

Capital Improvement Program Proposal – Detail

Department Name	Building Department	Project	Replace inspection vehicle	
		Fiscal Year	2010	
Department Head	Francis Ramsbottom	Cost	\$30,000	
		Priority	1	of 1

1. Description *Replace existing 1999 inspection vehicle. I would propose the new vehicle be a hybrid so as to forward one of the Board of Selectmen goals*

2. Useful Life *10 yr*

3. Purpose (Please 'X' one of the Boxes and Describe, if Applicable)

Schedule Replacement X

Increase Personnel Efficiency X

New or Expanded Service

Replace Obsolete or Unsafe Equipment X

Other (Please Explain)

(Explain Disposal of Old Equipment)

4. Justification *The Building Department has two inspection vehicles and three people who do inspections. When one vehicle is in for repair only one inspector can do work. Many times the Department needs two vehicles. Also at times other departments borrow one of our vehicles.*

5. How Was this Project's Priority Determined? *Without a reliable vehicle we cannot do our inspections*

6. Estimated Cost *\$30,00*

Less Trade-In (If Applicable) \$500

Net Cost \$29,500

7. Are Non-Town Revenues Available to Reduce Cost? *Yes, the funds will come from the Building Department revolving fund.*

8. If this Project is Delayed, What will be the Effect on your Department? *If the current vehicle cannot be maintained we may not be able to respond in a timely manor*

9. Please Describe the Effect of this Project on your Operating Budget. *NA*

Personnel Budget

Increase
Decrease

Expense Budget

Increase
Decrease

10. Attachments, if Applicable. *Vehicle request form*



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VEHICLE REQUEST FORM INSTRUCTIONS & INFORMATION

The Town of Acton is voluntarily complying with The Federal Energy Policy Act of 1992, which requires governmental fleets to meet the following standard -- 75% of new Light-Duty Vehicles (LDVs) acquisitions to be Alternative Fueled Vehicles (AFV). LDVs are defined as 8500 GVWR or less. Off-road, non-administrative emergency vehicles, and vehicles acquired solely for research or testing purposes are exempt from this standard. All new vehicles must be an EPA certified "Smart Way" or "Smart Way Elite" vehicle. Acton's minimum miles per gallon standard for all new LDV purchases are as follows:

New NHTSA Calculation:

	<u>Gasoline</u>	<u>E-85</u>
• Sedans/station wagons	21mpg City	N/A
• Full size Pick-ups & SUVs 2WD	15 mpg city	11 mpg city
• Full size Pick-ups & SUVs 4WD	14 mpg city	9 mpg city

To determine which vehicles meet the "Smart Way" certifications and mpg standard use the ratings at :

<http://www.epa.gov/greenvehicles/Index.do;jsessionid=82306299f6a3352b137f>

STEP-BY-STEP INSTRUCTIONS TO COMPLETE THE REQUEST FORM

1. Complete Section A with information on the vehicle to be purchased and the vehicle to be replaced (if applicable).
2. Complete Section C if the request is to request purchase an SUV, four wheel drive pickup, full size sedan or a police equipped vehicle.
3. Complete Section D if you are requesting an expansion to the size of your fleet.
4. Obtain signature of Department head or designee in Section B.
5. Please Complete Section 1 of Appendix A
6. Make an appointment with the Town Mechanics (1) to review the existing vehicle and (2) complete Appendix A prior to submission

Asset Code

Departments must use one of the following commodity codes when processing a request:

1. Sedans & Station Wagons
2. Vans, Light Duty Trucks and SUVs (GVW of 8500 or less)
3. Vans, Buses, & Trucks (GVW of over 8500 lbs)
4. Alternative Fuel Vehicles
5. Police Pursuit Vehicles



VEHICLE REQUEST FORM (Page 1)

Department/Division <u>Building</u>	Contact Name <u>Frank Ramsbottom</u>
ASSET CODE #	E-MAIL <u>Fransbottom@acton-ma.gov</u>

