractor shall use counsel reasonably acceptable to the State in carrying out its obligations under this section. The Contractor's obligations under this section to indemnify, defend and hold harmless against Claims includes, but is not limited to, Claims concerning confidentiality of any part of or all of the Contractor's proposal or any Records, any intellectual property rights, other proprietary rights of any person or entity, copyrighted or uncopyrighted compositions, secret processes, patented or unpatented inventions, articles or appliances furnished or used in the Performance.
- (b) Notwithstanding subsection (a) of this section, the Contractor shall not be responsible for indemnifying, defending or holding the State harmless from any liability arising due to the

negligence of the State or any other person or entity acting under the direct control or supervision of the State.

- (c) The Contractor shall reimburse the State for any and all damages to the real or personal property of the State caused by the Acts of the Contractor or any Contractor Parties. The State shall give the Contractor reasonable notice of any such damages.
- (d) The Contractor's duties under this section shall remain fully in effect and binding in accordance with the terms and conditions of the Agreement, without being lessened or compromised in any way, even where the Contractor is alleged or is found to have merely contributed in part to the Acts giving rise to the Claims and/or where the State is alleged or is found to have contributed to the Acts giving rise to the Claims.
- (e) The Contractor shall carry and maintain at all times during the term of the Agreement, and during the time that any provisions survive the term of the Agreement, sufficient general liability insurance to satisfy its obligations under this Agreement. The Contractor shall cause the State to be named as an additional insured on the policy and shall provide (1) a certificate of insurance, (2) the declaration page and (3) the additional insured endorsement to the policy to the Department prior to the Effective Date of the Agreement evidencing that the State is an additional insured. The Contractor shall not begin Performance until the delivery of these three (3) documents to the Department. The Department shall be entitled to recover under the insurance policy even if a body of competent jurisdiction determines that the Department or the State is contributorily negligent.
- (f) This section shall survive the Termination of the Agreement and shall not be limited by reason of any insurance coverage.
- (g) The Contractor's obligations under this section shall terminate after the Department has finally accepted all locomotives and all warranty issues have been resolved to the satisfaction of the Department.
- (h) The Contractor shall not settle or otherwise resolve any Claim that places an obligation on the State without the prior written consent of the Department.

14. Forum and Choice of Law. The parties deem the Agreement to have been made in the City of Hartford, State of Connecticut. Both parties agree that it is fair and reasonable for the validity and construction of the Agreement to be, and it shall be, governed by the laws and court decisions of the State of Connecticut, without giving effect to its principles of conflicts of laws. To the extent that any immunities provided by Federal law or the laws of the State of Connecticut do not bar an action against the State, and to the extent that these courts are courts of competent jurisdiction, for the purpose of venue, the complaint shall be made returnable to the Judicial District of Hartford only or shall be brought in the United States District Court for the District of Connecticut only, and shall not be transferred to any other court, provided, however, that nothing herein constitutes a waiver or compromise of the sovereign immunity of the State of Connecticut. The Contractor waives any objection which it may now have or will have to the laying of venue of any Claims in any forum and further irrevocably submits to such jurisdiction in any suit, action or proceeding.

15. Contractor Guaranties. The Contractor shall:

- (a) Perform fully under the Agreement;
- (b) Guarantee each of the overhauled locomotives against defective material or workmanship;

- (c) Furnish adequate protection from damage for all work and to repair damage of any kind, for which its workers are responsible, to the premises, Items, the Contractor's work or that of Contractor Parties;
- (d) With respect to the provision of Services, pay for all applicable permits, licenses and fees and give all required or appropriate notices;
- (e) Adhere to all provisions in this Agreement ensuring the confidentiality of Records that the Contractor has access to and are exempt from disclosure under the State's Freedom of Information Act or other applicable law; and
- (f) Neither disclaim, exclude nor modify the implied warranties of fitness for a particular purpose or of merchantability.

16. Implied Warranties. The Department does not disclaim, exclude or modify the implied warranty of fitness for a particular purpose or the warranty of merchantability.

17. Items, Standards and Appurtenances. Any Items delivered must be standard new Items, latest model, except as otherwise specifically stated in the Agreement. Remanufactured, refurbished or reconditioned equipment may be accepted if agreed to in writing by the Department. Where the Agreement does not specifically list or describe any parts or nominal appurtenances of equipment for the Items, it shall be understood that the Contractor shall deliver such equipment and appurtenances as are usually provided with the manufacturer's stock model.

18. Delivery.

- (a) Delivery of the locomotives shall be made in accordance with Exhibit A.
- (b) While the locomotive is in the care, custody and control of the Contractor, the Contractor is responsible for any property damage to the locomotive. All risk of loss and damage to the overhauled locomotives transfers to the Department upon conditional acceptance unless such loss or damage was caused by a failure of the Contractor.

19. Inspection and Shipping.

- (a) The Contractor understands and agrees that no overhauled locomotive shall be shipped to the Department prior to the Department or its representative inspecting the locomotive and determining that each such locomotive is ready to be shipped. Such determination by the Department shall not be deemed as acceptance of the locomotive or approval of the quality or sufficiency of the Contractor's Performance. Nor shall such determination make the Department responsible in any way for the quality or sufficiency thereof or constitute a waiver of any warranties or guaranties or release the Contractor from any liability.
- (b) Following a determination by the Department that a locomotive is ready to ship, the Contractor shall notify the Department of the date that each overhauled locomotive will be shipped to the Department. Such notification shall be provided in writing at least five (5) Working Days prior to each such shipping.

20. Force Majeure. The Department and the Contractor shall not be excused from their obligation to Perform in accordance with the Agreement except in the case of Force Majeure events and as otherwise provided for in the Agreement. In the case of any such exception, the nonperforming party shall give immediate written notice to the other, explaining the cause and probable duration of any such nonperformance.

21. Advertising. The Contractor shall not refer to the Contractor's work under this Agreement for advertising or promotional purposes, including, but not limited to, posting any material or data on the Internet, without the Department's prior written approval.

22. Americans With Disabilities Act. This section applies to those contractors who are or will be responsible for compliance with the terms of the Americans with Disabilities Act of 1990 (42 U.S.C. § 12101 *et seq.*) ("ADA") during the term of the Agreement. The Contractor represents that it is familiar with the terms of the ADA and understands that failure to comply with the ADA as the same applies to performance under this Agreement, either now or during the term of the Agreement, as it may be amended, will render the Agreement voidable at the option of the Department upon notice to the Contractor. The Contractor warrants that it will hold the State harmless and indemnify the State from any liability which may be imposed upon the State as a result of any failure of the Contractor to be in compliance with the ADA, as the same applies to performance under this Agreement.

23. Representations and Warranties.

(a) The Contractor, represents and warrants to the Department for itself and Contractor Parties, that:

(1) if they are entities, they are duly and validly existing under the laws of their respective states of organization and authorized to conduct business in the State of Connecticut in the manner contemplated by the Agreement. Further, as appropriate, they have taken all necessary action to authorize the execution, delivery and Performance of the Contract and have the power and authority to execute, deliver and Perform their obligations under the Agreement;

(2) they will comply with all applicable State and Federal laws and municipal ordinances in satisfying their obligations to the Department under and pursuant to the Agreement, including, but not limited to (1) Connecticut General Statutes Title 1, Chapter 10, concerning the State's Codes of Ethics and (2) Title 4a concerning State purchasing, including, but not limited to § 22a-194a concerning the use of polystyrene foam;

(3) the execution, delivery and Performance of the Agreement will not violate, be in conflict with, result in a breach of or constitute (with or without due notice and/or lapse of time) a default under any of the following, as applicable: (1) any provision of law; (2) any order of any court or the State; or (3) any indenture, agreement, document or other instrument to which it is a party or by which it may be bound;

(4) they are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any governmental entity;

(5) to the best of their knowledge, there are no Claims involving the Contractor or Contractor Parties that might reasonably be expected to materially adversely affect their businesses, operations, assets, properties, financial stability, business prospects or ability to Perform fully under the Agreement;

(6) they shall disclose, to the best of their knowledge, to the Department in writing any Claims involving the Contractor or Contractor Parties that might reasonably be expected to materially adversely affect their businesses, operations, assets, properties, financial stability, business prospects or ability to Perform fully under the Agreement, no later than ten (10) Working Days after becoming aware or after they should have become aware of any such Claims. For purposes of the Contractor's obligation to disclose any Claims to the Department, the ten (10) Working Days in the section of this Agreement concerning Disclosure of Contractor Parties Litigation shall run consecutively with the ten (10) Working Days provided for in this representation and warranty;

- (7) their participation in the response to the Solicitation and the Solicitation process is not a conflict of interest or a breach of ethics under the provisions of Title 1, Chapter 10 of the Connecticut General Statutes concerning the State's Code of Ethics;
- (8) the Contractor's response to the Solicitation was not made in connection or concert with any other person or entity, including any affiliate (as defined in the Tangible Personal Property section of this Agreement) of the Contractor, submitting a bid for the same Items or Services, and is in all respects fair and without collusion or fraud;
- (9) they are able to Perform under the Agreement using their own resources or the resources of a party who is not a Contractor;
- (10) the Contractor shall obtain in a written contract all of the representations and warranties in this section from any Contractor Parties;
- (11) they have paid all applicable workers' compensation second injury fund assessments concerning all previous work done in Connecticut;
- (12) they have a record of compliance with Occupational Health and Safety Administration regulations without any unabated, willful or serious violations;
- (13) they owe no past due unemployment compensation contributions;
- (14) they are not delinquent in the payment of any taxes owed, or, that they have filed a sales tax security bond, and they have, if and as applicable, filed for motor carrier road tax stickers and have paid all outstanding road taxes;
- (15) all of their vehicles used in the Performance of the Agreement have current registrations and, unless such vehicles are no longer in service, they shall not allow any such registrations to lapse;
- (16) each Contractor Party has vested in the Contractor plenary authority to bind the Contractor Parties to the full extent necessary or appropriate to ensure full compliance with and Performance in accordance with all of the terms and conditions of the Agreement and that all appropriate parties shall also provide, no later than fifteen (15) Working Days after receiving a request from the Department, such information as the Department may require to evidence, in the Department's sole determination, compliance with this section;
- (17) except to the extent modified or abrogated in the Agreement, all Title to Items installed in the overhauled locomotives shall pass to the Department upon complete installation, testing and acceptance of the locomotives and payment by the Department;
- (18) if either party Terminates the Agreement, for any reason, they shall relinquish to the Department all Title to the Items delivered, accepted and paid for (except to the extent any invoiced amount is disputed) by the Department;
- (19) with regard to third party products provided with the Items, they shall transfer all licenses which they are permitted to transfer in accordance with the applicable third party license;
- (20) they shall not copyright, register, distribute or claim any rights in or to the Items after the Effective Date of the Agreement without the Department's prior written consent;

(21) they either own or have the authority to use all Title of and to the Items , and that such Title is not the subject of any encumbrances, liens or claims of ownership by any third party;

(22) to the best of their knowledge, after conducting due diligence, the Items do not infringe or misappropriate any patent, trade secret or other intellectual property right of a third party;

(23) to the best of their knowledge after conducting due diligence, the Department's use of any Items shall not infringe or misappropriate any patent, trade secret or other intellectual property right of a third party;

(24) if they procure any Items , to the extent permitted by the licensor, they shall sub-license such Items and the Department shall be afforded the full benefits of any manufacturer or subcontractor licenses for the use of the Items ; and

(25) they shall assign or otherwise transfer to the Department, or afford the Department the full benefits of any manufacturer's warranty for the Items , to the extent that such warranties are assignable or otherwise transferable to the Department.

(b) The Contractor represents and warrants to the Department that:

(1) the Contractor's directors and officers, and key personnel who will be Performing under this Agreement, and the entity itself have not, within the three (3) years preceding the Agreement, in any of their current or former jobs, been convicted of, or had a civil judgment rendered against them , for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a transaction or contract with any governmental entity. This includes, but is not limited to, violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(2) the Contractor's directors and officers, and key personnel who will be Performing under this Agreement, and the entity itself are not presently indicted for or otherwise criminally or civilly charged by any governmental entity with commission of any of the offenses listed above;

(3) it has not within the three (3) years preceding the Agreement Effective Date had one (1) or more contracts with any governmental entity terminated prior to the expiration date of the contract; and

(4) it has not employed or retained any entity or person, other than a bona fide employee working solely for them, to solicit or secure the Agreement and that they have not paid or agreed to pay any entity or person, other than a bona fide employee working solely for them, any fee, commission, percentage, brokerage fee, gifts, or any other consideration contingent upon or resulting from the award or making of the Agreement or any assignments made in accordance with the terms of the Agreement.

24. Representations and Warranties Concerning Motor Vehicles. If in the course of Performance or in any other way related to the Agreement the Contractor at any time uses or operates in the State "motor vehicles," as that term is defined in § 14-1 of the Connecticut General Statutes the Contractor, represents and warrants for itself and the Contractor Parties, that:

(a) It is the owner of record or lessee of record of each such motor vehicle used in the Performance of the Agreement, and each such motor vehicle is duly registered with the Connecticut Department of Motor Vehicles ("ConnDMV") in accordance with the provisions of Chapter 246 of the Connecticut General Statutes. Each such registration shall be in valid status, and shall not be expired, suspended or revoked by ConnDMV , for any reason or cause. If such motor vehicle is not registered with

ConnDMV, then it shall be duly registered with another state, commonwealth, or federal entity in accordance with such other state's, commonwealth's or federal entity's applicable laws. Each such registration shall be in valid status, and shall not be expired, suspended or revoked for any reason or cause.

- (b) Each such motor vehicle shall be fully insured in accordance with the provisions of §§ 14-12b, 14-112 and 38a-371 of the Connecticut General Statutes, as amended, in the amounts required by the said sections or in such higher amounts as have been specified by ConnDMV as a condition for the award of the Agreement, or in accordance with all substantially similar provisions imposed by the law of the jurisdiction where the motor vehicle is registered.
- (c) Each Contractor Party who uses or operates a motor vehicle at any time in the Performance of the Agreement shall have and maintain a motor vehicle operator's license or commercial driver's license of the appropriate class for the motor vehicle being used or operated. Each such license shall bear the endorsement or endorsements required by the provisions of § 14-36a of the Connecticut General Statutes, as amended, to operate such motor vehicle, or required by substantially similar provisions imposed by the law of another jurisdiction in which the operator is licensed to operate such motor vehicle. The license shall be in valid status, and shall not be expired, suspended or revoked by ConnDMV or such other jurisdiction for any reason or cause.
- (d) Each motor vehicle shall be in full compliance with all of the terms and conditions of all provisions of the Connecticut General Statutes and regulations, or those of the jurisdiction where the motor vehicle is registered, pertaining to the mechanical condition, equipment, marking and operation of motor vehicles of such type, class and weight, including, but not limited to, requirements for motor vehicles having a gross vehicle weight rating of 18,000 pounds or more or motor vehicles otherwise described by the provisions of § 14-163c(a) of the Connecticut General Statutes and all applicable provisions of the Federal Motor Carrier Safety Regulations, as set forth in Title 49, Parts 382 to 399, inclusive, of the Code of Federal Regulations.

25. Disclosure of Contractor Parties Litigation. The Contractor shall require in its contracts with Contractor Parties that all Contractor Parties, as appropriate, disclose to the Contractor, to the best of their knowledge, any Claims involving the Contractor Parties that might reasonably be expected to materially adversely affect their businesses, operations, assets, properties, financial stability, business prospects or ability to Perform fully under the Agreement, no later than ten (10) Working Days after becoming aware or after they should have become aware of any such Claims. Disclosure shall be in writing.

26. Entirety of Contract. The Agreement is the entire agreement between the parties with respect to its subject matter, and supersedes all prior agreements, proposals, offers, counteroffers and understandings of the parties, whether written or oral. The Agreement has been entered into after full investigation, neither party relying upon any statement or representation by the other unless such statement or representation is specifically embodied in the Agreement.

27. Exhibits. All exhibits referred to in and attached to this Agreement are incorporated in this Agreement by such reference and shall be deemed to be a part of it as if they had been fully set forth in it.

28. Executive Orders. Performance undertaken in Connecticut pursuant to the Agreement is subject to the provisions of Executive Order No. Three of Governor Thomas J. Meskill, promulgated June 16, 1971, concerning labor employment practices, Executive Order No. Seventeen of Governor Thomas J. Meskill, promulgated February 15, 1973, concerning the listing of employment openings and Executive Order No. Sixteen of Governor John G. Rowland promulgated August 4, 1999, concerning violence in the workplace, all of which are incorporated into and are made a part of the Contract as if they had been fully set forth in it. The Contract may also be subject to Executive Order No. 14 of Governor M. Jodi Reil,

promulgated April 17, 2006, concerning procurement of cleaning products and services and to Executive Order No. 49 of Governor Dannel P. Malloy, promulgated May 22, 2015, mandating disclosure of certain gifts to public employees and contributions to certain candidates for office. If Executive Order 14 and/or Executive Order 49 are applicable, they are deemed to be incorporated into and are made a part of the Agreement as if they had been fully set forth in it. At the Contractor's request, the Department shall provide a copy of these orders to the Contractor.

29. Non-discrimination.

(a) For purposes of this section, the following terms are defined as follows:

- (1) "Commission" means the Commission on Human Rights and Opportunities;
- (2) "Contract" and "contract" include any extension or modification of the Contract or contract;
- (3) "Contractor" and "contractor" include any successors or assigns of the Contractor or contractor;
- (4) "Gender identity or expression" means a person's gender-related identity, appearance or behavior, whether or not that gender-related identity, appearance or behavior is different from that traditionally associated with the person's physiology or assigned sex at birth, which gender-related identity can be shown by providing evidence including, but not limited to, medical history, care or treatment of the gender-related identity, consistent and uniform assertion of the gender-related identity or any other evidence that the gender-related identity is sincerely held, part of a person's core identity or not being asserted for an improper purpose.
- (5) "good faith" means that degree of diligence which a reasonable person would exercise in the performance of legal duties and obligations;
- (6) "good faith efforts" shall include, but not be limited to, those reasonable initial efforts necessary to comply with statutory or regulatory requirements and additional or substituted efforts when it is determined that such initial efforts will not be sufficient to comply with such requirements;
- (7) "marital status" means being single, married as recognized by the State, widowed, separated or divorced;
- (8) "mental disability" means one or more mental disorders, as defined in the most recent edition of the American Psychiatric Association's "Diagnostic and Statistical Manual of Mental Disorders", or a record of or regarding a person as having one or more such disorders;
- (9) "minority business enterprise" means any small contractor or supplier of materials fifty-one percent (51%) or more of the capital stock, if any, or assets of which is owned by a person or persons: (1) who are active in the daily affairs of the enterprise, (2) who have the power to direct the management and policies of the enterprise, and (3) who are members of a minority, as such term is defined in subsection (a) of § 32-9n Connecticut General Statutes; and



(10) "public works contract" means any agreement between any individual, firm or corporation and the State or any political subdivision of the State other than a municipality for construction, rehabilitation, conversion, extension, demolition or repair of a public building, highway or other changes or improvements in real property, or which is financed in whole or in part by the State, including, but not limited to, matching expenditures, grants, loans, insurance or guarantees.

For purposes of this section, the terms "Contract" and "contract" do not include a contract where each contractor is (1) a political subdivision of the state, including, but not limited to, a municipality, (2) a quasi-public agency, as defined in § 1-120 of the Connecticut General Statutes, (3) any other state, including but not limited to any federally recognized Indian tribal governments, as defined in § 1-267 of the Connecticut General Statutes, (4) the federal government, (5) a foreign government, or (6) an agency of a subdivision, agency, state or government described in the immediately preceding enumerated items (1), (2), (3), (4) or (5).

(b) (1) The Contractor agrees and warrants that in the performance of the Contract such Contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such Contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the State of Connecticut; and the Contractor further agrees to take affirmative action to insure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by the Contractor that such disability prevents performance of the work involved; (2) the Contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, to state that it is an "affirmative action-equal opportunity employer" in accordance with regulations adopted by the Commission; (3) the Contractor agrees to provide each labor union or representative of workers with which the Contractor has a collective bargaining agreement or other contract or understanding and each vendor with which the Contractor has a contract or understanding, a notice to be provided by the Commission, advising the labor union or workers' representative of the Contractor's commitments under this section and to post copies of the notice in conspicuous places available to employees and applicants for employment; (4) the Contractor agrees to comply with each provision of this section and §§ 46a-68e and 46a-68f of the Connecticut General Statutes and with each regulation or relevant order issued by said Commission pursuant to §§ 46a-56, 46a-68e and 46a-68f of the Connecticut General Statutes; and (5) the Contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Contractor as relate to the provisions of this Section and § 46a-56 of the Connecticut General Statutes. If the contract is a public works contract, the Contractor agrees and warrants that he will make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on such public works projects.

(c) Determination of the Contractor's good faith efforts shall include, but shall not be limited to, the following factors: The Contractor's employment and subcontracting policies, patterns and practices; affirmative advertising, recruitment and training; technical assistance activities and such

other reasonable activities or efforts as the Commission may prescribe that are designed to ensure the participation of minority business enterprises in public works projects.

- (d) The Contractor shall develop and maintain adequate documentation, in a manner prescribed by the Commission, of its good faith efforts.
- (e) The Contractor shall include the provisions of subsection (b) of this section in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the State and such provisions shall be binding on a subcontractor, vendor or manufacturer unless exempted by regulations or orders of the Commission. The Contractor shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions including sanctions for noncompliance in accordance with Connecticut General Statutes §46a-56; provided if such Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Commission, the Contractor may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the State and the State may so enter.
- (f) The Contractor agrees to comply with the regulations referred to in this section as they exist on the date of this Contract and as they may be adopted or amended from time to time during the term of this Contract and any amendments thereto.
- (g) (1) The Contractor agrees and warrants that in the performance of the Contract such Contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of sexual orientation, in any manner prohibited by the laws of the United States or the State of Connecticut, and that employees are treated when employed without regard to their sexual orientation; (2) the Contractor agrees to provide each labor union or representative of workers with which such Contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such Contractor has a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor union or workers' representative of the Contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment; (3) the Contractor agrees to comply with each provision of this section and with each regulation or relevant order issued by said Commission pursuant to Connecticut General Statutes § 46a-56; and (4) the Contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Contractor which relate to the provisions of this section and § 46a-56 of the Connecticut General Statutes .
- (h) The Contractor shall include the provisions of the foregoing paragraph in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the State and such provisions shall be binding on a subcontractor, vendor or manufacturer unless exempted by regulations or orders of the Commission. The Contractor shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions including sanctions for noncompliance in accordance with Connecticut General Statutes § 46a-56; provided, if such Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Commission, the Contractor may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the State and the State may so enter.

30. Whistleblowing. This Agreement may be subject to the provisions of § 4-61dd of the Connecticut General Statutes. In accordance with this statute, if an officer, employee or appointing authority of the Contractor takes or threatens to take any personnel action against any employee of the Contractor in retaliation for such employee's disclosure of information to any employee of the contracting state or quasi-public agency or the Auditors of Public Accounts or the Attorney General under the provisions of subsection (a) of such statute, the Contractor shall be liable for a civil penalty of not more than five thousand dollars (\$5000.00) for each offense, up to a maximum of twenty per cent (20%) of the value of this Agreement. Each violation shall be a separate and distinct offense and in the case of a continuing violation, each day's continuance of the violation shall be deemed to be a separate and distinct offense. The State may request that the Attorney General bring a civil action in the Superior Court for the Judicial District of Hartford to seek imposition and recovery of such civil penalty. In accordance with subsection (f) of such statute, each large state contractor, as defined in the statute, shall post a notice of the provisions of the statute relating to large state contractors in a conspicuous place which is readily available for viewing by the employees of the Contractor.

31. Notice. All notices, demands, requests, consents, approvals or other communications required or permitted to be given or which are given with respect to this Agreement (for the purpose of this section collectively called "Notices") shall be deemed to have been effected at such time as the notice is placed in the U.S. mail, first class and postage pre-paid, return receipt requested or placed with a recognized, overnight express delivery service that provides for a return receipt. All such Notices shall be in writing and shall be addressed as follows:

If to the Department:

**State of Connecticut Department of Transportation**

**ADDRESS: 2800 Berlin Turnpike**

**Newington, CT 06131-7546**

**Attention: Richard Andreski, Bureau Chief, Bureau of Public Transportation**

If to the Contractor:

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Attention: \_\_\_\_\_

32. Insurance. Before commencing Performance, the Contractor shall obtain and maintain at its own cost and expense for the duration of the Agreement, the following insurance as described in (a) through (g) below. Contractor shall be responsible for any and all deductibles in the described insurance policies. The Contractor's insurers shall have no right of recovery or subrogation against the State and the described Contractor's insurance shall be primary coverage. Any failure to comply with the claim reporting provisions of the policy shall not affect coverage provided to the State. The State of

Connecticut shall be named as an Additional Insured on the Commercial General Liability, Automobile Liability, Railroad Protective Liability and Umbrella Liability.

- (a) **Commercial General Liability:** The Contractor shall provide Commercial General Liability Insurance in the amount of one million dollars (\$1,000,000) each occurrence including Premises and Operations, Independent Contractors, Products and Completed Operations, Contractual Liability and Broad Form Property Damage coverage. If a general aggregate is used, the general aggregate limit shall apply separately to the project or the general aggregate limit shall be twice the occurrence limit.
- (b) **Automobile Liability:** The Contractor shall provide Automobile Liability Insurance of one million dollars (\$1,000,000) combined single limit per accident for bodily injury. Coverage extends to owned, hired and non-owned automobiles. If the vendor/contractor does not own an automobile, but one is used in the execution of the Agreement, then only hired and non-owned coverage is required. If a vehicle is not used in the execution of the Agreement then automobile coverage is not required.
- (c) **Workers' Compensation and Employers Liability:** The Contractor shall provide statutory coverage in compliance with the Compensation laws of the State. Coverage shall include Employer's Liability with minimum limits of one hundred thousand dollars (\$100,000) each accident, five hundred thousand dollars (\$500,000) Disease – Policy limit, one hundred thousand (\$100,000) each employee.
- (d) **Railroad Protective Liability:** The Contractor shall provide at least two million dollars (\$2,000,000) for each accident or occurrence resulting in damages from: (1) bodily injury to or death of all persons; and/or (2) injury to or destruction of property, and subject to that limit per accident or occurrence, an aggregate coverage of at least six million dollars (\$6,000,000) for all damages during the policy period, and with all entities falling within any of the following listed categories named as insured parties: (i) the owner of the railroad right-of-way; and (ii) the owner of any railcar licensed or permitted to travel within that affected portion of railroad right-of-way; and (iii) the operator of any railcar licensed or permitted to travel within that affected portion of the railroad right-of-way; and (iv) any other party with an insurable interest; and (v) the State, if not falling within any of the above-listed categories.
- (e) **Umbrella Liability:** The Contractor shall provide Umbrella Liability Insurance for and in the name of the State with a total limit of five million dollars (\$5,000,000).
- (f) **Claims Made:** Claims Made insurance coverage is not acceptable with the exception of Professional Liability, when specified.
- (g) **Owner's and Contractor's Protective Liability:**  
The Contractor shall provide Owner's and Contractor's protective Liability Insurance for and in the name of the State with a total limit of one million dollars (\$1,000,000.00) per occurrence for all damages arising out of injury to or death of all persons and out of injury to or destruction of property in any one accident or occurrence and, subject to that limit per occurrence, a total (or aggregate) limit of two million dollars (\$2,000,000) for all damages arising out of bodily injury to or death of all persons in all accidents or occurrences and out of injury to or destruction of property during the policy period.

33. Headings. The headings given to the sections in the Agreement are inserted only for convenience and are in no way to be construed as part of the Contract or as a limitation of the scope of the particular section to which the heading refers.

34. Number and Gender. Whenever the context so requires, the plural or singular shall include each other and the use of any gender shall include all genders.

35. Contractor Changes. The Contractor shall notify the Department in writing no later than ten (10) Days after the effective date of any change in:

- (a) its certificate of incorporation or other organizational document;
- (b) more than a controlling interest in the ownership of the Contractor; or
- (c) the individual(s) in charge of the Performance.

Any such change shall not relieve the Contractor of any responsibility for the accuracy and completeness of the Performance.

36. Further Assurances. The parties shall provide such information, execute and deliver any instruments and documents and take such other actions as may be necessary or reasonably requested by the other party which are not inconsistent with the provisions of this Agreement and which do not involve the vesting of rights or assumption of obligations other than those provided for in the Agreement, in order to give full effect to the Agreement and to carry out the intent of the Agreement.

37. Audit and Inspection of Plants, Places of Business and Records.

- (a) The State and its agents, including, but not limited to, the Connecticut Auditors of Public Accounts, Attorney General and State's Attorney and their respective agents, may, at reasonable hours, inspect and examine all of the parts of the Contractor's and Contractor Parties' plants and places of business which, in any way, are related to, or involved in, the performance of this Agreement.
- (b) The Contractor shall maintain, and shall require each of the Contractor Parties to maintain, accurate and complete Records. The Contractor shall make all of its and the Contractor Parties' Records available at all reasonable hours for audit and inspection by the State and its agents.
- (c) The State shall make all requests for any audit or inspection in writing and shall provide the Contractor with at least twenty-four (24) hours' notice prior to the requested audit and inspection date. If the State suspects fraud or other abuse, or in the event of an emergency, the State is not obligated to provide any prior notice.
- (d) All audits and inspections shall be at the State's expense.
- (e) The Contractor shall keep and preserve or cause to be kept and preserved all of its and Contractor Parties' Records until three (3) years after the latter of (i) final payment under this Agreement, or (ii) the expiration or earlier termination of this Agreement, as the same may be modified for any reason. The State may request an audit or inspection at any time during this period. If any Claim or audit is started before the expiration of this period, the Contractor shall retain or cause to be retained all Records until all Claims or audit findings have been resolved.
- (f) The Contractor shall cooperate fully with the State and its agents in connection with an audit or inspection. Following any audit or inspection, the State may conduct and the Contractor shall cooperate with an exit conference.
- (g) The Contractor shall incorporate this entire section verbatim into any contract or other agreement that it enters into with any Contractor Party.

38. Background Checks.

(a) The State may require that the Contractor and Contractor Parties undergo criminal background checks as provided for in the State of Connecticut Department of Emergency Services and Public Protection Administration and Operations Manual or such other State document as governs procedures for background checks. The Contractor and Contractor Parties shall cooperate fully as necessary or reasonably requested with the State and its agents in connection with such background checks.

(b) Upon demonstration by the Contractor, to the State's satisfaction, that applicable collective bargaining agreements are inconsistent with subsection (a) of this section, the Contractor shall be excused from the requirement set forth in subsection (a).

(c) If it becomes known to the Contractor that any employee, subcontractor or subcontractor employee has been convicted of or charged with, or had a civil judgment rendered against him or her for the commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a transaction or contract with any governmental entity, including, but not limited to, violation of the federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statement, or receiving stolen property, the Contractor will not allow such employee or subcontractor, or subcontractor employee to perform Services under the Agreement.

39. Continued Performance. The Contractor and Contractor Parties shall continue to Perform their obligations under the Contract while any dispute concerning the Contract is being resolved.

40. Working and Labor Synergies at Work Sites. The Contractor shall be responsible for maintaining a tranquil working relationship between the Contractor work force, the Contractor Parties and their work force, State employees, and any other contractors present at the work site. The Contractor shall quickly resolve all labor disputes which result from the Contractor's or Contractor Parties' presence at the work site, or other action under their control. Labor disputes at any work site shall not be deemed to be sufficient cause to allow the Contractor to make any claim for additional compensation for cost, expenses or any other loss or damage, nor shall those disputes be deemed to be sufficient reason to relieve the Contractor from any of its obligations under the Agreement.

41. Contractor Responsibility.

(a) The Contractor shall be responsible for the entire Performance under the Agreement regardless of whether the Contractor itself performs. The Contractor shall be the sole point of contact concerning the management of the Agreement, including Performance and payment issues. The Contractor is solely and completely responsible for requiring the Contractor Parties to adhere to all applicable provisions of the Agreement.

(b) The Contractor shall exercise all reasonable care to avoid damage to the State's property or to property being made ready for the State's use, and to all property adjacent to any work site. The Contractor shall promptly report any damage, regardless of cause, to the State.

42. Severability. If any term or provision of the Contract or its application to any person, entity or circumstance shall, to any extent, be held to be invalid or unenforceable, the remainder of the Contract or the application of such term or provision shall not be affected as to persons, entities or circumstances other than those as to whom or to which it is held to be invalid or unenforceable. Each remaining term and provision of the Contract shall be valid and enforced to the fullest extent possible by law.

#### 43. Confidential Information.

(a) The Department will afford due regard to the Contractor's request for the protection of proprietary or confidential information which the Department receives. However, all materials associated with the Solicitation and the Agreement are subject to the terms of the Connecticut Freedom of Information Act ("FOIA") and all corresponding rules, regulations and interpretations. In making such a request, the Contractor may not merely state generally that the materials are proprietary or confidential in nature and not, therefore, subject to release to third parties. Those particular sentences, paragraphs, pages or sections that the Contractor believes are exempt from disclosure under the FOIA must be specifically identified as such. Convincing explanation and rationale sufficient to justify each exemption consistent with FOIA must accompany the request. The rationale and explanation must be stated in terms of the prospective harm to the competitive position of the Contractor that would result if the identified material were to be released and the reasons why the materials are legally exempt from release pursuant to FOIA. To the extent that any other provision or part of the Agreement, especially including the Solicitation, the Records and the specifications, conflicts or is in any way inconsistent with this section, this section controls and shall apply and the conflicting provision or part shall not be given effect. If the Contractor indicates that certain documentation is submitted in confidence, by specifically and clearly marking said documentation as CONFIDENTIAL," the Department will endeavor to keep said information confidential to the extent permitted by law. The Department, however, has no obligation to initiate, prosecute or defend any legal proceeding or to seek a protective order or other similar relief to prevent disclosure of any information that is sought pursuant to a FOIA request. The Contractor shall have the burden of establishing the availability of any FOIA exemption in any proceeding where it is an issue. In no event shall the Department or the State have any liability for the disclosure of any documents or information in its possession which the Department believes are required to be disclosed pursuant to the FOIA or other requirements of law.

(b) The Department shall notify the Contractor of any such FOIA request and the Contractor shall timely advise the Department as to whether it will seek a protective order or take such other actions as the Contractor may deem advisable to protect from disclosure the information it has designated, per subsection (a) of this section, as confidential or proprietary, and, if the Contractor is to seek a protective order or take such other action, the Contractor shall promptly do so.

(c) The Department shall be under no obligation to notify the Contractor of any FOIA request unless the request covers the particular sentences, paragraphs, pages or sections that the Contractor has designated as confidential or proprietary in accordance with subsection (a) of this section and for which explanation and rationale required pursuant to subsection (a) of this section has been provided.

(d) To the extent that the Contractor is subject to the federal Freedom of Information Act, 5 U.S.C. § 552 and related implementing regulations, 49 CFR Part 701 (collectively, "U.S. FOIA"), nothing herein shall require or be construed to require the Contractor to contravene U.S. FOIA's provisions and the Contractor's obligations pursuant thereto.

44. References to Statutes, Public Acts, Regulations, Codes and Executive Orders. All references in this Agreement to any statute, public act, regulation, code or executive order shall mean such statute, public act, regulation, code or executive order, respectively, as it has been amended, replaced or superseded at any time. Notwithstanding any language in this Agreement that relates to such statute, public act, regulation, code or executive order, and notwithstanding a lack of a formal amendment to this Agreement, the Agreement shall always be read and interpreted as if it contained the most current and applicable wording and requirements of such statute, public act, regulation, code or executive order as if their most current language had been used in and requirements incorporated into this Agreement at the time of its execution.

45. Disclosure of Records. This Agreement may be subject to the provisions of § 1-218 of the Connecticut General Statutes. In accordance with this statute, each contract in excess of two million five hundred thousand dollars (\$2,500,000.00) between a public agency and a person for the

performance of a governmental function shall (a) provide that the public agency is entitled to receive a copy of records and files related to the performance of the governmental function, and (b) indicate that such records and files are subject to FOIA and may be disclosed by the public agency pursuant to FOIA. No request to inspect or copy such records or files shall be valid unless the request is made to the public agency in accordance with FOIA. Any complaint by a person who is denied the right to inspect or copy such records or files shall be brought to the Freedom of Information Commission in accordance with the provisions of §§ 1-205 and 1-206 of the Connecticut General Statutes.

46. Summary of State Ethics Laws. Pursuant to the requirements of § 1-101qq of the Connecticut General Statutes, the summary of State ethics laws developed by the State Ethics Commission pursuant to § 1-81b of the Connecticut General Statutes is incorporated by reference into and made a part of the Agreement as if the summary had been fully set forth in the Agreement.

47. Sovereign Immunity. The parties acknowledge and agree that nothing in the Solicitation or the Agreement shall be construed as a modification, compromise or waiver by the State of any rights or defenses of any immunities provided by Federal law or the laws of the State of Connecticut to the State or any of its officers and employees, which they may have had, now have or will have with respect to all matters arising out of the Agreement. To the extent that this section conflicts with any other section, this section shall govern.

48. Time of the Essence. Time is of the essence with respect to all provisions of this Agreement that specify a time for performance; provided, however, that this provision shall not be construed to limit or deprive a party of the benefits of any, cure or use period allowed in this Agreement.

49. Certification as Small Contractor or Minority Business Enterprise. The Contractor shall be in breach of this Agreement if the Contractor is certified as a "small contractor" or a "minority business enterprise" under § 4a-60g of the Connecticut General Statutes and that certification lapses during the term of this Agreement.

50. Campaign Contribution Restriction. For all State contracts as defined in § 9-612(g)(1) of the Connecticut General Statutes having a value in a calendar year of fifty thousand dollars (\$50,000) or more or a combination or series of such agreements or contracts having a value of one-hundred thousand dollars (\$100,000) or more, the authorized signatory to this Agreement expressly acknowledges receipt of the State Elections Enforcement Commission's notice advising state contractors of state campaign contribution and solicitation prohibitions, and will inform its principals of the contents of the notice, as set forth in "Notice to Executive Branch State Contractors and Prospective State Contractors of Campaign Contribution and Solicitation Limitations," attached as Exhibit C.

51. Health Insurance Portability and Accountability Act.

- (a) If the Contactor is a Business Associate under the requirements of the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), the Contractor must comply with all terms and conditions of this section of the Agreement. If the Contractor is not a Business Associate under HIPAA, this section of the Agreement does not apply to the Contractor for this Agreement.
- (b) The Contractor is required to safeguard the use, publication and disclosure of information on all applicants for, and all clients who receive, services under the Contract in accordance with all applicable federal and state law regarding confidentiality, which includes but is not limited to HIPAA, more specifically with the Privacy and Security Rules at 45 C.F.R. Part 160 and Part 164, subparts A, C, and E; and
- (c) The Department is a "covered entity" as that term is defined in 45 C.F.R. § 160.103; and



- (d) The Contractor, on behalf of the Department, performs functions that involve the use or disclosure of "individually identifiable health information," as that term is defined in 45 C.F.R. § 160.103; and
- (e) The Contractor is a "business associate" of the Department, as that term is defined in 45 C.F.R. § 160.103; and
- (f) The Contractor and the Department agree to the following in order to secure compliance with the HIPAA, the requirements of Subtitle D of the Health Information Technology for Economic and Clinical Health Act (the HITECH Act), (Pub. L. 111-5, sections 13400 to 13423), and more specifically with the Privacy and Security Rules at 45 C.F.R. Part 160 and Part 164, subparts A, C, and E.
- (g) Definitions. For the purposes of this section of the Agreement:

(1) "Breach" shall have the same meaning as the term is defined in section 13400 of the HITECH Act (42 U.S.C. §17921(1)).

(2) "Business Associate" shall mean the Contractor or Contractor Parties.

(3) "Covered Entity" shall mean the Department.

(4) "Designated Record Set" shall have the same meaning as the term "designated record set" in 45 C.F.R. § 164.501.

(5) "Electronic Health Record" shall have the same meaning as the term is defined in section 13400 of the HITECH Act (42 U.S.C. §17921(5)).

(6) "Individual" shall have the same meaning as the term "individual" in 45 C.F.R. § 160.103 and shall include a person who qualifies as a personal representative as defined in 45 C.F.R. § 164.502(g).

(7) "Privacy Rule" shall mean the Standards for Privacy of Individually Identifiable Health Information at 45 C.F.R. part 160 and part 164, subparts A and E.

(8) "Protected Health Information" or "PHI" shall have the same meaning as the term "protected health information" in 45 C.F.R. § 160.103, limited to information created or received by the Business Associate from or on behalf of the Covered Entity.

(9) "Required by Law" shall have the same meaning as the term "required by law" in 45 C.F.R. § 164.103.

(10) "Secretary" shall mean the Secretary of the Department of Health and Human Services or his designee.

(11) "More stringent" shall have the same meaning as the term "more stringent" in 45 C.F.R. § 160.202.

(12) "This Section of the Contract" refers to the HIPAA Provisions stated herein, in their entirety.

(13) "Security Incident" shall have the same meaning as the term "security incident" in 45 C.F.R. § 164.304.

(14) "Security Rule" shall mean the Security Standards for the Protection of Electronic Protected Health Information at 45 C.F.R. part 160 and part 164, subpart A and C.

(15) "Unsecured protected health information" shall have the same meaning as the term as defined in § 13402(h)(1)(A) of HITECH. Act. (42 U.S.C. §17932(h)(1)(A)).

(h) Obligations and Activities of Business Associates.

- (1) Business Associate agrees not to use or disclose PHI other than as permitted or required by this Section of the Contract or as Required by Law.
- (2) Business Associate agrees to use appropriate safeguards to prevent use or disclosure of PHI other than as provided for in this Section of the Contract.
- (3) Business Associate agrees to use administrative, physical and technical safeguards that reasonably and appropriately protect the confidentiality, integrity, and availability of electronic protected health information that it creates, receives, maintains, or transmits on behalf of the Covered Entity.
- (4) Business Associate agrees to mitigate, to the extent practicable, any harmful effect that is known to the Business Associate of a use or disclosure of PHI by Business Associate in violation of this Section of the Contract.
- (5) Business Associate agrees to report to Covered Entity any use or disclosure of PHI not provided for by this Section of the Contract or any security incident of which it becomes aware.
- (6) Business Associate agrees to insure that any agent, including a subcontractor, to whom it provides PHI received from, or created or received by Business Associate, on behalf of the Covered Entity, agrees to the same restrictions and conditions that apply through this Section of the Contract to Business Associate with respect to such information.
- (7) Business Associate agrees to provide access, at the request of the Covered Entity, and in the time and manner agreed to by the parties, to PHI in a Designated Record Set, to Covered Entity or, as directed by Covered Entity, to an Individual in order to meet the requirements under 45 C.F.R. § 164.524.
- (8) Business Associate agrees to make any amendments to PHI in a Designated Record Set that the Covered Entity directs or agrees to pursuant to 45 C.F.R. § 164.526 at the request of the Covered Entity, and in the time and manner agreed to by the parties.
- (9) Business Associate agrees to make internal practices, books, and records, including policies and procedures and PHI, relating to the use and disclosure of PHI received from, or created or received by, Business Associate on behalf of Covered Entity, available to Covered Entity or to the Secretary in a time and manner agreed to by the parties or designated by the Secretary, for purposes of the Secretary determining Covered Entity's compliance with the Privacy Rule.
- (10) Business Associate agrees to document such disclosures of PHI and information related to such disclosures as would be required for Covered Entity to respond to a request by an Individual for an accounting of disclosures of PHI in accordance with 45 C.F.R. § 164.528 and section 13405 of the HITECH Act (42 U.S.C. § 17935) and any regulations promulgated thereunder.
- (11) Business Associate agrees to provide to Covered Entity, in a time and manner agreed to by the parties, information collected in accordance with clause h. (10) of this Section of the Contract, to permit Covered Entity to respond to a request by an Individual for an accounting of disclosures of PHI in accordance with 45 C.F.R. § 164.528 and section 13405 of the HITECH

Act (42 U.S.C. § 17935) and any regulations promulgated thereunder. Business Associate agrees that at the Covered Entity's direction to provide an accounting of disclosures of PHI directly to an individual in accordance with 45 C.F.R. § 164.528 and section 13405 of the HITECH Act (42 U.S.C. § 17935) and any regulations promulgated thereunder.