SECTION A		
Expansion/Replacement	<input type="checkbox"/> Expansion <input type="checkbox"/> Transfer <input checked="" type="checkbox"/> Replacement <small>(Complete Section D for Expansion Requests)</small>	If to be transferred, identify the receiving entity?
Purchase From:	<input checked="" type="checkbox"/> State Contract <input type="checkbox"/> Surplus <input type="checkbox"/> Quote	Purchase Option (check all that apply) <input checked="" type="checkbox"/> Purchase <input type="checkbox"/> Lease-Purchase
Vehicle Requested <input checked="" type="checkbox"/> New <input type="checkbox"/> Used (Check One)		
VEHICLE DATA	VEHICLE TO BE REPLACED	REQUESTED VEHICLE
Year	<u>1999</u>	
Make	<u>Ford</u>	
Model	<u>Contour</u>	
VIN	<u>1FAFP66L3XK152160</u>	N/A
License Number	<u>M 61360</u>	N/A
Inventory Tag Number	<u>4</u>	N/A
Current Odometer	<u>48754</u>	Estimated
Annual Miles Driven	Prior FY Actual <u>4455</u>	Estimated
Vehicle Value	Use Edmonds.com <u>\$1000</u>	
Vehicle Type	<u>Sedan</u>	
Check all that apply	<input type="checkbox"/> 4WD <input type="checkbox"/> Police Equipped	<input type="checkbox"/> 4WD <input type="checkbox"/> Police Equipped
Primary Assignment	<input type="checkbox"/> Individual <input type="checkbox"/> Function <input checked="" type="checkbox"/> Pool	<input type="checkbox"/> Individual <input type="checkbox"/> Function <input type="checkbox"/> Pool
Vehicle Purpose	<input type="checkbox"/> Employee Transportation <input type="checkbox"/> Client Transportation <input type="checkbox"/> Task Specific (describe below) <input type="checkbox"/> Special Purpose (describe below) <u>Building Dept. use</u>	<input type="checkbox"/> Employee Transportation <input type="checkbox"/> Client Transportation <input type="checkbox"/> Task Specific (describe below) <input type="checkbox"/> Special Purpose (describe below)
Reason for Replacement	<input checked="" type="checkbox"/> Routine (Over 120,000 miles) <input type="checkbox"/> Other (Complete Section E)	Actual Disposal Date/Miles
Estimated Disposal Date	<u>Fall 2010</u>	

SECTION B: SIGNATURES	
Requesting Person <u>Frank Ramsbottom</u> Date: <u>11-14-08</u>	Department Head <u>Russell W. Robinson</u> Date: <u>11-14-08</u>
	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied

SECTION C: ADDITIONAL JUSTIFICATION FOR CERTAIN VEHICLE TYPES

This section must be completed if a SUV, four wheel drive vehicle, full size sedan or a police equipped vehicle is requested.

Special Requirements: Check all that apply and then describe in detail in the space provided below.

- Regularly driven off road or on unimproved roads
- Equipment/Tool Storage
- Passenger Occupancy
- Utility Features
- Pursuit Vehicle
- Other *Building Dept. use*

Please describe the specific need here. Include justification describing why a lower cost; more fuel-efficient vehicle is not sufficient to meet agency needs.

Need clearance for undeveloped building lots

SECTION D: ADDITIONAL JUSTIFICATION FOR FLEET EXPANSION

This section must be completed for expansion vehicle requests.

Reason for Expansion: Check all that apply and then describe in detail in the space provided below:

- New Statutory Requirements
- Fleet Increase Approved by Town Manager
- Program Changes
- Other

Describe the need to expand the fleet here.

SECTION E: REASON FOR REPLACEMENT

If "Other" was selected as the reason for replacement on page one, please provide additional information below.

Section F: Projected activity (per vehicle)

	Within Acton	Outside of Acton	Total
miles/year	4000	4555	
hours/year			

Section G: Incremental cost for vehicle purchase (per vehicle)

Existing annual vehicle cost: \$	New annual vehicle cost: (purchase price times 12.33% plus cost of fuel and maintenance) \$	Incremental cost: (baseline - new) \$
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Section H: Vehicle Vendor Information

Contact	Address	State
Title	City	
Company	Zip Code	
E-Mail	Phone	F A X

Section I: Existing Vehicle Information

Fuel Type: CNG Diesel LNG LPG Gasoline Other

Fuel Usage in miles per gallon:

Section J: New Vehicle Information

Fuel Type: CNG Diesel LNG LPG Gasoline E85 Other

(If utilizing more than one fuel type, indicate which fuels and percentage operating time for each)

Emissions per vehicle (please indicate units-g/bhp-hr, or g/gallon)

NOx	VOC	PM2.5
-----	-----	-------

Emissions certified by:
 EPA Alternate certification (specify and attach documentation)

Vehicle use: On Road Off-road Type of Equipment:

Fuel Usage _____mpg
 (use the City rating at <http://www.epa.gov/greenvehicles/index.do?sessionId=8230b13c37d76d2451b2>)