(12) Business Associate agrees to comply with any state or federal law that is more stringent than the Privacy Rule.

(13) Business Associate agrees to comply with the requirements of the HITECH Act relating to privacy and security that are applicable to the Covered Entity and with the requirements of 45 C.F.R. sections 164.504(e), 164.308, 164.310, 164.312, and 164.316.

(14) In the event that an individual requests that the Business Associate (a) restrict disclosures of PHI; (b) provide an accounting of disclosures of the individual's PHI; or (c) provide a copy of the individual's PHI in an electronic health record, the Business Associate agrees to notify the covered entity, in writing, within two business days of the request.

(15) Business Associate agrees that it shall not directly or indirectly receive any remuneration in exchange for PHI of an individual without (1) the written approval of the covered entity, unless receipt of remuneration in exchange for PHI is expressly authorized by this Contract and (2) the valid authorization of the individual, except for the purposes provided under section 13405(d)(2) of the HITECH Act, (42 U.S.C. § 17935(d)(2)) and in any accompanying regulations

(16) Obligations in the Event of a Breach

(A) The Business Associate agrees that, following the discovery of a breach of unsecured protected health information, it shall notify the Covered Entity of such breach in accordance with the requirements of section 13402 of HITECH (42 U.S.C. § 17932(b) and the provisions of this Section of the Contract.

(B) Such notification shall be provided by the Business Associate to the Covered Entity without unreasonable delay, and in no case later than 30 days after the breach is discovered by the Business Associate, except as otherwise instructed in writing by a law enforcement official pursuant to section 13402 (g) of HITECH (42 U.S.C. § 17932(g)). A breach is considered discovered as of the first day on which it is, or reasonably should have been, known to the Business Associate. The notification shall include the identification and last known address, phone number and email address of each individual (or the next of kin of the individual if the individual is deceased) whose unsecured protected health information has been, or is reasonably believed by the Business Associate to have been, accessed, acquired, or disclosed during such breach.

(C) The Business Associate agrees to include in the notification to the Covered Entity at least the following information:

1. A brief description of what happened, including the date of the breach and the date of the discovery of the breach, if known.
2. A description of the types of unsecured protected health information that were involved in the breach (such as full name, Social Security number, date of birth, home address, account number, or disability code).
3. The steps the Business Associate recommends that individuals take to protect themselves from potential harm resulting from the breach.

4. A detailed description of what the Business Associate is doing to investigate the breach, to mitigate losses, and to protect against any further breaches.
  5. Whether a law enforcement official has advised either verbally or in writing the Business Associate that he or she has determined that notification or notice to individuals or the posting required under section 13402 of the HITECH Act would impede a criminal investigation or cause damage to national security and contact information for said official.
- (D) Business Associate agrees to provide appropriate staffing and have established procedures to ensure that individuals informed by the Covered Entity of a breach by the Business Associate have the opportunity to ask questions and contact the Business Associate for additional information regarding the breach. Such procedures shall include a toll-free telephone number, an e-mail address, a posting on its Web site and a postal address. Business Associate agrees to include in the notification of a breach by the Business Associate to the Covered Entity, a written description of the procedures that have been established to meet these requirements. Costs of such contact procedures will be borne by the Contractor or Contractor Parties.
- (E) Business Associate agrees that, in the event of a breach, it has the burden to demonstrate that it has complied with all notifications requirements set forth above, including evidence demonstrating the necessity of a delay in notification to the Covered Entity.

(i) Permitted Uses and Disclosure by Business Associate.

(1) General Use and Disclosure Provisions Except as otherwise limited in this Section of the Contract, Business Associate may use or disclose PHI to perform functions, activities, or services for, or on behalf of, Covered Entity as specified in this Contract, provided that such use or disclosure would not violate the Privacy Rule if done by Covered Entity or the minimum necessary policies and procedures of the Covered Entity.

(2) Specific Use and Disclosure Provisions.

- (A) Except as otherwise limited in this Section of the Contract, Business Associate may use PHI for the proper management and administration of Business Associate or to carry out the legal responsibilities of Business Associate.
- (B) Except as otherwise limited in this Section of the Contract, Business Associate may disclose PHI for the proper management and administration of Business Associate, provided that disclosures are Required by Law, or Business Associate obtains reasonable assurances from the person to whom the information is disclosed that it will remain confidential and used or further disclosed only as Required by Law or for the purpose for which it was disclosed to the person, and the person notifies Business Associate of any instances of which it is aware in which the confidentiality of the information has been breached.
- (C) Except as otherwise limited in this Section of the Contract, Business Associate may use PHI to provide Data Aggregation services to Covered Entity as permitted by 45 C.F.R. § 164.504(e)(2)(i)(B).

(j) Obligations of Covered Entity.

- (1) Covered Entity shall notify Business Associate of any limitations in its notice of privacy practices of Covered Entity, in accordance with 45 C.F.R. § 164.520, or to the extent that such limitation may affect Business Associate's use or disclosure of PHI.
- (2) Covered Entity shall notify Business Associate of any changes in, or revocation of, permission by Individual to use or disclose PHI, to the extent that such changes may affect Business Associate's use or disclosure of PHI.
- (3) Covered Entity shall notify Business Associate of any restriction to the use or disclosure of PHI that Covered Entity has agreed to in accordance with 45 C.F.R. § 164.522, to the extent that such restriction may affect Business Associate's use or disclosure of PHI.

(k) Permissible Requests by Covered Entity. Covered Entity shall not request Business Associate to use or disclose PHI in any manner that would not be permissible under the Privacy Rule if done by the Covered Entity, except that Business Associate may use and disclose PHI for data aggregation, and management and administrative activities of Business Associate, as permitted under this Section of the Contract.

(l) Term and Termination.

- (1) Term. The Term of this Section of the Contract shall be effective as of the date the Contract is effective and shall terminate when the information collected in accordance with clause h. (10) of this Section of the Contract is provided to the Covered Entity and all of the PHI provided by Covered Entity to Business Associate, or created or received by Business Associate on behalf of Covered Entity, is destroyed or returned to Covered Entity, or, if it is infeasible to return or destroy PHI, protections are extended to such information, in accordance with the termination provisions in this section.
- (2) Termination for Cause Upon Covered Entity's knowledge of a material breach by Business Associate, Covered Entity shall either:
  - (A) Provide an opportunity for Business Associate to cure the breach or end the violation and terminate the Contract if Business Associate does not cure the breach or end the violation within the time specified by the Covered Entity; or
  - (B) Immediately terminate the Contract if Business Associate has breached a material term of this Section of the Contract and cure is not possible; or
  - (C) If neither termination nor cure is feasible, Covered Entity shall report the violation to the Secretary.
- (3) Effect of Termination.
  - (A) Except as provided in (l)(2) above, upon termination of this Contract, for any reason, Business Associate shall return or destroy all PHI received from Covered Entity, or created or received by Business Associate on behalf of Covered Entity. Business Associate shall also provide the information collected in accordance with clause h. (10) of this Section of the Contract to the Covered Entity within ten business days of the notice of termination. This provision shall apply to PHI that is in the possession of subcontractors or agents of Business Associate. Business Associate shall retain no copies of the PHI.
  - (B) In the event that Business Associate determines that returning or destroying the PHI is infeasible, Business Associate shall provide to Covered Entity notification of the

conditions that make return or destruction infeasible. Upon documentation by Business Associate that return or destruction of PHI is infeasible, Business Associate shall extend the protections of this Section of the Contract to such PHI and limit further uses and disclosures of PHI to those purposes that make return or destruction infeasible, for as long as Business Associate maintains such PHI. Infeasibility of the return or destruction of PHI includes, but is not limited to, requirements under state or federal law that the Business Associate maintains or preserves the PHI or copies thereof.

(m) Miscellaneous Provisions.

- (1)Regulatory References. A reference in this Section of the Agreement to a section in the Privacy Rule means the section as in effect or as amended.
- (2)Amendment. The Parties agree to take such action as is necessary to amend this Section of the Agreement from time to time as is necessary for Covered Entity to comply with requirements of the Privacy Rule and the Health Insurance Portability and Accountability Act of 1996, Pub. L. No. 104-191.
- (3)Survival. The respective rights and obligations of Business Associate shall survive the termination of this Agreement.
- (4)Effect on Agreement. Except as specifically required to implement the purposes of this Section of the Agreement, all other terms of the Agreement shall remain in force and effect.
- (5)Construction. This Section of the Agreement shall be construed as broadly as necessary to implement and comply with the Privacy Standard. Any ambiguity in this Section of the Agreement shall be resolved in favor of a meaning that complies, and is consistent with, the Privacy Standard.
- (6)Disclaimer. Covered Entity makes no warranty or representation that compliance with this Section of the Agreement will be adequate or satisfactory for Business Associate's own purposes. Covered Entity shall not be liable to Business Associate for any claim, civil or criminal penalty, loss or damage related to or arising from the unauthorized use or disclosure of PHI by Business Associate or any of its officers, directors, employees, contractors or agents, or any third party to whom Business Associate has disclosed PHI contrary to the provisions of this Agreement or applicable law. Business Associate is solely responsible for all decisions made, and actions taken, by Business Associate regarding the safeguarding, use and disclosure of PHI within its possession, custody or control.
- (7)Indemnification. The Business Associate shall indemnify and hold the Covered Entity harmless from and against any and all claims, liabilities, judgments, fines, assessments, penalties, awards and any statutory damages that may be imposed or assessed pursuant to HIPAA, as amended or the HITECH Act, including, without limitation, attorney's fees, expert witness fees, costs of investigation, litigation or dispute resolution, and costs awarded thereunder, relating to or arising out of any violation by the Business Associate and its agents, including subcontractors, of any obligation of Business Associate and its agents, including subcontractors, under this Section of the Contract, under HIPAA, the HITECH Act, the Privacy Rule and the Security Rule.

52. Audit Requirements for Recipients of State Financial Assistance. For purposes of this section, the word "contractor" shall be deemed to mean "nonstate entity," as that term is defined in § 4-230 of the Connecticut General Statutes. The contractor shall provide for an annual financial audit

acceptable to the Department for any expenditure of state-awarded funds made by the contractor. Such audit shall include management letters and audit recommendations. The State Auditors of Public Accounts shall have access to all records and accounts for the fiscal year(s) in which the award was made. The contractor will comply with federal and state single audit standards as applicable.

IN WITNESS WHEREOF, the parties have executed this Contract by their duly authorized representatives with full knowledge of and agreement with its terms and conditions.

[CONTRACTOR NAME]

STATE OF CONNECTICUT  
Department Of Transportation

By: \_\_\_\_\_

By: \_\_\_\_\_

\_\_\_\_\_  
Print or Type Name

\_\_\_\_\_  
Print or Type Name

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_



# Request for Proposal #16DOT7001

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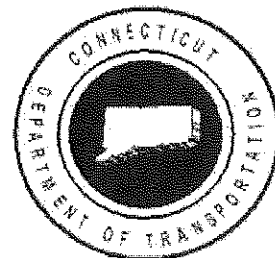
## OVERHAUL OF P40 LOCOMOTIVES FOR THE CONNECTICUT DEPARTMENT OF TRANSPORTATION

CTDOT Contact: **Mary Matuszak, Fiscal Administrative Supervisor**

Date Issued: **May 6, 2016**

Due Date: **September 9, 2016 at 2:00 pm Eastern Time**

**Department of Transportation**



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**NOTE:** This Table of Contents has been prepared for the convenience of those using this contract with the sole express purpose of locating quickly the information contained herein; and no claims shall arise due to omissions, additions, deletions, etc., as this Table of Contents shall not be considered part of the contract.

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### ABBREVIATIONS AND COMMONLY USED TERMS

Wherever the following abbreviations are used in these Specifications or on the Plans, they are to be construed the same as the respective expressions represented:

AAR	Association of American Railroads
AATCC	American Association of Textile Chemists and Colorists
AC	Alternating Current
ACSES	Advanced Civil Speed Enforcement System
ADA	Americans with Disabilities Act of 1990 as amended
AEI	Automatic Equipment Identification
AESS	Automatic Engine Start/Stop System
AFI	Air Filter Institute
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
a.m.	Ante Meridiem
AMCA	Air Moving and Conditioning Association
AMP	Amperes
ANSI	American National Standards Institute
API	American Petroleum Institute
APS	Auxiliary Power Supply
APTA	American Public Transportation Association
AREMA	American Railway Engineering and Maintenance of Way Association
ARI	Air Conditioning and Refrigeration Institute
ASC	Automatic Speed Control
ASES	Advanced Speed Enforcement System
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers
ASM	American Society for Metals
ASME	American Society of Mechanical Engineers
ASTM	American Society of Testing and Materials
ATC	Automatic Train Control
ATS	Automatic Train Stop
AWG	American Wire Gage
AWS	American Welding Society
BHP	Brake Horsepower
BPCO	Brake Pipe Cutout
BTE	Bench Test Equipment
BTL	Battery Trainline
Btu	British Thermal Unit
C	Degree Celsius
CDB	Degrees Celsius Dry Bulb

CWB	Degrees Celsius Wet Bulb
C	Capacitance
C/S	Cab Signal
CAD	Computer Aided Design
CCR	Connecticut Commuter Rail
CCW	Counter Clockwise
CDRL	Contract Deliverable Requirements List
cfm	Cubic Feet per Minute
CFR	Code of Federal Regulations
CMV	Charging Magnet Valve
COR	Change Order Request
COT&S	Clean Oil Test & Stencil
COTS	Commercial Off The Shelf Software
CPM	Critical Path Method
CQP	Contract Quality Plan
CPU	Central Processing Unit
CRF	Critical Radiant Flux
CSS	Cab Signal System
CTDOT	Connecticut Department of Transportation and designated agents
CuFt	Cubic Feet
CW	Clockwise
Cyl	Cylinder
Db	Decibel
DB	Dry Bulb
dBA	Decibel, A-Weighted Scale
DBE	Disadvantaged Business Enterprise
DC	Direct Current
DST	Daylight Savings Time
E	Modulus of Elasticity
ECR	Engineering Change Request
EFCO	Emergency Fuel Cut-Off
EIA	Electronic Industries Association
EMC	Electromagnetic Compatibility
EMCP	Electromagnetic Compatibility Plan
EMD	Electromotive Division
EMI	Electromagnetic Interference
EMV	Emergency Magnet Valve
EPA	United States Environmental Protection Agency
EPIC	Electro-Pneumatic Integrated Control

etc.	Etcetera
F	Degrees Fahrenheit
FDB	Degrees Fahrenheit Dry Bulb
FOB	Free on Board
FWB	Degrees Fahrenheit Wet Bulb
FAI	First Article Inspection
FBCU	Friction Brake Control Unit
FAR	Federal Acquisition Regulations
FCC	Federal Communications Commission
FEA	Finite Element Analysis
FMECA	Failure Mode Effects and Criticality Analysis
FMI	Field Modification Instruction
FOB	Free on board
fpm	Feet Per Minute
FRA	Federal Railroad Administration
FRACAS	Failure Reporting and Corrective Action System
FSR	Field Service Report
FTA	Federal Transit Administration
FTLD	Front Trainline Disconnect
g	Gravitational Acceleration
GE	General Electric
GP	General Purpose
GPM	Gallons per Minute
GPS	Global Positioning System
GTO	Gate Turn-Off
HAZ	Heat Affected Zone
HCFC	Hydrochlorofluorocarbon
HDLC	High Level Data Link Control
HEP	Head End Power
HFC	Hydrofluorocarbon
hp.	Horsepower
HVAC	Heating, Ventilation, and Air Conditioning
Hz	Hertz
I/O	Input/Output
IC	Integrated Circuit
ICEA	Insulated Cable Engineers Association
IEC	International Electrotechnical Commission
IEEE	Institute of Electrical and Electronic Engineers
IFB	Invitation for Bid

IFC	Integrated Function Computer
in.	Inch
IPS	Iron Pipe Size
ISO	International Standards Organization
Is	Flame Spread Index
JEDEC	Joint Electronic Device Engineering Council
kHz	Kilohertz
kVA	Kilovolt Ampere
kw.	Kilowatt
LAHT	Low Alloy High Tensile Strength (Steel)
LED	Light Emitting Diode
lb.	Pound
lbf	Pounds Force
LCD	Liquid Crystal Display
LED	Light Emitting Diode
LRU	Line Replaceable Unit
MBE	Minority Business Enterprise
MDBF	Mean Distance Between Failure
MDS	Monitoring and Diagnostics System
MHz	Megahertz
MBE	Minority Business Enterprise
MI	Mechanical Inspection
MIL	Military Specification
MNR	Metro North Railroad
Mph	Miles per hour
mphps	Miles per hour per second
mphpsps	Miles Per Hour Per Second Per Second
MR	Main Reservoir
ms	Millisecond
MTBF	Mean Time Between Failure
MTTR	Mean Time To Repair
MU	Multiple Unit (as it pertains to multiple unit car train operation)
NEC	National Electrical Code
NEMA	National Electrical Manufacturer's Association
NFL	No Field Lubrication
NFPA	National Fire Protection Association
NJT	New Jersey Transit
NRPC	National Railroad Passenger Corporation (Amtrak)
NTP	Notice to Proceed

NTSB	National Transportation Safety Board
OEM	Original Equipment Manufacturer
OSHA	Occupational Safety and Health Administration
PC	Personal Computer
PCS	Propulsion Control System
P.O.	Post Office
p.m.	Post Meridiem
ppm	Parts Per Million
Psi	Pounds per square inch
psia	Pounds per square inch, Absolute
psig	Pounds per square inch, Gauge
PTC	Positive Train Control
QA	Quality Assurance
RFP	Request For Proposals
rpm	Revolutions per Minute
rms	Root Mean Square
SBE	Small Business Enterprise
SDU	Speed Display Unit
S&I	Service and Inspection Facility
TBD	To be Determined
TBU	Tread Brake Unit
TDV	Thermostatic Drain Valve
TLC	Trainline Complete
TLCL	Trainline complete left
TLCR	Trainline complete right
TLV	Trainline Voltage
TOR	Top-of-Rail
UL	Underwriters Laboratories
US	United States
UNC	Unified National Coarse (Thread)
UNF	Unified National Fine (Thread)
US&S	United Switch and Signal
USASI	United States of America Standards Institute
USDOT	United States Department of Transportation
UTEX	Unit Trade Exchange (does not apply on new equipment.)
UV	Ultraviolet
V	Volt
Vac	Volts, Alternating Current
Vdc	Volts, Direct Current

VOM	Volt/Ohm Meter
VPI	Vacuum Pressure Impregnation
Vp-p	Voltage peak-to-peak
VSWR	Voltage Standing Wave Ratio
W	Watt
WB	Wet Bulb
WCRB	Warranty Claim Review Board
WMDS	Wayside Monitoring and Diagnostic Systems
WPS	Weld Procedure Specifications
WTB	Wire Train Bus
www	World Wide Web



## DEFINITIONS

Wherever the following terms are used in the Specifications or on the Plans, the intent and meaning shall be interpreted as follows:

- 1 Whenever in the Specifications or on the Plans the words "acceptable", "accepted", "approval", "approved", "authorized", "condemned", "considered necessary", "deemed necessary", "designated", "determined", "directed", "disapproved", "established", "given", "indicated", "insufficient", "ordered", "permitted", "rejected", "required", "reserved", "satisfactory", "specified", "sufficient", "suitable", "suspended", "unacceptable", "unsatisfactory", or words of like import are used, it shall be understood as if such words were followed by the words in writing, "by the Engineer" or "to the Engineer", unless otherwise specifically stated.
- 2 Wherever the word "indicated" is used, it shall be understood to mean "as described in the Specifications", "as shown on the Contract Plans", or "as required by the other Contract Documents."
- 3 Wherever the words "provided", "supplied", or "installed" are used in the Specifications in reference to work to be performed by the Contractor, it shall be understood to mean "furnished and delivered completed".
- 4 In this Specification pronouns of the male gender shall also mean the female gender.

**"A" END.** The end of a car opposite from the handbrake end.

**ACCEPTANCE.** Reviewed for conformity with Specification and accepted, in writing, by CTDOT.

**ACCEPTED EQUIVALENT, EQUIVALENT, OR SUBSTITUTE.** Refers to those situations wherein the Contractor, if he desires to offer substitute items, parts, materials, or equipment in lieu of those designated herein, shall obtain approval in writing from the State. The burden of proof that a substitute is, in fact, equivalent shall rest with the Contractor.

**ADDENDUM/ (ADDENDA).** Written interpretation(s) or revision(s) of any of the Contract Documents sent to Proposer prior to opening of Proposal.

**ALTERATION.** A change or substitution in the form, character, or detail of the work done or to be done within the original scope of the Contract.

**AMTRAK.** Shall mean the National Railroad Passenger Corporation.

**APPROVED TYPE.** Shall mean the type, material and design, as approved by CTDOT by letter, and incorporated on the Locomotive Manufacturer's drawings (to the extent information is shown on the drawings).

**AS BUILT.** A term used to describe actual construction.

**AUTHORIZED SIGNEE.** The person who is executing the Contract on behalf of the Proposer/Contractor and who is authorized to bind the Proposer/Contractor.

**AWARD.** The action of CTDOT accepting the Proposal of the most qualified responsive and responsible Proposer for the work, subject to the execution and approval of a satisfactory Contract therefore and providing the required bond to secure the performance thereof, and to such other conditions as may be specified or as required by law.

**"B" END.** The handbrake end of the vehicle.

**BASE LINE DESIGN.** The design of the Locomotive or any of its components, apparatus, systems, subsystems, or materials which have received drawing acceptance and First Article acceptance by CTDOT.

**BASIC or MANUFACTURER'S STANDARD.** Shall mean the component or part standard to be acceptable as part of the line-produced Locomotive.

**BID BOND.** The security furnished to CTDOT with a Proposal to guarantee that the Proposer will enter into a Contract if his Proposal is accepted. The Bid Bond may also be referred to as **BID GUARANTEE**.

**BILL OF MATERIALS.** A complete list of all parts and/or material needed for an assembly.

**BUSINESS DAYS.** see DAY(S), WORKING

**BUYER.** Connecticut Department of Transportation.

**CERTIFICATE OF COMPLIANCE.** Written certification that the Locomotive complies with the applicable laws, rules and regulations of the FRA and AAR.

**CHANGE ORDER.**

- a. A Contract Document executed by CTDOT and issued to the Contractor amending the Contract Documents

and/or Specifications. The change order establishes the basis for payment and time adjustments of the work affected by the changes.

- b. The Document becomes a part of the Contract when executed by the Contractor and CTDOT.
- c. A change order may consist of one or more Change Order Requests. (COR's)

**CLEAN.** To make free of dirt, impurities, pollutants and extraneous matter, following all remanufacturing standards.

**COLLUSION.** A secret agreement, conspiracy, or a secret understanding between two or more persons prejudicial to another.

**COMMUTER RAIL SYSTEM.** All right-of-way, tracks, structures and appurtenant devices over which the end products are expected to operate.

**CONDITIONAL ACCEPTANCE.** Acceptance of Locomotive(s) by CTDOT in writing at The Connecticut Commuter Rail Maintenance Facility, New Haven Connecticut after discrepancies listed on the Receiving Report have been corrected and the Locomotive(s) is certified for revenue and non-revenue service prior to final acceptance.

**CTDOT. Connecticut Department of Transportation**

**CONSULTANT OR CONSULTING ENGINEER.** The engineering consultant (firm) retained by CTDOT to assist CTDOT in the preparation of Plans and Specifications, Proposal evaluation, review of Contractor furnished drawings and documents, to furnish advice and assistance during the course of the procurement, and to furnish in-plant inspection services.

**CONTRACT.** The written agreement Form Contract executed between the State, and the Contractor, setting forth the obligations of the Parties thereunder, the performance of the procurement as indicated in the Proposal Documents and all authorized Change Orders issued subsequent to the execution of the Contract.

**CONTRACT BONDS.** The Performance and Payment Bonds executed by the Contractor and his surety or sureties, guaranteeing performance of the Procurement in accordance with the Contract and all subsequent agreements thereto.

**CONTRACT DOCUMENTS.** The agreement covering the performance of the work and furnishing of materials required in the construction of the project including but not limited to the "Notice to Contractors," "Proposal," "Plans," "Specifications," "Notice to Proceed," (Purchase Order) and "Performance Contract Bond," "Payment Bond," and all required Insurance Policies, also any and all "Special Provision," "Supplemental Specifications," made or to be made which reasonably could be required for the completion of the work in an acceptable manner.

**CONTRACT TIME.** The number of days allowed for completion of the Contract.

**CONTRACTOR.** The successful Proposer who is awarded a Contract for the overhaul of Locomotives as described in the agreed upon Technical Specifications. The Contractor will also be referred to as the Prime Contractor. Such Contractor shall be responsible for meeting the requirement that a minimum of fifty (50%) percent of the total labor be performed by the Contractor's employees. The Contractor/Prime Contractor is the Company or Corporation listed on the Contract Award.

**CONTRACTOR'S DRAWINGS.** Items such as general drawings, detail drawings, graphs, diagrams, sketches, calculations, and catalog cuts which are prepared by the Contractor to detail his work.

**CONTRACTUAL.** Of, or relating to items that are required by a Contract.

**COST ANALYSIS.** A cost analysis is the process of examining and evaluating a prospective Proposal or change order through the evaluation of the cost of each element which comprises it.

**COST PLUS.** A form of Contract for construction work in which the Contractor is reimbursed for the costs it incurs in performing the work plus a lump sum or percentage fee.

**CRITICAL PATH.** The series of activities that are crucial to the completion of the project within the specified time.

CTDOT. Connecticut Department of Transportation

**DAMAGED.** Any equipment, part or component, that is not in conformance with the original equipment manufacturer (OEM) requirement(s), and/or is impaired from its value and usefulness.

**DAY(S).** Unless otherwise designated, days as used in the Contract Documents will mean calendar days.

**DAY(S), WORKING.** Those calendar days during which regular business is conducted, excluding Saturdays and Sundays, and all locally observed Federal, and State holidays.

**DEFECT.** The presence of an imperfection that impairs the functionality, usefulness, and/or value of an equipment, part, or component.

**DEPARTMENT.** General reference to the Connecticut Department of Transportation and its respective officers. For the purpose of this RFP, references to the Department are restricted to the Office of Rail Operations and the Division of Purchasing and Materials Management within the Department.

**ASSISTANT DIRECTOR OF PURCHASING AND MATERIALS MANAGEMENT.** The Department of Transportation's Assistant Director of the Division of Purchasing and Materials Management.

**DUMMY ACTIVITY.** An activity which has no active part in the project except for display or representation of another activity.

**END PRODUCT.**

- a. The Contract Item(s) to be delivered to CTDOT in accordance with the Contract Documents.
- b. End Product(s) includes but is not limited to Locomotive, Locomotive Drawings, Specifications, Instruction Books, Manuals, Education Programs, Spare Parts and Services.

**EFFECTIVE DATE.** The date that the Contract is signed as-to-form by the State of Connecticut, Office of the Attorney General.

**ENGINEER.** Personnel authorized by CTDOT to represent CTDOT on project-related matters.

**ENGINEERING CHANGE.** A CTDOT initiated revision after the design is approved.

**EQUIVALENT.** An approved substitution similar in engineering, design, function, performance, and service life.

**"F" END.** The cab end of the cab car.

**FAIL SAFE.** A characteristic of a system, which insures that any malfunction affecting safety, shall cause the system to revert to a state that is known to be safe. To be considered "fail safe," the system shall also automatically furnish an acceptable indication in accordance with the Specification that a failure has occurred.

**FAILURE.** An improper condition requiring the vehicle to be withheld from or removed from scheduled service for corrective action.

**FIRST ARTICLE ACCEPTANCE.** The physical examination, acceptance, and commercial testing of, and acceptance by CTDOT of an initial part, major assembly, subassembly, system, subsystem, apparatus, or material, manufactured or assembled by either the Contractor or Subcontractors. Although the exercise of First Article Acceptance shall be at CTDOT option, the Contractor shall assume that CTDOT shall subject all of the above to First Article examination and acceptance.

**FINAL ACCEPTANCE.** The form accompanying the equipment and signed off by CTDOT.

**INSPECTION.** The careful examination, measurement and testing of materials, tools, gauges, fixtures apparatus, or other devices and services to ensure conformance with the Specification and Contract requirements.

**INSPECTOR.** An authorized representative of the Engineer, assigned to make any and all necessary inspections of the work performed and materials furnished by the Contractor.

**INTERFACE.** The points where two or more physical subsystems or systems meet to transfer energy or information.

**LAG.** To fail to maintain a pre-established speed or pace.

**LIKE NEW.** Equivalent, in terms of warranty and projected service life, to new.

**LOCAL TIME.** Eastern Standard Time or Daylight Savings Time as it applies to Newington, Connecticut

**LOCOMOTIVE.** The base locomotive to be overhauled.

**MANUFACTURER.** Shall mean the original manufacturer supplying materials, components, or apparatus whatsoever for installation on the Locomotives. The word "Supplier" has the same meaning.

**MATERIAL, (SUPPLIES).** Any substances specified for use in the construction and/or manufacture of the Procurement End Product(s), or to be furnished to CTDOT as loose items as part of the Procurement.

**MILESTONES.** An event or group of events which designates the completion of predetermined number of activities in the remanufacturing process.

**NETWORK.** Any netlike combination of lines, vanes, passages or the like.

**NEW.** Component manufactured from raw material and has not been fabricated from salvaged, reconstructed or repaired material and has never known service.

**NOTICE.** Shall mean a written notice.

**NOTICE TO PROCEED (NTP).** A notice to the Contractor of the date on which he is to proceed with the Contract work, equivalent to the State's Purchase Order. The State's Purchase Order is issued by the Connecticut Department of Transportation.

**OWNER OR PURCHASER.** Connecticut Department of Transportation

**PARTY, PARTIES.** The entities entering into the Contract.

**PAYMENT BOND.** The approved form of security furnished by the Contractor and his surety as a guaranty of good faith on the part of the Contractor to pay all debts pertaining to materials, rental of equipment, and labor used or employed in the execution of the Contract.

**PERFORMANCE BOND.** The approved form of surety furnished by the Contractor and his surety as a guaranty on the part of the Contractor to complete all work contained herein to the satisfaction of the State.

**PROCUREMENT (WORK).**

- a. The furnishing of all equipment, items, materials, parts, systems, data, design, services, incidentals, labor, and management and performance of the Contractual requirements defined in the Contract Documents, including changes thereto, in order to produce and deliver the purchased End Product(s).
- b. As used herein, the terms Work and Procurement are synonymous.

**PROJECT.** The total scope of work and the Suppliers' responsibilities as outlined in this Specification and as described in detail throughout all of the Contract Documents.

**PROOF** (used as a suffix). Apparatus is designated as splash proof, dust proof, etc., when so constructed, protected, or treated that its successful operation is not interfered with when subject to the specified material or condition.

**PROPOSAL.** The written offer provided to CTDOT by the Proposer to perform the work and furnish and deliver to CTDOT the equipment, materials and all deliverables that are part of the Contract at the prices quoted.

**PROPOSAL FORMS**

- a. The approved forms on which CTDOT requires Proposals to be prepared and submitted for the work, and which are part of the RFP.
- b. When executed by the Proposer, it becomes his written offer to perform the work and furnish and deliver the equipment materials at the prices quoted.

**PROPOSER.** The entity or entities providing to CTDOT their written offer in a form of a Proposal, complete with all required forms to perform the work and furnish and deliver the equipment and materials at the prices quoted.

**PURCHASE ORDER.** Equivalent to the Notice to Proceed (NTP), a notice to the Contractor of the date on which he is to proceed with the Contract work.

**QUALIFY.** As used in the Specification shall be the determination that an assembly, sub-assembly, or any part thereof is satisfactory for continued service under the Contractor's warranty, or that the item is suitable for repair or overhaul to restore it to warrantable service, or that the item must be replaced with a new (or warrantable rebuilt) part.

**QUALITY ASSURANCE (QA) / QUALITY CONTROL (QC) PROGRAM.** The Contractor's method of confirming that the workmanship and materials used in the repair/overhaul of the Locomotives are in conformance with the Specification.

**RECONDITION.** Disassemble and clean for complete inspection, in order to qualify for reuse and return to "like new" condition following OEM's maintenance instructions. Restore shall have the same meaning herein. Recondition also includes installation of the reconditioned equipment, part, assembly, component or subcomponent back into the Locomotive.

**REQUALIFIED/QUALIFIED.** Equipment, part, assembly, component, or subcomponent that is repaired or overhauled to like new OEM condition.

**REQUEST FOR CHANGE ORDER.** A document by which CTDOT or the Contractor can request a change in the Contract language as to revise the Contract. (See Change Order)

**REQUEST FOR CLARIFICATION.** A document by which the Contractor can request further clarification of the intent of the Specification relative to specific detail engineering or design situations that may from time to time arise.

**REFERENCE.** Where reference is made in the Contract Documents to publications or standards issued by associations or societies, the intent shall be to specify the current edition of such publications or standards in effect on the date on which the RFP was advertised, notwithstanding any reference to a particular date.

**RELIABILITY.** The probability of performing a specified function, without failure and within design parameters, for the

period of time intended under actual operating conditions.

**REMANUFACTURE.** An original part, component, or Locomotive that has been disassembled, qualified (mechanically, dimensionally, and nondestructively) and tested with all wear surfaces and material restored to limits established by latest OEM and/or CTDOT standards. All parts that are condemned by OEM and/or CTDOT standards shall be renewed. Remanufacture also includes the installation of the remanufactured equipment, part, assembly, component or subcomponent back into the Locomotive.

**RENEW.** Replace with new only, no seconds or reused material permitted. Item shall be the latest type, design, or revision that is applicable in the context of "like new" warranty requirements. Replace shall have the same meaning herein unless otherwise specified. Renew also includes installation of the renewed equipment, part, assembly, component or subcomponent back into the Locomotive.

**REPRESENTATIVE.** Shall mean anyone duly authorized by CTDOT to represent CTDOT and to act in this capacity and as so defined elsewhere.

**REPAIR.** The restoration of damage to a sound, usable condition that will conform to Federal standards, making the Locomotive usable for service.

**REQUIRED CONTRACT PROVISION.** Statements covering the requirements of the Federal and State governments, such as, but not limited to, employment, record of materials and supplies, subletting or assigning of the Contract, labor, certificates, taxes and related items.

**RESTORE.** Disassemble and clean sufficient for complete inspection, qualify for reuse and return to "like new" condition following OEM's maintenance instructions. Recondition shall have the same meaning herein. Restore also includes installation.

**RFP DUE DATE.** Date specified herein on which Proposals must be received by CTDOT.

**SECTION.** Section refers to the indicated section of this RFP plus all subsections thereof (unless the context indicates otherwise)

**SERVICE, as in SERVICE USE.** The operation of the Locomotives under normal conditions in consists with occupied passenger coaches.

**SERVICE OPERATOR.** The company that operates the Service under Contract to CTDOT, and recipient of the remanufacturer's warranty services on behalf of CTDOT.

**SHOP DRAWINGS.** Items, such as drawings, calculations, and catalog cuts, which are prepared by the Contractor to supplement or detail Contractor's Drawings or Specifications, or are prepared at Contractor's option to detail his work; or which the Contractor is required to submit to the Engineer for review, information, or record, including but not limited to electrical schematics and wiring diagrams, fabrication, erection, layout, assembly, installation, tests, maintenance, and repair drawings.

**SLIDE, WHEEL.** During braking, the condition existing when the rotational speed of the wheel is slower than that of pure rolling contact between tread and rail.

**SLIP, WHEEL.** Condition that occurs when the driving wheel of a Locomotive rotates at a speed faster than that of the train itself decreasing the Locomotive's tractive effort.

**SPECIFICATION.** The general, commercial, technical and special requirements, including work scope.

**SPIN, WHEEL.** During acceleration, the condition existing when the rotational speed of the wheel is faster than that of pure rolling contact between tread and rail.

**STANDARDS AND SPECIFICATIONS.** The latest issue of industry, government, or association standards or Specifications, or the Contractor's current standards or Specifications.

**STATE.** The State of Connecticut.

**SUBCONTRACTOR.** Any supplier of services, materials, components, or apparatus to the Contractor.

**SUPERVISOR.** The Contractor's authorized responsible representative in charge of the work.

**SUPPLIER (VENDOR).** The persons, firm, or corporations who furnish materials to the Contractor.

**SURETY.** The corporate body which is bound with and for the Contractor, who is primarily liable to the State, and which is appointed to be responsible for the Contractor's payment of all debts covering all materials and labor used or employed in the execution of the Contract, and for his acceptable performance of the work for which he has contracted.

**TIGHT** (used as a suffix). Apparatus is designated as water tight, dust tight, etc., when so constructed that the enclosing

case and seal will prevent entry of the stated foreign material.

**TRAM.** A condition of ideal truck geometry in which the axles are perfectly parallel and the wheels longitudinally in perfect alignment. The centers of the journal bearings represent the corners of a perfect rectangle. Tram is checked measuring the diagonal and longitudinal distances between reference points on the pedestal feet.

**UNITED STATES DEPARTMENT OF TRANSPORTATION.** United States Department of Transportation (DOT) means the Secretary of the (DOT) and other persons who may at the time be acting in the capacity of the Secretary, or authorized representative or any person otherwise authorized to perform the functions to be performed hereunder, including representatives of the Federal Transit Administration (FTA).

**UPGRADE.** To raise and improve the quality, classification and usefulness.

**VENDOR – (SEE SUPPLIER).**

**WARRANTY BOND.** Bonds equal to twenty-five percent (25%) of the cost of each Locomotive to protect against faulty materials or workmanship for two (2) years from the date of final acceptance of each Locomotive.

**WORK.** (Repair/Overhaul). Any and all labor, supervision, services, materials, machinery, equipment, tools, supplies, and facilities called for by the Contract and necessary to the completion thereof.

**WORK SCOPE.**

- a. Specifications pertaining generally to the method and manner of performing the work and/or the qualities and quantities of equipment and materials and End Products(s) to be furnished under the Contract.
- b. The technical Specifications may include provisions adopted and issued by CTDOT or may include other standards incorporated in the Contract Documents by reference, all as set forth in the Special Provisions.

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# Request for Proposals (RFP)

## Authorization

The following Terms and Conditions govern the Request for Proposals (RFP) issued by the Department of Transportation (CTDOT). Incorporated by reference into these Terms and Conditions are applicable provisions of the Connecticut General Statutes, including but not limited to, those in Section 13b-34.

Proposers shall comply with the statutes and regulations as they exist on the date of their bid and as they may be modified from time to time during the term of the contract, as it may be amended.

- The anticipated funding breakdown for this procurement is as follows:

State Participation: 100%

State Project No: 0300-0159 RS for eight (8) CTDOT locomotives  
0300-0187 RS for four (4) ex-NJT locomotives

## 1. Introduction To BizNet

CTDOT requires that all companies create a Business Network (BizNet) Account and add their company profiles to the State of Connecticut BizNet system. Companies are responsible for maintaining and updating company information in their BizNet Accounts as updates occur. Companies that have been certified through the Supplier Diversity or the Pre-Qualification Program, have already created a BizNet account.

The BizNet login is: <https://www.biznet.ct.gov/AccountMaint/Login.aspx>

New Companies: Create an account by clicking the BizNet login link above and then the button on the right labeled "Create New Account". Login and select CT Procurement and Company Information. Please be sure to complete information in all tabs (Company Information, Accounts, Address, etc...).

Existing Companies Needing to Update Their Information: Login to BizNet and select CT Procurement and Company Information.

Anyone having difficulty connecting to their account or downloading or uploading forms should call DAS/Procurement Services at 860-713-5095.

## 2. Business Friendly Legislation

Companies must submit forms electronically to their BizNet account if they haven't already done so. These forms must be updated on an annual basis, no later than thirty (30) days after the effective date of any material change. Rather than completing them with each bid/RFP submittal, companies that have already filed these forms have the ability to view, verify and update their information prior to submitting a bid/RFP response.

### Instructions for Uploading Affidavits and Non-Discrimination Forms:

Click on the following link for instructions on how to upload Affidavits and Non-Discrimination forms:

<http://das.ct.gov/images/1090/Upload%20Instructions.pdf>

#### (a) AFFIDAVITS

**THE FOLLOWING FORMS MUST BE SIGNED, DATED, NOTARIZED, UPLOADED OR UPDATED ON BIZNET. TO OBTAIN A COPY OF THESE FORMS, YOU MUST LOGIN INTO BIZNET AND FOLLOW THE INSTRUCTIONS LISTED ABOVE.**

- (1) OPM Ethics Form 1 – Gift & Campaign Contribution Certification **(at the time of Contract execution)**
- (2) OPM Ethics Form 5 – Consulting Agreement Affidavit **(at the time of RFP submittal)**
- (3) OPM Ethics Form 6 – Affirmation of Receipt of State Ethics Laws Summary **(at the time of RFP submittal)**
- (4) OPM Form 7 – Iran Certification **(at the time of RFP submittal)**

For information regarding these forms, please access the Office of Policy & Management's website by clicking on the following link: <http://www.ct.gov/opm/cwp/view.asp?a=2982&q=386038>

#### (b) NON-DISCRIMINATION

**CHOOSE ONE (1) FORM THAT APPLIES TO YOUR BUSINESS. COMPLETE AND UPLOAD OR UPDATE ON BIZNET ANNUALLY. TO OBTAIN A COPY OF THESE FORMS, YOU MUST LOGIN INTO BIZNET AND FOLLOW THE INSTRUCTIONS LISTED ABOVE (the Nondiscrimination Form will be required prior to the execution of the Contract)**

- (1) Form A – Representation by Individual (Regardless of Value)
- (2) Form B – Representation by Entity (Valued at \$50,000 or less)



- (3) Form C – Affidavit by Entity (RECOMMENDED) (Valued at \$50,000 or more)
- (4) Form D – New Resolution by Entity
- (5) Form E – Prior Resolution by Entity

For information regarding these forms and on which form your company should complete, please access the Office of Policy & Management's website by clicking following link:

[http://www.ct.gov/opm/cwp/view.asp?a=2982&q=390928&opmNav\\_GID=1806](http://www.ct.gov/opm/cwp/view.asp?a=2982&q=390928&opmNav_GID=1806)

### 3. **Insurance Accord Certificates**

Contractors are responsible for maintaining their BizNet accounts with new and/or updated insurance information.

The following documentation will need to be uploaded to each company's BizNet account and evidencing that the State is an additional insured prior to the execution of the contract:

- (a) Certificate of Insurance (Accord Form)
- (b) The insurance policy declaration page
- (c) The additional insured endorsement to the policy

Training documentation relating to the completion of the above-reference forms is available through the DAS Website under "DAS Business Friendly Initiatives" at the following website: <http://das.ct.gov/cr1.aspx?page=371>

### 4. **Proposal Responses**

Other than the forms noted above which should be submitted electronically, proposals must be mailed or hand-carried in accordance with the following instructions:

If the proposal is sent via **A COMMERCIAL EXPRESS CARRIER**, please address proposal as follows:

The Department of Transportation  
Attn: Mary Matuszak  
2800 Berlin Turnpike  
Newington, CT 06111

If the proposal is sent via **U. S. MAIL**, please address proposal as follows:

The Department of Transportation  
Attn: Mary Matuszak  
P.O. Box 317546  
Newington, CT 06131-7546

If the proposal is being **HAND CARRIED**, please deliver to:

The Department of Transportation  
2800 Berlin Turnpike  
Newington, CT  
Security Desk – Ask for Mary Matuszak at extension 2342

The following forms, along with any required documentation, descriptive literature, catalogs, brochures, pictures, etc. shall be submitted as part of your Proposal:

- Signature Page (DOTRFP-26)
- Statement of Qualifications (DOTRFP-14)
- Employment Information Form (DAS-45)

- Vendor Profile
- Form W-9
- Compliance with Connecticut General Statute Section 31-57b
- Acknowledgement of Addenda (if applicable)
- Form DOT-6 (If applicable)
- Exhibit B (Price Schedule)
- Required Submittals – See Section “Submittal Requirements”

Additional forms such as those listed below must be reviewed carefully and accepted by the Proposer prior to proposal submittal:

- Request for Proposal Document (DOTRFP-22)
- Exhibit A – Description of Goods & Services and Additional Terms & Conditions
- Exhibit A.1 – Technical Specifications
- Contract Exhibit C – SEEC Form 11
- Attachment 1 - Agency Contract Document” (CTDOT 50-A)

***Proposers are cautioned that there may be additional documents, attachments or requirements depending on the complexity of the RFP. Please read ALL RFP documents carefully and provide all required information. Failure to do so may result in rejection of your proposal.***

## 1. Overview

CTDOT will advertise, bid, and award a Contract for the overhaul of P40 road locomotives, to include, but not be limited to:

1. Furnishing material, labor, delivery, testing and warranty, as well as transportation to and from the Contractor's facilities.
2. Furnishing integrated schematics, drawings, inserts for catalogs and manuals.
3. Deliverables referred to throughout the Specification.

There are twelve (12) P40 locomotives, of the twelve (12), eight (8) are CTDOT locomotives identified by road numbers 833, 834, 836, 838, 840, 841, 842, and 843 and four (4) are ex-NJT locomotives, identified by road numbers 4800, 4801, 4802, and 4803, all of which were originally manufactured by the General Electric Company.

The locomotives after overhaul shall be capable of providing a minimum of twelve (12) to fifteen (15) years of reliable service without need of major overhaul or restoration.

- Proposals shall be in compliance with the Specifications. Alternate Proposals are not acceptable.
- Options: Capital Spare Parts may or may not be purchased, in whole or in part, at the sole discretion of the State.

## 2. Scope

1. It is the intent of these specifications to provide for the procurement of end product(s) in accordance with the RFP Documents, equipment and material of first quality, and the workmanship must be the best obtainable in the various trades. The equipment and material which the Contractor proposes to furnish must be of substantial and durable construction in all respects. No advantage will be taken by the Contractor or vendor in the omission of any part or detail which goes to make the product complete and ready for use. All manner of workmanship and material used in the production of the product shall conform in material, design and workmanship to the best practices known in the industry.
2. The Contractor will assume responsibility for all equipment, material and assembly used in the RFP item, whether the same is manufactured by the Contractor or purchased ready made from a source outside the Contractor's company. It is the sole responsibility of the Contractor to read the specifications and understand them.
3. Where the RFP Documents describe portions of the end product(s) in general terms, but not in complete detail, only materials and workmanship free from defects shall be used.
4. Unless otherwise specified, the Contractor shall furnish all labor, materials, tools, equipment, and incidentals which are necessary to complete the procurement.
5. All labor, equipment, and materials shall be furnished in strict accordance with the delivery schedule and conditions of the Contract Documents. The locomotives shall fulfill all the requirements of same and in particular, those defined in the Technical portion of this Specification, including any addenda thereto. The Prime Contractor shall be responsible for a minimum of fifty percent (50%) of the total labor costs for the Contract and must meet the requirements of "Contractor" delineated under Definitions.
6. The locomotives shall be capable in all respects for operation at speeds up to one hundred three (103) mph on level, tangent track.
7. The locomotives will be used in push-pull suburban commuter service.
8. The base scope of overhaul work is defined in Exhibit A – "Description of Goods and Services" and Exhibit A.1 – "Technical Specifications".
9. It should be noted that changes to the scope of work for each locomotive may be required to accommodate conditions uncovered during the overhaul process.
10. Changes which are determined to be hidden damage shall be addressed in accordance with the Change Order procedure below.
  - a. The Contractor shall submit to CTDOT, his/her labor rate and material mark-up for changes pursuant to this Section.
  - b. The Contractor shall bring to the immediate attention of CTDOT any conditions encountered during the overhaul process which involves hidden damage or missing material, for review and disposition by CTDOT.
    - i. Notification shall be made in writing via email within twenty-four (24) hours, with copy of same to CTDOT's resident inspector on-site.
    - ii. Notification shall be followed by a written statement containing the following information.
      - (a) A description of the deficiency and details of work to correct same.
      - (b) Detailed cost data including materials, labor and overhead, and profit.
      - (c) A statement of additional time, if any, required for completion of the Contract by reason of this change.
  - c. The Contractor shall not proceed with any work required by the change until written authorization is given by CTDOT.
11. CTDOT reserves the right to add additional, similar locomotives for overhaul if they become available.
12. Please refer to Exhibit A.1 for the detailed technical description of project Scope of Work.
13. Locomotive-Specific Requirements:

- A. The locomotive engines after overhaul shall be capable of providing a minimum of twelve (12) years reliable service without need of major overhaul or restoration.
- B. Replacement parts for locomotive components, including main engine, generator, auxiliary generator, traction motors, and air compressor shall be CTDOT approved.
  - 1. CTDOT requires that all parts supplied or overhauled meet the requirements of the OEM of the locomotives in terms of durability, tolerances, and fitness of purpose.
  - 2. Replacement parts shall be as manufactured by the OEM unless a request for an alternate supplier is submitted and approved by CTDOT on a case-by-case basis, or is otherwise required by this Specification.
  - 3. The burden of proof of quality of the parts supplied is the responsibility of the Contractor.

## Instructions to Proposers

### 1. Proposal Schedule

RELEASE OF RFP:	Date:	May 6, 2016
MANDATORY INSPECTION: (See below for instructions)	Date:	May 23-27, 2016
RECEIPT OF QUESTIONS – <u>Round 1</u> :	Date:	June 24, 2016
ANSWERS TO <u>Round 1</u> QUESTIONS POSTED AS ADDENDUM:	Date:	July 15, 2016
RECEIPT OF QUESTIONS – <u>Round 2</u> :	Date:	July 29, 2016
ANSWERS TO <u>Round 2</u> QUESTIONS POSTED AS ADDENDUM:	Date:	August 12, 2016
RFP DUE DATE:	Date:	September 9, 2016

CTDOT reserves the right to modify any of the dates and/or times noted above. If it becomes necessary to adjust the Proposal Schedule, the change(s) will be provided via a written Addendum and posted on the State Contracting Portal.

#### A. Mandatory Inspection

A pre-proposal inspection of the twelve (12) locomotives is mandatory. The locomotives are located at the New Haven Railyard, 54 Hallock Ave, New Haven, CT and will be available for inspection during the week noted above. Arrangements for the inspection should be made by contacting Ms. Marci Petterson, Supervising Rail Officer, Connecticut Department of Transportation by email at [marci.petterson@ct.gov](mailto:marci.petterson@ct.gov). **Inspections must be completed by May 27, 2016 at 3:00 pm**

Questions regarding the locomotives will not be answered at the time of inspection and any verbal discussions that may occur are not binding. All questions must be submitted in writing in accordance with "4. Questions", below.

### 2. Amendment or Cancellation of the RFP

CTDOT reserves the right to cancel, amend, modify or otherwise change this RFP at any time if it deems it to be in the best interest of the State to do so.

### 3. Internet Disclaimer

Documents and other information obtained through the Internet, World Wide Web sites or sources other than the Department of Administrative State Contracting Portal are not to be construed as official information for the purposes of conducting other business with CTDOT.

Persons and/or entities that reproduce and/or make such information available by any means are not authorized by CTDOT to do so and may be liable for claims resulting from the dissemination of unofficial, incomplete and/or inaccurate information.

#### 4. Questions

Questions for the purpose of clarifying this RFP must be received no later than the date and time specified in Section 1, "Proposal Schedule". There will be one (1) round of questions/responses for the purpose of clarifying the RFP. Questions must be submitted in writing (e-mail).

**Note: Always include the RFP identification (16DOT7001 – P40 Locomotive Overhaul RFP) in the Subject Line of your e-mail correspondence.**

Only questions that CTDOT considers to be in CTDOT's best interest will be answered. CTDOT is the only party who will determine its best interest.

A. All questions, including, but not limited to: requests for approval, exception, or clarification to the RFP Documents and the Technical Specifications should be e-mailed simultaneously to:

[mary.matuszak@ct.gov](mailto:mary.matuszak@ct.gov)

Connecticut Department of Transportation  
Division of Purchasing & Materials Management

AND

[marci.petterson@ct.gov](mailto:marci.petterson@ct.gov)

Connecticut Department of Transportation  
Office of Rail Operations

- B. If any prospective Proposer is in doubt as to the meaning or interpretation of this RFP, drawings, specifications and other solicitation documents, he must submit to CTDOT a written request for an interpretation thereof on the appropriate form (Form DOT-6 entitled "RFP Request for Approval, Exception or Clarification" which is attached hereto).
- C. If the prospective Proposer, by virtue of his review of the complete RFP Documents expects to take any exception to, or needs clarification of the Documents, he shall so advise CTDOT.
- D. The prospective Proposer should submit for review, a written list of his exceptions to the Technical Specifications. He shall state the reason for his exception, and the compatibility and interchangeability of his proposed substitution with existing equipment and components. Written request for review shall be submitted on Form DOT-6

#### 5. Amendments

- A. Revisions issued by Amendment may require that the date set for receipt of Proposals be postponed by such number of days as in the opinion of CTDOT which will enable prospective Proposers to revise their Proposals. In such cases, the Addendum will include an announcement of the new date for receipt of RFPs.
- B. Prospective Proposers are required to acknowledge receipt of all Addenda to this solicitation by returning a signed copy of each Addendum with their Proposal.

#### 6. General

- A. This Contract will be a firm fixed-price Contract (including negotiated prices – if any), except for those items specified as cost-plus.
  - 1. The Proposal price shall be for complete repair/overhaul, testing, delivery and warranty support of the locomotives ready for CTDOT revenue service use, and shall include all applicable freight and installation charges.
  - 2. For cost-plus work, the Proposal shall include certified payroll rates for all labor to be used, certified

overhead rates, and the Proposer's profit which shall not exceed 10%. Labor rates shall be at least the minimum rate established for the Project by the State Labor Department or the U.S. Department of Labor. Cost-plus work is subject to the requirements of Exhibit A - Section A40.

- B. Prices shall be quoted in U.S. Dollars, delivered FOB to Connecticut Commuter Rail Maintenance Facility, 54 Hallock Ave, New Haven, CT 06519 at the Contractor's expense.

## 7. Communications

During the period from your organization's receipt of this RFP until a contract is awarded, your organization shall not contact any employee of the State of Connecticut for additional information, except as follows:

- A. The Assistant Rail Administrator of the Department of Transportation, State of Connecticut, (or his/her designee) will be the contact for the prospective Proposers. However, written communication with CTDOT during the RFP process should be forwarded to the attention of:

Mary Matuszak, Fiscal Administrative Supervisor; Connecticut Department of Transportation, Division of Purchasing and Materials Management, by e-mail to [mary.matuszak@ct.gov](mailto:mary.matuszak@ct.gov)

- B. Each prospective Proposer shall designate one (1) individual or organization to function as an interface for contact with CTDOT during the Pre-Proposal period. The contact shall be for purpose of communications between the Proposer and CTDOT and for receipt of the RFP Documents and Addenda.

## 8. Solicitation Submission

Solicitations shall be submitted by the RFP due date and time noted in Section 1. Proposals received after the date and time specified shall be rejected.

- A. All RFPs shall be signed correctly with ink in the proper place provided, on the appropriate form (DOT-26).

## 9. Sealed Proposals (ONE ORIGINAL AND FIVE (5) COPIES)

Proposals must be submitted in a SEALED envelope or carton, clearly marked with RFP No., the date, and the name and address of the Proposer. Please use the label on Form DOTRFP-11 to identify your Proposal. Any material that is not so received may be opened as general mail, and result in invalidating the Proposer's submission. Electronic, facsimile or unsealed proposals will not be accepted under any circumstances.

1. This is a Request for Proposals (RFP), not an Invitation to Bid (ITB), therefore, Proposals are not opened in public on the due date.
2. Proposals received after the time and date of due date/time specified in the RFP will not be accepted for consideration.
3. A Proposer will not be allowed to resubmit a proposal after the due date and time specified in the ITB. Incomplete bid forms may result in the rejection of the bid. Amendments to proposals received by CTDOT after the due date/time specified will not be considered. Proposals may be computer prepared, typewritten or handwritten in ink. All proposals shall be signed by a person duly authorized to sign proposals on behalf of the Proposer. Unsigned proposals may be rejected.
4. In the event of a discrepancy between the unit price and the extension, the unit price shall govern. Prices should be extended in decimal form, not fractions, to be net, and shall include transportation and delivery charges fully prepaid by the Contractor to the destination specified in the RFP, and subject only to cash discount.



5. Pursuant to Section 12-412 of the Connecticut General Statutes, the State of Connecticut is exempt from the payment of excise, transportation and sales taxes imposed by the Federal Government and/or the State. Such taxes must not be included in proposal prices.
  
6. The Proposer fully acknowledges and agrees with all of the terms and conditions contained in this Form DOTRFP-22, the accompanying Proposal Form DOTRFP-26, and the Contract. Further, if the Proposer is awarded a contract for the goods and/or services called for in the Request for Proposals, the Proposer's signature on Proposal Form DOTRFP-26 shall mean that the Proposer shall be bound by and perform fully in accordance with all of the terms and conditions set forth in the RFP, this Form DOTRFP-22 and the Contract as if the Proposer had actually executed Form DOTRFP-22 and the Contract itself.

## Proposal Requirements

### 1. Contract Period

The State intends that this contract shall be in effect for a period of 5 years from the Effective Date of the Contract.

### 2. Motor Carrier Safety Review

If the performance of the Contract requires the use and operation of any commercial motor vehicle, as defined in section 14-1 of the Connecticut General Statutes, or other motor vehicle with a gross vehicle weight rating (GVWR) of 18,000 pounds or more, each proposer will be the subject of an evaluation, conducted by the Connecticut Department of Motor Vehicles (CTDMV) of its motor carrier safety fitness. The primary factor in the evaluation is the current SAFESTAT score, calculated by the U.S. Federal Motor Carrier Safety Administration (FMCSA) in accordance with the provisions of Title 49, Section 385.1, et seq., of the Code of Federal Regulations.

To be deemed qualified, the proposer must have an overall SAFESTAT category rating of "D" or better, on the date of evaluation. In addition, the proposer's driver and vehicle out-of-service rates will be consulted. The rates are determined by the number of out-of-service violations cited to the motor carrier in the course of all official, reported vehicle and/or driver inspections conducted during the preceding thirty (30) months. To be deemed qualified, the proposer must not have either a vehicle or driver out-of-service rate, by percentage of out-of-service violations per the total number of inspections reported, that is more than twice the national average. In addition, the proposer must have a current federal safety management practices rating of "Satisfactory," as defined in 49 CFR Section 385.3, as amended.

Proposer must provide the company's Federal DOT ID number where specified in Exhibit B. Failure to provide this information may result in the rejection of your proposal.

Further information concerning the motor carrier safety evaluation, to which a proposer is subject, may be obtained from CTDMV, at: <http://www.ct.gov/dmv/cwp/view.asp?a=804&q=512530> All official inspection and rating data that is used in the performance of each evaluation is available to any motor carrier through the federal SAFESTAT website, at <http://www.ai.volpe.dot.gov/>.

### 3. Quantities and/or Usages

Any quantities set forth in this RFP are estimated quantities and/or usages only and in no way represent a commitment and/or intent to purchase any particular amount. Actual quantities may vary and will be identified on individual purchase orders issued by the requesting entity.

### 4. Brand Name Specifications and/or References

The use of the name of a manufacturer or of any particular make, model or brand in describing an item does not restrict Proposers to that manufacturer or specific article unless limited by the term "no substitute". However, the article being offered must be of such character and quality so that it will serve the purpose for which it is to be used equally as well as that specified, and the Proposer shall warrant to CTDOT that it is fit for that purpose. Proposals on comparable items must clearly state the exact article being offered including any and all applicable options and the Proposer shall furnish such other information concerning the article being offered as will be helpful in evaluating its acceptability for the purpose intended. If the Proposer does not indicate that the article offered is other than as specified, it will be understood that the Proposer is offering the article exactly as specified. Proposers must submit complete documentation on the specifications and quality levels of the proposed products. Proposals submitted that do not contain this documentation are subject to rejection.

- A. It is not the intent of this Specification to have the Contractor seek acceptance from CTDOT for the various interchangeable items of different manufacture that are normally stocked and used by the Contractor. It is the

intent of this Specification that alternative material for major items of equipment, herein specified, be acceptable to CTDOT.

- B. The burden of proof as to the quality and suitability of alternatives shall be upon the Contractor and he shall furnish all information necessary as required by CTDOT at no additional cost to CTDOT.
- C. If potential Proposers believe that their product is an equivalent to the product specified, they must submit a written request to CTDOT. There shall be no substitution for any accepted material, component, design, or fabrication unless and until the proposed substitute has received written acceptance of CTDOT. CTDOT may require the removal of any substitute or unaccepted item which is installed without the written acceptance of CTDOT, removal will be at the Contractor's expense.
- D. Where use of an alternative material involves redesign of or changes to other parts of the work, the cost and the time required to affect such redesign or changes shall be considered in evaluating the suitability of the alternative material. No additional cost will be paid by CTDOT as a result of the use of an alternative material.
- E. No test or action relating to the acceptance of substitute materials shall be made until the request for substitutions is made in writing by the Proposer, accompanied by the complete data as to the equality of the materials proposed. Such request shall be in ample time to permit approval without delaying the work. Requests for approved equivalent must be fully supported with catalog information, specifications, illustration and Engineer approved drawings or other pertinent information as evidence that the substitute offered is equivalent to or better than the specification. Where an approved equivalent is requested, the Proposer must demonstrate the equality of this product to CTDOT to determine whether the Proposer's product is or is not equivalent to that specified.
- F. Whenever classification, rating, or other certification by a body, such as UL, NEMA, or AAR, is part of the Specification for any material, proposals for use of alternative material shall be accompanied by reports from the listed or equivalent independent testing laboratory indicating compliance with Specification requirements.
- G. The Proposer shall reasonably demonstrate that an adequate supply of materials, repair parts, and specialties of his own design and manufacture, as well as materials, repair parts, and specialties of the Subcontractors will be available promptly as the need by CTDOT may arise.
- H. The cost of all testing required to provide quality of the material proposed shall be borne by the Proposer.
- I. It shall be understood that specifying a brand name, components, and/or equipment in this Specification shall not relieve the Proposer from his responsibility to produce the product in accordance with the Contractual requirements.
- J. The Proposer is responsible for notifying CTDOT of any unsuitable brand name, component and/or equipment that may be called for in the Specification, and to propose a suitable substitute for consideration.

## 5. Insurance

Insurance requirements are noted in the attached "Agency Contract Document" (CTDOT 50-A), Section 32, "Insurance".

## 6. Bonds

### A. Evidence of Surety

Include evidence from a surety or insurance company stating that the Bidder is capable of obtaining the required insurance and bonds referenced in this RFP. The evidence of surety shall clearly state the financial rating categorization and reference the contract value in a manner similar to the notation provided below: "As surety for [the above named Contractor], [XYZ Company] with A.M. Best Financial Strength Rating

[rating] and Financial Size Category [Size Category] will furnish a Performance Bond, a Payment Bond and a Warranty Bond in the stated amounts, and said bonds will cover the Project and any warranty periods on behalf of the Contractor, in the event that such firm be the successful Proposer and enter into a contract for this project.”

**B. Bid Guarantee**

A Bid Bond will be required in the amount of 5% of the total contract price proposal, excluding options. Such bond must accompany the Proposer’s RFP submission. Failure to submit a Bid Bond on a form acceptable to the State shall result in the rejection of the Proposer’s RFP. Other offers of surety will be reviewed on a case by case basis.

1. A Bid Bond must be issued by a fully qualified surety company acceptable to the State and listed as a company currently authorized under 31 CFR, Part 223 as possessing a Certificate of Authority as described thereunder.
2. Rights Reserved  
In submitting this Proposal, it is understood and agreed by the Proposer that the right is reserved by The State to reject any and all Proposals, or part of any Proposal, and it is agreed that the Proposal may not be withdrawn for a period of one hundred eighty (180) days subsequent to the opening of Proposals, without the written consent of the State.
3. It is also understood and agreed that if the undersigned Proposer should withdraw any part or all of his Proposal within one hundred eighty (180) days after the RFP due date without the written consent of the State, shall refuse or be unable to enter into this Contract, as provided above, or refuse or be unable to furnish adequate and acceptable Performance and Payment Bonds, or refuse or be unable to furnish adequate and acceptable insurance, he shall forfeit his bid security to the extent of the State damages occasioned by such withdrawal, or refusal, or inability to enter into an agreement, or provide adequate security therefor.
4. It is further understood and agreed that to the extent the defaulting Proposer’s Bid Bond, Certified Check, Cashier’s Check, Treasurer’s Check, and/or Official Bank Check (excluding any income generated thereby which has been retained by the State) shall prove inadequate to fully recompense the State for the damages occasioned by default, then the Proposer agrees to indemnify the State and pay over to the State the difference between the bid security and the State’s total damages, so as to make the State whole.

**C. Performance Bond**

A Performance Bond will be required in the full amount of the Contract. Such bond must be received within twenty (20) days of request. Failure to submit a Performance Bond on a form acceptable to the State shall result in the State either re-awarding the contract to the next highest scoring Proposer or re-bidding the contract. Other offers of surety will be reviewed on a case by case basis. It is the responsibility of the Contractor to ensure that its bond is updated as required.

**D. Payment Bond**

A Payment Bond will be required in the full amount of the Contract. Such bond must be received within twenty (20) days of request. Failure to submit a Payment Bond on a form acceptable to State shall result in the State either re-awarding the contract to the next highest scoring Proposer or re-bidding the contract. Other offers of surety will be reviewed on a case by case basis. It is the responsibility of the Contractor to ensure that its bond is updated as required.

**E. Warranty Bond:**

The Contractor shall, prior to the issuance by the Department of written Final Acceptance, furnish a separate Warranty Bond in a form acceptable to the State in an amount equal to the total negotiated contract amount for the initial minimum Technical Support and Warranty Period.

The bond shall secure the Contractor's obligation to provide required technical support and warranty services and replace or repair defective materials and faulty workmanship for a minimum period of two (2) years after issuance of Final Acceptance.

**F. All such bonds shall be:**

1. Corporation: The Bond must be signed by an official of the Corporation above his official title and the corporate seal must be affixed over his signature.
2. Firm or Partnership: The Bond must be signed by all the partners and indicate they are "Doing Business As (name of firm)".
3. Individual: The Bond must be signed by the individual owning the business and indicated "Owner".
4. The Surety Company executing the Bond must be licensed to do business in the State of Connecticut, or Bond must be countersigned by a company so licensed.
5. The Bond must be signed by an official of the Surety Company and the corporate seal must be affixed over his signature.
5. Signature of two witnesses for both principal and the Surety must appear on the Bond.

**7. Price Proposal**

**See Exhibit B, Price Proposal Template for use when responding to this RFP.**

- A. Proposer's base proposal shall be for the overhaul of twelve (12) P40 locomotives, in accordance with the technical and contractual requirements of this Specification.
- B. This Contract will be a firm fixed-price (including negotiated prices – If any), Contract except for those items specified as cost-plus.
  1. The Proposal price shall be for complete overhaul, testing, delivery and warranty support of the locomotives ready for CTDOT revenue service use, and shall include all applicable freight and installation charges.
  2. For cost-plus work, the Proposal shall include certified payroll rates for all labor to be used, certified overhead rates, and the Proposer's profit which shall not exceed 10%. Labor rates shall be at least the minimum rate established for the Project by the State Labor Department or the U.S. Department of Labor. Cost-plus work is subject to the requirements of Exhibit A - Section A40.
- C. Prices shall be quoted in U.S. Dollars, delivered FOB to Connecticut Commuter Rail Maintenance Facility, 54 Hallock Ave, New Haven CT., 06519 at the Proposer's expense.
- D. This Proposal shall be binding upon the Proposer for one hundred eighty (180) calendar days following the RFP due date. Any RFP on which the Proposer shortens the acceptance period may be rejected (see Section 3.18).

**8. Spare Parts**

- A. The Proposer shall furnish prices for Optional Spare Parts on the attached Exhibit B.
- B. The Proposer shall submit, as part of his Proposal, a list of recommended non-consumable spare parts and

a list of recommended consumable spare parts.

1. These lists are for informational purposes only and will not be used in RFP Evaluation.

#### **9. Stability of Proposed Prices**

Any price offerings from proposers must be valid for a period of One Hundred Eighty (180) days from the due date of the proposals.

#### **10. Proposal Modifications**

No additions or changes to any proposal will be allowed after the proposal due date, unless such modification is specifically requested by CTDOT. CTDOT, at its option, may seek proposer retraction and/or clarification of any discrepancy or contradiction found during its review of proposals.

#### **11. Competency of Proposers**

A. All Proposers shall submit with their Proposal, a statement outlining in detail his locomotive repair and/or overhaul experience including on the attached "Proposer's Statement of Qualifications", Form DOTRFP-14:

1. A tabulation by year of build of the numbers of locomotives of each type, which were overhauled in the last five (5) years.
2. The entity for whom the overhaul work was performed.
3. The locations and descriptions of the facilities where the above work was performed including the percent of labor performed by the prime Contractor.
4. The location and description of the facility where the work to be done under this Contract will be performed, and have necessary technical capability to perform the work as described.
5. Statement of financial resources.
6. Statement that Proposer has the capacity to overhaul the locomotives specified in this document within the time specified.
7. Statement of all locomotive repair, overhaul, manufacture or remanufacturing Contracts which the Proposer has been awarded or on which the Proposer is apparent low type of vehicles and the delivery dates for same. Refusal to provide requested information may cause rejection of the RFP.
8. CTDOT reserves the right to verify any and all information supplied by the Proposers in conjunction to this RFP.
9. CTDOT reserves the right to inspect the Proposer's facility(ies) that will be utilized in the overhaul of the locomotives, prior to the awarding of this RFP.
10. CTDOT reserves the right to determine as non-conforming a Proposer whose competency and/or qualifications in CTDOT's judgment and in the State's best interests do not meet the intent of this section and may refuse to award a Contract to any individual, partnership, firm or corporation based upon, but not limited to, one or more of the above facts. When in CTDOT's judgment the sworn statement indicates that the Proposer does not have the required experience in the class of work to be bid on, fails to have the proper labor and equipment to prosecute the work within the time allowed, or fails to have sufficient capital and quick assets to finance the work.
11. Doubt as to technical ability, production capacity, or financial strength which cannot be resolved affirmatively shall require a determination of non-responsiveness by CTDOT.

- B. A Proposer who fails to comply with Section #11 of this document will not be considered for award of the Contract.

**12. Proposer Presentation of Supporting Evidence**

Proposers must be prepared to provide any evidence of experience, performance, ability, and/or financial surety that CTDOT deems to be necessary or appropriate to fully establish the performance capabilities represented in their proposals.

**13. Proposer Demonstration of Proposed Services and or Products**

At the discretion of CTDOT, proposers must be able to confirm their ability to provide all proposed services. Any required confirmation must be provided at a site approved by CTDOT and without cost to the State.

**14. Quality Assurance Program**

The Contractor shall establish and maintain an effective Quality Assurance Program and staff to ensure that the locomotive(s) meet(s) all Specification requirements. **Proposers shall submit a detailed outline of their Quality Assurance Program with their RFP documents.**

**15. Samples**

The quality of accepted samples does not supersede specifications for quality in the Request for Proposals unless the sample is superior in quality. All deliveries shall have at least the same quality as the accepted sample.

Samples are furnished free of charge. Proposers must indicate if their return is desired, which CTDOT shall do provided that they are returned at Proposer's sole cost and expense, FOB Proposer's destination, and that they have not been made useless by testing. If they are made useless by testing, the State may dispose of the samples as it deems to be appropriate. Samples may be held for comparison with deliveries.

**16. Erroneous Awards**

CTDOT reserves the right to correct inaccurate awards.

**17. Proposal Expenses**

Proposers are responsible for all costs and expenses incurred in the preparation of proposals and for any subsequent work on the proposal that is required by CTDOT.

**18. Ownership of Proposals**

All proposals shall become the sole property of the State and will not be returned.

**19. Ownership of Subsequent Products**

Any product, whether acceptable or unacceptable, developed under a contract awarded as a result of this RFP shall be the sole property of the State unless otherwise stated in the contract.

**20. Oral Agreement or Arrangements**

Any alleged oral agreements or arrangements made by proposers with any State agency or employee will be disregarded in any State proposal evaluation or associated award.

**21. Rejection of Proposals**

- A. Proposals which fail to meet the requirements of stated herein, or which are incomplete, conditional or obscure, or which contain additions not called for, erasures, alterations, white-out or irregularities of any kind or in which errors occur, or which contain abnormally high or abnormally low prices for any class or item of work, may be rejected as invalid, at the discretion of the State.
- B. More than one Proposal from the same Proposer, whether or not the same or different names appear on the signature page, shall not be considered.

- C. Any Proposer that has an interest in more than one Proposal for the work contemplated will cause the rejection of all Proposals made by him directly or indirectly.
- D. All Proposals shall be rejected if there is reason for believing that collusion exists among the Proposers.

## **22. Withdrawal of Proposals after RFP Due Date**

### **Withdrawal of Proposal Due to Error**

1. A Proposer may withdraw his RFP from consideration if the proposal price was substantially lower than the other RFPs due solely to a mistake therein, provided the RFP was submitted in good faith, and the mistake was a clerical mistake as opposed to a judgment mistake, and was actually due to an unintentional arithmetic error or an unintentional omission of a quantity of work, labor or material made directly in the compilation of a Proposal with unintentional arithmetic error or unintentional omission which can be clearly shown by objective evidence drawn from inspection of original work papers, documents and materials used in the preparation of the RFP sought to be withdrawn.
2. The Proposer shall give notice in writing of his claim of right to withdraw his Proposal along with his original work papers, documents, and materials used in the preparation of the Proposal to the Bureau of Finance and Administration, Division of Purchasing and Materials Management within two (2) business days of the conclusion of the RFP Due Date.
3. If the Bureau of Finance and Administration, Division of Purchasing and Materials Management denies the withdrawal of a Proposal within ten (10) business days after receiving notice from the Proposer under the provisions of this section, CTDOT shall notify the Proposer in writing stating the reasons for its decision and award the Contract to such Proposer at the Proposal price, provided such Proposer is a responsible and responsive Proposer.
4. If the Bureau of Finance and Administration, Division of Purchasing and Materials Management allows a Proposal to be withdrawn by the authority of this Section, the second highest-scoring Proposer shall be deemed the Awarded Proposer (see Section 20 A.)

## **23. Pre-Award Audit**

- A. After the RFP Due Date and prior to Contract award, CTDOT shall have reviewed and evaluated all data submitted by the Proposer.
- B. The State reserves the right to perform or have performed a financial review of the successful Contractor's resources, and to require the submission of a statement of work in progress by the Contractor.
- C. The cost for performing the above audits or reviews shall be the sole responsibility of CTDOT. Contractor shall not include any such related costs in his Proposal.

## **24. Cost/Price Analysis**

A cost/price analysis and evaluation and/or audit may be performed of the cost proposal in order to determine if the price is fair and reasonable. A detailed cost proposal and analysis of up to four (4) Bids awarded to the Proposer within the past two (2) years may be requested.

- A. A price analysis is the process of examining and evaluating a prospective price without evaluation of the separate cost elements.
  1. It should be recognized that a price analysis through comparison to other similar Contracts shall be based on an established or competitive price of the elements used in the comparison.
  2. The comparison shall be made to the purchase of similar quantity and involving similar specifications.
- B. A cost analysis is the process of examining and evaluating a prospective Proposal through the evaluation of



the cost of each element which comprise the Proposal Price.

**25. Contract Award**

The State reserves the right to award this Contract in a manner deemed to be in the best interest of the State and may include, but not be limited to:

- A. by item, group of items, or in its entirety
- B. Multiple Vendor Award

The highest scoring Proposer will be notified in writing by email or otherwise that he has been selected to enter into negotiations. Upon successful completion of negotiations, the Proposer will be notified and a Contract Award will be posted on the State Contracting Portal.

**26. Failure to Accept Award**

- A. Should the successful Proposer fail to accept an Award within ten (10) days of said notice and submit the surety and insurance required within twenty (20) days from the date of notice, CTDOT may, at its option, determine that the Proposer has abandoned the RFP and thereupon the Proposal and acceptance shall be null and void. The Contract may be awarded to the next highest-scoring responsive and responsible qualified Proposer, and so on until such Contract is awarded and accepted.
- B. The guarantee accompanying the Proposal shall be retained or collected by CTDOT as liquidated damages for the delay and expense caused by the abandonment of the Contract.
- C. It is agreed that the foregoing paragraph shall be construed and treated by the parties to the Contract not as imposing a penalty upon said Contractor for failure to fully execute the Contract as agreed on or before the time specified in the RFP, but as liquidated damages to compensate CTDOT because of the failure of the Contractor to fully execute the Contract on or before the date specified in the RFP.

**27. Exercise of Options**

- A. CTDOT reserves the right to exercise the spare parts Options identified in the Contract either as a total package or on an individual item basis, or not exercise any of the Options whichever CTDOT determines to be in its best interest, within one (1) year of the effective date of the Contract Award. All quantities are estimated. The State reserves the right to add or delete quantities of spare parts Proposal unit price. Proposers will quote firm unit prices for the Options in their Proposal.
- B. Shipment of Spare Parts shall commence within ten (10) months after awarding the option.
- C. CTDOT reserves the right to exercise Locomotive Options identified in the Contract either as a total package or on an individual item basis, or not exercise any of the Options, whichever CTDOT determines to be in its best interest, within one (1) year of the effective date of the Contract Award. All quantities are estimated. The State reserves the right to add or delete quantities at the Proposal per unit price. Proposers will quote firm unit prices for the Options in the Contract.

## Selection Criteria

A selection committee will review and score all proposals. This is a competitively negotiated, best-value procurement. Award will be made to the Proposer who is deemed responsible, possesses the management, financial, and technical capabilities necessary to fulfill the requirements of the contract, whose proposal conforms to the submittal requirements stated herein, and who is judged by an integrated assessment of the general considerations and specific criteria (defined as the Selection Criteria) to be most advantageous to CTDOT, with price and other factors considered.

Prior to evaluating any proposal, CTDOT may take into consideration several general criteria to determine the completeness and responsiveness of the submission. These general considerations include:

- The Proposer has submitted a complete proposal, with all required forms and information as requested by the deadline established by CTDOT.
- The Proposer has agreed to abide by the terms and conditions of the State's typical contract agreement, or has clearly identified proposed exceptions to these terms and conditions in its submittal.
- The Proposer demonstrates sufficient financial stability to undertake a project of this size and scope.
- The Proposer meets any and all Disadvantaged Business Enterprise (DBE) and Affirmative Action requirements specified by the State.
- The Proposer agrees to abide by all Federal, state, and local rules, requirements, and regulations.

The following information, in addition to the requirements identified throughout this RFP Document, will be considered as part of the Selection process **and are listed in order of relative importance.**

**1. PRICE**

- a. Proposal Prices

**2. SCHEDULE:**

- a. Anticipated Shop Availability (in days from Notice to Proceed (NTP))
- b. Delivery of First P40 Locomotive (in days from NTP)
- c. Anticipated schedule/duration for twelve (12) P40 Locomotives

**3. SERVICES/WARRANTY:**

- a. Equipment Warranty
- b. Response Time
- c. Warranty Staff Location
- d. Warranty Staff Experience

**4. CONTRACTUAL OR TECHNICAL EXCEPTIONS**

**5. PERSONNEL**

- a. Number of Qualified Technicians
- b. Certifications
- c. Number of Laborers (Non-Technical)

**6. REFERENCES:**

- a. Services Provided to Other States or Railroads
- b. Services Provided to CT State Agencies
- c. Services Provided to Private Sector

**7. TECHNOLOGY**

- a. Shop Facilities (in house)
- b. Major Vendors utilized by Contractor

**8. BUSINESS INFORMATION**

- a. Brief History
- b. Annual Report/Financial Statement
- c. Length of Time in Business
- d. State Contracts (similar type of work)
- e. Affiliated Businesses

CTDOT may award by individual item, group of items, or the entirety of all items. CTDOT may also reject any and all RFPs in whole or in part, and waive minor irregularities and omissions if the best interest of the state will be served.

## Submittal Requirements

The Contractor shall furnish written evidence satisfactory to the State that they fully understand the purpose for which the equipment is intended and that they are qualified and capable of fulfilling all provisions of this contract. Please provide a written response to each item noted below as part of RFP submission (one (1) original and five (5) copies) to enable comparison by the Selection Committee. Please number and letter your responses to correspond with each item listed below for identification purposes. Failure to provide the required information in full will be reflected in the scoring of your proposal.

### Transmittal Letter Format

The Proposer's submission shall include a transmittal letter showing the Proposer's name, post office address, telephone number, fax number, and name, title, telephone number, email address, and signature of the person submitting the proposal. This person identified in the cover letter will be considered by the State as the contact person for the Proposer. The transmittal letter should also clearly identify the prime contractor and any and all sub-contractors and sub-consultants, as well as proposed teaming arrangements.

1. **Criteria:** Price
  - a. Proposal Prices

**Submittals:** Exhibit B – Price Schedule

2. **Criteria:** Schedule
  - a. Anticipated Shop Availability (in days from Notice to Proceed (NTP))
  - b. Delivery of First P40 Locomotive (in days from NTP)
  - c. Anticipated schedule/duration for twelve (12) P40 Locomotives

**Submittals:** Proposers shall provide a work plan and preliminary schedule for accomplishing the work proposed. Proposers should include a clear, concise narrative incorporating Gantt charts or equivalent tables that documents work plan responsibilities, the duration of each task, proposed implementation milestones, and sufficient time for the State reviews, approvals, and testing. Proposers should develop a relative timetable based on a Notice to Proceed (NTP); and a Statement affirming that Proposer has the capacity to overhaul the locomotives specified in this document within the time specified.

3. **Criteria:** Services / Warranty:
  - a. Equipment Warranty
  - b. Response Time
  - c. Warranty Staff Location
  - d. Warranty Staff Experience

**Submittals:** Provide a narrative addressing each of the items above

4. **Criteria:** Contractual or Technical Exceptions

**Submittals:** Form D-6 - "Request for Approval, Exception or Clarification" (Make additional copies, if needed)

5. **Criteria:** Personnel
  - a. Number of Qualified Technicians
  - b. Certifications
  - c. Number of Laborers (Non-Technical)

**Submittals:** To determine that Proposer has the necessary technical capability to perform the work as described, provide a list of number and types of personnel; brief resumes for key staff, and a list and/or copies of applicable certifications held by company/personnel. Proposers shall also identify any Subcontractors, or third party participants as part of their proposed project team and provide similar background information for them.

6. **Criteria:** References
- a. Services Provided to Other States or Railroads
  - b. Services Provided to CT State Agencies
  - c. Services Provided to Private Sector

**Submittals:** For each of the items above, provide the following:

- A tabulation by year of build of the numbers of locomotives of each type, which were overhauled in the last five (5) years.
- The entity for whom the overhaul work was performed, with the name of a contact person, contact person's title, entity address, telephone number, email address, and the role of the contact person in the referenced work.
- The locations and descriptions of the facilities where the above work was performed including the percent of labor performed by the prime Contractor.
- Statement of all locomotive repair, overhaul, manufacture or remanufacturing Contracts which the Proposer has been awarded, or on which the Proposer is apparent low, type of vehicles, and the delivery dates for same.

7. **Criteria:** Technology
- a. Shop Facilities (in house)
  - b. Major Vendors utilized by Contractor

**Submittals:** Provide the location and description of the facility where the work to be done under this Contract will be performed,

8. **Criteria:** Business Information
- a. Brief History
  - b. Annual Report/Financial Statement
  - c. Length of Time in Business
  - d. Affiliated Businesses

**Submittals:** In addition to a brief narrative identifying each of the above, Proposers shall provide a statement of financial resources in a separately sealed envelope, in the form of audited annual income statements for the last two (2) years available.

This RFP is not a contract and, alone, shall not be interpreted as such. Rather, this RFP only serves as the instrument through which proposals are solicited. The State will pursue negotiations with the proposer whose proposal scores highest. If, for whatever reason, CTDOT and the initial proposer fail to reach consensus on the issues relative to a contract, then CTDOT may commence contract negotiations with other proposers. CTDOT may decide at any time to suspend the current RFP process and may elect to start the RFP process again, at its sole discretion.

Attachment 1 to this RFP is a draft contract and it is included in this RFP in order to show contract provisions that the State of Connecticut requires. It may not be the specific contract that the State and the successful vendor(s) will sign. After CTDOT selects a vendor, CTDOT will deliver a draft contract to the vendor for purposes of potential negotiations. The contract that CTDOT and the successful vendor will sign may vary from Attachment 1. The contract may include a liquidated damages clause at the discretion of the State.

## Description of Goods & Services Specifications and Additional Terms and Conditions – Exhibit A

The Specifications attached with this Request for Proposal (RFP) define the conditions and requirements applicable to the overhaul, delivery, testing and warranty of CTDOT's P40 road locomotive units, including the transportation to and from the Contractor's facilities. The requirements also include but are not limited to:

- Furnishing integrated schematics, drawings, inserts of catalogs and manuals.
- Deliverables referred to throughout the Specifications.

There are twelve (12) P40 locomotives, of the twelve (12), eight (8) are CTDOT locomotives identified by road numbers 833, 834, 836, 838, 840, 841, 842, and 843 and four (4) are ex-NJT locomotives, identified by road numbers 4800, 4801, 4802, and 4803, all of which were originally manufactured by the General Electric Company.

### A.1 See Exhibit A.1, "Technical Specifications"

### A.2 Responsibilities of the Contractor

- A. The Contractor shall submit a complete Master Program Schedule for CTDOT review and approval no later than thirty (30) days after Notice to Proceed and provide monthly updates thereafter. **[CDRL 1-001]**. The program schedule shall identify all milestones, the earliest and latest possible dates for accomplishing each milestone, the shortest and longest permissible time span between each dependent milestone, and major and minor paths which are critical for accomplishment of program objectives. The initial baseline schedule shall be maintained for the duration of the contract for review.
- B. The Master Program Schedule shall be monitored and controlled by the Contractor's management team responsible for all management functions and shall be updated and submitted to the Engineer for review and approval at least monthly during the design, production, and acceptance phases of the Contract **[CDRL 1-002]**
- C. Contractor shall submit to CTDOT for review and approval a listing and submittal schedule of all required documents described in this Specification within thirty (30) calendar days from the Notice to Proceed. **[CDRL 1-003]**
- D. The Contractor shall perform all necessary design work required for the overhaul of the locomotives, and shall prepare all necessary detail drawings, design calculations, other specified technical documentation, and Contract-required submittals. The Contractor shall submit such additional or revised drawings, diagrams, calculations, test results, and demonstrative evidence as CTDOT deems necessary to confirm the completeness and accuracy of Contractor's submittal.
- E. The Contractor shall ensure that each manufacturer/supplier of major items of equipment has a copy of the complete Specification. Copies of Purchase Orders (which may have prices deleted) and revisions to purchase orders for all major items of equipment, as determined by the General Provisions, shall be submitted to CTDOT on an ongoing basis, no less frequent than every thirty (30) days **[CDRL 1-004]**.
- F. As a minimum, the Contractor shall obtain from its subcontractors the same agreement with regard to warranty that the Contractor is required to extend to CTDOT. The Contractor shall obtain from each of those subcontractors written certification of the application and method to be used for warranty of its equipment. A copy of the Contractor's request and the subcontractor's certification shall be submitted to CTDOT for review and approval within thirty (30) days after NTP **[CDRL 1-005]**.
- G. The Contractor shall be responsible for all engineering efforts required to complete the overhaul work, including all required upgrading and modification.
- H. The Contractor shall be responsible for the procurement of all material required to complete the overhaul of the engine and any additional optional equipment overhaul of the locomotives defined in this specification.
- I. The Contractor shall furnish all management, labor, materials, tools, equipment, data, design, service and incidentals necessary to overhaul the locomotives and deliver the locomotive in strict conformance with the Contract requirements, in a proper, thorough, skillful, and workmanlike manner, complete and ready for service.