ADDITIONAL REQUIRED INFORMATION

Purchase/Lease Information:

Anticipated Cost: _____ Lease period: _____ months/years

Anticipated Annual Mileage: _____

Maximum Annual Mileage (leased vehicles): _____

Cost in Excess of Allowed Annual Mileage (leased vehicles): _____

If You Require This Vehicle for Commuting, Please Detail One-Way Mileage between Employee's Home and Office, Address of Overnight Parking, And the Need for This Vehicle for Commuting Purposes

If You Will Not be Purchasing an AFV, Please Attach Documentation to Explain Why You Will Not be Able to Purchase an AFV.

Hybrid



APPENDIX A: VEHICLE PURCHASE REQUEST FORM page 1 of 2

Section 1: Existing Vehicle Information - to be completed by Requestor

Make Ford	Model Contour	Year 1999	Car/Truck # 4	License Plate # 1M61360
Fuel Type: <input type="checkbox"/> CNG <input type="checkbox"/> Diesel <input type="checkbox"/> LNG <input type="checkbox"/> LPG <input checked="" type="checkbox"/> Gasoline <input type="checkbox"/> Other				

Section 2: Existing Vehicle Condition - to be completed by the Town's Mechanics

GVWR NA	Fuel Use (mi/gal):
*ENGINE type: 4 cyl <input type="checkbox"/> 6 cyl <input checked="" type="checkbox"/> 8 cyl <input type="checkbox"/>	
*TRANSMISSION TYPE: Manual <input type="checkbox"/> Automatic <input checked="" type="checkbox"/>	

Condition of Vehicle - to be completed by the Town's Mechanics

	Excellent	Good <input checked="" type="checkbox"/>	Fair <input type="checkbox"/>	Poor <input type="checkbox"/>	Date last Repaired
*Engine		<input checked="" type="checkbox"/>			
*Transmission		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
*Frame		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
*Differential		<input checked="" type="checkbox"/>			
*Brakes (Power?)		<input checked="" type="checkbox"/>			
*Steering (Power?)		<input checked="" type="checkbox"/>			
*Suspension		<input checked="" type="checkbox"/>			
*Clutch		NA		<input checked="" type="checkbox"/>	
*Body				<input checked="" type="checkbox"/>	
*Radiator		<input checked="" type="checkbox"/>			
*Battery		<input checked="" type="checkbox"/>			
*Air Conditioner		<input checked="" type="checkbox"/>			
*Heater		<input checked="" type="checkbox"/>			
*Lights		<input checked="" type="checkbox"/>			
*Upholstery		<input checked="" type="checkbox"/>			
*Paint		<input checked="" type="checkbox"/>			
*Glass		<input checked="" type="checkbox"/>			
*Jack		<input checked="" type="checkbox"/>			
*Radio AM/FM		<input checked="" type="checkbox"/>			
*Radio 2-way		<input checked="" type="checkbox"/>			
*TIRES:		<input checked="" type="checkbox"/>			
R FRONT		<input checked="" type="checkbox"/>			
L FRONT		<input checked="" type="checkbox"/>			
R REAR		<input checked="" type="checkbox"/>			
L REAR		<input checked="" type="checkbox"/>			
SPARE		<input checked="" type="checkbox"/>			



APPENDIX A: VEHICLE PURCHASE REQUEST FORM page 2 of 2

Mechanic's Narrative

Vehicle #4 ~~is~~ is 10yrs old it has had some minor repairs. But the age of this car anything could go wrong at anytime. The body and frame are starting to rust out. The body is going to need some body work in the near future in the rusting panels. This would be a good swap vehicle to another Department.

Charles Wilkoff
Mechanic's Signature

11/14/08
Date

Capital Improvement Program Proposal – Detail

Department Name Council On Aging

Project Architect, COA Expansion
Fiscal Year 2010

Department Head Jean Fleming

Cost \$100,000
Priority 1 of 2

1. Description

Hire architect to do preliminary work on either expansion of the existing senior center or plans for a new center, depending on which option, if either, the Town decides to do.