- J. The Contractor shall utilize the OEM standards in the performance of this contract unless otherwise stated.
- K. The Contractor is responsible for making any modifications that may be required by FRA during completion of locomotive construction, testing and delivery.
- L. The Contractor is responsible for developing procedures for all repairs to be made and component and system testing performed on CTDOT locomotives. Each procedure shall be approved by CTDOT prior to commencement of the test detailed in the procedure. Where specification provisions require inspection of parts to determine suitability for continuing in service, it is assumed that the Contractor will determine what repairs, if any, are required and carry them out with the concurrence of CTDOT's representatives.
- M. Where components or assemblies are specified to be overhauled or remanufactured, the Contractor may, with CTDOT's approval, supply new material.
- N. Where replacement of consumables is specified, they shall be replaced with new.
- O. All small hardware and body parts which are missing from components specified to be overhauled shall be replaced with new material by the Contractor at his expense.
- P. The locomotives after the overhaul shall be complete with auxiliary equipment, subsystems and accessories, and shall be in full working order.
- Q. The Contractor is responsible for developing procedures for all static functional and dynamic operational testing of the locomotives. Each procedure shall be approved by CTDOT prior to commencement of the work detailed in the procedure.

### **A3. CTDOT Responsibilities**

CTDOT will be responsible for the following activities:

- A. The following work will include, but not be limited to, duties performed under the general direction of CTDOT. CTDOT will delegate its Authorized Representative to take the following actions:
  - 1. Inspection of the work for compliance with the Contract.
  - 2. Issuance of written orders to stop and/or resume work under the "Stop Work Order" clause of the Contract Provisions.
  - 3. Preparation of CTDOT estimate for Proposed Contract Modifications.
  - 4. Modification of Contract pursuant to the "Changes to the Contract" section of the Contract Provisions Section A25., in each instance not to exceed the dollar amount authorized by CTDOT in the notice of delegation.
  - 5. Preparation and approval of payments, including releasing retainage and assessing liquidated damages.
  - 6. An approval in writing of the Contractor's shop drawings, working drawings, materials, equipment, manufacturing plans, quality assurance programs, and storage areas.
  - 7. An approval in writing of the Contractor's progress schedule when required.
  - 8. Designation of time and location of pickup and delivery within the schedule set forth in the Contract.
  - 9. Issue "Cure Notices", pursuant to the "Abandonment or Default by Contractor" Clause of the Contract Provisions Section A24., "if the Contractor fails to perform any of the other provisions of this Contract, or so fails to make progress as to endanger performance of this Contract in accordance with its terms."
- B. The Authorized Representative is not authorized to render final decisions under the "Disputes" provision of the Contract Provisions.
- C. The Authorized Representative is not authorized to issue Termination Notices pursuant to the terms of this Contract.
- D. The presence or absence of the Authorized Representative or his inspectors shall not relieve the Contractor from any requirements of the Contract.



#### **A4. Communication Requirements**

- A. The Contractor shall be responsible for supervising and directing the work under this Contract and all Subcontractors that he may utilize.
- B. All correspondence, drawings, data, or other written communications pertaining to this Contract shall be in English using the English system of weights and measures. All monies expressed shall be in United States dollars. All conversations between the Contractor and CTDOT shall be in English. All correspondence shall be on single sided 8.5" x 11" white sheets.
- C. Communications in connection with this Contract shall be in writing, and shall be delivered personally; electronically, or by facsimile, or by regular, registered or certified mail addressed to the officer(s) or employee(s) of CTDOT and of the Contractor designated to receive such communications. Telephone calls may be used to expedite communications, but shall not be official communication unless confirmed in writing.
- D. In order to preclude misunderstandings and delays in the overhaul process arising from language difficulties, CTDOT requires that those representatives of the Contractor who serve as an official liaison to CTDOT or its representatives shall be sufficiently fluent and versed in their speech, writing, and understanding of the English language so as to enable a facile and comprehensive language intercourse between the Contractor and CTDOT, and its representatives, to the extent that it concerns their ability to communicate.
  - 1. CTDOT reserves the right of rejection of any representative of the Contractor who is found by CTDOT to be so deficient in ability to communicate in English as to be prejudicial to CTDOT's best interest.

#### **A5. Submittal Form**

- A. All submissions shall be properly referenced to clearly indicate the location, service, and function of each particular subject, and shall include the proper references to the appropriate Specification section including drawing numbers and details. Where the manufacturer's publications in the form of catalogs, pamphlets, or other data sheets are submitted in lieu of prepared shop drawings, such submissions shall specifically indicate the item for which approval is requested. Identification of items shall be made in ink. Submissions showing only general information will not be acceptable.
- B. The submittal of electronic files of all drawings, letters, attachments, CDRLs, and other documents shall be via email to the Project Manager, attention: [marci.petterson@ct.gov](mailto:marci.petterson@ct.gov)

#### **A6. Conformity with Plans and Specifications**

- A. No willful and substantial deviation from the Plans and Specifications shall be made unless authorized in writing by CTDOT.
- B. Any change which can affect the amount of, or time for completion of, the Contract shall be handled by Change Order to the Contract in accordance with "Scope", #10 and Section A25.

#### **A7. Service Engineer**

- A. The Contractor shall furnish the services of one or more, as mutually agreed upon, qualified, factory trained, English-speaking, Field Service Engineer(s) promptly when requested by CTDOT for assistance during inspection, operation, testing and adjustment of the Contractor furnished equipment, to insure satisfactory performance, and to instruct a reasonable number of CTDOT Service Operator's employees in the proper use and care of the equipment.
- B. The Contractor shall have a Service Engineer available, within twenty-four (24) hours of receipt of request for service, during a time period from delivery of the first locomotive to Final Acceptance of the final locomotive, and within seventy-two (72) hours of receipt of request for service during the warranty period.
- C. The cost of the Service Engineer(s) shall be included in the Contract Price.

#### **A8. Engineer's Facilities**

- A. The Contractor shall furnish and maintain at his own expense an office and facilities for the use of CTDOT, the Engineers and Inspectors at each plant where production or fabrication and assembly is performed. The office shall be in close proximity to the final assembly area.
1. The office shall have:
    - a. Tumbler lock on the door;
    - b. Private and interplant telephone service;
    - c. One (1) standard office desk with swivel chair; and
    - d. Two (2) five (5) drawer filing cabinets (letter or legal size).
  2. Access to office restroom facilities or self-contained restroom facilities shall be provided.
  3. There shall be direct access to the office via automobile during normal business hours and/or while production is in operation.
  4. Facsimile transmission service shall be provided.
  5. The Contractor shall provide a desktop computer, Intel Core2 or better, with an internet connection. Software shall include, at a minimum:
    - a. Windows 7 operating system
    - b. Microsoft Office 2010 Internet Explorer

#### **A9. Security**

Contractor must adhere to established security and/or property entrance policies and procedures established for each State location. It is the responsibility of each contractor to understand and adhere to those policies and procedures prior to any attempt to enter the premises.

#### **A10. Property Damage**

Contractor shall make prompt restitution to CTDOT by certified check or replacement, or repairs (subject to CTDOT's approval), in settlement of any damage(s) to the Contract User or tenants' property caused by the Contractor's employee(s).

#### **A11. Planning and Scheduling**

- A. The Contractor, within four (4) weeks from Notice to Proceed, shall submit to CTDOT for review and acceptance the submission schedule for the following items:
1. Master Program Schedule
  2. Contract Deliverables Requirement List
  3. Copies of Purchase Orders
  4. Subcontractor's certification of warranty
  5. Project Management Plan
  6. Drawing list and scheduled completion dates of drawings
  7. Work schedule analysis list and scheduled completion dates of analyses
  8. Quality Assurance Program
  9. Detailed bar chart and drawing for the repair, overhaul, testing, and delivery of the locomotives
  10. Procedures list for in-plant inspections and tests and schedule for submission of procedures

11. Special instruction books
  12. All other items requiring CTDOT review and acceptance.
- B. Sufficient time shall be provided in the submission schedule to permit CTDOT review and acceptance a minimum of four (4) weeks prior to repair, overhaul, replacement/installation, or other need for each item.

**A12. Management Systems**

This Section delineates the requirements for the management systems which shall be sufficiently comprehensive to enable CTDOT to ascertain, with a high degree of confidence, that the Contractor will meet the requirements of these Specifications and to enable CTDOT to monitor the Contract effort.

A. Management Program

The Contractor shall establish an organization to properly manage this locomotive overhaul program. The organization shall be highly responsive to the needs of CTDOT in these Specifications. The Contractor shall develop a Management Plan [CDRL 1-006] and submit to CTDOT for review and approval. The Management Plan shall be submitted within thirty (30) days after NTP and shall be updated at two (2) month intervals. The Management Plan shall describe all design and configuration reviews and audits required by the Specification and shall include, but shall not necessarily be limited to:

1. An Organization Chart defining the responsibilities and qualifications of all personnel, including addresses and telephone numbers for Contractor, subcontractors, and major equipment suppliers.
2. The internal methods and communications to be used to control the program schedule, technical performance, program changes, subcontracts, purchase orders, material procurement, and field service support.
3. A Master Program Schedule showing key milestones and events.
4. A flowchart of all project tasks indicating task integration, including subsystems integration, industrial design, weight control, and conceptual design of the vehicles.
5. Design reviews conducted on a periodic basis to assess the degree of completion of technical effort related to major milestones.
6. First Article Inspections (FAIs): FAIs are required for all Locomotive Systems and Subsystem of a new design. First Article Inspections, where applicable, must be part of the Systems/Subsystems Overhaul Plans to be submitted by the Contractor as required in each of the Sections of the Technical Specifications.
7. A schedule identifying all elements of design and manufacture requiring approval or otherwise deliverable under the terms of the Contract, indicating when and for which items CTDOT approval is required, to the level of the individual item submittal.

B. Contract Deliverable Requirements List (CDRL)

TABLE -1

CDRL	Description	Due
CDRL 1-001	Master Program Schedule	Thirty (30) Days after NTP
CDRL 1-002	Master Program Schedule Updates	Every Thirty (30) Days
CDRL 1-003	Contract Deliverables Requirement List	Thirty (30) Days after NTP
CDRL 1-004	Copies of Purchase Orders	Every Thirty (30) Days
CDRL 1-005	Contractor's Requests for and Subcontractor's Submittal of certification of warranty	Thirty (30) Days after NTP
CDRL 1-006	Management Plan	Thirty (30) Days after NTP

### **A13. Serial Numbers**

- A. Serial numbers for each component overhauled shall be recorded on a digital spreadsheet by locomotive road number.
- B. Multiple components per vehicle shall each be given an approved designation by position or otherwise.
- C. Serial numbers shall be recorded on one spreadsheet for all applicable components as removed from vehicles during dismantling, or received separately from CTDOT.
- D. Serial numbers shall be recorded on a second spreadsheet for all applicable components as applied to vehicles during reassembly, or shipped separately to CTDOT.
- E. Spreadsheet formats shall be submitted for review and acceptance of CTDOT.
- F. Spreadsheets shall be prepared in Microsoft Excel 2010 format.
- G. Information on spreadsheets shall be updated on a monthly basis and sent to CTDOT by email. The final spreadsheet shall also be sent to CTDOT by email, both to the attention of [marci.petterson@ct.gov](mailto:marci.petterson@ct.gov)

### **A14. New Materials**

- A. The Contractor shall furnish all materials required to repair and/or overhaul the locomotive(s) in accordance with the Contract Documents, and said materials shall meet the requirements of the Specifications for the kind of applications involving their use.
- B. Only quality materials which are generally accepted in the industry and conform to the requirements of these Specifications shall be used in the work.

### **A15. Quantities and/or Usages**

These are estimated quantities and/or usages only and in no way represent a commitment and/or intent to purchase. Actual quantities may vary and will be identified on individual purchase orders issued by CTDOT.

### **A16. Contractor's Material Qualification**

- A. It is the responsibility of the Contractor to furnish complete end products, materials and specialties of the type, design, and performance which will result in integrated, operating end product units and/or systems in accordance with the Technical Provisions.
- B. Contractor shall be responsible for the satisfactory delivery and operation of all equipment and materials covered by the Contract Document whether manufactured by him, or manufactured by a Subcontractor.
- C. Contractor shall furnish evidence, if required by the Engineer, that equipment of comparable rating (or higher) to that which he proposes to furnish, has been in satisfactory operation in similar applications.

### **A17. Patent Indemnity**

- A. In the performance of this Contract CTDOT has required the Contractor to furnish certain equipment, components, materials and supplies which may be:
  - 1. Items designated by brand name,
  - 2. Other items.
- B. Items in category Section A17., A. 1. are furnished by the Contractor at the direction CTDOT, and accordingly have not been investigated for possible risks arising under patents. The Contractor therefore assumes no obligation to CTDOT with respect to such risks.
- C. As to items in Section A17., A. 2. the Contractor warrants that the products furnished hereunder, and any part hereof, shall be delivered free of any rightful claim of third party for infringement of any United States patent.
- D. If notified in writing and given authority, information, and assistance, the Contractor shall defend, or may

settle, at its expense any suit or proceeding against CTDOT so far as based on a claimed infringement which would result in a breach of this warranty and the Contractor shall pay all damages and costs awarded therein against CTDOT due to such breach.

- E. In case any product, or part thereof, is in such suit held to constitute an infringement and the use for the purpose intended of such product or part is enjoined, the Contractor shall, at his expense and option, either procure for CTDOT the right to continue using said product or part, or replace with some non-infringing product or part or modify same so it becomes non-infringing, or remove the product and refund the purchase price (less reasonable depreciation for any period of use) and any transportation costs separately paid CTDOT.
- F. The preceding states the entire liability of the Contractor for patent infringement by said products or any part thereof. The Contractor shall indemnify CTDOT for any costs, expenses and damages which it may be obliged to pay, by reason of any infringement, at any time during the prosecution or after the completion of the work.
- G. After termination of the guarantee applying to the last locomotive delivered, CTDOT will assume the right to manufacture, or to cause to be manufactured, any assembly or component for its sole use in maintaining in relation to letters of patent or copyrights. Except for patented devices, the Contractor shall not have exclusive proprietary rights pertaining to the design of the locomotive(s).
- H. CTDOT reserves the right to request and review any and all documents which may assign the rights of a patented item(s) from the patent holder or patentee to the awarded Contractor.
- I. While CTDOT recognizes that certain materials or component parts may be produced under the terms of licensing or cross licensing agreements, it must be understood that the use of such materials and component parts requiring the application of recurring royalty charges, costs or payments is specifically prohibited.

#### **A18. Permits**

The Contractor shall procure all permits and licenses in producing the end product, pay all charges, fees, and taxes and give all notices necessary and incidental to the due and lawful prosecution of this procurement.

#### **A19. Subcontractors**

CTDOT must approve any and all subcontractors utilized by the Contractor prior to any such Subcontractor commencing any work. Contractors acknowledge by the act of submitting a Proposal that any work provided under the contract is work conducted on behalf of CTDOT and that the Commissioner of DOT or his designee may communicate directly with any Subcontractor as CTDOT deems to be necessary or appropriate. It is also understood that the Contractor shall be responsible for all payment of fees charged by the Subcontractor(s). A performance evaluation of any Subcontractor shall be provided promptly by the Contractor to CTDOT upon request.

#### **The Contractor must provide the majority (50% or more) of services described in the specifications**

- A. Before entering into any Subcontracts, the Contractor shall submit a written statement to the Engineer giving the name and address of the proposed Subcontractor, the portion of the work and material which he is to perform and finish, and any other information necessary to prove that the proposed Subcontractor has the necessary facilities, skill, integrity, past experience and financial resources to perform the work in accordance with the terms and conditions of this Contract.
- B. If the Engineer determines that the proposed Subcontractor is qualified, he will notify the Contractor within seven (7) working days.
  - 1. If the determination is to the contrary, however, the Engineer will, within ten (10) days, notify the Contractor who may thereupon submit the name of another proposed Subcontractor unless he decides to do the work himself.
- C. The Engineer approval of a Subcontractor shall not relieve the Contractor of any of his responsibilities, duties, and liabilities hereunder.

- D. The Contractor shall be solely responsible to CTDOT for the acts or defaults of his Subcontractor and of such Subcontractor's officers, agents and employees, each of whom shall, for this purpose, be deemed to be the agent and employees of the Contractor to the extent of his Subcontract.
1. He shall also be responsible for the coordination of the work of the trades, Subcontractors and material men.
- E. No Subcontractor shall be permitted to perform work until he, or the Contractor, has furnished satisfactory evidence of insurance as required.
- F. The Contractor shall promptly, upon request, file with the Engineer a confirmed copy of the Subcontract, with the price and terms of payment deleted.
- G. CTDOT or its representatives will not undertake to settle any difference between the Contractor and his Subcontractors, or between Subcontractors.
- H. The Subcontractor shall look only to the Contractor for the payment of the claims of any nature whatsoever arising out of said Subcontract, and said Subcontractor agrees, as a condition of granting by CTDOT of the consent to the making of the Subcontract, that he shall make no claim whatsoever against CTDOT, its members or agents, for any work performed or thing done by reason of said Subcontract, or for any other cause whatsoever that may arise by reason of the relationship created between the Contractor and the Subcontractor by the Subcontract.
- I. Payments to Subcontractors:  
Section 49-41 and Section 49-41c of the Connecticut General Statutes require general Contractors to pay their Subcontractors within thirty (30) days of having received payment by CTDOT for work performed or materials furnished by such Subcontractor. In turn, Subcontractors have thirty (30) days upon receiving payment from the general Contractor to pay their Subcontractors.

#### **A20. Contract Time and Liquidated Damages**

One Thousand One Hundred (1100) calendar days from the NTP will be allowed for completion of work on this project.

- A. It is understood and agreed by the Contractor that time is of the essence in the delivery of supplies, services, materials, and equipment of the character and quality specified in the RFP documents.
- B. On or before the date stated in the Proposal for delivery, or the date to which the time of delivery shall have been extended under the provisions of Section A21., delivery of all locomotives shall have been completed in accordance with the terms of the Contract.
- C. In the event these specified supplies, services, materials and equipment are not delivered by the dates specified in the Contractor's Proposal and incorporated herein as part of the Contract, there will be deducted, not as a penalty but as Liquidated Damages, the sum of eight hundred dollars (\$800) per day per each locomotive, one thousand dollars (\$1000) per set of drawings, and two thousand dollars (\$2000) per set of manuals.
- D. When a delay occurs due to reasonable causes beyond the control of the Contractor, including but not limited to, acts of God, acts of government of any governmental agency, war or war conditions, riot or civil conditions, sabotage, strikes, lockouts, accident, fire, flood, typhoons, hurricanes, explosion, damage to plant, equipment, or facilities, the time for performance and completion of the work may be adjusted and extended as required to accommodate the delays and their effect.
1. Upon receipt of a written request and justification for any extension from the Contractor, CTDOT may extend the time for performance of the Contract or delivery of goods herein specified, at CTDOT's sole discretion, for good cause shown.
  2. The Contractor shall have the option of providing leased equipment subject to the acceptance of the Engineer and CTDOT's sole discretion.

- E. The Contractor shall use reasonable diligence to remove or overcome any such causes as expeditiously as possible. In no event, however, shall the Contractor be liable for Liquidated Damages for each locomotive under this provision or any other provision of the Contract in excess of ten percent (10%) of the value of the work on each locomotive, as indicated in the Base Bid unit delivered price.
- F. Whatever sum of money may become due and payable to CTDOT by the Contractor under this Section may be retained out of money belonging to the Contractor in the hands and possession of CTDOT.
- G. Permitting the Contractor to continue and deliver locomotives after the time fixed for their completion, or after the date to which the time for delivery may have been extended, shall in no way operate as a waiver on the part of CTDOT of any of its rights under the Contract.

**A21. Determination and Extension of Contract Time for Completion**

- A. It is an essential part of this Contract that the Contractor shall perform fully, entirely, and in an acceptable manner, the work required under the Contract within the time stated in the RFP, except that the Contract time for completion shall be adjusted as follows:
  - 1. In case the commencing of the work is delayed or any part thereof is delayed or suspended by CTDOT (except for reasons caused by the fault or neglect of the Contractor), the Contractor shall be granted an extension of time in which to complete the work or any portion of the delay less a reasonable period of time within which he could have done necessary preliminary work.
  - 2. Each Change Order as issued will include a statement of additional time, if any, that is agreed upon by the Contractor and the Contracting Officer as required for the completion of this Contract by reason of this Change Order, and no other time allowance on account of the performance of the work covered by such Change Order shall be allowed.
- B. The Contract period has been carefully considered and has been established for reasons of importance to CTDOT. This time limit shall be enforced and any prospective Contractor who is not willing to accept this Contract with intention of complying with the time limit is cautioned not to submit a Proposal.

**A22. Stop and Suspension of Work**

- A. CTDOT may, at any time, by written order to the Contractor, stop all, or any part, of the work called for by this Contract for a period not to exceed ninety (90) days after the order is delivered to the Contractor and for any further period to which the parties may agree.
  - 1. Any such order shall be specifically identified as a Stop Work Order issued pursuant to this Section.
  - 2. Upon receipt of such an order, the Contractor shall forthwith comply with its terms and take all reasonable steps to minimize the incurring of costs allocable to the work covered by the order during the period of work stoppage.
  - 3. Within a period of ninety (90) days after a Stop Work Order is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, CTDOT shall either:
    - a. Cancel the Stop Work Order; or
    - b. Terminate the work covered by such order as provided in the attached "Agency Contract Document" (CTDOT 50-A), Section 8, "Termination".
- B. If a Stop Work Order issued under this Section is cancelled or the period of the order or any extension thereof expires, the Contractor shall resume work.
  - 1. An equitable adjustment will be made in the delivery schedule or Contract price, or both, and the Contract will be modified in writing accordingly, if:

- a. The Stop Work Order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this Contract; and
  - b. The Contractor asserts a claim for such adjustment within thirty (30) days after the end of the period of work stoppage; provided that, if CTDOT decides the facts justify such action, he may receive and act upon such claim asserted at any time prior to final payment under this Contract.
- C. If a Stop Work Order is not cancelled and the work covered by such order is terminated for the convenience of CTDOT, the reasonable costs resulting from the Stop Work Order will be allowed in arriving at the termination settlement.

**A23. Claim for Delay or Suspension of the Work**

- A. The Contractor hereby agrees that he shall have no claim for damages of any kind on account of any delay in commencement of the work or any delay or suspension of any portion thereof, except as hereinafter provided.
- 1. If the Engineer in his judgment shall determine that the performance of all or any major portion of the work is suspended, delayed, or interrupted for any unreasonable period of time, any act of CTDOT in the administration of the Contract or by CTDOT's failure to act as required by the Contract within the time specified in the Contract (or if no time is specified, within a reasonable time), and without the fault or negligence of the Contractor, an adjustment shall be made by CTDOT for any increase in the actual cost of performance of the Contract (excluding profit and overhead) necessarily caused by the period of such suspension, delay, or interruption.
    - a. Adjustment shall be made also in the delivery or performance dates or any other Contractual provision affected by such delay or interruption.
    - b. No adjustment shall be made if the performance by the Contractor would have been prevented by other causes even if the work had not been suspended, delayed or interrupted by CTDOT or its representative.
    - c. No adjustment shall be made, under this Section, for which an adjustment is provided or excluded under any other Section of this Contract.
  - 2. No claim shall be allowed under this Subsection for CTDOT's failure to act as required by the Contract within the time specified in the Contract (or if no time is specified, within a reasonable time) for any cost incurred more than twenty (20) days before the Contractor shall have notified CTDOT in writing of his claim due to CTDOT's failure to act.
  - 3. No claim under this Subsection shall be allowed unless the claim, in an amount stated, including breakdown of how the amount was computed, is asserted in writing as soon as practical after the termination of such delay or interruption, but not later than the date of the final payment under the Contract.
- B. Any dispute concerning whether the delay or suspension is unreasonable or any other question of fact arising under this paragraph shall be determined by CTDOT or its designee and such determination and decision, in case any question should arise, shall be a condition precedent to the right of the Contractor to receive any money hereunder.
- C. The Contractor further agrees that the sole allowance for any such delay or suspension, other than as provided above, is an extension of time as provided in Section A21., A.

**A24. Abandonment or Default by Contractor**

- A. CTDOT may, subject to the provisions of the attached Agency Contract Document" (CTDOT 50-A), Section 8, "Termination", by written notice of default to the Contractor, terminate the whole or any part of this Contract in any one of the following circumstances:
- 1. If the work to be done under this Contract is abandoned by the Contractor; or



2. If the Contractor fails to make delivery of the supplies or to perform the services within the time specified herein or any extension thereof; or
  3. If the Contractor fails to perform any of the other provisions of this Contract, or so fails to make progress as to endanger performance of this Contract in accordance with its terms, and in either of these two circumstances does not cure such failure within a period of ten (10) days (or such longer period as CTDOT may authorize in writing) after receipt of notice from CTDOT specifying such failure.
- B. In the event CTDOT terminates this Contract in whole or in part as provided in the attached Agency Contract Document" (CTDOT 50-A), Section 8, "Termination", CTDOT may procure, upon such terms and in such manner as CTDOT may deem appropriate, supplies or services similar to those so terminated, and the Contractor shall be liable to CTDOT for any excess costs for such similar supplies or services; provided, that the Contractor shall continue the performance of this Contract to the extent not terminated under the provision of this section.
- C. Except with respect to default or delay to Subcontractors, the Contractor shall not be liable for any excess costs if the failure to perform the Contract arises out of causes beyond the control and without the fault or negligence of the Contractor.
1. Such causes may include, but are not restricted to, acts of God or of the public enemy, acts of the government in its sovereign capacity or CTDOT in its Contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather; but in every case the failure to perform must be beyond the control and without the fault or negligence of the Contractor.
  2. If the failure to perform is caused by the default or delay of the Subcontractor or supplier at any tier, and if such default or delay arises out of causes beyond the control of the Contractor and Subcontractor and supplier and without the fault or negligence of any of them, the Contractor shall not be liable for any excess costs for failure to perform, unless the supplies or services to be furnished by the Subcontractor or supplier were obtained from other sources in sufficient time to permit the Contractor to meet the required delivery schedule.
- D. If this Contract is terminated as provided in the attached Agency Contract Document" (CTDOT 50-A), Section 8, "Termination", CTDOT, in addition to any other rights provided in this section, may require the Contractor to transfer title and deliver to CTDOT, in the manner and to the extent directed by CTDOT, any completed supplies, and such partially completed supplies and materials, parts, tools, dies, jigs, fixtures, plans, drawings, information, and Contract rights (herein after called "manufacturing materials") as the Contractor may have specifically produced or specifically acquired for the performance of such part of this Contract as has been terminated; and the Contractor shall, upon direction of CTDOT, protect and preserve property in the possession of the Contractor in which CTDOT has an interest.
1. Payment for completed supplies delivered to and accepted by CTDOT shall be at the Contract price.
  2. Payment for manufacturing materials delivered to and accepted by CTDOT and for protection and preservation of property shall be in an amount agreed upon by the Contractor and the Engineer; failure to agree to such amount shall be a dispute concerning a question of fact within the meaning of the section of this Contract entitled "Claims and Disputes", Section A27.
  3. CTDOT may withhold from amounts, otherwise due the Contractor for such completed supplies or manufacturing materials, such sum as the Engineer determines to be necessary to protect CTDOT against loss because of outstanding liens or claims of former lien holders.
- E. If, after notice of termination of this Contract under the provisions of this section, it is determined for any reason that the Contractor was not in default under the provisions of the section, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to in the attached Agency Contract Document" (CTDOT 50-A), Section 8.
- F. If the Contractor fails to deliver the supplies or perform the services within the time specified in this Contract, or any extension thereof, the actual damage to CTDOT for the delay will be difficult or impossible to determine.

1. Wherefore in lieu of actual damages, the Contractor shall pay to CTDOT as fixed, agreed, and Liquidated Damages for each day of delay, the amount set forth in Section A20., C.
  2. Alternatively, CTDOT may terminate this Contract in whole or in part as provided in the attached Agency Contract Document" (CTDOT 50-A), Section 8, "Termination", and in that event the Contractor shall be liable in addition to the excess costs provided in Section A20. above, for such Liquidated Damages accruing until such time as CTDOT may reasonably obtain delivery or performance of similar supplies or services.
  3. The Contractor shall not be charged with Liquidated Damages when the delay arises out of causes beyond the control and without the fault or negligence of the Contractor and Subcontractor and supplier at any tier, as defined in Section A19. above, and in such event, subject to the "Claims and Disputes", Section A26., the Engineer shall ascertain the facts and extent of the delay and shall extend the time for performance of the Contract when in his judgment the findings of fact justify an extension.
- G. The rights and remedies of CTDOT provided in this section shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.
- H. As used in Section A19., the terms "Subcontractor" and "Subcontractors" mean Subcontractor(s) at any tier.

#### **A25. Changes to Contract**

- A. By written notice to the Contractor, CTDOT may make changes within the general scope of the Contract, in the goods or services to be provided by the Contractor, the method of shipment or packing, the place of delivery, or the place of performance. The Contractor shall promptly comply with the notice and shall make all subsequent shipments of goods and performance of services in conformity to the notice.
- B. If any such change causes an increase or decrease in the Contractor's cost of performance or the time required for performance, an equitable adjustment in the Contract price and/or the time allowed for performance of the Contract shall be negotiated and the Contract modified accordingly by written supplemental agreement. Any claim by the Contractor for adjustment under this clause must be asserted by written notice to CTDOT within thirty (30) days from the date of receipt by the Contractor of the change notice.
1. In no event, may the amount of any Contract, without adequate consideration, be increased for any purpose, including, but not limited to, relief of a Contractor from the consequences of an error in his Proposal.
  2. If the parties fail to agree to an adjustment, the question of an increase or decrease in the Contract price or time allowed for performance shall be resolved in accordance with the procedures for resolving disputes provided by Section A27.
- C. Neither the existence of a claim, a dispute, submission of the dispute to the dispute resolution process, litigation or any portion of this provision or CHANGES shall excuse the Contractor from promptly proceeding with performance of the Contract as changed by the notice. Any proposed change in this Contract shall be submitted to CTDOT for its prior approval.
- D. CTDOT may, upon mutual agreement with the Contractor, issue written modifications to the Technical Specifications of this Contract, and within the general scope thereof. In making any modification, the resulting increase or decrease in cost for the modification shall be determined by one of the following methods as selected by CTDOT:
1. The written modification shall stipulate the mutually-agreed upon price for the specific addition to/deletion from the Technical Specifications which shall be added to or deducted from the Contract amount.
  2. The written modification shall stipulate the number of unit quantities added to/deleted from the Contract and multiplied by the unit price which shall be added to or deducted from the Contract amount.
  3. The written modification shall direct the Contractor to proceed with the work and to keep, and present in such form as CTDOT may direct, a correct account of the cost of the change together with all vouchers therefore. The cost shall include an allowance for overhead and profit to be mutually agreed upon by

CTDOT and the Contractor.

- E. The written notice submitted by the Contractor for work outside of the scope of the Contract shall include the following information:
  - 1. Description of the change and detail of the work to be done.
  - 2. Detailed cost and pricing data to include material, labor, overhead and profit. Prices shall be quoted in United States of America dollars (no cents) on a per locomotive basis.
  - 3. A statement of additional time, if any, that is required for the completion of the Contract.
- F. CTDOT acknowledges that damages may exist which are not visibly obvious and are not currently included in the Overhaul Specification. Should the Contractor discover such damages, the Contractor shall immediately notify CTDOT and begin the preparation of a Work Scope Change Request, in accordance with the following:
  - 1. Description of change and details of work to be done.
  - 2. Detailed cost and pricing data to include material, labor, overhead and profit. Prices shall be quoted in United States of American dollars (no cents) on a per locomotive basis.
  - 3. A statement of additional time, if any, that is required for the completion of the Contract by reason of this proposed modification.
- G. The Contractor shall maintain and provide a record of all Engineering and/or Contractual Change Orders that have been submitted and/or accepted/denied by CTDOT.
  - 1. Changes shall be logged and listed on a Change Status Report that shows and identifies the action taken on each change.
  - 2. The Change Status Report shall be updated at least bi-weekly and copies submitted to the CTDOT, Office of Rail Operations, Project Manager, and the onsite Engineer.
  - 3. A separate report shall be prepared and updated showing the original and revised Contract cost per locomotive delineating all additions on a per item and per Change Order basis, with the format of the report to be approved by CTDOT.
- H. Employees and representatives of CTDOT are not authorized to request work to be performed or services to be provided other than as specified above.
- I. CTDOT shall not accept any responsibility whatsoever for work or services for which there is no specific proper authorization.
- J. All Change Orders shall be executed in accordance with CTDOT policies and procedures, the document of which shall be supplied to the Contractor at the time of execution, and may or may not be noted on the Purchase Order change as determined by CTDOT.
- K. Contractor Proposed Changes
  - 1. The Contractor may at any time submit to CTDOT in writing for review and acceptance or denial, proposed modifications to the Contract Documents which will benefit CTDOT. CTDOT shall review and may accept such modifications. Upon acceptance by CTDOT of the proposed changes, CTDOT shall execute and issue a Change Order.
  - 2. Denial of a proposed modification shall neither provide the Contractor with any basis for claim for damages nor release the Contractor from Contractual responsibilities.

#### **A26. Dispute Accounting**

- A. When costs are a factor in any request by the Contractor for a Contract price adjustment pursuant to "Changes to Contract", Section A25., "Claim for Delay or Suspension of Work", Section A23. or a claim under any provision of this Contract, the Contractor and/or any Subcontractor engaged in performing the affected work shall maintain and furnish to CTDOT, on request, separate accounts by job order or other suitable accounting

procedure, of all incurred segregatable, direct costs, (less allocable credits), of work, both changed and not changed, allocable to the change.

#### **A27. Claims and Disputes**

- A. Except as otherwise provided in this Contract, any dispute concerning a question of fact arising under this Contract which is not disposed of by agreement shall be decided by the Assistant Rail Administrator (Bureau of Public Transportation), who shall produce his decision in writing within sixty (60) days of receipt of written notification of the dispute by the Contractor and mail or otherwise furnish a copy thereof to the Contractor.
- B. The decisions of the Bureau of Public Transportation shall be final and conclusive unless, within six (6) months from the date of receipt of such copy, the Contractor mails or otherwise furnishes to CTDOT a written appeal addressed to the Department of Transportation, Bureau of Finance and Administration, Office of Purchasing and Materials Management, 2800 Berlin Turnpike, P.O. Box 317546, Newington, Connecticut, 06131-7546.
- C. In connection with any appeal proceeding under this Section, the Contractor shall be afforded an opportunity to be heard and to offer evidence in support of his appeal.
- D. Pending final decision of a dispute hereunder, the Contractor shall proceed diligently with the performance of the Contract and in accordance with CTDOT's decision.

#### **A28. Storage of Materials and Preparation for Delivery**

- A. Storage of Materials
  - 1. All materials intended for use on these locomotives shall be marked and stored in the Contractor's plant so as to be readily identified, and shall be adequately protected during handling and storage.
- B. Certificate of In-Plant Inspection and Release for Shipment
  - 1. Unless specifically excepted by the Contract Documents, and additionally at the sole discretion of CTDOT, each locomotive shipped from the Contractor's plant shall be complete, ready to run.
  - 2. In the event that locomotives are complete and ready for shipment prior to the delivery dates required by CTDOT as detailed in this specification, the Contractor shall so notify CTDOT. At CTDOT's option, said locomotives may be shipped.
- C. Preparation for Delivery
  - 1. All parts that must be removed to permit shipment and those items not permanently secured to the locomotive(s), shall be securely boxed to prevent damage, and shipped in the locked locomotive to which they belong.
- D. Delivery
  - 1. To be considered to be "delivered", each locomotive, subsequent to receipt, must be in a sound, whole, ready-to-run condition, ready for receiving inspection. Should CTDOT agree to allow locomotives to be shipped onto the Service Operator's property with work remaining to be done, the locomotives shall not, unless otherwise agreed upon by CTDOT, be considered to be "delivered" until the Contractor has satisfactorily completed all such work. The Contractor shall be responsible for all locomotive related costs incurred during the "shipment", "receipt" and delivery of the locomotives.

#### **A29. Receipt of Contractor Furnished Equipment and Materials**

- A. Receipt of Locomotives
  - 1. Each completed locomotive shall be received on its own wheels on the tracks at the Connecticut Commuter Rail Maintenance Facility, 54 Hallock Ave., New Haven, Connecticut, 06519.
  - 2. Each locomotive will be inspected and a Receiving Report will be prepared by CTDOT.
- B. Receipt of Spare Parts and Other Materials

1. The Contractor shall notify:

The Connecticut Department of Transportation  
Office of Rail Operations  
50 Union Avenue  
New Haven, Connecticut, 06519

Attn: SLE Locomotive Overhaul, Ms. Marci Petterson, Project Manager.

In writing not less than fourteen (14) days prior to shipment of spare parts and other materials that are to be shipped separately from the locomotive(s).

2. The spare parts and other materials shall be shipped prepaid to:

Connecticut Commuter Rail Maintenance Facility  
54 Hallock Avenue,  
New Haven, Connecticut, 06519

Attn: SLE Locomotive Overhaul, Ms. Marci Petterson, Project Manager

3. A Receiving Report shall be prepared listing any missing parts or damage that may have occurred during shipment. The report shall be signed by both the Service Operator's representative and CTDOT's representative.
4. On receipt of any such report which indicates a short shipment or damaged item, the Contractor shall promptly replace any missing or damaged equipment and material to prevent delay of the project. (See Section A23).

#### **A30. Contractor's Title to Materials**

No materials or supplies for the work shall be purchased by the Contractor or by any Subcontractor subject to any chattel mortgage or under a conditional sales or other agreement by which an interest is retained by the seller. The Contractor warrants that he has clear title to all materials and supplies for which he invoices for payment.

#### **A31. Schedule of Joint Inspection and Release for Work**

- A. Within sixty (60) days after the NTP, the Contractor and CTDOT will successfully complete a joint inspection and release of the first two (2) locomotives from CTDOT to the Contractor. This does not release the Contractor from any other provisions.
- B. The Contractor shall be responsible for preparation and shipment of all locomotives from CTDOT to the Contractor's plant and the return of same to CTDOT.
- C. The number of locomotives that may be removed from CTDOT's property at any one time will be determined based on factors such as service needs, the status of the remainder of the locomotive fleet, and the Contractor's availability. This number is to include locomotives in transit to or from the Contractor's facilities. It is anticipated that work will commence on the prototype units of each type a sufficient time period prior to the remaining locomotives to allow for modifications to plans or designs as necessary. CTDOT will release additional locomotives of the same type on a one (1) for one (1) basis upon the Conditional Acceptance of each locomotive.

#### **A32. Inspection**

- A. All supplies (which throughout this clause includes without limitation raw materials, components, intermediate assemblies, and end products) shall be subject to inspection and test by CTDOT, to the extent practicable at all times and locations.
- B. CTDOT shall have the right to reject (with or without instructions as to their disposition) or to require correction, supplies or lots of supplies which are defective in material or workmanship, or are not otherwise in conformity with the requirements of this Contract. Such supplies shall be removed or, if permitted or required by CTDOT, corrected in place by and at the expense of the Contractor promptly after notice, and shall not

thereafter be submitted for acceptance.

- C. If the Contractor fails to promptly remove such supplies or lots of supplies which are required to be removed or promptly replaced or correct such supplies or lots of supplies, CTDOT may either:
  - 1. By Contract or otherwise replace or correct such supplies and back charge to the Contractor the cost incurred by CTDOT thereby; or
  - 2. Terminate this Contract for default as provided in the clause of this Contract entitled "Abandonment or Default by Contractor", Section A24.
- D. Unless the Contractor corrects or replaces such supplies or lots of supplies within the delivery schedule, the Engineer may require the delivery of such supplies or lots of supplies at an equitable reduction in price. Failure to agree to such price reductions shall be a dispute concerning a question of fact within the meaning of the section of this Contract entitled "Claims and Disputes", Section A27.
- E. If any inspection or test is made by CTDOT on the premises of the Contractor or a Subcontractor, the Contractor without additional charge shall provide all reasonable facilities and assistance for the safety and convenience of CTDOT's inspectors in the performance of their duties.
- F. If CTDOT's inspection or test is made at a point other than the premises of the Contractor or a Subcontractor, it shall be at the expense of CTDOT except as otherwise provided in this Contract; provided, that in the case of rejection, CTDOT shall not be liable for any reduction in value of samples used in connection with such inspection or test.
- G. All inspections and tests by CTDOT shall be performed in such a manner as not to unduly delay the work.
- H. CTDOT reserves the right to charge to the Contractor any additional cost incurred by the Engineer for inspection and test when supplies are not ready at the time such inspection and test is requested by the Contractor, or when re-inspection or re-test is necessitated by prior rejection or when the Contractor proceeds with a test that CTDOT and/or the Engineer wish to be present at and have given proper advance notice to be present at such test.
- I. Acceptance or rejection of the supplies shall be made as promptly as practicable after delivery, except as otherwise provided in this Contract; but failure to inspect and accept or reject supplies shall neither relieve the Contractor from responsibility for such supplies as are not in accordance with the Contract requirements nor impose liability on CTDOT therefore.
- J. The inspection and test by CTDOT of any supplies or lots of supplies does not relieve the Contractor from any responsibility regarding defects or other failures to meet the Contract requirements which may be discovered prior to acceptance. Except as otherwise provided in this Contract, acceptance shall be conclusive except as regards to latent defects, fraud, or such gross mistakes or negligence as to amount to fraud.
- K. The Contractor shall provide and maintain a Quality Assurance and inspection system acceptable to CTDOT covering the supplies hereunder.
- L. Records of all inspection work by the Contractor shall be kept complete and available to CTDOT during the performance of this Contract and for such longer period as may be specified elsewhere in this Contract.

### **A33. Responsibility for Inspection**

Notwithstanding the requirements for any CTDOT inspection and test contained in the Specifications applicable to this Contract, except where specialized inspections or tests are specified for performance solely by CTDOT, the Contractor shall perform or have performed the inspections and tests required to substantiate that the supplies and services provided under the Contract conform to the drawings, Specifications, and Contract requirements.

### **A34. Correction of Deficiencies**

A. Definitions: As used in this section:

- 1. "Deficiency" means any condition or characteristics in any supplies (which term shall include related

technical data) or services furnished hereunder, which is not in compliance with the requirements of this Contract; and

2. "Correction" means any and all action necessary to eliminate any and all deficiencies; and
3. The word "Supplies" as used herein means items or end items as furnished by the Contractor and related services required under this Contract.

B. General: The rights and remedies of CTDOT provided in this section:

1. Shall not be affected in any way by any other provisions under this Contract concerning the conclusiveness of inspection and acceptance; and
2. Are in addition to and do not limit any rights afforded to CTDOT by any other section of this Contract.
3. This section shall apply to those deficiencies discovered concerning materials or the locomotive(s) by either CTDOT, its duly appointed representatives, or the Contractor for up to two (2) years after the locomotive(s) are accepted, or a lesser time as indicated in the Contract Documents.
4. The Contractor shall not be responsible under this section for the correction of deficiencies in CTDOT furnished materials, except for deficiencies in installation, unless the Contractor performs or is obligated to perform any modifications or other work on such property. In that event, the Contractor shall be responsible for correction of deficiencies to the extent of such modifications or other work as required in the Contract Documents.
5. The Contractor shall not be responsible under this section for the correction of deficiencies caused by CTDOT.