2. Useful Life

3. Purpose (Please 'X' one of the Boxes and Describe, if Applicable)

- | | |
|---|--|
| <p><input type="checkbox"/> Schedule Replacement</p> <p><input checked="" type="checkbox"/> New or Expanded Service</p> <p><input type="checkbox"/> Other (Please Explain)</p> | <p><input type="checkbox"/> Increase Personnel Efficiency</p> <p><input type="checkbox"/> Replace Obsolete or Unsafe Equipment (Explain Disposal of Old Equipment)</p> |
|---|--|

4. Justification

The Senior Center Expansion Steering Committee for the Board of Selectmen has done a lot of preliminary work this past year, with assistance from town staff, with no expenditures, to explore various options for expansion of the senior center. Professional architectural services are now needed to move ahead.

5. How Was this Project's Priority Determined?

The senior population of Acton has increased from 2000 when the senior center opened in 1994 to almost 3500 as of January 2008, with projections to 4400 and beyond by 2010. To provide adequate programs and services, Senior Center space needs to be expanded.

6. Estimated Cost \$100,000

Less Trade-In (If Applicable)
Net Cost

7. Are Non-Town Revenues Available to Reduce Cost?

Not known

8. If this Project is Delayed, What will be the Effect on your Department?

Without professional architectural expertise, this project will slow to a grinding halt. The COA department will need to limit programs and services in coming years without additional space.

9. Please Describe the Effect of this Project on your Operating Budget.

<u>Personnel Budget</u>	<u>Expense Budget</u>
Increase	Increase
Decrease	Decrease

10. Attachments, if Applicable.

Capital Proposal FY10 Architect, COA Expansion

The Acton Senior Center, located at 50 Audubon Drive in South Acton, is a one story building with 5,180 square feet of usable space.

The building consists of a large living room, large dining room, 3 staff offices and one computer room, in addition to bathrooms, storage alcove and storage basement, which is only accessible through the outside bulkhead. Built in 1994 in conjunction with the Audubon Hill "55 and over" condominiums, it is leased to the Town for a nominal fee each year from the Audubon Hill Community Corporation.

Since 2002, the number of senior participants in programs and classes has more than doubled. The number of contacts with people coming for fuel, legal, tax, health insurance and general financial assistance has almost quadrupled. Exercise classes, offered each morning, always have waiting lists when initially offered. Acton's senior population continues to grow, now almost 3,500 as opposed to 2,000 when the center first opened. Population predictions are for continued growth, to 4,400 and beyond by 2010.

Today's senior citizens, including the up and coming "Baby Boomers," are clearly looking for a wide range of programs and services in their communities to help them stay active, healthy and independent as long as possible. They recognize the need to keep their minds and bodies active. They want to maintain the skills they have and develop new skills, hobbies and interests. They want to give back to their communities by finding meaningful volunteer opportunities. The Acton Senior Center is and should be an important and central resource to our senior residents as they pursue these goals.

In the fall of 2006, the COA staff and COA Board developed a comprehensive survey, distributed to about 2000 senior households. Almost 500 responses were received. They reflected increased interest in exercise programs, particularly those focused on balance, music and art appreciation, photography, foreign languages, world religions, cooking, day trips and evening programs.

As we attempt to meet the increased desire for program variety and breadth of services, the limitations of our existing space have become more apparent:

- ❖ The large living room and dining room (also used for meals) are our only program areas.
- ❖ The computer room, offering basic lessons and specialized workshops to seniors, is also our only private meeting space. It is used by health, tax and legal consultants in addition to being the only private area our Outreach Coordinator can use to meet with individuals and families.

- ❖ Our durable medical equipment loan program (walkers, canes, shower seats, etc.) requires staff going up and down outdoor bulkhead stairs several times a week. Sometimes the lock has been frozen, so that we can't access equipment.
- ❖ Health clinics (podiatry, blood pressure) offered by Acton Public Health Nursing Services take place in a corner of the dining room, for lack of any other space.
- ❖ The flooring (carpeting) for our exercise classes is inadequate.
- ❖ There is no comfortable "drop in" area for seniors to gather, have a cup of coffee, as our space is usually scheduled for classes, programs, discussion groups.
- ❖ The staff offices/ small reception area is tucked away in the back of the building, rather than by the front entrance where most seniors and visitors come into the building. Staff is often unaware of people entering into the building and visitors often walk through program areas to reach our staff offices.

At the April 2007 Town Meeting, a Feasibility Study was approved to explore Expansion of the Senior Center and Parking Area. In the fall, an Advisory Committee was formed by the Board of Selectmen to work on this project.