C. Deficiencies in Accepted Supplies or Services

1. Notice to Contractor; His Recommendation for Correction

If CTDOT determines that a deficiency exists in any of the supplies or services accepted by CTDOT under this Contract, CTDOT shall promptly notify the Contractor of the deficiency, in writing, within ten (10) days. Upon timely notification of the existence of such a deficiency, or if the Contractor independently discovers a deficiency in accepted supplies or services, the Contractor shall promptly submit to CTDOT in writing within ten (10) days his recommendation for corrective actions, together with supporting information in sufficient detail for CTDOT to determine what corrective action, if any, shall be undertaken.

2. Direction to Contractor Concerning Correction of Deficiencies

Within ten (10) days after receipt of the Contractor's recommendations for corrective action and adequate supporting information, CTDOT shall give the Contractor written notice not to correct any deficiency, or to correct or partially correct any deficiency within a reasonable amount of time and at a specified location.

3. Correction of Deficiencies by Contractor

The Contractor shall promptly comply with any timely written direction by CTDOT to correct or partially correct a deficiency, at no increase in the Contract price. The Contractor shall also prepare and furnish to CTDOT data and reports applicable to any correction required under this section (including revision and updating of all other affected data called for under this Contract) at no increase in the Contract price.

4. Modification of Contract With Respect to Uncorrected Deficiencies

In the event of timely notice of a decision not to correct or only to partially correct, the Contractor shall promptly submit a technical and cost proposal to amend the Contract to permit acceptance of the affected supplies or services in accordance with the revised requirements, and an equitable reduction in Contract price shall promptly be negotiated by the parties and reflected in a supplemental agreement to this Contract.

D. Deficiencies in Supplies or Services Not Yet Accepted

If the Contractor becomes aware at any time before acceptance by CTDOT (whether before or after tender to

CTDOT) that a deficiency exists in any supplies or services, he shall promptly correct the deficiency or, if he elects to invoke the procedures in Section A34., C. above, he shall promptly communicate information concerning the deficiency to CTDOT, in writing, together with his detailed recommendation for corrective action.

E. No Extension in Time for Performance; Increase in Contract Price

1. In no event shall CTDOT be responsible for extension or delays in the scheduled deliveries or periods of performance under this Contract as a result of the Contractor's obligations to correct deficiencies, nor shall there be any adjustment of the delivery schedule or period of performance as a result of such correction of deficiencies, except as may be agreed to by CTDOT, in a supplemental agreement with adequate consideration.
2. It is hereby specifically recognized and agreed by the parties hereto that this clause shall not be construed as obligating CTDOT to increase the Contract price of this Contract.

F. Transportation Charges

1. When CTDOT returns supplies to the Contractor for correction or replacement pursuant to this section, the Contractor shall be liable for transportation charges up to an amount equal to the cost of transportation by the usual commercial method of shipment from the designated destination point under this Contract to the Contractor's plant, in addition to any charges provided for by Section A34., F.2. below. The Contractor shall also bear the responsibility and the risk of loss for the supplies while in transit.
2. When compliance with the terms of this section by the Contractor involves shipment of corrected or replacement supplies from the Contractor to CTDOT, the Contractor shall be liable for transportation charges up to an amount equal to the cost of transportation by the usual commercial method of shipment from the Contractor's plant to the designated destination point under this Contract, in addition to any charges provided for by Section A34., F. 1. above. The Contractor shall also bear the responsibility and the risk of loss for the supplies while in transit.

G. Failure to Correct

If the Contractor fails or refuses to:

1. Present a detailed recommendation for corrective action in accordance with A34., C. above,
2. Correct deficiencies in accordance with A34., C. above, or
3. Prepare and furnish data and reports in accordance with A34., C. above, CTDOT shall give the Contractor written notice specifying the failure or refusal and setting a period after receipt of the notice within which it must be remedied. If the failure or refusal is not cured within the specified period of time, CTDOT may, by Contract or otherwise, as required:
  - a. Correct the supplies or services, or
  - b. Replace the supplies or services -- and if the Contractor fails to furnish timely disposition instructions, CTDOT may dispose of non-conforming supplies for the Contractor's account in a reasonable manner, in which case CTDOT is entitled to reimbursement from the Contractor or from the proceeds for the reasonable expenses of care and disposition, as well as for excess costs incurred or to be incurred; and
  - c. Obtain applicable data and reports; and charge to the Contractor the cost occasioned to CTDOT thereby.

H. Correction of Deficient Replacements and Re-performances

Any supplies or parts thereof corrected or furnished in replacement and any services re-performed pursuant to this section shall also be subject to all the provisions of the section to the same extent as supplies or services initially accepted.

I. Disassembly / Reassembly Expense



The Contractor shall be liable for reasonable cost of disassembly/reassembly of larger items necessary to remove the supplies to be inspected and/or returned for correction or replacement.

### **A35. Delivery of Completed Locomotives**

- A. The overhauled locomotive(s) shall be delivered by the Contractor, to the Connecticut Commuter Rail Maintenance Facility, Hallock Avenue, New Haven, CT 06519 at his own expense. Delivery of the overhauled locomotives to the New Haven site will not constitute acceptance by the State. Liability for any damage, vandalism, including, but not limited to shipping damage, damage while on the State's property prior to CTDOT's formal conditional acceptance in writing, will remain the responsibility of the Contractor. CTDOT's issuance of a certificate of conditional acceptance, signed by a duly authorized representative will be the only transfer of liability to CTDOT, excepting Warranty requirements and such other requirements as contained within the Contract. (See attached Agency Contract Document" (CTDOT 50-A), Section 32 "Insurance").
- B. The twelve (12) P40 locomotives shall be delivered to CTDOT within a maximum of One Thousand One Hundred (1100) days from the NTP. Locomotives may be delivered earlier than scheduled.

### **A36. Conditional Acceptance of Locomotives**

- A. CTDOT will commence Conditional Acceptance inspection as expeditiously as possible after the delivery of each locomotive. CTDOT will advise the Contractor of any defects by reason of which CTDOT cannot make its Conditional Acceptance of the locomotive. Upon issuance of a written "Notice of Rejection" by CTDOT, the locomotive(s) will be turned back to the Contractor for appropriate corrective action(s). After the Contractor has completed his corrective work, CTDOT will recommence its Conditional Acceptance inspection.
  - 1. Conditional Acceptance Tests and procedures will be agreed to between the Contractor and the Engineer.
  - 2. On-site testing at CTDOT shall only be conducted on weekdays between the hours of 9 p.m. and 4:00 a.m. The Contractor and CTDOT's representative shall be present during all testing.
- B. If, during Conditional Acceptance inspection, CTDOT determines that a locomotive(s) is suitable for operation in revenue service, but that it is not totally responsive to the Specification requirements such that substantial delay might be incurred in implementing required corrective action(s), CTDOT may, at its discretion, issue a "Certificate of Conditional Acceptance" for the locomotive(s) for mutual execution by CTDOT and the Contractor. Such conditionally accepted locomotives shall then be available to CTDOT for use in revenue service until such time as the Contractor is able to initiate and execute the necessary corrective action(s).
  - 1. Such "Conditional Acceptance of a locomotive(s)" shall not negate its (their) eligibility for achieving a milestone payment in accordance with the Schedule of Partial Payments (Section A40.)
  - 2. Warranty commences to run on all parts upon Conditional Acceptance into revenue service except for those parts requiring corrective action.

### **A37. Final Acceptance of Locomotives**

Final Acceptance of each locomotive will be as agreed to by the Contractor and the Engineer.

### **A38. Technical Assistance**

- A. The Contractor shall provide Service Representative(s) at CTDOT's Maintenance Facility to conduct receiving inspection and acceptance testing, and subsequently for a period of thirty (30) days, commencing with the start of revenue service, and thereafter at the request of CTDOT.
- B. The Service Representative(s) shall:
  - 1. Participate in Contractor-provided training of CTDOT's operating and maintenance personnel.
  - 2. Conduct (with CTDOT) receiving inspections and testing of locomotives upon delivery.
  - 3. Participate in acceptance documentation.

4. Assist CTDOT in processing and expediting warranty claims and ordering of parts and materials.
5. Provide technical expertise and support to CTDOT in commissioning, troubleshooting, and liaison with the Contractor. Office space for Contractor personnel will be provided by CTDOT.

**A39. Compensation/Milestone Payment Schedule Terms of Payment**

Payment Terms: CTDOT payment terms are Net 45. Since the Contract allows for milestone payments all such payments shall be governed by the Net 45 payment term.

The following constitutes the method of payment of this Contract:

- A. CTDOT shall make all payments to the Contractor in United States Dollars.
- B. Payment for the locomotives will be made by check within forty five (45) days after receipt of a properly prepared Contractor's invoice form and upon completion of the milestone corresponding to the payment due.
- C. Milestone payments shall be achieved and become eligible for payment only in the sequential order listed below.
- D. In no event shall the amount of invoices to CTDOT at the time of each milestone exceed 100% of the cost incurred by the Contractor to that date.
- E. The Contractor shall provide a certificate from the auditors, at the time of each milestone, certifying the amount of accumulative actual cost incurred by the Contractor.
- F. If an audit should disclose any invoices that exceed 100% of the costs, this excess shall be returned to CTDOT and shall be remitted to the Contractor at such time as those costs are incurred.
- G. If a locomotive does not meet all of the requirements set forth in the Technical Provisions, CTDOT may, as its exclusive option, "Conditionally Accept" the locomotive and place it in revenue service pending receipt of Contractor furnished materials and/or labor necessary to effectuate corrective action.
- H. When the first milestone payment is prepared, the Contractor shall submit to CTDOT, a cash draw-down forecast indicating the estimated amount of each progress payment by month projected through the completion of the project.
- I. Invoices shall be prepared in triplicate. The original document is to be forwarded to:

Connecticut Department of Transportation  
2800 Berlin Turnpike  
P.O. Box 317546  
Newington, Connecticut 06131-7546  
Attn: Mr. Mark Hayes  
Manager of Fiscal and Administration

The first copy of the invoice package should be sent to:

Connecticut Department of Transportation  
Union Station  
50 Union Avenue  
New Haven, Connecticut, 06519  
Attn: Ms. Marci Petterson  
Principal Engineer

Remainder of page intentionally left blank

#### A40. Schedule of Partial Payments

The release of payment for this Work shall be based on a milestone completion schedule. The payment schedule shall be based on milestones as follows:

**Table 2: Milestone Completion Payment Schedule**

Milestone	%	total %	Description
1	2	2	<b>Negotiation Complete, Award of Contract</b>
2	1	3	Bonds and Insurance
3	2	5	<b>Joint Specification Review, Complete CDRL List Review</b>
4	1	6	Preliminary program Schedule, Inspection and Test Procedure Submission Schedule
5	2	8	<b>Contractors Program Management Plan for Incorporation into CDOT's PMP</b>
6	2	10	Submission and Acceptance of Quality Assurance Program
7	12 x 1%	22	<b>Joint inspection – each unit</b>
8	2	24	<b>Preliminary System Overhaul Plan, Preliminary Manual Outlines</b>
9	4	28	<b>Subcontractor List and Purchase Order Copies</b>
10	4	32	<b>Submission and Acceptance of Test Plan</b>
11	4	36	<b>Submission of Recommended Spare Parts List</b>
12	4	40	<b>Shipment of First Unit to Contractor</b>
13-24	12 x 4	88	<b>Conditional <u>acceptance – per unit</u></b>
25	12	100	<b>Final acceptance of ALL Locomotives</b>

#### A41. Cost-Plus Work

- A. The Contractor shall not proceed with any cost-plus work until written authorization is given by CTDOT or its representative.
- B. The Contractor shall issue a monthly invoice for approved and executed cost-plus work on a per vehicle basis.
- C. An initial estimate of the work shall be submitted by the Contractor and shall include the estimated time and materials required to complete the work. This estimate is subject to a cost analysis which will act as a basis to determine a not to exceed amount so that the work may proceed prior to a final agreement. The agreed upon estimate will be used as a basis for negotiation of costs associated with the work.
- D. For all work done on a cost-plus basis, the Contractor's compensation shall be determined in accordance with the following:

- 1. Labor

For all labor, CTDOT shall pay the Contractor the wage rate actually paid as shown by its certified payroll, which shall be at least the minimum rate established for the Project by the State Labor Department or the U.S. Department of Labor, and in accordance with the rates provided in the Contractor's Proposal. CTDOT shall also pay the Contractor the certified overhead rates provided in the Contractor's Proposal. CTDOT reserves the right to determine the number and type of personnel to be employed for the cost-plus work.

- 2. Specialized Work

When CTDOT directs the Contractor to perform specialized work requiring skills, tools and equipment substantially unlike those ordinarily used by the Contractor or its authorized subcontractors, CTDOT will pay the Contractor for the use of a specialist to perform the specialized work. For such specialized services, including materials incorporated into the work, CTDOT will pay the Contractor its actual costs, plus a fee/profit markup of three percent (3%). Prior to performing such specialized work, the Contractor shall obtain and submit a minimum of three (3) price quotes for the work, if requested by CTDOT.

Approval of such additional payments will be given only after the Contractor provides to CTDOT receipted supplier invoices for all relevant costs. Failure of the Contractor to produce receipted supplier invoices will result in non-payment by CTDOT.

- 3. Materials

For all materials necessary for cost-plus work, CTDOT will pay the Contractor its actual cost for such materials, including delivery charges as shown by original receipted invoices. Failure of the Contractor to produce receipted supplier invoices will result in non-payment by CTDOT.

In lieu of receipted invoices for materials used which were not specifically purchased for the Project, but were taken from the Contractor's stock, the Contractor shall provide to CTDOT an affidavit certifying that such materials were not purchased for the Project, that the materials were taken from the Contractor's stock, that the quantity claimed to have been used on the Project was actually so used, and that the price claimed for the materials is currently their fair market value.

CTDOT will not reimburse the Contractor for any penalty or charge incurred due to the Contractor's late or delayed payment for the pertinent materials.

- 4. Handling Fees and Profits

The initial proposed estimate for the work will be used as the basis to negotiate handling fees and profits associated with the work as follows:

- Up to \$1,000 – an added 10% of that dollar value.

- Over \$1,000 to \$10,000 – \$100 plus five percent (5%) of any amount over \$1,000.

- Over \$10,000 – \$550 plus three percent (3%) of any amount over \$10,000.

5. Miscellaneous

The compensation provided for in (1), (2), (3) and (4) above shall be deemed payment in full for the cost-plus work and shall be deemed as full compensation for same, including costs of superintendence, use of small tools, equipment for which no rental is allowed, safety equipment, consumables, field office overhead, home office overhead, bonding, other insurance and profit. The Contractor's representative and the Engineer shall compare their respective records of the extra work done on a cost-plus basis at the end of each day. Copies of these records shall be signed by both the Engineer and the Contractor's representative. The Engineer will then forward a copy of same to the Contractor in accordance with Department procedures. Upon payment of such costs by the Contractor, the Contractor shall immediately furnish the Engineer with original receipted bills covering the costs, including transportation charges, for all materials used for such work.

**A42. Payment for Spare Parts**

The spare parts shall be payable based upon receipt and acceptance by CTDOT. Acceptance or rejection of each item shall be made within forty-five (45) days of receipt of such item.

**A43. Basis for Payment**

Basis for payment shall be as follows:

- A. In the event the Contractor has subcontracted any of the work in accordance with the provision of Section A18., prior to final payment, the Contractor shall furnish valid Waiver and Release of Lien documents in form acceptable to CTDOT for the work.
- B. The acceptance by the Contractor of the final payment shall operate as and shall be a release to CTDOT and every member, agent, and employee thereof, from all claim and liability to the Contractor for anything done or furnished for, or relating to, the work, or for any act or neglect of CTDOT or of any person relating to or affecting the work.

**A44. Retainage**

- A. Upon the completion of all work, a final statement of costs shall be submitted to CTDOT within ninety (90) days. The final payment to the Contractor shall be made within thirty (30) days from the submission of the final statement, minus five percent (5%) of the total contract value, as retainage as required by CTDOT to guarantee successful completion of the Contract, subject to final audit by CTDOT or its Authorized Representative.
- B. Upon completion of the project to the satisfaction of the Engineer, the Contractor may request, in writing, the release of the retained amount. Upon receipt of such request, CTDOT shall certify for payment of such retained monies.

**A45. Project Meetings**

- A. Meetings shall be held monthly or as deemed necessary, or as scheduled by CTDOT, at which time the Contractor and the Engineer shall be present to discuss any and all details as required relative to the execution of the work.
  - 1. Additional meetings shall be held as required by CTDOT, or at the request of the Contractor, in order to discuss the particular aspects of the work.
  - 2. Manufacturers, Subcontractors, Suppliers and/or other representatives, as determined necessary by CTDOT, shall be present at any such meetings.
- B. The Contractor shall be responsible for keeping detailed minutes of all meetings, including but not limited to the following information:
  - 1. Date, time, and location:

2. Attendees, including titles and affiliations;
  3. Subjects discussed, and agreements reached;
  4. Drawings and sketches submitted for review and action taken.
- C. The minutes of each meeting shall be prepared by the Contractor and delivered, within ten (10) business days of the close of the meeting, as directed by CTDOT's designee present.
- D. The minutes shall be reviewed by all attendees for any corrections, if necessary, and any discrepancies shall be brought to the attention of the Engineer in writing for resolution.

**A46. Project Photographs**

- A. The Contractor shall furnish a group of photographs of each locomotive to CTDOT, showing the progress, taken at the start of repair and/or overhaul, at significant stages of the work, and at the completion.
- B. The minimum number of photographs to be taken per locomotive shall be at the discretion of CTDOT.

**A47. Contractor's Drawings, Analysis and Specification**

- A. The Contractor shall maintain and update as required a log listing all drawings and analyses by number and title and showing dates of preparation, submission, and preliminary and final acceptance, and shall submit copies of same to the Engineer if any modifications or alterations have been made.
- B. Should the Contractor find that original drawings are required in order to perform the work, the Contractor shall submit to the Engineer, with such promptness as to cause no delay in the work, a request for said drawings. The time required for CTDOT to provide original drawings, when available, to the Contractor shall not be accepted as a reason for delays in delivery.

**A48. Drawing Review**

- A. Review by the Engineer of the Contractor's drawings does not relieve the Contractor or any Subcontractor of the responsibility for full compliance with the Contract requirements; for correctness of dimensions, clearances and material quantities; for proper design of details; for proper fabrication and construction techniques; for proper coordination with Subcontractors; and for providing all devices required for safe and satisfactory construction and operation.
- B. The Contractor shall submit drawings for review with such promptness as to cause no delay in the work.
- C. CTDOT may exercise its right of First Article Acceptance as a further review to confirm the validity of the Contractor's design and drawings.
- D. The following drawings shall be submitted for review by the Engineer:
1. The Contractor shall submit two (2) electronic copies of drawings prepared specifically for this Contract to the Engineer for review and approval. Each electronic copy of each drawing shall be provided as an AUTOCAD drawing with \*.DWG file extension, as well as a .pdf copy. A submittal form shall be provided with each drawing listing the drawing number, title and revision.
  2. Two (2) copies of all supplier drawings, catalog cuts, instruction books, renewal parts data lists, tabulations and the like, not adaptable for the furnishing of reproduces.
  3. Review procedures shall be as follows:
    - a. Contractor submits drawings for review.
    - b. Engineer shall respond as rapidly as practical, fifteen (15) working days average time from receipt, to the Contractor that drawings fall in one of the following categories:
      - (1) Approved
      - (2) Conditionally Approved
      - (3) Disapproved

- c. This review shall not relieve the Contractor or any Subcontractor of responsibility for full compliance with Contract requirements; for correctness of dimensions, clearances and material quantities; for proper design of details; for proper fabrication and construction techniques; for proper coordination with other trades; and for providing all devices required for safe and satisfactory construction and operation.
  - d. The Engineer shall make every effort to expedite review of drawings to protect the Contractor's required lead time, to protect delivery schedule.
  - e. The drawing submittal forms designated in all categories above shall be signed by the Engineer, in a rubber stamped block to be applied by CTDOT, with one copy being returned to the Contractor.
  - f. Drawings designated in categories (2), and (3) above shall be promptly revised and resubmitted by the Contractor.
  - g. Construction on the various areas of the locomotive(s) shall not commence until drawing(s) delineating the work to be performed on the particular area of the locomotive(s) have been submitted to the Engineer and been designated "Approved" or "Conditionally Approved".
  - h. Contractor shall submit drawings for review in the order in which he intends to undertake work on the locomotive(s).
  - i. It is not the intent of CTDOT to require that all drawings governing the locomotive(s) be submitted for review before any work can commence.
  - j. However, the Contractor should submit drawings showing physically related areas of the locomotive(s) as simultaneously as possible.
  - k. Acceptance of the Contractor's drawings and data by CTDOT shall be for general detail and arrangement only, and shall not relieve the Contractor of any responsibility including, but not limited to, responsibility for accuracy of dimensions and details. The Contractor shall remain responsible for agreement and conformity of its drawings and data to the Contract Documents and Specifications.
- E. Any drawings which are revised subsequent to signed approval by the Engineer shall be resubmitted for review and acceptance of the revision.

#### **A49. Rights in Technical Data**

- A. CTDOT shall have the right to use, duplicate or disclose technical data, in any form, including but not limited to those listed below, in whole or in part, in any manner and for any purpose whatsoever, and to have or permit others to do so:
- 1. Any manuals, instructional materials prepared for installation, operation, maintenance or training purposes;
  - 2. Technical data pertaining to end items, components or processes which were prepared for the purpose of identifying sources, size, configuration, mating and attachment characteristics, functional characteristics and performance requirements ("form, fit and function" data, e.g., specification control drawings, catalog sheets, outline drawing, etc.);
  - 3. Other technical data which has been, or is normally furnished without restriction by the Contractor or Subcontractor;
  - 4. Other specifically described technical data which the parties have agreed will be furnished without restriction.
- B. CTDOT shall have the right to use, duplicate, or disclose technical data other than that defined in Section A17., A.1., in whole or in part, with the express limitation that such technical data shall not, without the written permission of the party furnishing such technical data, be:
- 1. Released or disclosed in whole or in part outside CTDOT, and its Contractors for the operation and maintenance of the Connecticut Commuter Rail Service;
  - 2. Used in whole or in part by CTDOT for manufacture; or,
  - 3. Used by a party other than CTDOT except for emergency repair or overhaul work only, by or for CTDOT where the

item or process concerned is not otherwise reasonably available to enable timely performance of the work; provided that the release or disclosure thereof outside CTDOT shall be made subject to a prohibition against further use, release or disclosure.

- C. Technical data provided in accordance with the provisions of Section A.17 A.2. shall be identified by a legend which suitably recites the aforesaid limitation. Nothing herein shall impair the right of CTDOT to use similar or identical data acquired from other sources.
- D. Technical data, as used in this section, means technical writing, sound recordings, pictorial reproductions, drawings, or other graphic representations and works of a technical nature, whether or not copyrighted, which are specified to be delivered pursuant to this Contract. The term does not include financial reports, cost analyses, and other information incidental to Contract administration.
- E. Material Covered by Copyright
  - 1. The Contractor agrees to and does hereby grant to CTDOT and to its officers, agents and employees acting within the scope of their official duties, a royalty-free, non-exclusive and irrevocable license throughout the world for CTDOT purposes to publish, translate, reproduce, deliver, perform, dispose of, and to authorize others to do so, all technical data now or hereafter covered by copyright.
  - 2. No such copyrighted matter shall be included in technical data furnished hereunder without the written permission of the copyright owner for CTDOT to use such copyrighted matter in the manner described above.
  - 3. The Contractor shall report to CTDOT (or higher tier Contractor) promptly and in reasonable written detail each notice or claim of copyright infringement received by the Contractor with respect to any technical data delivered hereunder.

F. Relation to Patents

Nothing in this section shall imply a license to CTDOT under any patent, or be construed as affecting the scope of any license or other right otherwise granted to CTDOT under any patent.

**A50. Warranty**

- A. The Contractor warrants and guarantees to CTDOT all items that have been reconditioned, repaired, overhauled or replaced and any newly installed equipment for two (2) years commencing on the date of Conditional Acceptance.
  - 1. The Contractor shall provide, at no additional cost to the State, Warranty Bonds equal to twenty-five percent (25%) of the amount of the base contract of each car to protect against faulty materials or workmanship for two (2) years from the date of Conditional Acceptance of each locomotive.
  - 2. Warranty Bonds will be accepted and corresponding Performance Bonds will be released in kind upon Final Acceptance of each locomotive.
- B. Warranties in this specification are in addition to any statutory remedies or warranties imposed on the Contractor. Consistent with this requirement the Contractor warrants and guarantees to CTDOT and its Service Operator assignee each complete locomotive, and specific subsystems and components as follows:
  - 1. The locomotive is warranted and guaranteed to be free from defects for two (2) years beginning on the date of Conditional Acceptance of each locomotive. During this warranty period, the locomotive shall maintain its structural, mechanical and functional integrity. The warranty is based on regular revenue service operation of the locomotive and associated sub-systems under the operating conditions of Commuter Passenger Rail and the prevailing climate and track conditions in the Connecticut region
    - a. Spare parts for two (2) years from date of installation. In no case shall the guarantee period exceed four (4) years from the date of delivery of the spare parts.
    - b. All retrofit work for a period of two (2) years from the date of completion.
  - 2. If, after placing the locomotive into revenue service operation, and for the duration of the warranty period,



the equipment fails to meet the terms of the warranty, CTDOT will notify the Contractor of the existence of such a defect.

- a. The Contractor shall correct or replace the defective equipment at his expense including associated costs such as, but not limited to, freight out and in, service engineering charges, etc.; and shall be subject to all provisions of this section to the same extent as materials initially delivered.
3. If the Contractor receives warranties from Subcontractors, such warranties shall be passed to CTDOT.
4. The warranty shall not apply to any part or component of the locomotive that has been subjected by CTDOT to negligence, accident, or that has been repaired or altered by CTDOT so as to adversely affect its performance or reliability, except insofar as such repairs were in accordance with the Contractor's maintenance manuals and the workmanship was in accordance with recognized standards of the industry. The warranty shall also be voided if CTDOT fails to conduct normal inspections and scheduled preventive maintenance procedures as recommended in the Contractor's maintenance manuals.
5. The warranty shall apply to scheduled maintenance items except consumables. The warranty shall extend to any part that fails or is damaged as a result of a failure of a warranted part.
6. The Service Operator will do whatever is necessary to make minor repairs to the locomotives as soon as possible after discovery of the need for such repairs without the necessity of prior approval from the contractor. The Service Operator will notify the Contractor as soon as practicable by telephone or utilizing contractor's paging equipment if necessary. The Service Operator and the Contractor will seek to resolve warranty responsibility issues as soon as contact is made and will continue the discussion after the repairs have been completed if necessary.

When warranty repairs are required, CTDOT and/or its Service Operator, and the Contractor shall agree within ten (10) working days or less after notification on the most appropriate course for the repairs and the exact scope of the repairs to be performed under the warranty.

- a. If no agreement is obtained within ten (10) working days or less, or if the Contractor fails or refuses to replace or correct the deficiency, CTDOT and/or its Service Operator may have the materials corrected or replaced with similar items.
- b. CTDOT and/or its Service Operator will bill the Contractor the full amount, plus a service and general administration fee, of the costs occasioned thereby, or obtain an equitable adjustment in the Contract price to compensate for the defects.
7. If CTDOT requires the Contractor to perform major warranty covered repairs, the Contractor must begin work necessary to effect repairs within five (5) working days after receiving notification of a defect. CTDOT shall make the locomotive available for complete repairs in accordance with the Contractor's timely repair schedule.
  - a. It is agreed that the Contractor will undertake major warranty repairs (i.e. those which cannot be performed by the Service Operator at the CCR shop) within five (5) working days after receiving notification of a defect. For non-major repairs, the Contractor Operator will perform the repair work as soon as possible.
8. Due to the regular maintenance demands on the Service Operator's facilities and maintenance personnel, it will be possible for said forces to undertake only minimal adjustment, repair, or replacement work on equipment for the duration of the Contract.
9. The Contractor shall, therefore in such event, be responsible for securing facilities and personnel to complete all work required for the duration of the Contract.
10. The Contractor is reminded that all corrective and warranty work and services that are to be accomplished on the State's property must be performed by the Service Operator designated by CTDOT. All negotiations for the performance of such work and services must be conducted solely with the Service Operator. CTDOT shall not at any time, be charged for required corrective and warranty work and services provided by the

Service Operator or the Contractor.

11. In no case shall corrective and/or warranty work, under guarantee or otherwise, of defects in design, material, or workmanship, take the form of an increase in maintenance requirement beyond that specified in the Contract Documents, or that submitted by the Contractor at the time of bidding for the Contract, or that described in the original edition of the maintenance instructions.
- C. If CTDOT and/or its Service Operator performs the warranty covered repairs, it shall correct or repair the defects and any related defects using Contractor supplied spare parts if available from its own stock, or those supplied by the Contractor specifically for this repair.
1. If spare parts are not available from the Contractor on a timely basis, then original parts of the same or better quality shall be used by CTDOT or its Service Operator so as to maintain original equipment performance fit, durability, reliability, and function. Substitution of used parts for new spare parts is prohibited.
  2. Monthly, or at a period to be mutually agreed upon, reports of all repairs covered by this warranty shall be submitted by CTDOT and/or its Service Operator to the Contractor for reimbursement or replacement of spare parts.
- D. CTDOT may request that the Contractor supply spare parts for warranty covered repairs being performed by CTDOT. These parts shall be shipped prepaid to CTDOT from the source selected by the Contractor or within ten (10) working days of receipt of the request for said parts.
1. The Contractor may request that parts covered by the warranty be returned to the manufacturing plant. The total cost for this action shall be paid by the Contractor.
  2. CTDOT and/or its Service Operator shall be reimbursed by the Contractor for defective parts and for parts that must be replaced to correct the defect. It is agreed that any spare parts borrowed by the contractor shall be replaced with like components as originally delivered.
  3. If any component, unit, or subsystem is repaired, rebuilt, or replaced by the Contractor or by CTDOT, with the concurrence of the Contractor, the subsystem shall have the unexpired warranty period of the original subsystem.
  4. Functional operation, as referred to above, shall commence on the date that the equipment is first put into revenue service operation. If the date of revenue service operation exceeds three (3) months from the date of actual delivery by the Supplier, the Supplier shall have the right to inspect his equipment prior to revenue service operation.

**A51. Fleet Failure (Components)**

- A. Where a fleet failure of ten percent (10%) of the quantity for warranted multiple units (example: traction motors) or twenty-five percent (25%) of the warranted quantity for single components (example: air compressor) occurs within the warranty period, the remaining items shall be thoroughly inspected, receive repair, replacement or adjustment under the warranty, even those items which have passed beyond the warranty period before failure was recognized. All such items shall be subject to warranty reinstatement provided for in the following:
1. The Contractor shall correct a fleet defect under the warranty provisions as defined herein. After correcting the defect, the Contractor shall promptly undertake and complete a work program reasonably designed to prevent the occurrence of the same defect in all other similar type vehicles overhauled under this Contract. The work program shall include inspection and/or correction of the potentially defective parts in all of the vehicles.
  2. The warranty on items determined to be fleet defects shall extend no longer than one (1) year from the date of final acceptance of the last unit to be overhauled in this program. The extended warranty shall begin on the repair/replacement completion date for the corrected item.
  3. In the event that the calculations of failures, based on the above percentages, results in a fractional figure

it shall be rounded off to the next highest whole number.

## **A52. Purchase Orders and Payments**

### Purchase Orders

Questions concerning purchase orders are to be directed to CTDOT's Processing Unit at 860-594-2070.

### Invoices and Payments

CTDOT's Accounts Payable Unit through the Comptroller's Office will issue Payments. Payment and invoicing inquiries should be directed to CTDOT's Accounts Payable Unit at 860-594-2305.

All invoices must include:

1. Contractor F.E.I.N.
2. Complete Contractor name and billing address.
3. Project number, if applicable.
4. Invoice number and date.
5. Purchase order number.
6. Itemized description of services and/or material supplied.
7. Adjustments, if applicable.
8. Quantity, unit, unit price, and extended amount.
9. Ticket numbers corresponding to each invoice must be listed or attached to the company invoice as a separate sheet, if applicable.
10. Work periods and traffic control prices must be itemized, if applicable.

For prompt payment processing, please mail invoices to the following address:

State of Connecticut  
Department of Transportation  
Bureau of Finance and Administration  
Attn: Accounts Payable SW1A  
P.O. Box 317546  
Newington, CT 06131-7546

Payments may be delayed if the invoice form is not properly completed in accordance with the instructions noted above.

## **A53. Legal Address of Contractor**

Any notice of communication to the Contractor shall be deemed served if delivered to the Contractor or to the address named in the RFP, or if deposited in the U.S. Post Office, postage prepaid, addressed to the Contractor as aforesaid; and the date of service shall be the date of such delivery, or, if mailed, five (5) days after such mailing; provided, however, that any notice of default shall be sent by certified mail.

## **A54. Business Operational Changes**

In the event that the awarded Contractor moves or updates telephone numbers, it is the responsibility of the Contractor to advise the Department of Transportation, Division of Purchasing & Materials Management of such changes in writing. The State will not be held responsible for payments or Purchase Orders that are delayed due to additional routing caused by the lack of notification on the Contractor's part. Change of address or telephone updates must be forwarded to:

State of Connecticut, Dept. of Transportation  
Div. of Purchasing & Materials Management  
2800 Berlin Turnpike  
P.O. Box 317546  
Newington, CT 06131-7546

Attn: Mary Matuszak, Fiscal Administrative Supervisor  
mary.matuszak@ct.gov

**A55. Revisions in Organization of Corporation**

That the Contractor shall notify the State in writing when there is a change in its Connecticut Certificate of Registration with the Secretary of State's Office or a change in the individual(s) in charge of the work specified herein. Neither change shall relieve the Contractor of any responsibility for the accuracy and completeness of all products of the work under this Agreement, including any supplements thereto.

**A56. Revisions in Organization of Partnership**

That the State, on written notice by the Contractor of changes in the partnership structure of his organization, may enter into a supplemental agreement with the new partners providing releases are provided to the State from the former partner, or partners, stating that he/she has been compensated in full or that provision has been made for compensation in full for all work performed under terms of the Contract and a financial statement is submitted showing that solvency of the partnership is maintained. The death of a partner shall not release the partnership from the performance of the Contract and the remaining functions must be performed by the surviving partner(s) until the terms of the Contract are fully executed. The withdrawal of any partner from the partnership shall not relieve him from his liability for performance of the Contract.

**A57. Public Inspection of Certain Records**

- A. Except as provided herein, all proceedings, records, Contracts and other public records relating to Contract transactions shall be open to the inspection of any citizen, or any interested person, firm, or corporation, in accordance with the State of Connecticut Statutes Chapter 3, Title 1. See also Sections A17. and A49.
- B. Cost estimates relating to a proposed Contract transaction prepared by or for a public body shall not be open to public inspection.
- C. Upon request any person shall be afforded the opportunity to inspect RFP records within a reasonable time after the award of the RFP. In the event that the public body decides not to open the Proposals, prior to the announced opening date, all Proposals that were received shall remain sealed and not subject to public inspection.

**A58. Order of Precedence**

- A. In the event of an inconsistency in this Contract, unless otherwise provided herein, the inconsistency shall be resolved by giving precedence in the following order:
  - 1. Contract Provisions
  - 2. The other provisions of the Contract, whether incorporated by reference or otherwise.
  - 3. Drawings
  - 4. The Work Scope
- B. The Contractor shall take no advantage of any apparent error or omission in the Plans or Work Scope. In the event the Contractor discovers such an error or omission, he shall immediately notify CTDOT. CTDOT shall then make such corrections and interpretation as may be deemed necessary for fulfilling the intent of the Contractor's responsibilities

**A59. Standards**

- A. The equipment and materials provided by the Contractor shall comply specifically with the requirements of the AAR and FRA and the recommendations of the APTA PRESS Standards, latest revisions. They shall also comply with all other applicable federal, state and local codes in effect at the time of submission of Proposal by the Contractor.
  - 1. Overhauled locomotives shall be suitable for operation in Connecticut, New York, and Massachusetts
- B. If a conflict is discovered among any of the above requirements the following order of priority shall govern:

1. FRA – USDOT regulations
  2. EPA regulations
  3. Laws of the State of Connecticut
  4. Laws of the Commonwealth of Massachusetts
  5. Laws of the State of New York
  6. Purchase agreement and Specification
  7. Standards and Recommended Practices of the AAR
  8. Standards and Recommended Practices of APTA
- C. In the event of such conflict, the Contractor shall notify CTDOT promptly.
- D. Trade names and/or manufacturer's names and part numbers shown through this specification do not denote "Sole Source Items" unless specifically identified as such.
- E. The Contractor may, propose, subject to CTDOT's approval, alternates for CTDOT's acceptance in accordance with the requirements of this specification.
- F. Where references are made to the requirements of the FRA (49 CFR), EPA, recommendations of the AAR, and specifications and instructions of the equipment manufacturer, it is the intent that they shall be the latest issue in effect at the time of Proposal submittal.

#### **A60. General Overhaul Requirements**

- A. This Specification outlines the specific components of the locomotive on which work is required for renewal, upgrading, overhaul, or replacement of parts or apparatus.
- B. Replacement of parts or apparatus shall be made in kind except where specified that an upgraded replacement is required.
1. The Contractor may propose, subject to CTDOT's approval, unit exchange (UTEX) parts of apparatus for equivalent parts of the same manufacture which meet the requirements of this Specification.
  2. Components furnished by a manufacturer that are assembled, housed, and wired into package units at the point of manufacture, shall be tested at the point of manufacture, and a certified test report concerning actual tests made on the components being furnished for this Contract shall be mutually agreed upon between the Contractor and CTDOT.

#### **Other Requirements**

**A61.** Section 4a-81 (the "Act") of the Connecticut General Statutes requires that the Request For Proposals of which these Terms and Conditions are a part include a notice of the consulting affidavit requirements described in the Act. Accordingly, pursuant to the Act, vendors are notified as follows:

(a) No state agency or quasi-public agency shall execute a contract for the purchase of goods or services, which contract has a total value to the state of fifty thousand dollars or more in any calendar or fiscal year, unless the state agency obtains the written affidavit described in subsection (b) of this section.

(b) (1) The chief official of the vendor awarded a contract described in subsection (a) of this section or the individual awarded such contract who is authorized to execute such contract, shall attest in an affidavit as to whether any consulting agreement has been entered into in connection with such contract. Such affidavit shall be required if any duties of the consultant included communications concerning business of such state agency, whether or not direct contact with a state agency, state or public official or state employee was expected or made. "Consulting agreement" means any written or oral agreement to retain the services, for a fee, of a

consultant for the purposes of (A) providing counsel to a contractor, vendor, consultant or other entity seeking to conduct, or conducting, business with the State, (B) contacting, whether in writing or orally, any executive, judicial, or administrative office of the state, including any department, institution, bureau, board, commission, authority, official or employee for the purpose of solicitation, dispute resolution, introduction or requests for information or (C) any other similar activity related to such contract. "Consulting agreement" does not include any agreements entered into with a consultant who is registered under the provisions of Chapter 10 of the Connecticut General Statutes concerning the State's Codes of Ethics, as of the date such affidavit is submitted. (2) Such affidavit shall be sworn as true to the best knowledge and belief of the person signing the certification on the affidavit and shall be subject to the penalties of false statement. (3) Such affidavit shall include the name of the consultant, the consultant's firm, the basic terms of the consulting agreement, a brief description of the services provided, and an indication as to whether the consultant is a former state employee or public official. If the consultant is a former state employee or public official, such affidavit shall indicate his or her former agency and the date such employment terminated. (4) Such affidavit shall be updated no later than 30 days after the effective date of any such change contained in the most recently filed affidavit or upon submittal of any new bid or proposal, whichever is earlier.

(c) If a vendor refuses to submit the affidavit required under subsection (b) of this section, then the state agency shall not award the Contract to such vendor and shall award the contract to the next highest ranked vendor or the next lowest responsible qualified bidder or seek new bids or proposals.

**A62.** Section 4-252 (the "Statute") of the Connecticut General Statutes requires that the Request for Proposals, of which these Terms and Conditions are a part, include a notice of the vendor certification requirements described in the Statute. Accordingly, pursuant to the Statute, vendors are notified as follows:

(a) The terms "gift," "quasi-public agency," "state agency," "large state contract," "principals and key personnel" and "participated substantially" as used in this section shall have the meanings set forth in the Statute.

(b) No state agency or quasi-public agency shall execute a large state contract unless the state agency or quasi-public agency obtains the written certifications described in this section. Each such certification shall be sworn as true to the best knowledge and belief of the person signing the certification, subject to the penalties of false statement.

(c) Any principal or key personnel of the person, firm or corporation submitting a bid or proposal for a large State contract shall certify on such forms as the State shall provide:

(1) That no gifts were made by (A) such person, firm, corporation, (B) any principals and key personnel of the person, firm or corporation, who participates substantially in preparing bids, proposals or negotiated State contracts, or (C) any agent of such person, firm, corporation or principals and key personnel, who participate substantially in preparing bids, proposals or negotiating state contracts, to (i) any public official or state employee of the state agency or quasi-public agency soliciting bids or proposals for state contracts, who participates substantially in the preparation of bid solicitations or requests for proposals for state contracts or the negotiation or award of state contracts, or (ii) any public official or state employee of any other state agency, who has supervisory or appointing authority over such state agency or quasi-public agency;

(2) That no such principals and key personnel of the person, firm or corporation, or agent of such person, firm or corporation or principals and key personnel, knows of any action by the person, firm or corporation to circumvent such prohibition on gifts by providing for any other principals and key personnel, official, employee or agent of the person, firm or corporation to provide a gift to any such public official or state employee; and

(3) That the person, firm or corporation is submitting bids or proposals without fraud or collusion with any person.

(d) Any bidder or proposer that does not make the certification required under this section shall be disqualified and the state agency or quasi-public agency shall award the contract to the next highest ranked proposer or the next lowest responsible qualified bidder or seek new bids or proposals.

(e) Each state agency and quasi-public agency shall include in the bid specifications or request for proposals for a large state contract a notice of the certification requirement of this section.

**A63.** For all State contracts, defined in Conn. Gen. Stat. §9-612 as having a value in a calendar year of \$50,000 or more, or a combination or series of such agreements or contracts having a value of \$100,000 or more, the authorized signatory to this Agreement expressly acknowledges receipt of the State Elections Enforcement Commission's notice advising state contractors of state campaign contribution and solicitation prohibitions, and will inform its principals of the contents of the notice, as set forth in "Notice to Executive Branch State Contractors and Prospective State Contractors of Campaign Contribution and Solicitation Limitations," attached as Exhibit C.

**A64.** Public Act 11-55 and Public Act 11-229 have amended the nondiscrimination provisions of the Connecticut General Statutes to add gender identity or expression to the existing protected classes and to require State contractors to adopt policies in support of the new statutes by means of an affidavit or resolution. Accordingly, attached as Form NDC is a form certification that the successful contractor must deliver executed at the time that it executes the Contract. The execution and submittal of this affidavit or resolution is a condition precedent to the State's executing the Contract, unless the contractor is exempt from this statutory requirement, in which case the contractor must obtain a written waiver from the State's Commission on Human Rights and Opportunities.

**A65. Interest of Member of, or Delegates to, Congress**

No member of, or delegate to, the Congress of the United States will be admitted to any share or part of this Contract or to any benefit arising there from. (41U.S.C. § 22.)

**A66. Prohibited Interest**

No member officer or employee of CTDOT or of a local public body during his tenure or one (1) year thereafter will have any interest, direct or indirect, in this Contract or the proceeds thereof.

**A67. Compliance with CT Gen. Statutes Sections 33-922, 33-636 and 33-953**

Prior to the award of any contract, corporations which are incorporated in states other than Connecticut (foreign corporations) must have on file with the Connecticut Secretary of State's Office, an approved Certificate of Authority and corporations incorporated in Connecticut (domestic corporations) must have on file an approved Certificate of Incorporation. All required annual reports for both types of corporations, including the organizational report for domestic corporations must also be on file with the Connecticut Secretary of State's Office. See Conn. General Statutes Sections 33-922, 33-636 and 33-953. Any questions regarding these filing requirements may be directed to the Connecticut Secretary of State's Office at (860) 509-6002. You may also review information on the Secretary of State's Office website at <http://www.sots.ct.gov>.

**A68. Rail Safety Improvement Act of 1988**

- A. The Contractor shall comply with the Rail Safety Improvement Act of 1988 – Public Law 100-342 dated June 22, 1988, or as amended.
- B. This Act mandates that the U.S. Department of Transportation (DOT) revise the Code of Federal Regulations (CFR) Title 49 Parts 200 through 268 to include the intent of the law.
- C. The Contractor shall be aware of developments in the FRA rule making procedures and advise CTDOT in writing of any changes to the locomotive or locomotive borne equipment that might be required as a result of the rule revisions.

**A69. Roadway Worker Protection**

All Contractor personnel working in the vicinity of the railroad or on railroad property must receive Roadway Worker Protection (RWP) training. The Contractor is responsible for all costs of RWP Training. All Contractor personnel working in the vicinity of the railroad or on railroad property must wear a hard hat, an approved fluorescent safety vest, OSHA approved safety glasses and proper work boots, provided by the Contractor, at all times. The Contractor shall provide their personnel with a photo identification badge, which shall include the employee's full name and the name of the Contractor.

**A70. AMTRAK Railroad Operations**

The Contractor shall coordinate his activities with Amtrak, and shall receive permission for all operations that are in proximity of the railroad tracks. Work within fifteen (15) feet of the tracks shall be avoided, and the contractor is prohibited from performing any work that could interfere with Amtrak Railroad operations or the protection of railroad crossings.

**A71. Americans with Disabilities Act of 1990**

This clause applies to those contractors who are or will be responsible for compliance with the terms of the Americans with Disabilities Act of 1990, (42 U.S.C. 12101 et seq.), (Act), during the term of the contract. The contractor represents that it is familiar with the terms of the Act and that it is in compliance with the Act. Failure of the contractor to satisfy this standard as the same applies to performance under this contract, either now or during the term of the contract as it may be amended, will render the contract voidable at the option of the State upon notice to the contractor. The contractor warrants that it will hold the State harmless and indemnify the State from any liability which may be imposed upon the State as a result of any failure of the contractor to be in compliance with this Act, as the same applies to performance under this contract.

**A72. Appendix CR**

That the Contractor shall comply with the Regulations of the United States Department of Transportation (Title 49, Code of Federal Regulations, Part 21) issued in implementation of Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4, and Appendix CR attached hereto, and made a part hereof.

**A73. Liquidation of Indebtedness**

The State may refuse at any time to make payments under this contract, if (a) the Contractor has failed to comply with the terms of the contract or any applicable state law or regulation, or (b) the contractor is indebted to the State of Connecticut and the collection of the indebtedness will not impair accomplishment of the objectives of this contract. Under such conditions, the State will inform the Contractor, in writing, that payment will not be made after a specified date until the noncompliance described in such is corrected, or the indebtedness is liquidated.

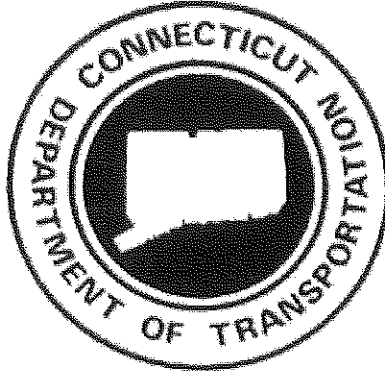
**A74. Laws to be Observed**

- A. The Contractor at all times shall observe and comply with all Federal and State laws and local bylaws, ordinances and regulations in any manner affecting the conduct of the work, and all such orders or decrees as exist at present and those which may be enacted later, of bodies or tribunals having any jurisdiction or authority over the work. He shall indemnify and save harmless the State and all of its officers, agents and servants against any claim or liability arising from or based on the violation of any such law, bylaw, ordinance, regulation, order or decree, whether by himself or his employees.
- B. If any discrepancy or inconsistency is discovered in the Contract for the work in relation to any law, ordinance, regulations, order or decree; the Contractor shall forthwith report the same to CTDOT in writing.
- C. The Contractor shall at all times observe and comply with and shall cause all his agents, employees and Subcontractors to observe and comply with, all existing laws, ordinances, regulations, orders, and decrees.



**EXHIBIT A.1**

**TECHNICAL SPECIFICATIONS**



Connecticut DOT

P40 OVERHAUL  
Technical Specification

May, 2016



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**1 Scope and Responsibilities (See DOTRFP-22, 2. "Scope" and Exhibit A, A.2 "Responsibilities of the Contractor" )**

## **2 GENERAL REQUIREMENTS**

### **2.1 LOCOMOTIVE CHARACTERISTIC REQUIREMENTS**

#### **2.1.1 General Requirements**

This Section establishes performance, environmental and general overhaul criteria for the eight (8) ex-Amtrak ConnDOT P40 locomotives No.'s 833, 834, 836, 838, 840, 842 and 843 and the four (4) ex-NJT ConnDOT P40 locomotives No.'s 4800, 4801, 4802 and 4803. These requirements apply to all aspects of the locomotive.

#### **2.1.2 Basic Design Considerations And Maintainability**

- A. The overhauled locomotive shall make every possible provision for safety of employees, for maximum ease and safety of passage through the locomotive, and for ease of cleaning and maintenance.
- B. Apparatus requiring frequent inspection or attention shall be readily accessible and replaceable.
- C. The new installation or relocation of apparatus supports and housings shall be arranged to provide interchangeability between like equipment and locomotives.
- D. As part of the general requirements for safe construction, the Contractor shall ensure that there are no sharp edges or corners anyplace in the locomotive where operators or maintenance personnel may come in contact with such edges. This requirement shall apply to equipment or components furnished by Suppliers as well as to material of the Contractor's own manufacture.
- E. Maintainability of the locomotive and associated equipment shall be given prime consideration by the Contractor in the overhaul of the locomotive, and by the Contractor's vendors in the design and building of the components and subsystems. No component of the locomotive shall require scheduled periodic maintenance more frequently than once every ninety-two (92) days, normal inspection and servicing excluded.
- F. The overhauled locomotives shall be capable of a minimum of 12-15 years of operation after completion of the overhaul.
- G. Please note that ConnDOT is open to the concept of re-powering the P40 fleet with an engine type that meets ConnDOT's service needs, is compliant with EPA emissions requirements and has minimal lifecycle maintenance costs. Any plan to re-power the locomotive would have to be approved by ConnDOT and would supercede the requirements of this technical specification and in particular to Section 6 and Section 10.

#### **2.1.3 Regulatory Compliance**

- A. The locomotive shall comply in all respects with the requirements of the applicable laws of the states in which they will operate:

1. Connecticut
  2. New York
  3. Massachusetts
- B. They shall also comply with the most recent standards and recommendations of the following agencies:
1. Association of American Railroads
  2. Federal Railroad Administration
  3. Environmental Protection Agency, Clean Air Act
  4. American Public Transportation Association
- C. While specific agency regulations and recommendations are called for in this Specification, they shall not be considered to the exclusion of all others. Where apparent conflict exists, the Contractor shall advise ConnDOT immediately so that ConnDOT may determine the prevailing requirement.
- D. The locomotives shall also comply with all applicable collective bargaining agreements.

#### **2.1.4 Specific Design Requirements**

The locomotives shall meet the following specific design requirements. The Contractor shall present documentation that confirms that these design requirements have been met [CDRL 2-001].

- A. The maximum height of the locomotives shall remain at 14 feet, 8 inches as delivered, with new wheels and no variable supplies (fuel and sand). The locomotives shall operate in multiple unit configurations with each other, with ConnDOT's GP40 locomotives, and with any of ConnDOT's cab control cars.

##### **2.1.4.1 Locomotive Noise Emission**

- A. The locomotives shall be overhauled to achieve the lowest possible external noise levels.
- B. The Contractor shall detail all actions being taken to ensure that external noise levels are minimized.
- C. The locomotives shall not exceed the noise levels specified in this specification and 49 CFR 210 and 40 CFR 201.
- D. The locomotives shall meet the following external noise requirements when static and in open field conditions.
1. All values are in A-weighted sound level (dBA) and shall be measured using properly calibrated equipment at 100 ft. fore, aft, sides, 48 inches above ground:
    - a. Prime-mover at idle (no HEP) 66 dBA max.
    - b. Throttle 8 (no HEP) 86 dBA max.
  2. Noise tests shall be conducted on the first unit.

- E. Noise shall also be measured with the locomotive moving at 60 mph. on level tangent track, with all normal accessories operating, 100 ft. from the locomotive in an open field.
- F. The horn shall be tested to ensure that noise level from the installed location is in compliance with requirements of 49 CFR 229.129.

**2.1.4.2 Cab Interior Noise**

- A. Locomotive cab noise shall be in compliance with the requirements of 49 CFR 229.121 (a), except that the sound level shall average less than or equal to 78 db(A), with an upper 99% confidence limit of 80 db(A).
- B. Noise emission plates shall be prepared and installed in all locomotives in a location in the cab acceptable to ConnDOT.

**2.1.4.3 Exhaust Emissions**

The prime mover diesel engine shall be certified to meet the Tier 0 exhaust emission requirements of 40 CFR 92 as tested in the locomotives delivered under this Contract.

**2.1.4.3.1 Environment And Wayside Conditions**

Vehicle shall be designed to operate in the following ambient conditions:

**2.1.4.3.1.1 Temperatures**

Table 2-1

	<b>Normal (95% of Duty Cycle)</b>		<b>Peak (5% of Duty Cycle)</b>	
<b>Maximum:</b>	98°F	37°C	111° F	40°C
<b>Minimum:</b>	0°F	-18°C	-18°F	-28°C

The locomotive shall be capable of continuous full engine horsepower operation at standard conditions. Engine lube oil, cooling and exhaust systems and locomotive electrical equipment design shall ensure that the locomotive is capable of continuously delivering the full available horsepower of the diesel engine(s) to traction and HEP at ambient temperatures of up to 111° F.

**2.1.4.3.1.2 Wind Velocity**

Normal maximum 40 mph (64 kmph) with gusts to 87 mph (140 kmph).

**2.1.4.3.1.3 Relative Humidity**

20% to 100% (Non-Condensing).

**2.1.4.3.1.4 Snow**

Maximum of 23.6” (599 mm) per 24 hour period.

**2.1.4.3.1.5 Rain Fall**

2.10” (53 mm) in any one hour, with a maximum of 8.40” (213 mm) per 24 hour period.

#### **2.1.4.3.1.6 Freezing Rain**

0.50" (12.7 mm) in any hour, with a maximum of 2.00" (51 mm) per day.

#### **2.1.4.4 Equipment Temperature Considerations**

- A. All equipment shall be designed to operate effectively, with full functionality, up to 140°F (60°C)
- B. Equipment enclosures shall be ventilated if necessary to prevent the internal temperature from exceeding 120°F (49°C)
- C. All equipment shall be designed to withstand extended storage in extreme temperature conditions (non-functioning), from -30°F (-35°C) up to 180°F (82°C)

#### **2.1.4.5 Track Configuration**

- A. Nominal gauge – 4 feet 8-½ inches
- B. Minimum horizontal curve (coupled to train) – 288 ft radius (20 degree curve)
- C. Maximum track superelevation – 6 inches
- D. Operation may be on track maintained to all classes track per 49 CFR 213.9, for speeds of up to 103 mph (166 km/h).
- E. The locomotive shall be able negotiate a No. 8 crossover on 12' 2" track centers when coupled to a ConnDOT trailer car.
- F. Minimum radius of vertical curve – 2000 feet.

#### **2.1.4.6 Electromagnetic Interference**

The locomotives and their components shall not be adversely affected by any electro-magnetic frequency at field strengths found in ConnDOT, Amtrak NEC and MNR territory, and conversely, shall not interfere with the transmission and the reception of the following established frequencies, as currently exist on the ConnDOT, Amtrak NEC and MNR network in the following categories:

- A. Audio frequencies for overlay track circuits and highway crossing approach circuits.
- B. Audio frequencies for highway crossing island circuits and electrical lock circuits.
- C. Signal power.

##### **2.1.4.6.1 Electromagnetic Compatibility**

Emission Limits: The locomotives shall not exceed applicable portions of Title 47 CFR.

##### **2.1.4.6.2 Operating Performance**

The locomotives shall be overhauled to maintain the same as-built performance.

## **2.2 CLEARANCE REQUIREMENTS**

The locomotives shall comply with as-delivered clearance requirement.

### 2.3 WEIGHT REQUIREMENTS

The locomotives shall comply with as-delivered weight limits.

### 2.4 CONTRACT DELIVERABLE REQUIREMENTS LIST

Table 2-2

CDRL	Description	Due
CDRL 2-001	Design Requirements Confirmation	TBD by Contractor

End of Section

## **3 LOCOMOTIVE BODY AND STRUCTURE REQUIREMENTS**

### **3.1 GENERAL SCOPE OF WORK**

The following subsections collectively define the scope of work to be performed by the Contractor on the locomotive body.

The body and structural work to be performed shall be confirmed by the Contractor and presented to ConnDOT review and approval in a Locomotive Body and Structural Overhaul Plan [CDRL 3-001].

#### **3.1.1 Locomotive Body Inspection and Repairs**

- A. The Contractor shall inspect the locomotive body for structural integrity, fatigue cracks, corrosion, water leaks and general appearance. The sides, roof and ends of the locomotive body exterior shall be inspected for cracks, dents, holes and damaged or defective welds. Dye penetrant or other non-destructive testing methods shall be used to verify cracks or weld defects which visual inspection cannot conclusively confirm. Dye penetrant testing shall be performed in accordance with the most current edition of ASTM Standard Test Method for Liquid Penetrant Examination, ASTM E-165.
- B. The Contractor's inspection process will consist of, but not be limited to, the following:

##### **3.1.1.1 General Inspection**

The Contractor shall visually inspect the entire structure for defects in accordance with good practice and the Specification's requirements. The Contractor shall identify any material that is missing, bent, cracked, modified, or distorted in any way. The Contractor shall prepare and provide ConnDOT with a report for each locomotive identifying these defects. This report shall identify each defect and recommend its disposition. This disposition may be to accept the defect "as is" or to repair. If the recommendation is to repair, a repair procedure shall be prepared for each recommended repair. The repair procedure shall describe the repair in sufficient detail so that it can be evaluated for manufacturing and engineering. The Contractor's base proposal shall include a predetermined amount of locomotive body and structural repair work up to a pre-defined Scope and Cost Limit that the Contractor shall present as part of the Contractor's Proposal [CDRL 3-002]. For any locomotive-specific body and structural work that is discovered to be beyond the predetermined and agreed threshold (hidden damage), the Contractor shall prepare a cost estimate and repair procedure that have sufficient detail so it can be evaluated for ConnDOT approval. No work on items included as part of this submittal shall commence without ConnDOT approval [CDRL 3-003].

##### **3.1.1.2 Welding Inspection**

The Contractor's welding inspector shall visually inspect, and dye penetrant inspect all structural welds that are accessible for inspection. The welding inspector shall prepare a report for each locomotive describing the findings. The report shall include the inspector's recommended disposition for any structural weld defects [CDRL 3-004].



### **3.1.1.3 Main Frame/Underframe Structure**

- A. The following shall be inspected for cracks and/or wear and repaired as indicated.
  - 1. Center pin traction post shall be inspected and re-qualified. All materials shall be returned to OEM dimensional specifications.
  - 2. Air ducts shall be inspected and replaced if found defective.
  - 3. Fuel tanks shall be inspected and re-qualified.
  - 4. All air piping and associated clamps where piping passes through the frame and carbody floor. Replace if found to be defective.
  - 5. Draft gear pockets shall be inspected and re-qualified.
  - 6. The Contractor shall ensure that all new welds conform to ANSI/AWS D15.1-86 specifications.
- B. All damaged or worn frame areas shall be repaired.
- C. Front and rear end plates and supports shall be replaced only if the locomotive has been in a major collision. On all other locomotives, the front and rear end plates shall be repaired. Front skirts shall be replaced if damaged.

#### **3.1.1.3.1 Front End Arrangement**

- A. Snow Plow – re-qualify.
- B. Sidesteps – re-qualify.

#### **3.1.1.3.2 Rear End Arrangement**

- A. Replace or repair hose storage rack assembly.
- B. Sidesteps – re-qualify.
- C. The car-body floor shall be sealed, and drainage shall be routed to the holding tank which is located between the fuel tanks. All floor drain holes must be ground flush so as to allow water to drain out of the carbody. Ensure that drain pipe is adequately welded to deck plate (i.e. no void or cracks).

### **3.1.1.4 Locomotive Body Exterior**

- A. Radiator hatch shall be removed and repaired.
- B. Dynamic brake grid hatch shall be removed and repaired.
- C. Equipment blower/excitation hatch shall be removed and repaired.
- D. Engine air intake hatch shall be removed, inspected for cracks and metal fatigue and repaired. Applicable GE field modification instructions shall be performed. All gaskets and seals shall be replaced with new materials.
- E. All other roof hatches shall be removed, washed, inspected for cracks and metal fatigue and re-qualified. All gaskets and seals shall be replaced with new materials. Hatches shall be installed with new mounting hardware.

- F. All exterior damage, holes and carbody rust shall be repaired, particularly the rear corners at the side sill area and the rain gutters on the cab end. Dents and scrapes in excess of ¼" deep and within a 3 foot radius shall be repaired with ConnDOT's approval.
- G. Any drain holes that have raised lip shall be ground down flat so as not to prevent water from draining out. Ensure that drain pipe is adequately welded to deck plate (i.e. no voids or cracks).
- H. All exterior carbody screens shall be removed and replaced with new material. Insure that new V screens have the identical hole size and pattern as that which is being replaced.
- I. Side cab entry step treads shall be replaced with new components.
- J. Battery boxes shall be replaced with new boxes. The new boxes shall have grating type drain pan installed in the bottom of the box and be painted with acid resisting paint.
- K. Sandboxes shall be re-qualified. Copper bearing steel, Cor-Ten or equivalent material to be used to make repairs.
- L. Rear outside sand trap doors, hinges and latches shall be re-qualified.
- M. All safety appliances shall be inspected and repaired or replaced to ensure compliance with Federal regulations.
- N. GE FMI 00052 – Composite Nose Modification shall be performed on the eight (8) ConnDOT ex-Amtrak locomotives.
- O. All doors, latches and hinges for the air conditioning and air brake cabinets shall be inspected for rust damage and to ensure proper function and re-qualified. Both hinges and latches shall be lubricated.
- P. All headlight, ditch light and marker light bulbs shall be replaced with new material. All wiring and fastening terminals shall be inspected to ensure a good connection. Lighted number boards, shall be eliminated and covered with blanking plates that are painted per the paint scheme provided in this Section. The light fixtures and wiring for the number boards located in the short hood area shall remain in place and be inspected and repaired as necessary.
- Q. Both left and right side emergency fuel cut-off (EFCO) switches, seal-tite and junction box shall be tested and inspected for damage or defects. If defects are found they shall be replaced with new. Operational testing of switches shall be performed on both inbound and outbound inspections.
- R. The Contractor shall inspect all locomotive body mounts, structural supports and attachment points for cracks, breaks, or structural damage. Dye penetrant or other non-destructive testing methods shall be used to verify cracks that visual inspection cannot conclusively confirm.

### **3.1.1.5 Carbody Interior: Main Engine Room**

- A. All rotating equipment shall be disconnected. All wiring shall be marked and tagged for identification and hook-up. All fuel, oil and water lines to the engine, lube cooler, radiators, fuel tank, ecology tank and pre-heater shall be disconnected so as not to

damage existing piping. All mounting bolts and hardware shall be removed. Rotating equipment shall be removed. The interior and sump area of the locomotive shall be washed. Traction motor air ducts shall be cleaned. The main engine and traction/HEP alternator shall be UTEX with General Electric, re-aligned together and re-installed in the carbody. All threaded holes shall be chased and new hardware shall be installed to re-mount equipment. All mounting and assembly hardware shall be new material.

- B. Remove lube cooler and UTEX with General Electric. Inspect all associated piping and fittings, replace or re-qualify existing. Replace all gaskets and O-rings with new material.
- C. Flexible air ducting for blower hatch shall be removed and replaced with new upon installation.
- D. The electrical cabinet metal cooling shroud shall be removed to ensure thorough cleaning of electric panels.
- E. New fire extinguishers and brackets shall be installed.
  - 1. Fire extinguisher shall be ConnDOT/MNR standard.
- F. All conduit, seal-tite and wiring for engine room lights shall be inspected and replaced if damaged. All light lenses shall be removed, cleaned and re-installed. All bulbs shall be replaced with new bulbs.
- G. All conduit, seal-tite and wiring to water sensor plug (WTS) and engine air filter pressure switch (EFPS) shall be inspected and replaced if damaged.
- H. All wiring, seal-tite and cleats for main alternator, auxiliary blower excitation hatch and traction motor blower shall be inspected for defects and re-qualified to OEM specifications.
- I. Fuel monitoring seal-tite, wiring and cannon plugs shall be inspected for damage or defects and re-qualified to OEM specifications.
- J. Air intake flexible boot, and all rubber hoses and clamps for the air intake filter box hatch shall be replaced with new material.
- K. Water and oil drain lines from the engine to the ecology tank shall be replaced with new material.
- L. All fuel ball cocks and fuel lines between the manifold and the main engine shall be replaced with new material.
- M. Four surge assemblies are mounted on the deck, one above each fuel compartment. Check this assembly for cracks and/or signs of leakage. Re-qualify all surge assemblies to meet OEM specifications. NOTE: There is an internal baffle that is critical to performance of this arrangement; however, repairs should only be made if fuel leaks from vent tubes during filling or in service.
- N. New horn magnet valves shall be installed.
- O. All engine room doors and latches shall be inspected and repaired if necessary. All keepers, latches and handles shall be replaced with new material.
- P. All engine room door seals shall be replaced with new material.

- Q. Rubber door stops on all engine room doors shall be replaced with new material.
- R. Engine room top rail shall be thoroughly cleaned.
- S. Hatch support rail gaskets shall be replaced with new material.
- T. Check and re-apply sealant to all horizontal carbody “Z” section side wall stiffeners and vertical “U” shaped posts where sealant is missing or has separated.

#### **3.1.1.6 Carbody Interior: Compressor Room**

- A. All rotating equipment shall be disconnected. All wiring shall be marked and tagged for identification and hook-up. All water and air lines shall be disconnected so as not to damage existing piping. All mounting bolts and hardware shall be removed. Rotating equipment shall be removed. The interior of the compartment shall be washed. The air compressor and equipment blower shall be UTEX with General Electric. UTEX and installation procedure shall be submitted to ConnDOT for review and approval [CDRL 3-005].
- B. Both the air compressor and equipment blower motor mounting plates shall be cleaned and prepared for re-installation. All threaded holes shall be chased and new hardware installed to re-mount equipment.
- C. The air compressor discharge line gasket and O-ring shall be replaced with new material.
- D. Air compressor exhaust pipe and rubber hose shall be replaced with new material.
- E. The compressor governor switch in the CA9 cabinet shall be renewed.
- F. The main reservoir gauge in the CA9 cabinet shall be re-certified.
- G. All copper and steel air lines shall be cleaned, inspected and replaced with new material if damaged or defective.
- H. All rubber hoses to radiators shall be replaced with new material.
- I. All Victaulic or Marmon seals and mounting clamps shall be replaced with new material, torque to OEM specification.
- J. Equipment blower inlet seal and seal outlet duct shall be replaced with silicone when mounting the equipment.
- K. All seal-tite, and wiring to engine room lights, marker lights, headlights and resistor panel shall be cleaned, inspected and replaced with new material if damaged or defective. Light fixtures shall be cleaned and bulbs replaced with new.
- L. The CA-9 shall be cleaned of all dirt and debris.
- M. Compressor contactors CDC1, CDC2 and CDC2A in CA9 cabinet shall be replaced.
- N. All conduit, cables and cleats shall be replaced.
- O. Fuel monitoring system shall be tested. If found to be defective, it shall be replaced with new material.
- P. CA9 cabinet door seal shall be replaced with new material.

- Q. Upper wall hatch rails shall be cleaned and radiator hatch mounting holes shall be inspected.
- R. Side and rear door seals shall be replaced with new material. Rubber door stops on all three doors shall also be replaced with new material. Side and rear door hinges shall be inspected and lubricated, mounting bolts shall be tightened. Side and rear door keeps shall be replaced with new material; door latches and locks shall be inspected and tested to ensure functionality.
- S. Side and rear door windows and rubber mounting weather stripping shall be replaced with new material.
- T. Rear wall tool box shall be emptied and cleaned. Hinges, latches and door seals shall be inspected and replaced if found to be damaged. Hoses and tools shall be installed on outbound inspection. A bracket shall be installed on the tool box for attaching a lead seal, seal numbers shall be recorded on the appropriate form prior to departure.
- U. ConnDOT/MNR type fire extinguishers and associated brackets shall be installed. ConnDOT will provide manufacturer and model numbers to the Contractor.
- V. Insure that all deck drains are clean.

#### **3.1.1.7 Carbody Interior: Toilet Room**

- A. The toilet and all of its associated equipment shall be removed and abandoned.
- B. Toilet room shall be washed and disinfected.
- C. The Contractor shall provide a plan for closing and sealing all toilet penetrations for ConnDOT approval [CDRL 3-006].
- D. Light fixture shall be removed, cleaned and re-installed, the lens shall be cleaned and the bulb replaced.
- E. Toilet room shall be completely painted per the requirements stated in this Section.

#### **3.1.1.8 Carbody Interior: Electrical Equipment Room**

- A. All dirt and debris shall be cleaned out.
- B. The AFR, BPFR, BRP, RBCP, HEFR, EDR, and FRP control rectifiers shall be blown out and cleaned.
- C. Contactor tips shall be replaced on the following:
  - 1. power contactors
  - 2. braking contactors
  - 3. air compressor drive contactor
  - 4. motor braking contactors
  - 5. reverser and dynamic braking contactors.
  - 6. All motor switch modules shall be UTEXed. All pneumatic switch gears shall be replaced.

D. All HEP switchgear shall be inspected and re-qualified.

### **3.1.1.9 Carbody: Other Areas**

A. GE FMI (Short Hood Area) – 27 point connector reinforcement and installation of stainless steel washer bottle shall be performed on the eight (8) ex-Amtrak locomotives.

## **3.1.2 Paint and Exterior Treatments**

### **3.1.2.1 Materials and General Requirements**

A. The Contractor shall submit color samples and manufacturer's specifications of recommended paints and primers to ConnDOT for review and approval [CDRL 3-007]. Each locomotive shall be completely painted in accordance with ConnDOT-specified locomotive exterior paint scheme including logos, locomotive numbering and other exterior lettering.

1. The interior and exterior of the locomotive shall be thoroughly cleaned and prepared for repainting.
2. Painting materials shall be applied according to the recommendations of paint manufacturer including cleaning and material preparation.
3. Contractor shall ensure that all surfaces to be painted are as free as possible of surface blemishes that may detract from the finished appearance.
4. Interior signs and equipment markings shall be rigid labels securely applied, or decals or vinyl lettering. Materials (signs) and application methods are to be submitted to ConnDOT for review and approval prior to application [CDRL 3-008].
5. Exterior Painting – The Contractor shall paint the exterior of the carbody, and all exterior equipment (from the bottom of the side sills and anti-climbers up) using DuPont “IMRON” polyurethane paints or approved equivalent. Couplers and draft gear shall not be painted.
  - a. All painted exterior carbody surfaces shall have a three-coat paint application, consisting of one primer coat and two finish coats.
  - b. A Final clear coat will be applied on top of the three-coat paint application.
  - c. Contractor shall select a complete paint system to ensure compatibility between the primer, finish coats and clear coat.
6. Underframe Painting – Underframe equipment and structure, except control equipment, (from the bottom of the side sills and anti-climbers down) shall be given at least two coats of rust preventive paint. The underframe structure shall be cleaned of all scale, flux, etc. and Primer painted before application of finish paint.
7. Interior Painting – The interior of the locomotive shall be painted using the Contractor's standard color(s).
  - a. Interior painted surfaces shall have a minimum of two coats, consisting of one primer coat and one finish coat.

- b. Contractor shall select a complete paint system to ensure compatibility between the primer and finish coat.
- 8. Truck Painting – Before truck installation, the Contractor shall clean all accumulated dust, dirt or other foreign matter off of the trucks. Contractor shall spray and air dry one coat of metal primer on all exposed surfaces of the trucks and a final coat of light-bodied approved truck paint. Truck paint shall be of a type that will not conceal cracks that may develop in service. Wheels, axles, exposed elastomers and brake shoes shall not be painted.
- 9. Equipment Compartment and Locker Paints – The inside of all newly installed control equipment compartments, electrical lockers and junction boxes shall receive at least two coats of an approved white electrical insulating paint. Repaired interior areas of existing electrical enclosures shall be touch-up painted to maintain the insulative properties.
- 10. Battery Enclosure – Metal battery enclosure (s) shall be given one coat of an approved acid resisting paint.
- 11. Lettering and Numbering – Lettering, numbering and logos shall be applied to the exterior and interior as applicable, subject to review and acceptance by ConnDOT. Breakers, switches and gauges shall be properly and clearly identified. All electrical items such as terminal blocks, relays and resistors shall be clearly and permanently identified as per applicable locomotive or subcontractor wiring drawings.
- B. Tags and Stenciling – All FRA – required stenciling shall be provided, in conformance with FRA requirements. Raised – letter identifying tags shall be applied at all external air and electrical receptacles, and hoses.

### **3.1.2.2 Identification Numbers**

- A. Side Numbers
- B. Rear end numbers
- C. Cab interior locomotive numbers and letter
- D. A five inch tall decal “F” is located on each side sill near the front end and shall identify that end as the front. The decal’s color shall be selected to provide the greatest visibility, and shall be approved by ConnDOT.
- E. All letters and numbers shall be Helvetica medium face.
- F. Install new AEI tags with new road numbers. ConnDOT to supply AEI tags.

Note: ConnDOT will provide the Contractor with a list of new locomotive road numbers prior to the application.

### 3.2 CONTRACT DELIVERABLE REQUIREMENTS LIST

Table 3-1

CDRL	Description	Due
CDRL 3-001	Locomotive Body and Structural Overhaul Plan	TBD by Contractor
CDRL 3-002	Scope and Cost Limit for Locomotive Body and Structural Repair Work	Include in Proposal
CDRL 3-003	Locomotive-specific body and structural work scope and cost estimate	Case-by-case, as needed basis
CDRL 3-004	Welding Inspector's Report	TBD by Contractor
CDRL 3-005	UTEX and Installation Procedure	TBD by Contractor
CDRL 3-006	Plan for sealing toilet penetrations	TBD by Contractor
CDRL 3-007	Paint color samples	TBD by Contractor
CDRL 3-008	Materials (signs) and application methods	TBD by Contractor

**End of Section**



## **4 COUPLER, DRAFT GEAR AND TRAINLINE CONNECTION OVERHAUL REQUIREMENTS**

### **4.1 GENERAL SCOPE OF WORK**

Locomotives shall be capable of multi-unit operation in consist with other ConnDOT locomotives and cab control trailer cars.

The coupler, draft gear and trainline connection work to be performed shall be confirmed by the Contractor and presented to ConnDOT review and approval in a Coupler, Draft Gear and Trainline Connection Overhaul Plan [CDRL 4-001].

#### **4.1.1 Coupler and Draft Gear**

Inspect front coupler, draft gear assembly, coupler carrier and wear plate assembly and replace only if necessary. Replace rear coupler, NC390 draft gear, and coupler carrier wear plate with new material.

#### **4.1.2 Electric and Pneumatic Trainlines**

##### **4.1.2.1 480 Volt Trainline System**

- A. The two (2) permanently attached jumper cables at the rear of the locomotive shall be replaced with new standard HEP jumper cables, Clements National 84B102702P3 or approved equal. All existing HEP receptacles shall be cleaned, inspected, tested, and re-qualified to OEM specifications.
- B. The nylon securement system shall be replaced with new.
- C. New 480 volt jumpers on all four corners shall be inserted and attached to the locomotive.
- D. The 480 volt junction boxes shall be opened and inspected. All lugs and connections shall be checked for tightness and continuity. Boxes shall be cleaned and repaired to like new condition and lid gasketing shall be replaced with new material.
- E. 480 volt trainline shall be checked for continuity from side to side and end to end.
- F. The trainline complete system shall be checked for continuity from side to side and end to end.
- G. The Contractor shall reconfigure the HEP power pin phase rotation on the four (4) ex-NJT locomotives to match the phase rotation on the eight (8) ex-Amtrak locomotives.
- H. The Contractor shall reconfigure the HEP control pins 1, 2 and 3 on the four (4) ex-NJT locomotives to match the configuration on the eight (8) ex-Amtrak locomotives.

##### **4.1.2.2 27 Point Communication Trainline**

- A. The 27 point communication trainline circuits on the four (4) ex-NJT locomotives shall be reconfigured from NJT standards to ConnDOT standards.

- B. The existing 27 point communication trainline shall be inspected, and each wire tested for continuity and grounds from end to end and side to side. Receptacles and contact pins shall be replaced with new material. The trainline system shall be re-qualified to meet OEM performance standards.
- C. Unless otherwise noted, all original functions within the locomotive will be retained.
- D. The mounting surfaces of receptacles shall be inspected for corrosion, cleaned and repaired as required.

**4.1.2.3 27 Point MU Trainline**

- A. The 27 point MU trainline circuits on the four (4) ex-NJT locomotives shall be reconfigured from NJT standards to ConnDOT standards.
- B. The existing 27 point communication trainline shall be inspected, and each wire tested for continuity and grounds from end to end and side to side. Receptacles and contact pins shall be replaced with new. The trainline system shall be re-qualified to meet OEM performance standards.
- C. Unless otherwise noted, all original functions within the locomotive will be retained.
- D. The mounting surfaces of receptacles shall be inspected for corrosion, cleaned and repaired as required.

**4.2 CONTRACT DELIVERABLE REQUIREMENTS LIST**

Table 4-1

CDRL	Description	Due
CDRL 4-001	Coupler, Draft Gear and Trainline Connection Overhaul Plan	TBD by Contractor

**End of Section**

## **5 CAB AND LOCOMOTIVE CONTROLS**

### **5.1 GENERAL SCOPE OF WORK**

The cab and locomotive control work to be performed shall be confirmed by the Contractor and presented to ConnDOT review and approval in a Cab and Locomotive Controls Overhaul Plan [CDRL 5-001].

#### **5.1.1 Cab Area and Control Stand/Console**

##### **5.1.1.1 Cab Area**

The cab area shall have the following equipment replaced with new or rebuilt components:

- A. New MAP form holder, F-40 Style.
- B. New holder for FRA Inspection Form – F6180-49A.
- C. Remove ashtray, and cover hole with blank plate. Blanking plate shall be finished to match surrounding surfaces.
- D. Nose access screen shall be removed and repaired if damaged and re-qualified to meet OEM performance standards.
- E. Trash receptacles shall be replaced with new receptacles.
- F. EBCO ER 2RR refrigerator/freezer shall be replaced with a new unit.
- G. The coat hooks located on the electrical doors shall be replaced with new coat hooks.
- H. A new Amtrak standard First Aid kit shall be installed.
- I. Install new ConnDOT approved fire extinguishers.
- J. Inspect and re-qualify side mirrors. If broken, replace with new in-kind.
- K. Inspect fusee and flare box and replace if damaged.
- L. Refinish cab interior wall and ceiling panels in place, in accordance with Section 3.1.2.
- M. Quick disconnect fasteners shall be installed in both overhead cab visor panels.
- N. Replace both engineer and foreman's windshield solar screens with new 49 CFR 238 compliant screens.

##### **5.1.1.2 Control Stand/Console**

- A. Control stand/Console shall be cleaned and exterior shall be painted.
- B. The center lift-up panel on the control stand shall be removed. Inspect all mounting hardware, make any necessary repairs and re-qualify. Sand and paint panel and all coffee-cup holders. Re-install on locomotive.

## **5.1.2 Cab Controls**

### **5.1.2.1 Windshield Wipers**

- A. Windshield wiper motors and wipers shall be rebuilt in kind and all associated air piping shall be re-qualified to meet OEM performance standards.
- B. Windshield washer tanks shall be removed. FMI GE FMI (Short Hood Area) – 27 point connector reinforcement and installation of stainless steel washer bottle shall be performed. (ref. Section 3.1.1.9)
- B. The reservoir compartment shall be cleaned And all rusted surfaces shall be repaired and painted.
- C. New washer fluid shall be added and the wipers and washer system shall be tested for proper operation. Adjustments and/or part replacements shall be made until it is achieved.
- D. Clamps shall be applied in the overhead console to secure windshield washer hoses.

### **5.1.2.2 Radio and Communications**

#### **5.1.2.2.1 Communications Equipment**

- A. 12VDC radio battery shall be replaced with a new battery and the system shall be tested to ensure radio operation during locomotive battery failure.
- B. Qualcomm System shall be de-activated and removed.
- C. End-of-Train system shall be de-activated.

#### **5.1.2.2.2 Cab Radio**

- A. The current radio shall be removed.
- B. All wiring and connectors shall be re-qualified to OEM performance standards .
- C. A new ConnDOT approved multi-channel, programmable narrow band (12.4kHz) radio system, Motorola Spectra (Model # MBR43KME1170AD) or GE 12RII or approved equivalent, shall be installed, and shall operate in conjunction with the train communication system.
- D. The Contractor is responsible for integration of the radio with the locomotive and any other systems with which the radio interacts in normal revenue and non-revenue operation.

## **5.1.3 Seats**

The engineer's seat shall be replaced, in-kind, with a new seat. Inspect other cab seats and replace only if damaged.

## **5.1.4 Cab Heat**

The 74V forced air cab heater system shall be removed, rebuilt to meet OEM performance standards and reinstalled.

### **5.1.5 Cab Air Conditioner**

- A. Prime 480V air conditioner package shall be removed and rebuilt to meet OEM performance standards.
- B. Car body air filters shall be replaced with new material.
- C. Areas under the cab floor and the air conditioner drain line shall be cleaned.
- D. Air conditioner air ducts shall be thoroughly cleaned and disinfected. Deflector shrouds shall be cleaned, repaired if necessary and re-qualified to meet OEM performance standards.
- E. All cab air ducts shall be inspected for rips or tears, and replaced if defective. Ensure that all air ducts have hose straps installed and secured.
- F. Air conditioner mounting pads shall be inspected and replaced with new material if cracked or stripped.
- G. Air conditioner mounting pads and compartment floor shall be painted with a ConnDOT approved rust-inhibiting paint.
- H. The rebuilt air conditioning package shall be re-installed using all new hardware.

### **5.1.6 Cab Interior**

The Cab shall remain intact. Cab walls, windows, side-sliding windows, and doors shall be inspected, repaired or replaced and re-qualified. All new materials installed in the cab as part of this overhaul shall be compliant with 49 CFR part 238. A list of these materials shall be provided to ConnDOT, along with their signed certificates verifying compliance with the requirements of 49 CFR part 238. The refurbished cab as completed by the Contractor shall meet the requirements of the sound test specified in this Specification.

### **5.1.7 Cab Inward and Forward Facing Camera and LDRS-V System**

The contractor shall install a Wabtec Railway Electronics (WRE) LDRS-V system which is their next generation video system that combines video and event recorder data into a single hardware component which includes a FRA crash hardened memory module.

#### **5.1.7.1 LDRS-V Components**

The LDRS-V system is a universal system that can be installed in locomotives or cab cars with a minimal level of effort. The system kit as provided by Wabtec Railway Electronics consist of the following components:

- A. 1 ea. WRE Part No. 34331P - LDRS-V
- B. 1 ea. WRE Part No. 34690-2 - Color Camera – Wide Angle
- C. 1 ea. WRE Part No. 34556-2 - Color Camera – Standard Lens
- D. 2 ea. WRE Part No. 34546P - Cable Assembly Split PoE / Audio
- E. 2 ea. WRE Part No. 83369P - M12 to M12 Ethernet Cable
- F. 1 ea. WRE Part No. 34553-5 - Cable Assembly External Mic
- G. 1 ea. WRE Part No. 34554P - Microphone Module Assembly LSZ H
- H. 1 ea. WRE Part No. 33643P - Cable Assembly LL to LDRS
- I. 1 ea. WRE Part No. 34606P - Cable Assembly Power/Alarm

- J. 1 ea. WRE Part No. 83955P - LSI Bracket, 6MCU Max
- K. 1 ea. WRE Part No. 34624P - Fabricated Mounting Plate LSI Shelf

#### **5.1.7.2 LDRS-V**

The LDRS-V is the main component of the system which records and stores all of the collected data into its internal FRA crash hardened memory module. It is powered by the vehicle's 74VDC power supply and it is connected directly to the vehicle's event recorder. The LDRS-V can be mounted in the vehicles short hood area or in the compartment where the lavatory was originally installed.

#### **5.1.7.3 Wide Angle Color Camera**

The wide angle camera will be used to capture the actions within the cab. It will be mounted in a location that is unobtrusive and that which provides the best view of the operator's activities while operating the train.

#### **5.1.8 Standard Lens Color Camera**

The standard lens color camera will be used to capture the actions ahead of the train. The camera will be mounted on the observer's side directly facing the windshield using the provided mounting bracket. The camera will be positioned so that the lens is in the operators line of sight and within the sweep of the windshield wiper.

#### **5.1.9 Split PoE/Audio Cables**

The two (2) split PoE audio cables are used as splitters that provide connectivity between the cameras, microphone(s) and the LDRS-V via the Ethernet cables.

#### **5.1.10 M12 Ethernet Cables**

The two (2) M12 to M12 cables will be routed from the LDRS-V unit to each of the cameras located in the cab.

#### **5.1.11 External Mic Cable**

The external mic cable will be routed above the cab ceiling panel from the PoE splitter to the microphone module assembly.

#### **5.1.12 Microphone Module Assembly LSZH**

The LSZH microphone will be used to monitor horn and bell activation. It will be mounted in a suitable location to record the horn and bell activation.

#### **5.1.13 Power and Alarm Cable Assembly**

The power and alarm cable will be routed to the terminal boards located in the electrical compartment to pick up the required 74VDC input and interface to the vehicles horn and alarm inputs.

#### **5.1.14 Cable Assembly LL to LDRS and M Series Recorder LL Splitter**

The LL to LDRS cable and LL splitter will be used to provide connectivity between the LDRS-V and the vehicles event recorder.

#### **5.1.15 Power Source**

A new circuit breaker will be installed to power the system in the locomotives 74VDC Load Center.

### **5.2 Connectivity to the Event Recorder**

#### **5.2.1 The LDRS-V is equipped with a FRA crash hardened memory module that will be used to store all recorded video and locomotive/cab car data. It does require connectivity to the vehicles event recorder to maintain time synchronization. Cab Flooring**

Existing flooring shall be cleaned, inspected and replaced with new floor covering as required. Damaged or torn subflooring panels shall be replaced. All floor panel latches shall be cleaned, inspected, lubricated to meet OEM performance standards or replaced with new as required.

#### **5.2.2 Cab Lighting and Switches**

- A. Inspect all cab light fixtures and replace with new material only if damaged or defective.
- B. Replace all instrumentation light bulbs with new material.
- C. Ensure all lighting and miscellaneous switches are operational and perform to OEM performance standards.
- D. Inspect all sand switches and lights to ensure proper operation and perform to OEM performance standards.
- E. Replace horn sequencer switch assembly with a new assembly.

#### **5.2.3 Electrical Doors**

- A. All electrical doors shall be inspected for damaged panels. Repair, replace all panels as required.
- B. Inspect latches and hinges on all electrical doors and replace only if damaged or defective.
- C. Replace electric locker door seals with new material.
- D. GE FMI MOD00242 – The Locomotive CRU Cover Foam Kit modification shall be performed.
- E. GE FMI (Cab) – The Cab Insulation Upgrade around electrical cabinet shall be performed.

#### **5.2.4 Cab Safety Appliances**

- A. All grab irons shall be inspected for damage, repaired or replaced if necessary and re-qualified to OEM performance standards.

- B. All bumper pads shall be inspected for damage and replaced with new material as necessary.

**5.2.5 Doors, Windows and Glass**

- A. Fixed and sliding-side windows, as well as rubber, shall be replaced with new material.
- B. Cab entry door seals and engine room door seals shall be replaced with new material. Ensure that seals are properly vented.
- C. Install new FRA approved heated front windshields.
- D. Cab entry and engine room door latches, hinges and keepers shall be replaced with new material.

**5.2.6 Cab Roof**

The cab roof shall be inspected for any damage, repaired and re-qualified by a leak test or other ConnDOT-approved means.

**5.3 CONTRACT DELIVERABLE REQUIREMENTS LIST**

Table 5-1

<b>CDRL</b>	<b>Description</b>	<b>Due</b>
CDRL 5-001	Cab and Locomotive Controls Overhaul Plan	TBD by Contractor

**End of Section**



## **6 MAIN AND AUXILIARY GENERATOR, PROPULSION AND DYNAMIC BRAKING SYSTEMS**

### **6.1 GENERAL SCOPE OF WORK**

The main and auxiliary generator, propulsion and dynamic braking system work to be performed shall be confirmed by the Contractor and presented to ConnDOT review and approval in an Main and Auxiliary Generator, Propulsion and Dynamic Braking Systems Overhaul Plan [CDRL 6-001].

### **6.2 MAIN GENERATOR**

The main generator shall be Unit Exchanged (UTEX) with General Electric. This requirement is subject to change and is dependant on the contractors response to Section 2.1.2.G as part of the plan to repackage the prime mover..

### **6.3 AUXILIARY GENERATOR**

Auxiliary generator bearings and slip rings shall be removed and replaced in accordance with GE maintenance manual and with OEM parts. Auxiliary generator shall be re-qualified to OEM specifications.

### **6.4 PROPULSION ELECTRICAL COMPONENTS AND CABINETS**

All components within propulsion control cabinets shall be inspected and re-qualified to OEM specifications. If defects are found, the components shall be replaced with OEM components.

### **6.5 TRACTION MOTORS AND GEARBOX**

- A. GE 752 AH traction motors shall be be UTEXed and returned as GE 50 R configuration motors and reinstalled. New pinions shall be installed on the motors.
- B. Traction motors shall be assembled into complete wheel combo units per OEM specifications.

### **6.6 PROPULSION SYSTEM HIGH AND LOW VOLTAGE CABLING AND CONNECTIONS**

All propulsion high and low voltage cabling and connections shall be inspected and re-qualified to OEM performance standards. Any defective cabling and/or connection shall be replaced with OEM standard cabling and/or connection for the application being addressed.

## 6.7 CONTRACT DELIVERABLE REQUIREMENTS LIST

Table 6-1

CDRL	Description	Due
CDRL 6-001	Main and Auxiliary Generator, Propulsion and Dynamic Braking Systems Overhaul Plan	TBD by Contractor

**End of Section**

## 7 MISCELLANEOUS ELECTRICAL SYSTEMS

### 7.1 GENERAL SCOPE OF WORK

The electrical work to be performed shall be confirmed by the Contractor and presented to ConnDOT review and approval in a Electrical System Overhaul Plan [CDRL 7-001].

### 7.2 ELECTRICAL SYSTEM

#### 7.2.1 Batteries

Replace main starting batteries with new 530 amp-hr lead-acid batteries.

#### 7.2.2 Video Display Units

The three (3) Video Display Units shall be removed. General Electric Model 780, or approved equivalent, shall replace these VDUs.

#### 7.2.3 Electrical System Details

##### A. Locomotive Wiring

1. All Communication and MU/Control trainline wiring, HEP cabling, high voltage traction motor cabling and cleats shall be inspected for physical damage, repaired or replaced if necessary and re-qualified by the Contractor, with a procedure approved by ConnDOT.
2. All trainline wiring, high voltage cabling and HEP cabling shall be cleared of all grounds. Insulation resistance to ground shall not be less than 5 Megohms (MΩ). Cleats shall be inspected for physical damage, repaired or replaced if necessary and re-qualified to OEM performance standards.

B. The memory backup batteries in the Cab Logic Panel and IFC panels shall be replaced with new batteries.

C. All motors and generators shall be Unit Exchanged (UTEX) with General Electric. To include two DC grid fans, one radiator cooling fan, two equipment blower motor assemblies, one alternator blower motor assembly, auxiliary generator, compressor motor and one main/HEP alternator. ALL ROTATING EQUIPMENT REMOVAL AND INSTALLATION SERIAL NUMBERS SHALL BE RECORDED AND PROVIDED TO ConnDOT.

D. Inspect, test and re-qualify master controller to OEM performance standards. Controller shall be greased and bulb shall be replaced. If found to be defective, replace with a rebuilt unit.

E. All conduit shall be inspected for damage, repaired or replaced if necessary and re-qualified to OEM performance standards.

1. Inspect, repair or replace if damaged and re-qualify all conduit and piping which contains underframed wiring between left and right fuel tanks for damage.

- F. All magnet valves, including control wiring and piping shall be replaced with new material.
- G. All pressure switches, including control wiring and piping shall be replaced with new material.
- H. Replace redundant battery charger system with new components.
- I. Replace engine prime, stop/start switch with new components.
- J. Existing lights and fixtures shall be repaired or replaced if necessary and re-qualified to OEM performance standards.
- K. GE FMI MOD00179 – P42 XFC Contactor Elimination Modification shall be performed.

#### **7.2.4 Dynamic Brake Hatch**

- A. The dynamic brake hatch cover shall be removed, cleaned, repaired and painted. Grids shall be inspected and tested per SMI-51031. Insulators that support grids shall be replaced with new material. Wiring shall be inspected and meggered and all necessary repairs shall be made prior to re-installation. Both dynamic brake grid motors shall be UTEX.
- B. New foam and rubber seals shall be installed on the hatch.
- C. All mounting holes shall be inspected. Holes found to be oblong or cracking around the hole shall be repaired.
- D. The hatch shall be re-installed utilizing all new roof mounting hardware.
- E. All hoses shall be replaced with new hoses.

#### **7.2.5 Equipment Blower Hatch**

- A. The equipment blower hatch cover shall be removed, cleaned, repaired and painted.
- B. Both equipment blowers shall be removed and UTEX.
- C. All wiring seal-tite and conduit shall be inspected and repaired as necessary.
- D. All removable interior and exterior panels shall be removed, cleaned, painted and reinstalled. Any damaged panels shall be replaced in-kind with new material.
- E. Hatches shall be inspected for cracked or broken welds and repaired as required.
- F. New foam seals on equipment blowers shall be installed.
- G. Both UTEX equipment blowers shall be re-installed.
- H. All mounting holes shall be inspected. Holes found to be oblong or cracking around the hole shall be repaired as required.
- I. All rubber and foam seals on the hatch shall be replaced with new material.
- J. Install new air intake filters and install hatch utilizing new mounting hardware.
- K. All air and drain hoses shall be replaced with new hoses.

**7.2.6 Interior and Exterior Lighting**

All interior and exterior lighting fixtures shall be reconditioned in to conform with OEM performance standards.

**7.2.7 Battery Charger**

The battery charger shall be reconditioned to conform with OEM specifications.

**7.3 CONTRACT DELIVERABLE REQUIREMENTS LIST**

Table 7-1

<b>CDRL</b>	<b>Description</b>	<b>Due</b>
CDRL 7-001	Electrical System Overhaul Plan	TBD by Contractor

**End of Section**

## **8 TRUCK AND SUSPENSION**

### **8.1 GENERAL SCOPE OF WORK**

The trucks shall be completely rebuilt per OEM specifications using only General Electric approved truck kit and parts. The current 752AH traction motors shall be retained. New Timken journal roller bearings, or approved equivalent, shall be used. ALL REMOVAL AND INSTALLATION SERIAL NUMBERS FOR WHEEL SETS, TRACTION MOTORS, TRUCKS AND POSITION ON LOCOMOTIVE SHALL BE RECORDED AND PROVIDED TO ConnDOT.

The truck and suspension work to be performed shall be confirmed by the Contractor and presented to ConnDOT for review and approval in a Truck and Suspension Overhaul Plan [CDRL 8-001].

#### **8.1.1 Wheels, Axles and Journal Bearings**

##### **8.1.1.1 Wheels**

Wheels shall be replaced with new AAR Type E-40, Class B wheels, in accordance with AAR Specification M-107, latest issue. Wheels shall also have AAR 1B narrow flange contour, with tread taper of 1:40.

##### **8.1.1.2 Axles**

- A. All axles are to be inspected and qualified in accordance with the AAR Wheel & Axle Manual, Section G, Part II of the AAR Manual of Standards and Recommended Practices.
- B. Axles which cannot be qualified for reuse shall be replaced with new axles, which are in accordance with AAR Specification M101, Class F, latest issue. U-tube housings shall be rebuilt to OEM performance standards and re-installed.
- C. Bull gears shall be qualified and re-mounted per GE maintenance directives. If necessary, replace in-kind with new gears.

##### **8.1.1.3 Journal Bearings**

Journal roller bearings shall be reconditioned by an approved AAR Wheel Shop and re-mounted in accordance with the Roller Bearing Manual, Section H, Part II of the AAR Manual, or alternative GE instructions.

#### **8.1.2 Suspension Elements**

- A. Replace all primary and secondary truck springs with new. Clean, inspect and re-qualify to meet OEM performance standards all secondary suspension spring seats. Replace with new as required.
- B. Install new lateral, yaw and vertical shocks.

### **8.1.3 Truck Frame**

- A. All components shall be removed from truck frames. Frames shall be completely cleaned and repainted prior to build-up process.
- B. Magnetic particle inspection of trucks after thorough cleaning shall be required. This inspection should pay particular attention to the welds and cross ties.
- C. Replace nose supports and all pins and rubber bushings in trucks.
- D. Trucks shall be trammed and rebuilt to OEM specifications.
- E. All tie rods, rubber bushings and pins shall be removed from the truck frame. New tie rods and rubber bushings shall be installed.
- F. Remove lemniscate assembly (Watts link) from the truck frame, clean and paint all components and rebuild lemniscate assembly (Watts link). Install new rubber bushings in all components and inspect longitudinal frame for damage.
- G. Replace all hot support bearing probe assemblies with new probes on each combo U-tube assembly.
- H. Replace speed sensor cables with new cables.
- I. The rebuilt ombo units shall be re-installed into the rebuilt trucks.
- J. Replace sand brackets with latest style from General Electric or approved equivalent.
- K. Reassembly of trucks shall be accomplished with all new hardware, nuts, bolts and pins. Only General Electric hardware shall be used.

#### **8.1.3.1 Journal Boxes**

Journal boxes shall be inspected for wear and cracking, and repaired or replaced and re-qualified to OEM performance standards.

### **8.1.4 Liners and Wear Surfaces**

All liners and wear surfaces shall be replaced with OEM specified new components.

#### **8.1.4.1 Tread Brakes and Rigging**

Tread brakes shall be removed and rebuilt to OEM specifications, automatic slack adjusters shall be replaced with new welded slack adjusters. New cylinders with dual air inlets for right and left positioning shall be installed

### **8.1.5 Truck Mounted Air Piping**

- A. Remove all truck mounted air lines. Install new truck piping, replace all pipe brackets, clamps and hardware with new components.
- B. Replace all air hoses running from tread brake units to truck piping with new hoses.
- C. Replace all truck hoses and fittings as presently indicated by GE overhaul kit instructions.

## 8.2 CONTRACT DELIVERABLE REQUIREMENTS LIST

Table 8-1

<b>CDRL</b>	<b>Description</b>	<b>Due</b>
CDRL 8-001	Truck and Suspension Overhaul Plan	TBD by Contractor

End of Section



## **9 AIR SUPPLY AND FRICTION BRAKE SYSTEM**

### **9.1 GENERAL SCOPE OF WORK**

- A. A signed FRA cab card shall be provided in the cab of the locomotive at delivery of the overhauled locomotive.
- B. Each locomotive's brake system shall receive a complete brake system overhaul, inspection and test in accordance with 49 CFR 229 and the requirements of this technical specification. The work to be performed shall be confirmed by the Contractor and presented to ConnDOT review and approval in an Air Supply and Friction Brake System Overhaul Plan [CDRL 9-001].

#### **9.1.1 Valves**

- A. The current 26L air brake system shall have all valves removed and replaced with rebuilt air valves.
  - 1. All air brake valves shall be rebuilt by an AAR certified Air Brake Shop.
  - 2. All air components shall meet the change-out requirements of 49 CFR 238.309 and applicable requirements of 49 CFR 229.
- B. The emergency valves in the cab shall be tested for operation and replaced if found to be defective.
- C. All vented and non-vented ball cocks on the trainline shall be inspected and tested to assure a seal against air leakage. If found to be defective they shall be replaced with new.

#### **9.1.2 Air Compressor and Filter/Dryer**

- A. Locomotive No.'s 4801, 4802 and 4803 are equipped with new generation Graham-White series electronic air dryers.
- B. The Salem 975 Series air dryers on the remaining locomotives shall be removed and replaced with a new generation Graham-White series air dryers. All air system filters shall be replaced with new filters.

#### **9.1.3 Air Tanks and Piping**

- A. Trainline brake pipe hose, MR train supply air hose and locomotive MU hoses shall be replaced at both ends and on both sides of the locomotive with new hoses.

##### **9.1.3.1 Main Reservoir**

- A. Main reservoir automatic drain valves shall be disconnected and removed. Main reservoir automatic drain valves shall be overhauled to like-new condition matching the latest configuration. Main reservoirs shall be blown out with compressed air to remove any moisture and debris. Main reservoirs, mounting brackets, mounting hardware and MR automatic drain valve guards shall be inspected for damage and defects. Any main reservoirs or mounting hardware, which are found to be damaged, defective, cracked, or

corroded, shall be replaced with new material. Upon completion of main reservoir inspection and repairs, the overhauled main reservoir automatic drain valves shall be reinstalled and reconnected. Verify proper operation of main reservoir automatic drain valves.

- B. The main reservoir line from the air tanks to the air compressor shall be wrapped with insulation in order to prevent pipe from freezing.

#### **9.1.4 Warning Devices**

##### **9.1.4.1 Horn**

The horn shall be tested with a calibrated sound level meter to ensure that the horn meets FRA requirements. Remove the horn from the equipment blower hatch and rebuild to OEM specifications if it fails the decibel test.

##### **9.1.4.2 Bell**

The bell shall be removed and rebuilt per OEM specifications. The bell shall be re-installed using new mounting rubbers and tested.

#### **9.1.5 Sanding**

##### **9.1.5.1 Sand Traps and Hoses**

Inspect and check operation of front and rear lead axle Salem 227 type sand traps, including rotary shut off valves. Install new sand hoses, clamps and nozzles to trucks.

##### **9.1.5.2 Sand Box**

- A. Inspect all sand boxes; ensure that they are not leaking nor blocked by wet sand. Repair if found to be defective.
- B. Remove the air conditioning unit and clean out all sand and debris in HVAC, air brake and sand box area under the cab floor.

##### **9.1.5.3 Sand Fill Covers**

Inspect all fill box doors, hinges and latches, repair if damage is found. All gaskets shall be replaced with new material.

##### **9.1.5.4 Electrical System**

Electrical wiring shall be inspected for nicks, cuts chafing and exposure to excessive oil. Damaged wires shall be replaced and tested with a procedure approved by the Engineer.

## 9.2 CONTRACT DELIVERABLE REQUIREMENTS LIST

Table 9-1

<b>CDRL</b>	<b>Description</b>	<b>Due</b>
CDRL 9-001	Air Supply and Friction Brake System Overhaul Plan	TBD by Contractor

**End of Section**

## **10 MAIN ENGINE, MAIN ENGINE COOLING AND FUEL SYSTEM**

### **10.1 GENERAL SCOPE OF WORK**

The main engine, main engine cooling system and fuel system work to be performed shall be confirmed by the Contractor and presented to ConnDOT review and approval in a Main Engine, Main Engine Cooling and Fuel System Overhaul Plan [CDRL 10-001].

#### **10.1.1 Engine**

Engine shall be a UTEX with a General Electric "Tier 0" certified engine per 40 CFR 1033. If a Tier 0+ certified UTEX engine is available at the time overhaul work commences, it shall be utilized by the contractor. ENGINE REMOVAL AND INSTALLATION SERIAL NUMBERS SHALL BE RECORDED AND PROVIDED TO ConnDOT.

The turbocharger air box shall be modified to conform with the requirements of GE FMI – GE Locomotive Air Box Modification P42.

##### **10.1.1.1 Automatic Engine Stop/Start System (AESS)**

- A. An AESS compliant with EPA Tier 0+ shall be installed that will automatically:
  - 1. Shut down the locomotive when it has been idling for a period of time as determined by ConnDOT
  - 2. Start the main engine once the main engine coolant temperature has dropped 5 degrees Fahrenheit below a preset engine temperature to be maintained
  - 3. Shut down the main engine once a pre-determined temperature has been reached.
  - 4. Monitor and maintain battery charge.
- B. This modification shall conform with the requirements of GE FMI – Loco Auto Start-Stop.
- C. Contractor shall submit to ConnDOT a detailed description of the equipment and functional operation of the AESS system he/she proposes to install for ConnDOT approval [CDRL 10-002].
- D. Contractor shall provide revised locomotive electrical schematics for the AESS as installed [CDRL 10-003].
- E. Training in the operation of the AESS shall be provided [CDRL 10-004].

#### **10.1.2 Cooling System**

##### **10.1.2.1 Radiator Hatch**

- A. The radiator hatch shall be removed, cleaned, repaired and painted. Shutters shall be replaced with new assemblies. All shutter cylinders shall be replaced with new. All air lines shall be inspected and repaired. All damaged carbody screens shall be replaced with new screens. Radiator cooling fans shall be UTEX.

- B. Existing radiators shall be removed, and replaced with new OEM mechanically bonded radiators. New Gaskets and O-rings shall be installed.
- C. All wiring, seal-tite and conduit shall be inspected and replaced if defective with new material.
- D. All removable interior and exterior panels shall be removed, cleaned, painted and reinstalled.
- E. Any damaged panels or hatches shall be replaced with new material.
- F. Hatch welds shall be inspected. Cracked or broken welds shall be repaired.
- G. New foam seals on equipment blowers shall be installed.
- H. All mounting holes shall be inspected. Holes found to be oblong or cracking around the hole shall be repaired.
- I. All rubber and foam seals on the hatch shall be renewed.
- J. The hatch shall be re-installed utilizing all new roof mounting hardware.
- K. All hoses shall be replaced with new.

#### **10.1.2.2 Engine Air Intake Hatch**

- A. All air intake filters shall be replaced with new.
- B. Hatch shall be removed and interior and exterior shall be washed.
- C. Hatches shall be inspected for cracked or broken welds and repaired as required.
- D. All mounting holes shall be inspected. Holes found to be oblong or cracking around the hole shall be repaired as required.
- E. All hinges on the summer/winter doors shall be inspected and repaired as required.
- F. All other hinges and filter door tie down devices shall be inspected for cracked or torn rubber and repaired if defective.
- G. All rubber and foam seals on the hatch shall be renewed with new material.
- H. New secondary baggie air intake filters shall be installed, and the hatch shall be re-installed with new mounting hardware.
- I. All drain hoses shall be replaced with new.

#### **10.1.3 Fuel System**

##### **10.1.3.1 Fuel Tank**

- A. The fuel tanks shall be inspected for damage and leaks and repaired where defects are found. The tanks shall be re-qualified by the Contractor to OEM performance standards. The fuel tank shall be drained of fuel during the inbound inspection and will have the clean outs removed and cleaned so as not to collect any debris.
- B. All fuel sight glasses shall be removed and replaced with new sight glasses. Locomotive sight glass replacement modification (9722) shall be performed.

- C. Fuel equalization modification, FMI 34-3673 shall be performed.
- D. Remove fuel suction and return line assembly (one per compartment), inspect for cracks or other signs of deterioration and repair or replace with new components as required. Ensure that low fuel level shut off valve is in place and functioning properly.
- E. Inspect, repair or replace if damaged, all conduits, which contain underframe wiring running between left and right fuel tanks.

**10.1.3.2 Ecology Tank**

- A. The ecology tank shall be drained and flushed out.
- B. The ecology tank shall be inspected for damage and repaired or replaced and re-qualified to meet OEM performance standards.

**10.1.3.3 Fuel Fill**

- A. On locomotives equipped with Snyder type fuel fills, the fuel fill equipment shall be inspected, repaired if damaged and re-qualified in a manner approved by ConnDOT.
- B. On locomotives that do not have Snyder fuel fill equipment, the existing fuel fill equipment shall be removed. A Snyder type fuel fill shall be installed on both sides of the locomotive, including electric shut-off sensors in each of the four compartments.

**10.2 CONTRACT DELIVERABLE REQUIREMENTS LIST**

**Table 10-1**

<b>CDRL</b>	<b>Description</b>	<b>Due</b>
CDRL 10-001	Main Engine, Main Engine Cooling and Fuel System Overhaul Plan	TBD by Contractor
CDRL 10-002	Detailed description of the equipment and functional operation of the AESS system	TBD by Contractor
CDRL 10-003	Revised locomotive electrical schematics for the AESS as installed	TBD by Contractor
CDRL 10-004	Training in the operation of the AESS	TBD by Contractor

**End of Section**

## 11 HEAD END POWER

### 11.1 GENERAL SCOPE OF WORK

Note: THE HEP alternator and HEP switchgear are to be overhauled per provisions elsewhere in the specification.

### 11.2 CONTRACT DELIVERABLE REQUIREMENTS LIST

Table 11-1

CDRL	Description	Due
N/A	N/A	N/A

End of Section

## 12 OPERATIONAL SAFETY SYSTEMS

### 12.1 GENERAL SCOPE OF WORK

The operational safety systems work to be performed shall be confirmed by the Contractor and presented to ConnDOT review and approval in a Operational Safety Systems Overhaul and Installation Plan [CDRL 12-001].

The Contractor shall remove and return all of the existing US&S cab signal system components on the ex-Amtrak locomotives and the ex-NJT locomotives to ConnDOT for future disposition. The replacement ATC system will be a PHW 9-aspect cab signal system fully integrated and compatible with a PHW ACSES system configured to operate on Amtrak's Northeast Corridor. The PHW ATC system shall include all of the components required to integrate with the existing locomotive sub systems including the propulsion and braking systems as well as the locomotive IFC. The PHW 9 Aspect ATC Electronics will be housed in shared enclosure with the PHW ACSES OBC and Data Radio on both the ex-Amtrak locomotives and the ex-NJT locomotives. The ATC/ACSES electronics enclosures can be mounted in either the short hood space where the existing US&S Cab Signal equipment is located or in the compartment behind on the Engineer's side that was originally used as the lavatory.

#### 12.1.1 CAB SIGNAL/ACSES SYSTEM

- A. All of ConnDOT's ex-Amtrak locomotives are currently equipped with PHW ACSES PTC systems using a 900 MHz Data Radio. The upgrade to ACSES II Rev 11 will require the change from the 900 MHz Data Radio system to the 220 MHz Data Radio. The upgrade to ACSES II will also require the installation of a new 220 MHz Tri Mode roof mounted antenna and the removal of the existing 900 MHz roof mounted antenna. The contractor shall determine the location of the new antenna mount and properly seal the existing roof penetrations. All of the existing ACSES equipment (OBC enclosure, card file including all PCB's, power supplies) and data radios are currently located in the R end of the locomotive. All of this ACSES equipment with the exception of the 900 MHz data radio is to be removed and returned to PHW for re-qualification and upgraded to the latest ACSES II configuration. The 900 MHz data radio is to be returned to ConnDOT with the cab signal equipment. All of the ACSES components that are re-qualified and or upgraded will be repackaged and returned to the contractor as part of the ATC/ACSES II kit for installation. All of the ACSES under floor equipment (scanner antenna and CTV box) shall also be removed, cleaned and inspected and repaired as necessary and reinstalled in their existing locations. The EC-5 Cable is used to connect the ACSES OBC to the under floor CTV box shall be removed and discarded. A new EC-5 cable shall be installed to connect the OBC (in its new location) to the CTV box. The existing ACSES Pressure switch manifold assembly located under the cab floor, shall be removed and discarded. A new PHW modular pressure switch manifold will be installed in the same location. The existing ACSES ADU shall be removed and discarded. A new Revision 11 ADU shall be installed in the cab at the location of the existing ADU.



- B. The contractor shall install into the ex-NJT locomotives complete “new” ATC/ACSES packaged systems that are designed based on the repackaged system built for the ex-Amtrak locomotives.
- C. The entire ATC/ACSES system, when fully integrated, shall be compliant with Amtrak’s FRA PTC “Rev 11 type approval” [No. FRA-TA-2010-001]. Any deviation from the approved equipment requires the approval of ConnDOT. In such event, the Contractor shall be responsible for obtaining “Type Approval” from the FRA for any equipment supplied which is different from that which has already been given type approval.

#### **12.1.2 Alerter**

The alerter system shall be re-qualified to meet OEM performance standards.

#### **12.1.3 Event Recorder**

The Contractor shall install a new Wabtec FRA crash hardened memory module (PCM) Event Recorder that interfaces with the IFC. At minimum, all existing inputs shall be recorded. In order to be in compliance with 49CFR 229.135, any additional PTC related inputs shall also be recorded.

The Event Recorder shall be synchronized with the LDRS-V and Camera system specified in Section 12.1.4

#### **12.1.4 LDRS-V Forward and Interior Facing Camera System**

The Contractor shall install a new Wabtec Locomotive Data Recording System-Video (LDRS-V) and audio system to include a forward facing camera mounted on the fireman’s side dashboard, an interior facing camera and an in-cab microphone and a LDRS-V to record all forward facing video, cab operator activities and external audio events. The LDRS-V recording unit can be mounted in either the short hood space or the compartment with the ATC and ACSES Train Control Equipment.

#### **12.1.5 Speed Sensing System**

All speed sensors shall be replaced with new OEM speed sensors. The speed sensor cables shall be re-qualified per OEM performance standards or replaced with new as required. The Quip Speed Sensor universal processor shall be re-qualified to meet OEM performance standards and re-installed.

#### **12.1.6 First Article Inspections**

A first article inspection (FAI) of the ATC/ACSES equipment shall be held at the supplier’s facilities prior to its shipment to the Contractor. Appropriate testing shall be a part of the FAI for the ATC/ACSES equipment. FAI package shall be submitted within 15 days of scheduled FAI [CDRL 12-002].

A first article inspection (FAI) of the LDRS-V and interface to the IFC equipment shall be held at the supplier’s facilities prior to its shipment to the Contractor. Appropriate testing shall be a

part of the FAI for the LDRS-V FAI package shall be submitted within 15 days of scheduled FAI [CDRL 12-003].

## 12.2 CONTRACT DELIVERABLE REQUIREMENTS LIST

Table 12-1

<b>CDRL</b>	<b>Description</b>	<b>Due</b>
CDRL 12-001	Operational Safety Systems Overhaul and Installation Plan	TBD by Contractor
CDRL 12-002	FAI package for ATC/ACSES	Within 15 days of scheduled FAI
CDRL 12-003	FAI package for LDRS-V Inward and Forward Facing Camera System and interface to the IFC and Event Recorder.	Within 15 days of scheduled FAI

**End of Section**

## 13 MATERIALS AND WORKMANSHIP

### 13.1 GENERAL

- A. This section is applicable to all parts of the locomotive.
- B. Material, workmanship and processes shall be in accordance with the requirements of this Section, unless otherwise approved.
- C. Inclusion of a material or method in this Section does not indicate approval for application or use in a specific situation. When a material or method is specified in this Section, this Section shall be applicable; however, specific requirements detailed in appropriate Specification take precedence over this Section.
- D. Material Safety Data Sheets (MSDS) shall be submitted for all materials, including lubricants used in the fabrication of these locomotives, except for non-hazardous metallic materials. Information shall be in a form compliant with ANSI Z400.1-1993.
- E. All materials and skillful workmanship shall be equal to or better than accepted industry standards.
  - 1. Substitution – Substitution of materials other than those designated, shall be submitted for prior review and approval by ConnDOT.
  - 2. Mating Surfaces – All mating surfaces shall be clear and free from dirt, grease, scale and other contaminants prior to attachment or joining.
  - 3. Operating Environment – All materials used in the overhaul of the locomotives shall be chosen to economically and safely achieve their function for the design life of the locomotives in the intended service environment.
  - 4. Interior Cleaning – Fabrics and other non-metallic materials used for interior appointments shall not be affected by industrial compounds used for cleaning such materials.
  - 5. Replacement Parts – All replacement parts shall be OEM standard, unless otherwise approved by ConnDOT.
  - 6. Replacement Hardware – Missing nuts, bolts, screws and similar hardware must be replaced by the Contractor. Additionally, all fasteners smaller than ½ inch diameter, which are removed in the course of the overhaul work shall be replaced with new.

#### 13.1.1 Standards

- A. The following domestic standards and specifications define materials for this contract: Federal or Military Specifications or Standards, the Specifications of the Aluminum Association of America, AAR, ANSI, APTA, ASME, ASTM, FRA, IEEE, and additional requirements, as specified herein.
- B. Where other or foreign standards are proposed by the Contractor, the Contractor shall submit documentation for review and approval; demonstrating the proposed standards are the equivalent of the foregoing standards and specifications. Proposed substitute

specifications shall be submitted in both English and the language of the country of origin.

### 13.1.2 Marking

All materials intended for use on these locomotives shall be marked or stored so as to be readily identifiable, and shall be adequately protected during handling and storage. Rejected material shall be clearly marked and stored in a controlled area specifically designated for that purpose.

### 13.1.3 Prohibited Materials

The following materials are prohibited from use on the locomotives:

- PVC
- Asbestos
- Cadmium
- Lead (except for solder and battery)
- PCBs
- Carcinogenic materials
- Materials listed in 29 CFR Sec. 1910.19

### 13.1.4 Cleaning

#### A. Cleaning During Locomotive Overhaul

1. During locomotive overhaul, adequate care shall be taken to prevent drill cuttings or other material from entering in areas of tubing, piping or electrical wiring, or accumulating in areas, which become inaccessible after subsequent assembly.
2. Where drilling or other work has to be performed after installation of air brake equipment, piping or electrical equipment or wiring, adequate precautions shall be taken to prevent metallic or other waste or debris from causing future problems.
3. A list of recommended cleaning agents shall be provided to ConnDOT for all materials exposed to normal cleaning operations. This information shall also be included in the maintenance documentation for the locomotive [CDRL 13-001].

#### B. Before delivery of the locomotive, a final clean up shall be made to assure all debris is removed. Areas of particular concern, but not limited thereto, are:

1. All electrical junction boxes, lockers, panels, heaters, exposed terminal blocks where retained metallic debris can cause future problems
2. Oil, water, fuel and air tanks and piping from which debris could be drawn into valves, pumps, or other equipment.

### 13.1.5 Unit Exchange (UTEX)

- A. Unless otherwise stated, UTEX is to be with General Electric (GE). Alternate suppliers may be proposed and are subject to approval by ConnDOT

- B. UTEX procedures shall be provided to ConnDOT for approval prior to UTEX of equipment.

### **13.2 ELASTOMERS**

- A. Elastomers shall be compounded and cured to perform as intended in the ConnDOT environment. Elastomers shall have high resistance to ultraviolet and other solar radiation, weather, and to all ConnDOT locomotive-washing and cleaning fluids. All elastomeric parts shall be resistant to ozone, oxidation, heat, oil, grease and acid, and shall have the longest possible life, consistent with the other characteristics specified.
- B. The following elastomeric parts shall be of neoprene unless otherwise specified or approved:
  - 1. Glazing Rubber
  - 2. Door Seals
  - 3. Door Nosing
  - 4. Isolation Tapes/Pads
  - 5. Other parts exposed to the outdoor ambient environment, except where otherwise specified
- C. The following elastomeric parts shall be of natural rubber or approved equal:
  - 1. All resilient mounts
  - 2. Elastomeric truck components
- D. Elastomers used within pneumatic or hydraulic equipment shall be replaced with new to meet the performance requirements of this Specification for the pneumatic or hydraulic device.
- E. Window and Door Sealing – Rubber shall be compounded to preclude discoloration or staining of neighboring areas, particularly from water drainage.

### **13.3 GLASS**

- A. Front windshield shall conform to FRA 49 CFR part 223, type 1 requirements.
- B. Side glazing shall conform to FRA 49 CFR part 223, type 2 requirements.

### **13.4 WIRE AND CABLE**

- A. All conductors shall be new soft annealed copper tinned and stranded per AAR Specification S502 (former No. 589), and jacketed with cross-linked polyethylene (Flammanol SL) or radiation cross-linked polyolefin (Exane) or ConnDOT approved equivalent and shall have properties and characteristics as specified in AAR Specification S501.
- B. All wire and cable shall be in accordance with AAR RP-585 and the recommendations of APTA RP-009-98.

### **13.4.1 Wiring**

- A. Wires should be segregated according to APTA RP-E-002-98. Any deviation requires the express permission of ConnDOT.
- B. All wiring practice and terminals shall be in accordance with APTA-RP-E-002-98 and IEEE-16-2004.
- C. Grounding – All electrical circuits shall be completely insulated from locomotive structure.
- D. Terminals – Terminals for wire and cable shall be of the crimp or soldered type. Terminals shall be applied using methods and tools, recommended by the terminal manufacturer. Terminations should be made according to APTA RP-E-002-98.
- E. Service loops in wiring at terminal board connections shall be provided. Conductors shall be protected by suitable means to minimize breakage of the conductor at or near the terminal.
- F. Inspect, repair or replace of damaged, and re-qualify PVC pipe, which contains underframe wiring running between left and right fuel tanks.
- G. All wiring harness will be adequately secured and protected from chafing.
- H. No more than four terminations per stud (or per tier of a stud if using an AAR termination stacking configuration) shall be permitted.

### **13.4.2 Conduits, Junction Boxes and Fittings**

Conduits, junction boxes and fittings shall be assembled to the Contractor's and OEM standards and subject to the approval of ConnDOT. Replacement and newly installed conduit, junction boxes and fittings on the locomotive shall meet, at a minimum, IP65 rating for environmental construction.

## **13.5 WELDING AND BRAZING**

### **13.5.1 General**

- A. The Contractor shall be responsible for the quality of its own welding and brazing and that done by its Suppliers. All welders employed in the making of welds on structures or products built under this Specification shall have been tested to determine their ability to operate the welding equipment to be used to make the types of welds required, in a Specification compliant manner.
- B. Before welding of any sort is started, parts to be joined shall be properly cleaned of coatings and films such as rust, oxide, mill scale, oil, grease, corrosion products and other foreign materials.
- C. Cleaning materials and processes shall be in accordance with applicable parts of Section 2, MIL-HDBK-132, "Protective Finishes". Finished welds shall present a clean appearance.

### 13.5.2 Structural

- A. All structural welding practices not specifically covered in other sections of this Specification shall be in accordance with requirements of the American Welding Society (AWS) “Structural Welding Code, Steel”, AWS-D1.1 an AWS-D1.3 “Structural Welding Aluminum”, AWS-D1.2 and the AWS Handbook. Resistance welding shall be in accordance with MIL-W-6858. Requirements for dynamically loaded structures shall have precedence over those for statically loaded structures.
- B. Additional information on definitions, processes or other questions pertaining to welding shall be referred to AWS Welding Handbooks, latest edition. Requirements in addition to AWS Requirements are specified in following paragraph (C) Welder Qualifications.

### 13.5.3 Welder Qualification

Welders employed in the making of welds on structures or products built under this Specification shall make only those welds for which they have been qualified in accordance with the requirements of the AWS, ASME Section IX, or other approved qualifying procedures. Records of welder qualification tests shall be made available for review upon ConnDOT’s request.

## 13.6 PIPING AND TUBING

### 13.6.1 General

- A. All piping, valves, fittings, installation methods, and testing shall be in accordance with the Code for Pressure Piping, ASME B 31.1. All joints shall be easily accessible.
- B. Following installation, all piping systems shall be cleaned to remove dirt, metal chips, oily contamination, and moisture. After cleaning, all piping systems shall be pressure tested in accordance with the Code for Pressure Piping, ASME B 31.1. Following cleaning and pressure testing, an approved means to temporarily prevent recontamination shall be incorporated. All leaks shall be repaired and the system re-cleaned and retested until leak-free.
- C. Pipes must be supported throughout their length and at all connections to prevent vibration or noise and to limit stresses in the pipe to less than 50% of the pipe’s fatigue endurance limit. Pipes and their connections shall not interfere with the removal of other components. Pipe routing and support shall be planned and accomplished in an efficient, organized manner to keep the total length and number of fittings and bends to an absolute minimum. All changes in direction shall be accomplished by bending the pipe to a radius of not less than specified by AAR Specification No. 2518, Standard S-400, or to an approved radius. Direction-change fittings are not permitted in the trainlined brake pipe or in the brake cylinder pipe. Support and clearances provided between adjacent pipes and between pipes and surrounding structure, equipment or other appurtenances shall be sufficient to prevent chafing or contact due to any combination of locomotive loading and deflection, locomotive dynamics, and thermally induced movement. The minimum clearance shall be  $\frac{1}{8}$  inch (3 mm).
- D. At all locations where pipe or tubing passes through holes in the floor, bulkheads, structure, or any fixed member, it shall be rigidly clamped to protect against possible damage or noise due to bearing, abrasion, or locomotive dynamics-induced rattling.

Clamps shall not be welded, brazed or otherwise permanently fastened to any pipe or tubing.

- E. Pipe and tubing interfaces with clamps shall be insulated with an elastomeric or woven non-asbestos mineral fabric tape material to protect and sound-insulate the pipe or tubing.
- F. Wherever locomotive body piping interfaces with vibration-isolated rotating equipment such as the air compressor and air conditioning compressor-condenser unit, approved flexible vibration eliminators shall be used. The pipe connection at either end of the flexible elements shall be rigidly clamped no farther than 2 inches (50.8 mm) from the flexible elements.
- G. All pipe clamps shall be inherently rigid and shall be firmly attached to locomotive structure. Cantilevered clamps or clamp supports that are weaker than service-proven designs will not be accepted. All clamps shall be of a suitable material for the application.

#### **13.6.2 Air Piping, Tubing, and Fittings**

- A. The main reservoir pipe and brake pipe shall be stainless steel tube per ASTM A 269 or type "K" annealed copper tube per ASTM B 88, latest revision.
- B. Piping shall be installed no lower than 2 inches (50.8 mm) below the floor sheet or structural member and shall be arranged for maximum damage protection from flying rail debris, especially in the truck and outboard of the bolster areas. Where inherent locomotive borne equipment protection is not possible in damage-prone areas, approved guards or reinforced piping sections may be used, subject to approval. The sizing of the main reservoir pipe and brake pipes shall meet the brake supplier's requirements.
- C. If copper tubing is used, all joints shall utilize fittings of wrought copper or non-porous cast brass in accordance with ASME B 16.22 and B 16.18.
- D. All air piping must comply in all respects with the OEM and air brake supplier's original design and installation requirements.

#### **13.6.3 Air Conditioning System Piping, Tubing, and Fittings**

- A. Air conditioning refrigerant lines larger than  $\frac{3}{8}$  inch (9.5 mm) outside diameter shall be of seamless copper tubing, "ACR" type, drawn to H58 temper as defined by ASTM B 280. Air conditioning refrigerant lines smaller than  $\frac{3}{8}$  inch outside diameter may be annealed to the O60 condition. Wrought copper sweat type fittings shall be used. Joints shall be kept to a minimum; wherever possible formed or bent tubing, bent utilizing a bending tool designed specifically for bending of the tubing used, shall be used in preference to fittings. All inaccessible runs of tubing shall be without joints, and all joints shall be readily accessible for inspection and repair.
- B. Suction lines shall be designed and installed without traps. The suction line shall be sized for 3 psi (20.7 kPa) maximum system pressure drop and the liquid line shall be sized adequately to prevent flashing due to pressure drop.
- C. Lines subject to condensation shall be insulated with an approved insulation, applied with approved contact cement. The liquid line shall be insulated in all areas where required to



provide additional mechanical or thermal protection. Insulation at all joints and fittings shall be mitered and sealed with an approved material. The insulation, adhesive, and sealant shall meet the Specification requirements for thermal, smoke emission, toxicity, and flammability performance.

- D. All refrigerant piping and pipe subassemblies shall be deburred, cleaned, dried, and capped with tight-fitting plastic caps, or approved equal on all openings after fabrication. Caps shall remain in place until immediately prior to incorporation into the final assembly.
- E. Vibration eliminators shall be used in piping at any location where there is relative motion between sections. Tubing installations shall be designed to allow any single length of tubing to be replaced without dismantling or removing surrounding equipment, piping, wiring, or other appurtenances.
- F. Condensate drain lines shall be seamless copper tubing, type "K", in either the O60 annealed or H58 tempered condition, as defined by ASTM B 88, or seamless stainless steel tubing.

#### **13.6.4 Brazing and Soldering of Piping, Tubing, and Fittings**

All brazing and soldering shall comply with the applicable parts of this Specification, and the following requirements.

- A. All refrigerant piping and air system copper tubing shall be joined using silver solder conforming to Federal Specification QQ-B-654A, BAg-5, BCuP-5, or for copper-to-copper connections only BCuP-3.
- B. Refrigeration piping and tubing shall be internally swept with a continuous flow of a non-oxidizing gas such as dry nitrogen during brazing.
- C. Condensate drain tubing shall be joined using 95-5 solder or Silver Solder as above.
- D. Solder joints shall be wiped and have flux cleaned from tubing and fittings after soldering.
- E. After fabrication, the refrigeration and air systems shall each be cleared of all dirt and foreign matter, flushed with a degreasing agent and dried, all according to a written procedure prepared for each by the Contractor and as approved.

#### **13.7 PRESSURE VESSELS**

- A. All pressure vessels shall conform to the latest revision of Section VIII of the ASME Boiler and Pressure Vessel Code for Unfired Pressure Vessels and applicable sections of 49 CFR 229.
- B. Test reports shall be furnished for each pressure vessel, and each pressure vessel shall be stamped to document the test [CDRL 13-002].

### 13.8 CONTRACT DELIVERABLE REQUIREMENTS LIST

Table 13-1

<b>CDRL</b>	<b>Description</b>	<b>Due</b>
CDRL 13-001	List of recommended cleaning agents shall be provided to ConnDOT for all materials exposed to normal cleaning operations	TBD by Contractor
CDRL 13-002	Test reports shall be furnished for each pressure vessel, and each pressure vessel shall be stamped to document the test	TBD by Contractor

**End of Section**

## 14 QUALITY ASSURANCE REQUIREMENTS

### 14.1 General

This Specification defines the requirements for an Quality Assurance and Inspection Program to be maintained by the Contractor. The Contractor's Quality Assurance (QA) and Inspection Program shall assure that all aspects of the Contract are in conformance with the design, materials and workmanship requirements provided in this Specification. The Contractor shall submit a Quality Assurance and Inspection Program for ConnDOT review and approval within 15 days after notice to proceed [CDRL 14-001].

### 14.2 Application

- A. The requirements of this Specification shall apply to the extent necessary to demonstrate conformance with Contract requirements.
- B. The Contractor shall demonstrate a quality control program which provides for inspection, testing, documentation of material dispositions, acceptance/rejection and status identification of materials, components, processes, work in process and finished work to assure conformance with Contractor's standards and with the requirements of this Specification.

### 14.3 Requirements

#### 14.3.1 General

- A. The Contractor shall be responsible for the conduct of all the inspection required to demonstrate full conformance of the work to Contract requirements.
- B. The Contractor shall these inspections at its own facility subject to the approval of ConnDOT.
- C. The Contractor shall provide an inspection system capable of producing objective evidence that finished work meets the quality requirements of the Contract.
- D. The system shall be considered acceptable when, as a minimum, it provides for the detection and removal of non-conforming material, either prior to or at the latest stage of fabrication manufacture or other processing where a characteristic can be tested, observed or measured.
- E. Inspection necessary to demonstrate conformance to Contract requirements, wherever performed, shall hereinafter to be referred to as "last point" inspection.

#### 14.3.2 Contractor Inspection Representative

The Contractor's designated Quality Assurance representative shall have authority, on behalf of the Contractor to resolve inspection matters to the satisfaction of ConnDOT.

### **14.3.3 Quality Control and Inspection Log**

The Contractor's Quality Control and Inspection Log, with such exceptions as may be noted below, shall be the controlling document for the overhaul of each locomotive. A copy shall be supplied to ConnDOT for review and approval before put into use [CDRL 14-002]. This log will travel with each locomotive throughout the overhaul and testing process and shall be made available to ConnDOT upon request.

### **14.3.4 Documents for Inspection**

The Contractor shall ensure that the latest approved versions of the applicable drawings, specifications and instructions, and changes thereto, are used for inspection purposes. These documents shall be made available to ConnDOT for its view at the Contractor's location.

### **14.3.5 Test and Inspection Equipment**

The Contractor shall be responsible for the provision and maintenance of inspection equipment suitable to demonstrate conformance of the work to technical requirements. This inspection equipment shall be maintained under a recognized gauge control system. Calibration shall be traceable to applicable standards.

### **14.3.6 Purchasing**

The Contractor shall be responsible to ensure that all purchased material and services conform to Contract requirements.

### **14.3.7 Incoming Material Inspection**

The Contractor shall provide for inspection, testing and identification of incoming material.

### **14.3.8 Fabrication, Manufacturing and Assembly Inspection**

- A. The Contractor shall, as a minimum, perform all required last point inspections. The Contractor may institute any additional inspection of material in process considered necessary to determine the quality of work.
- B. The Contractor shall ensure that the work has been subjected to all last point inspections indicated on the inspection plan and that the relevant inspection records are complete. The Contractor shall subject all finished work to final inspection to ensure that Contract requirements as met. Only finished work which fully conforms to requirements shall be submitted for acceptance or be delivered.
- C. The Contractor shall keep objective evidence of the inspection and use checklists to be sure that no major functional characteristic has been overlooked.

### **14.3.9 Workmanship**

The Contractor shall ensure that workmanship is maintained at a level of quality consistent with the technical and functional requirements of the work. Workmanship shall be defined to the greatest practical extent by written standards or production samples inspected and accepted by the Contractor as examples of satisfactory workmanship.

#### **14.3.9.1 Welding**

The Contractor's facilities and welders shall be certified in accordance with AWS and/or Contractor's equivalent standards and shall be verified as meeting these standards by random inspections of test pieces and of process variables. The Contractor may repair welding anomalies using industry-approved practices. The Contractor shall make Welder Certifications available to ConnDOT upon request.

#### **14.3.10 Test and Inspection Records**

The Contractor shall maintain records of all tests and inspections performed to substantiate conformance to Contract requirements. Records shall include positive identification of material, and finished work, the specified inspections performed, and the results obtained. Records shall include disposition of all rejected materials.

#### **14.3.11 Material Control**

The Contractor shall maintain a system which precisely indicates the up-to-date inspection status of material and finished work.

#### **14.3.12 Accommodation, Facilities and Assistance**

- A. The Contractor shall provide ConnDOT with reasonable access at all times to plants of the Contractor and sub-contractors in order to monitor compliance with contractual quality requirements.
- B. The Contractor shall provide adequate office facilities including space, furniture and telephone service for such monitoring during the entire span of time during which the work on this Contract is performed. Anyone designated by ConnDOT shall also be provided with reasonable access at all times.

### **14.4 Evaluation And Inspection**

#### **14.4.1 General**

- A. The Contractor's Inspection System shall be subject to evaluation by ConnDOT to ensure that it meets the requirements of this Specification and the requirement of the Contract. The method of evaluation shall be at the direction of ConnDOT.
- B. The Contractor's operations required by this section shall be subject to:
  - 1. Review at unscheduled intervals, of the effectiveness of the Contractor's Inspection System.
  - 2. Inspection after receipt of the work, to determine compliance with Contract requirements.

#### **14.4.2 Final Inspection**

The Contractor shall perform a Final Inspection before shipment. ConnDOT may monitor the inspection and require that any part, device or apparatus needing adjustment, repair or replacement be corrected.

### 14.4.3 Receiving Inspection

Upon arrival at the designated point of delivery, each locomotive shall be jointly inspected by ConnDOT and by Contractor representative(s) to assure that the locomotive is in safe and operable condition, to determine any damage incurred in transportation, and to conduct an inventory to assure that no items have been removed. A checklist will be prepared, listing all corrective actions that must be performed. ConnDOT may withhold final acceptance until all corrective actions have been performed.

### 14.5 CONTRACT DELIVERABLE REQUIREMENTS LIST

Table 14-1

CDRL	Description	Due
CDRL 14-001	Quality Assurance and Inspection Program for ConnDOT	15 days after NTP
CDRL 14-002	Contractor's Quality Control and Inspection Log	TBD by Contractor

**End of Section**

## **15 INSPECTION AND TESTING**

### **15.1 INSPECTIONS AND TESTS**

#### **15.1.1 General**

- A. Prior to final acceptance, tests shall be performed in accordance with previously submitted and approved test procedures. The results of these tests must demonstrate compliance with all test and specification requirements.
- B. All certificates of inspection, testing, and approval required by ConnDOT or public authorities shall be secured by the Contractor and promptly submitted to ConnDOT.

#### **15.1.2 Test Procedures**

- A. Unless otherwise specified, the Contractor's standard test procedures for this model locomotive shall apply. The test procedures to be used shall be submitted for ConnDOT's approval within 60 days after the Notice to Proceed [CDRL 15-001]. No test shall be conducted without prior approval of the procedure for such test.
- B. If the Contract Documents, laws, ordinances, rules, regulations, and orders of any public authority having jurisdiction require any portion of the procurement process or products to be inspected, tested, and approved, the Contractor shall:
  1. Notify ConnDOT of the testing location, and obtain ConnDOT's written approval prior to conducting tests [CDRL 15-002]; and
  2. Notify ConnDOT of the date and time for such inspection and testing no less than 30 days in advance so that ConnDOT may be present if necessary [CDRL 15-003].

#### **15.1.3 Test Requirements**

The following tests shall be performed on each locomotive:

- A. At the contractor's shop:
  1. Full load engine test- preferably on a dynamometer
  2. Complete engine & main generator load test, including 10-step test
    - a. During engine and generator test in the locomotive, check that radiator inlet shutters operate properly
  3. Functional blended brake test
  4. Static continuity and insulation tests of MU Control and Communications trainlines
  5. Functional cab signal/ATC/ACES tests
  6. Cab air conditioning and heating functional tests
  7. Headlight, ditch light, and marker light tests
  8. Basic megger testing of low and high voltage systems

9. Functional air brake test verifying performance meeting FRA regulations
10. Functional full load test of the HEP generator
11. Movement test on track
12. Fuel fill test including checks to make sure suction and return line piping for each compartment is correctly installed and that the shut off valves operate correctly
13. Dynamic Brake assembly full load test (via self loading) prior to blended brake test
14. All EFCO switches operates properly
15. Oil and water shutdowns operate properly
16. Each locomotive shall be tested for water-tightness in accordance with Contractor's test procedures.
17. Static clearance shall be measured on the first two locomotives. The static outline of the locomotives shall not exceed AAR Plate 'C' or the maximum height listed in Section 2.
18. The Contractor shall weigh each locomotive at shipment and furnish a printed weight ticket to ConnDOT. Each end of each locomotive shall be weighed individually to check for weight distribution. The scale used in weighing the locomotives shall be maintained as per Part 1 of the AAR Scale Handbook, 1988, or other approved standard.
  - a. The maximum allowable weight differential between trucks with full supplies is 2,700 pounds.
  - b. The pre-shipment weight ticket information shall be recorded in the Locomotive History Book.
19. Functional test of the wheel slip/slide system to verify performance as designed.
20. Functional test of the hand brake to verify it will hold the locomotive on a 3% grade.
21. A complete sequence test shall be made on each locomotive, including front-rear sequence changes, relays and switches, sanding, auxiliary motor starting circuits, wheel slip control, main propulsion and braking, main circuit breaker, calibration of safety relays, meter calibration, excitation, and any other testing required to insure that all circuits are performing properly.
22. Sound Level Tests
  - a. Cab interior noise, to demonstrate from this test that it meets the requirements of 49 CFR 229.121, Appendix H. This test shall be performed on two different locomotives.
  - b. An exterior sound test shall also be performed to verify compliance with 49 CFR 210.31 and 40 CFR 201.11. This test must be performed on one locomotive only.
23. Event recorder test to verify all inputs are properly recorded.
24. A full functional test of the AESS system installed in the locomotive shall be performed, verifying the correct operation of all the features of the system and its conformance to the parameters (time, temperature, battery charge, etc.) established for the startup and stopping of the engine.



B. At ConnDOT:

1. Static functional “compatibility test” with a ConnDOT cab car
2. A shakedown non-revenue road test in ConnDOT territory with a maximum size train of coaches

**15.1.4 Written Reports**

- A. Written reports of all tests performed on the locomotives and their components shall be submitted to ConnDOT for acceptance within 10 days of completion of subject test [CDRL 15-004].
- B. Tests required by the Specification which are performed on all locomotives or all components shall be included in the Locomotive History Book, see Section 16.1.2.

**15.1.5 General Test Requirements**

- A. All tests required in Section 15.1.3.B.1 shall be performed at plants of the Contractor or of Sub-contractors. Tests required in Section 15.1.3.B.2 shall be performed at ConnDOT. All test procedures and test facilities shall be reviewed by ConnDOT prior to performance of the tests.
- B. The Contractor shall identify track of proper length and alignment to permit implementation of the qualification track tests required. These tests shall be conducted by and at the expense of the Contractor. All working and moving parts, and all operating devices and controls of each locomotive and its apparatus shall be tested and put in proper operating condition before locomotives are accepted. The Contractor shall perform all of the adjustments specified herein.
- C. Should the locomotive be disassembled in any way for shipment, it shall be given an operational test upon reassembling at the delivery point on the track provided by ConnDOT, at the expense of the Contractor.
- D. After receipt of the locomotive at the designated delivery point and before into regular operation, each locomotive will be carefully inspected and any part, device or apparatus requiring adjustment, repair or replacement will be called to the attention of the Contractor, in writing, who shall make adjustment, repair or replacement at its own expense.
- E. ConnDOT reserves the right to make, at its own expense, additional operating tests of locomotives within the parameters set out in this Specification. The Contractor may assign a competent representative to witness such operating tests. Any defects disclosed by such tests, in apparatus, material or workmanship shall be corrected at the Contractor’s expense. All expense and costs incurred in the removal of locomotives from the designated delivery point for correction of defects shall be borne by the Contractor.
- F. Official final acceptance of the locomotive by ConnDOT shall be performed after all tests are successfully completed in accordance with the requirements stated herein. Except as noted, all costs and expenses incurred in performing these tests, including transportation to and from the test tracks, shall be borne solely by the Contractor.

### 15.1.6 Test Plans and Data

- A. All test data, in accordance with the manufacturer's standard test procedures, shall be subject to ConnDOT's review and comment, and shall become the property of ConnDOT upon satisfactory completion of tests. If the locomotive or any related equipment or subsystems fail to satisfy the test requirements, or demonstrate noncompliance with proposal performance, necessary corrective adjustment shall be made, and this locomotive shall be retested.
- B. The Contractor shall submit to ConnDOT for review and approval, no later than 60 calendar days after Notice to Proceed, a Master Test Plan covering all tests and equipment adjustments required by the Specification [CDRL 15-005]. The Master Test Plan shall cover all supplier and subcontractor tests to be completed at the supplier's or subcontractor's plant, all Contractor tests to be completed at its plant (in order to determine if the locomotive meets the requirements of the Specification and is fully operational), prior to issuance by the ConnDOT Representative of a Release for Shipment certificate. Should the Test Plan not be adequate and/or fail to meet the requirements of the Specification, ConnDOT will require the submittal of additional plans, details, and schedules to ensure that the program is adequate to meet Specification requirements. The approval of ConnDOT does not in any way relieve the Contractor of responsibility for the adequacy of the program within the scope of the Specification.
- C. The Contractor shall advise ConnDOT 5 working days in advance of the time and place of all tests. If representatives are not available at time of tests, tests will proceed to maintain construction sequence and timing.

### 15.2 TESTS AT ConnDOT FACILITIES

- A. After delivery at New Haven, ConnDOT will perform various tests. As part of this testing, each locomotive shall be coupled to a consist of 4 trailer cars and 1 cab car and tested for trainline air and electrical compatibility, all trainline air, control and electrical wiring shall be tested by functioning the consist first with the locomotive as control, then the cab car as control. Head end power supply including locomotive and wayside control loops shall be functioned and polarity checked.
- B. Upon successful performance of these tests, the train will then operate on the main line at various speeds up to maximum to demonstrate that the propulsion, braking and all other systems of the locomotive are operating properly. Specifically, the correct performance of the cab signal/ATC/ACES system shall be verified over ConnDOT operating territory between New Haven and New London.
- C. Contractor shall provide a service representative to advise ConnDOT with regard to the tests and to witness the tests.
- D. The Contractor shall provide a detailed plan for this compatibility and road testing at ConnDOT, including step-by-step procedures, for approval by ConnDOT within 60 days after NTP [CDRL 15-006].

### 15.3 CONTRACT DELIVERABLE REQUIREMENTS LIST

Table 15-1

CDRL	Description	Due
CDRL 15-001	Test Procedures	Within 60 days after NTP
CDRL 15-002	Testing locations	TBD by Contractor
CDRL 15-003	Test dates and times	Within 30 days of subject test
CDRL 15-004	Test report	Within 10 days after subject test
CDRL 15-005	Master Test Plan	Within 60 days after NTP
CDRL 15-006	Compatibility and road test plan	Within 60 days after NTP

**End of Section**

## **16 TECHNICAL DOCUMENTS AND TRAINING**

### **16.1 DOCUMENTATION**

The Contractor shall furnish sufficient documents for maintaining, repairing and servicing new or modified equipment and related systems applied to the locomotives as part of this overhaul, including suggested means of access and procedures.

These requirements do not apply to proprietary manufacturing details.

#### **16.1.1 Drawings**

- A. The Contractor shall provide photographs and “as-built” drawings as stated herein to show equipment and parts actually furnished for this order.
- B. Prior to commencement of work, the Contractor shall prepare and submit, 4 sets of advance drawings, for review and comment by ConnDOT [CDRL 16-001].
- C. Reproducible “as built” drawings shall be provided within 15 days after delivery of the first locomotive. These drawings shall be furnished in CAD format (dwg – AutoCAD or dgn – MicroStation). Mylar film to be delivered after final acceptance [CDRL 16-002].

#### **16.1.2 Maintenance and Parts Catalogs**

- A. Six as-built parts catalogs shall be provided for all new equipment and systems applied to the locomotives. This shall be detailed through assembly drawings, diagrams and component breakdowns to include the lowest level replaceable components, identified by Contractor’s part numbers [CDRL 16-003].
- B. Servicing and maintenance manuals or other descriptive literature shall cover all components purchased and applied as units. The catalogs and supporting documentation shall be arranged and include sufficient information to identify, describe and facilitate ordering all replacement parts that will be required [CDRL 16-004].
- C. The identification on the “Parts List” shall, as a minimum, show the reference number, part number, quantity required and description.

#### **16.1.3 Records and Forms**

Prior to, or upon delivery of each unit, the Contractor shall supply the following for each unit.

- A. Scale tickets showing the weight at each end and the total weight of each locomotive [CDRL 16-005].
- B. Serial number listing of new or UTEX main components. Engine serial number and piston clearance records shall include injector serial numbers [CDRL 16-006].
- C. Copies of all required test reports (see section 15)
- D. Four copies of FRA Form F-6180-49A, “Locomotive Inspection and Repair Record,” completely filled out and notarized, for submission to the FRA, for display in the locomotive and for the files of ConnDOT [CDRL 16-007].

- E. Two copies of the Contract Operator's form "Automatic Train Stop and Cab Signal Test" [CDRL 16-008].

#### 16.1.4 Support Equipment

A list of all non-standard tools required to operate and maintain the equipment and systems newly applied to the locomotives shall be provided by the Contractor prior to the return shipment of the first unit [CDRL 16-009].

#### 16.1.5 Locomotive History Books

Prior to, or upon delivery of each unit, the Contractor shall supply the following for each unit, contained in loose-leaf bound "Locomotive History Books."

- A. Certificate of vehicle conformance. It shall be the responsibility of the Contractor to obtain all certificates of conformance.
- B. Scale tickets showing the weight at each end and the total weight of each locomotive.
- C. Serial number listing of main components. Engine serial number and clearance record shall include injector serial numbers. Truck serial number record shall include wheels and traction motors. Serial numbers of journal bearings and axles shall also be recorded. Refer to Appendix A Section A11 for additional Serial Number recording requirements.
- D. Air brake cleaning and testing records (Five copies).
- E. Copies of all required test reports.
- F. Four copies of FRA Form F-6180-49A, "Locomotive Inspection and Repair Record," completely filled out and notarized, for submission to the FRA, for display in the locomotive and for the files of ConnDOT.

#### 16.1.6 Photographs

For each photograph listed in the following subsections, the Contractor shall provide the JPEG file. All JPEG files shall be consolidated and delivered in CD-ROM(s), which shall also include a searchable spreadsheet listing all JPEG filenames and corresponding brief description of the photograph.

##### 16.1.6.1 Construction

Photographs of any locomotive produced under this Contract during various stages of construction are to be furnished by the Contractor. The photographs shall include:

- A. Completed truck assemblies:
- B. Underframe
  - 1. Prior to installation of attached equipment, showing engine bed, HEP and air compressor mounts, pneumatic tubing and piping, and electrical wiring, cables, conduits and raceways.
  - 2. Subsequent to installation of main engine alternator, compressor, equipment rack, HEP apparatus and electrical cabinet.

##### Finished Locomotive

- A. Front View
- B. Rear View
- C. Left Side
- D. Right Side
- E. Engine Control Panels
- F. Cab Interior Complete
- G. Control Console
- H. Roof

#### **16.1.7 Carbody Interior Spaces and Equipment**

### **16.2 TRAINING**

The Contractor shall provide training for ConnDOT's operating and maintenance personnel, in all aspects of operations, troubleshooting and maintenance of the new or modified locomotive components, sub-components or systems. These instruction courses shall be conducted at New Haven, CT. The Contractor shall coordinate with ConnDOT to assure that the training is completed within 30 calendar days of receipt of the first locomotive [CDRL 16-010].

### **16.3 TECHNICAL ASSISTANCE**

The Contractor shall provide Service Representative(s) at ConnDOT's Maintenance Facility to conduct receiving inspection and acceptance testing, and subsequently for the entire warranty period, commencing with the start of revenue service.

The Service Representative(s) shall:

- A. Participate in Contractor-provided training of ConnDOT's operating and maintenance personnel.
- B. Conduct (with ConnDOT) receiving inspections and testing of locomotives upon delivery.
- C. Participate in acceptance documentation.
- D. Assist ConnDOT in processing and expediting warranty claims and ordering of parts and materials.
- E. Provide technical expertise and support to ConnDOT in commissioning, troubleshooting, and liaison with the Contractor. Office space for Contractor personnel will be provided by ConnDOT.

### **16.4 DOCUMENT SUBMITTALS**

Contractor shall submit to ConnDOT for review and approval a listing and submittal schedule of all required documents described in this Specification within 90 calendar days from the Notice to Proceed [CDRL 16-011].

## 16.5 CONTRACT DELIVERABLE REQUIREMENTS LIST

**Table 16-1**

<b>CDRL</b>	<b>Description</b>	<b>Due</b>
CDRL 16-001	Advance Drawings	TBD by Contractor
CDRL 16-002	As Built Drawings	15 Days After Delivery of First Locomotive
CDRL 16-003	As Built Parts Catalogs	TBD by Contractor
CDRL 16-004	Maintenance Manuals	TBD by Contractor
CDRL 16-005	Scale Tickets	At or prior to delivery of Each Locomotive
CDRL 16-006	Serial Number Listing	At or prior to delivery of Each Locomotive
CDRL 16-007	FRA Inspection and Repair Records	At or prior to delivery of Each Locomotive
CDRL 16-008	Automatic Train Stop and Cab Signal Test Form	At or prior to delivery of Each Locomotive
CDRL 16-009	List of Support Equipment	TBD by Contractor
CDRL 16-010	Training	30 Days After Delivery of First Locomotive
CDRL 16-011	Schedule of Documentation	90 Days after NTP

**End of Section**

## **17 SHIPMENT AND ACCEPTANCE**

### **17.1 CONSIGNMENT AND ROUTING**

- A. All expenses incurred in preparing and moving locomotives and materials to and from ConnDOT facilities shall be the responsibility of the Contractor.
- B. Locomotives shall, at the Contractor's expense, be shipped from the Contractor's plant to the Contractor c/o The Connecticut Commuter Rail Maintenance Facility, Hallock Ave., New Haven CT 06519.
- C. All costs of transportation, including additional materials to be supplied by the Contractor, shall be the responsibility of the Contractor.
- D. Locomotives shall be shipped without sand, water, and fuel; however the prime mover and air compressor shall have a full complement of lube oil.
- E. Spare parts and material shall be shipped at the Contractors expense to The Connecticut Commuter Rail Maintenance Facility, Hallock Ave., New Haven, CT 06519.
- F. If Option I is exercised, spare parts are to be delivered to coincide with the delivery of the first locomotive.
- G. ConnDOT shall be notified upon shipment of any locomotives, parts, or other items at:

Connecticut Department of Transportation  
Union Station  
50 Union Avenue  
New Haven, CT 06519

### **17.2 CERTIFICATE OF IN-PLANT INSPECTION & RELEASE FOR SHIPMENT**

- A. A certificate of in-plant inspection and release for shipment shall be prepared prior to shipment of each locomotive from the Contractor's facilities.
  - 1. The certificate shall be signed and dated by both the Contractor's and ConnDOT representatives.
- B. Prior to shipment of the locomotive(s) to New Haven, a final in-plant inspection of the locomotive and a review of its documentation shall be performed by ConnDOT representative(s).
- C. At the final in-plant inspection the Contractor shall have compiled for review by ConnDOT representative(s) the documentation of all tests, inspections, serial numbers, weights, etc. to be entered into the individual Locomotive History Book.
- D. The Contractor shall allocate at least one (1) full working day, which shall be a weekday during daylight hours, for the ConnDOT representatives to perform the review inspection, over a pit, with station power and air applied, of each locomotive ready for shipment to assure that the locomotive totally meets the requirements of the Specification and is fully operational.



- E. The Contractor shall furnish to ConnDOT prior to completion of the Release For Shipment certificate for each locomotive, two copies of the following original documents completed, signed and dated:
1. Contract Operator's form "Automatic Train Stop and Cab Signal Test".
  2. The Contractor shall also place in the card holders in the cab of the locomotive the following original completed, signed and dated documents:
  3. Locomotive Inspection and repair record, form FRA F6180-49A ("Cab Card"), including inspections and tests required by 49 CFR 229.23, 229.25, 229.27 and 229.31.
- F. Upon successful completion of inspection and review, a Certificate of In-Plant Inspection and Release for Shipment will be issued by ConnDOT to accompany the shipment of the locomotive(s). A locomotive shall not be delivered to ConnDOT's property without the Certificate. The Contractor shall make any necessary repairs and perform other necessary corrective action so that all Open Items are corrected.

### 17.3 RECEIVING INSPECTION

- A. Upon delivery of the completed locomotive(s) at ConnDOT Facilities, the Contractor and ConnDOT representatives shall visually inspect the locomotive(s) for damage, loss, vandalism, or other discrepancies incurred during shipment.
- B. Receiving Inspections shall be conducted on Mondays through Fridays only, excepting holidays.
- C. A Receiving Inspection Report listing all damage, loss, vandalism, or other discrepancies found shall be prepared and signed by the Contractor's representative(s).
1. Any discrepancies noted in the Receiving Inspection Report shall be adjusted, repaired, or replaced by the Contractor, at the Contractor's expense.
  2. Due to the regular maintenance demands on the Connecticut Commuter Rail facilities and maintenance personnel, it will be possible for said personnel to undertake only running repairs necessary for daily revenue operation of the locomotives prior to Final Acceptance.
  3. The Contractor shall therefore be responsible for securing facilities and personnel separate from those of Connecticut Commuter Rail to complete all additional work required for the duration of the Contract.
  4. Any defects in apparatus, material, or workmanship disclosed by inspections or tests, shall be corrected at the Contractor's expense prior to Final Acceptance.
  5. All expenses and costs incurred in the removal of locomotive(s) from the designated delivery point for correction of defects shall be borne by the Contractor.

## **17.4 CONDITIONAL ACCEPTANCE INSPECTION (ALL LOCOMOTIVES)**

### **17.4.1 Preparation for Road Service**

- A. Following acceptance of the Receiving Inspection Report by ConnDOT, the Contractor shall prepare the locomotive(s) for road service.
- B. Supplies of sand, coolant, and fuel will be furnished and applied by the Contract Operator.
- C. The Contractor shall successfully perform a terminal train air brake test and cab signal departure test as part of the preparation of the locomotive.

### **17.4.2 Conditional Acceptance Inspection**

- A. Upon completion of the preparation of each locomotive and acceptance by ConnDOT for road service, a non-revenue road test will be conducted by the Contract Operator. The Contractor shall be responsible for the compensation of any on-site test personnel employed by the Contractor.
  - 1. Road tests will be performed in accordance with Section 15.2.
  - 2. On-site testing at CTDOT shall only be conducted on weekdays between the hours of 9:00 p.m. and 4:00 a.m.. The Contractor and a ConnDOT representative(s) shall be present during all testing.
- B. Following successful completion of the non-revenue road tests, a Certificate of Conditional Acceptance will be prepared and signed by the Engineer. The Certificate shall note any discrepancies remaining to be corrected by the Contractor, but of such a nature that they would not preclude safe operation of the locomotive in road service.
- C. Conditional Acceptance Testing shall be performed in a timely fashion. ConnDOT and the Contract Operator shall have a minimum of three working days from the Receiving Inspection to begin conditional acceptance testing, and a maximum of five working days from Receiving Inspection to furnish Conditional Acceptance provided the tested locomotive meets the Specification requirements. If multiple locomotives arrive simultaneously in New Haven, two extra test days will be allocated per additional locomotive.
- D. If, during Conditional Acceptance inspection, CTDOT determines that a locomotive(s) is suitable for operation in revenue service, but that it is not totally responsive to the Specification requirements such that substantial delay might be incurred in implementing required corrective action(s), CTDOT may, at its discretion, issue a "Certificate of Conditional Acceptance" for the locomotive(s) for mutual execution by CTDOT and the Contractor. Such conditionally accepted locomotives shall then be available to CTDOT for use in revenue service until such time as the Contractor is able to initiate and execute the necessary corrective action(s).
  - 1. Such "Conditional Acceptance of a locomotive(s)" shall not negate its(their) eligibility for achieving a milestone payment in accordance with the Schedule of Partial Payments (Section A39).
  - 2. Warranty commences to run on all parts upon Conditional Acceptance into revenue service except for those parts requiring corrective action.

### 17.5 FINAL ACCEPTANCE

- A. Locomotive final acceptance shall be based on the following requirements having been met:
1. Contractual and workmanship deficiencies discovered during inspections of the locomotive have all been corrected by the Contractor in a manner judged satisfactory to the Contract requirements.
  2. The Contractor has provided ConnDOT with Contract and Specification test reports showing that the required tests and inspections have been successfully completed with results satisfactory to ConnDOT.
  3. Documentation is complete, including historic record keeping of work performed in compliance with the contract, and any documentation required per Section 19.04. All documentation must have received ConnDOT approval.
  4. The locomotive has performed in revenue service for 5 round trips without requiring any unscheduled maintenance.
- B. Certificate of Final Acceptance will be executed by ConnDOT for each locomotive [CDRL 17-001].

### 17.6 CONTRACT DELIVERABLE REQUIREMENTS LIST

Table 17-1

CDRL	Description	Due
CDRL 17-001	Certificates of Final Acceptance	TBD by Contractor

**End of Section**

**EXHIBIT B**

PRICE SCHEDULE

Fiscal Admin. Supp.:  
Mary K. Matuszak  
Telephone Number:  
(860) 594-2342

**STATE OF CONNECTICUT**  
**DEPARTMENT OF TRANSPORTATION**

RFP NO.:  
16DOT7001 P40

**PRICE SCHEDULE**  
*IMPORTANT!*  
**RETURN ORIGINAL AND ONE COPY**

DELIVERY:

TERMS: CASH DISCOUNT:

% Days

PROPOSER NAME:

Federal DOT ID #:

Payment terms are net 45 days. Any deviation may result in RFP rejection.  
Proposal prices shall include all transportation charges FOB state agency.

Page 1 OF 5

ITEM #	QTY	DESCRIPTION UNIT PRICE WRITTEN IN WORDS	LABOR	MATERIAL	TOTAL	DELIVERED UNIT PRICE	TOTAL BASE PROPOSAL PRICE
1	12	SCOPE AND RESPONSIBILITY AT: _____ Dollars each	N/A	N/A	N/A	N/A	N/A
2	12	GENERAL REQUIREMENTS AT: _____ Dollars each	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
3	12	LOCOMOTIVE BODY AND STRUCTURE AT: _____ Dollars each	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
4	12	COUPLER, DRAFT GEAR AND TRAINLINE CONNECTION AT: _____ Dollars each	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
5	12	CAB AND LOCOMOTIVE CONTROLS AT: _____ Dollars each	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
6	12	MAIN AND AUXILIARY GENERATOR, PROPULSION AND DYNAMIC BRAKING SYSTEMS AT: _____ Dollars each	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
7	12	MISCELLANEOUS ELECTRICAL SYSTEMS AT: _____ Dollars each	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
8	12	TRUCK AND SUSPENSION AT: _____ Dollars each	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
9	12	AIR SUPPLY AND FRICTION BRAKE SYSTEM AT: _____ Dollars each	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____



**STATE OF CONNECTICUT**  
**DEPARTMENT OF TRANSPORTATION**

RFP NO.:  
16DOT7001 P40

Fiscal Admin. Supv.:  
Mary K. Matusek  
Telephone Number:  
(860) 594-2342

**PRICE SCHEDULE**  
**IMPORTANT!**  
**RETURN ORIGINAL AND ONE COPY**

DELIVERY:

TERMS: CASH DISCOUNT:

% Days

PROPOSER NAME:

Federal DOT ID #:

Payment terms are net 45 days. Any deviation may result in RFP rejection.  
Proposal prices shall include all transportation charges FOB state agency.

Page 3 OF 5

**CERTIFIED RATES FOR COST-PLUS WORK (See Section A.41):**

SHOP LABOR TYPE (ABBREVIATION)	DESCRIPTION OF CERTIFIED PAYROLL RATES	CERTIFIED PAYROLL RATE	CERTIFIED OVERHEAD RATE (%)	ADMINISTRATIVE FEE \$ OR % PER INSTANCE	CONTRACTOR'S PROFIT (%)
		\$ _____	_____ %		_____ %
		\$ _____	_____ %		_____ %
		\$ _____	_____ %		_____ %
		\$ _____	_____ %		_____ %
		\$ _____	_____ %		_____ %
		\$ _____	_____ %		_____ %
		\$ _____	_____ %		_____ %
		\$ _____	_____ %		_____ %
		\$ _____	_____ %		_____ %

(Continue on additional sheets if additional lines are needed.)

All cost-plus work must be approved by CTDOT prior to the work being performed. Any material costs or shipping costs for extra work must be backed up with original documentation (detailed invoices) from suppliers and transportation providers. If detailed invoices or sufficient documentation are not provided, those costs will not be reimbursed. Time and Material documentation and invoicing should be provided to CTDOT on a monthly basis.

# STATE OF CONNECTICUT

## DEPARTMENT OF TRANSPORTATION

RFP NO.:  
16DOT7001 P40

Fiscal Admin. Supv.:  
Mary K. Matuszak  
Telephone Number:  
(860) 594-2342

**PRICE SCHEDULE**  
*IMPORTANT!*  
**RETURN ORIGINAL AND ONE COPY**

Payment terms are net 45 days. Any deviation may result in RFP rejection.  
Proposal prices shall include all transportation charges FOB state agency.

Page 4 OF 5

DELIVERY:	
TERMS:	CASH DISCOUNT:
PROPOSER NAME:	% Days
Federal DOT ID #:	

**SPARE PARTS UNIT COSTS (DOTRFP-22, Proposal Requirements, #8):**

ITEM	DESCRIPTION	TOTAL UNIT COST**
1.		\$
2.		\$
3.		\$
4.		\$
5.		\$
6.		\$
7.		\$
8.		\$
9.		\$
10.		\$
11.		\$
12.		\$
13.		\$
14.		\$
15.		\$
16.		\$
17.		\$
18.		\$
19.		\$
20.		\$



**STATE OF CONNECTICUT**  
DEPARTMENT OF TRANSPORTATION

Fiscal Admin. Supv.:  
Mary K. Mataszak  
Telephone Number:  
(860) 594-2342

**PRICE SCHEDULE**  
*IMPORTANT!*  
**RETURN ORIGINAL AND ONE COPY**

Payment terms are net 45 days. Any deviation may result in RFP rejection.  
Proposal prices shall include all transportation charges FOB state agency.

Page 5 OF 5

DELIVERY:

TERMS: CASH DISCOUNT: % Days

PROPOSER NAME:

Federal DOT ID #:

ITEM	DESCRIPTION	TOTAL UNIT COST**
21.		\$
22.		\$
23.		\$
24.		\$
25.		\$
26.		\$
27.		\$
28.		\$
29.		\$
30.		\$
31.		\$
32.		\$
33.		\$
34.		\$
35.		\$
36.		\$
37.		\$
38.		\$
39.		\$
40.		\$

EXHIBIT C

SEEC FORM 11



## Notice to Executive Branch State Contractors and Prospective State Contractors of Campaign Contribution and Solicitation Limitations

This notice is provided under the authority of Connecticut General Statutes §9-612(G)(2), as amended by P.A. 10-1, and is for the purpose of informing state contractors and prospective state contractors of the following law (*italicized words are defined on the reverse side of this page.*

### CAMPAIGN CONTRIBUTION AND SOLICITATION LIMITATIONS

No *state contractor, prospective state contractor, principal of a state contractor or principal of a prospective state contractor*, with regard to a *state contract or state contract solicitation* with or from a state agency in the executive branch or a quasi-public agency or a holder, or principal of a holder of a valid prequalification certificate, shall make a contribution to (i) an exploratory committee or candidate committee established by a candidate for nomination or election to the office of Governor, Lieutenant Governor, Attorney General, State Comptroller, Secretary of the State or State Treasurer, (ii) a political committee authorized to make contributions or expenditures to or for the benefit of such candidates, or (iii) a party committee (which includes town committees).

In addition, no holder or principal of a holder of a valid prequalification certificate, shall make a contribution to (i) an exploratory committee or candidate committee established by a candidate for nomination or election to the office of State senator or State representative, (ii) a political committee authorized to make contributions or expenditures to or for the benefit of such candidates, or (iii) a party committee.

On and after January 1, 2011, no state contractor, prospective state contractor, principal of a state contractor or principal of a prospective state contractor, with regard to a state contract or state contract solicitation with or from a state agency in the executive branch or a quasi-public agency or a holder, or principal of a holder of a valid prequalification certificate, shall **knowingly solicit** contributions from the state contractor's or prospective state contractor's employees or from a *subcontractor or principals of the subcontractor* on behalf of (i) an exploratory committee or candidate committee established by a candidate for nomination or election to the office of Governor, Lieutenant Governor, Attorney General, State Comptroller, Secretary of the State or State Treasurer, (ii) a political committee authorized to make contributions or expenditures to or for the benefit of such candidates, or (iii) a party committee.

### DUTY TO INFORM

State contractors and prospective state contractors are required to inform their principals of the above prohibitions, as applicable, and the possible penalties and other consequences of any violation thereof.

### PENALTIES FOR VIOLATIONS

Contributions or solicitations of contributions made in violation of the above prohibitions may result in the following civil and criminal penalties:

**Civil Penalties** – Up to \$2,000 or twice the amount of the prohibited contribution, whichever is greater, against a principal or a contractor. Any state contractor or prospective state contractor which fails to make reasonable efforts to comply with the provisions requiring notice to its principals of these prohibitions and possible consequences of their violations may also be subject to civil penalties of up to \$2,000 or twice the amount of the prohibited contributions made by their principals.

**Criminal penalties** – Any knowing and willful violation of the prohibition is a Class D felony, which may subject the violator to imprisonment of not more than 5 years, or not more than \$5,000 in fines, or both.

### CONTRACT CONSEQUENCES

In the case of a state contractor, contributions made or solicited in violation of the above prohibitions may result in the contract being voided.

In the case of a prospective state contractor, contributions made or solicited in violation of the above prohibitions shall result in the contract described in the state contract solicitation not being awarded to the prospective state contractor, unless the State Elections Enforcement Commission determines that mitigating circumstances exist concerning such violation.

The State shall not award any other state contract to anyone found in violation of the above prohibitions for a period of one year after the election for which such contribution is made or solicited, unless the State Elections Enforcement Commission determines that mitigating circumstances exist concerning such violation.

Additional information may be found on the website of the State Elections Enforcement Commission, [www.ct.gov/seec](http://www.ct.gov/seec). Click on the link to "Lobbyist/Contractor Limitations."



## DEFINITIONS

"State contractor" means a person, business entity or nonprofit organization that enters into a state contract. Such person, business entity or nonprofit organization shall be deemed to be a state contractor until December thirty-first of the year in which such contract terminates. "State contractor" does not include a municipality or any other political subdivision of the state, including any entities or associations duly created by the municipality or political subdivision exclusively amongst themselves to further any purpose authorized by statute or charter, or an employee in the executive or legislative branch of state government or a quasi-public agency, whether in the classified or unclassified service and full or part-time, and only in such person's capacity as a state or quasi-public agency employee.

"Prospective state contractor" means a person, business entity or nonprofit organization that (i) submits a response to a state contract solicitation by the state, a state agency or a quasi-public agency, or a proposal in response to a request for proposals by the state, a state agency or a quasi-public agency, until the contract has been entered into, or (ii) holds a valid prequalification certificate issued by the Commissioner of Administrative Services under section 4a-100.

"Prospective state contractor" does not include a municipality or any other political subdivision of the state, including any entities or associations duly created by the municipality or political subdivision exclusively amongst themselves to further any purpose authorized by statute or charter, or an employee in the executive or legislative branch of state government or a quasi-public agency, whether in the classified or unclassified service and full or part-time, and only in such person's capacity as a state or quasi-public agency employee.

"Principal of a state contractor or prospective state contractor" means (i) any individual who is a member of the board of directors of, or has an ownership interest of five per cent or more in, a state contractor or prospective state contractor, which is a business entity, except for an individual who is a member of the board of directors of a nonprofit organization, (ii) an individual who is employed by a state contractor or prospective state contractor, which is a business entity, as president, treasurer or executive vice president, (iii) an individual who is the chief executive officer of a state contractor or prospective state contractor, which is not a business entity, or if a state contractor or prospective state contractor has no such officer, then the officer who duly possesses comparable powers and duties, (iv) an officer or an employee of any state contractor or prospective state contractor who has *managerial or discretionary responsibilities with respect to a state contract*, (v) the spouse or a *dependent child* who is eighteen years of age or older of an individual described in this subparagraph, or (vi) a political committee established or controlled by an individual described in this subparagraph or the business entity or nonprofit organization that is the state contractor or prospective state contractor.

"State contract" means an agreement or contract with the state or any state agency or any quasi-public agency, let through a procurement process or otherwise, having a value of fifty thousand dollars or more, or a combination or series of such agreements or contracts having a value of one hundred thousand dollars or more in a calendar year, for (i) the rendition of services, (ii) the furnishing of any goods, material, supplies, equipment or any items of any kind, (iii) the construction, alteration or repair of any public building or public work, (iv) the acquisition, sale or lease of any land or building, (v) a licensing arrangement, or (vi) a grant, loan or loan guarantee. "State contract" does not include any agreement or contract with the state, any state agency or any quasi-public agency that is exclusively federally funded, an education loan, a loan to an individual for other than commercial purposes or any agreement or contract between the state or any state agency and the United States Department of the Navy or the United States Department of Defense.

"State contract solicitation" means a request by a state agency or quasi-public agency, in whatever form issued, including, but not limited to, an invitation to bid, request for proposals, request for information or request for quotes, inviting bids, quotes or other types of submittals, through a competitive procurement process or another process authorized by law waiving competitive procurement.

"Managerial or discretionary responsibilities with respect to a state contract" means having direct, extensive and substantive responsibilities with respect to the negotiation of the state contract and not peripheral, clerical or ministerial responsibilities.

"Dependent child" means a child residing in an individual's household who may legally be claimed as a dependent on the federal income tax of such individual.

"Solicit" means (A) requesting that a contribution be made, (B) participating in any fund-raising activities for a candidate committee, exploratory committee, political committee or party committee, including, but not limited to, forwarding tickets to potential contributors, receiving contributions for transmission to any such committee or bundling contributions, (C) serving as chairperson, treasurer or deputy treasurer of any such committee, or (D) establishing a political committee for the sole purpose of soliciting or receiving contributions for any committee. Solicit does not include: (i) making a contribution that is otherwise permitted by Chapter 155 of the Connecticut General Statutes; (ii) informing any person of a position taken by a candidate for public office or a public official, (iii) notifying the person of any activities of, or contact information for, any candidate for public office; or (iv) serving as a member in any party committee or as an officer of such committee that is not otherwise prohibited in this section.

"Subcontractor" means any person, business entity or nonprofit organization that contracts to perform part or all of the obligations of a state contractor's state contract. Such person, business entity or nonprofit organization shall be deemed to be a subcontractor until December thirty first of the year in which the subcontract terminates. "Subcontractor" does not include (i) a municipality or any other political subdivision of the state, including any entities or associations duly created by the municipality or political subdivision exclusively amongst themselves to further any purpose authorized by statute or charter, or (ii) an employee in the executive or legislative branch of state government or a quasi-public agency, whether in the classified or unclassified service and full or part-time, and only in such person's capacity as a state or quasi-public agency employee.

"Principal of a subcontractor" means (i) any individual who is a member of the board of directors of, or has an ownership interest of five per cent or more in, a subcontractor, which is a business entity, except for an individual who is a member of the board of directors of a nonprofit organization, (ii) an individual who is employed by a subcontractor, which is a business entity, as president, treasurer or executive vice president, (iii) an individual who is the chief executive officer of a subcontractor, which is not a business entity, or if a subcontractor has no such officer, then the officer who duly possesses comparable powers and duties, (iv) an officer or an employee of any subcontractor who has managerial or discretionary responsibilities with respect to a subcontract with a state contractor, (v) the spouse or a dependent child who is eighteen years of age or older of an individual described in this subparagraph, or (vi) a political committee established or controlled by an individual described in this subparagraph or the business entity or nonprofit organization that is the subcontractor.