This committee, chaired by Paulina Knibbe, has spent the last year gathering information relevant to this task, visiting other senior centers, gathering statistics on growth of the senior population and future projections, assessing space needs and usage in the current senior center, determining how parking could be expanded on the current site, reviewing other building sites and leasing opportunities in Acton, meeting with groups of seniors and other residents to get their feedback as to their priorities for usage of the senior center now and in the future. An in depth study was done of all the activities and services provided currently and which could be provided if more space were available, determining all the functions that a senior center would optimally provide to the community and how to best provide them.

At this point in November 2008, an architect has been hired using the funds (up to \$25,000) approved in April 2007 to do a preliminary and very basic rendition of three possible plans for expansion: expanding the current site, utilizing leased space, or building a new center on Town owned land. A cost analysis will be done of each option and all three options will be presented to town residents at the end of January, at both an afternoon meeting in the senior center and an evening meeting in town hall.

The feedback from town residents at that time will help the steering committee make a recommendation to the BOS about how and when to move forward with this project.

This request for \$100,000 for an architect is being made at this time because, by the end of January, the committee will have completed all the work they can do without more professional assistance. The next step would be to hire an architect for design work on the option that will be recommended to the BOS by this advisory committee.

Capital Improvement Program Proposal – Detail

Department Name	Council on Aging	Project	Increase parking at Senior Center	
		Fiscal Year	2010	
Department Head	Jean Fleming	Cost	\$135,000	
		Priority	2	of 2

1. Description

Add up to 27 more parking spaces for the Acton Senior Center, increasing from 39 to 65. Highway Department would do the construction, at approx. \$5000/ space..

2. Useful Life Indefinite

3. Purpose (Please 'X' one of the Boxes and Describe, if Applicable)

<input type="checkbox"/> Schedule Replacement	<input type="checkbox"/> Increase Personnel Efficiency
<input checked="" type="checkbox"/> New or <u>Expanded</u> Service	<input type="checkbox"/> Replace Obsolete or Unsafe Equipment
<input type="checkbox"/> Other (Please Explain)	<input type="checkbox"/> (Explain Disposal of Old Equipment)

4. Justification

The Senior Center currently has 39 parking spaces, including 4 handicapped spaces. When multiple programs and classes are taking place concurrently, or when there is a large program or dinner attracting 60 – 80 people, senior citizens need to park on Audubon Drive and walk up the long driveway to the senior center. This is difficult for seniors with walking or respiratory difficulties, particularly in inclement weather. The addition of these spaces would make it possible for more seniors to park closer to the building.

5. How Was this Project's Priority Determined?

We have requested additional parking for the last 3 years. However, this is priority #2 because the architectural services for expansion of the senior center are more important as a necessary step in meeting the increased demand for program/ meeting space at the senior center.

\$135,000

Less Trade-In (If Applicable)

Net Cost \$135,000

7. Are Non-Town Revenues Available to Reduce Cost?

Not that I am aware of.

8. If this Project is Delayed, What will be the Effect on your Department?

Parking challenges will remain the same when multiple high attendance programs are going on simultaneously or when there are large social or educational events. Some seniors may not attend if they don't want to walk up the hill to the senior center.

9. Please Describe the Effect of this Project on your Operating Budget.

<u>Personnel Budget</u>	<u>Expense Budget</u>
Increase	Increase x
Decrease	Decrease

10. Attachments, if Applicable. **None**

COA Capital Proposal FY10
Increase Parking at Acton Senior Center

The request to increase parking at the Acton Senior Center has been made for the last three years. 10 spaces were added as parallel spaces along the driveway about 4 – 5 years ago, which brought our total to 39 spaces, including 4 handicapped spaces.

Although some people carpool or take the van to the center, parking continues to be a challenge whenever a number of programs overlap or a large program/ dinner takes place. This generally takes place 4 – 5 times a week at present.

When the spaces are full, parking continues down the driveway leading up from Audubon Drive, which is a steep hill for many seniors to walk up, particularly in bad weather or if they have ambulatory or respiratory problems.

Because of the request to either expand the existing senior center or possibly lease or build in another site within the next few years, this request to expand parking has taken a back seat in our capital requests.

However, we want to stress that this is an ongoing problem for seniors participating in our programs or coming here for needed services, e.g. fuel assistance, health insurance, long term care or legal counseling. I have seen cars turn and drive away when parking is not available and seniors' only choice would be to park down the hill and walk up.

The Engineering Dept. has done some preliminary work on a variety of parking expansion options, which could be undertaken with or without building expansion.

One of those options is attached, which would increase parking spaces to 65, on areas that would be level and near the building so walking up and down the hill would not be necessary.

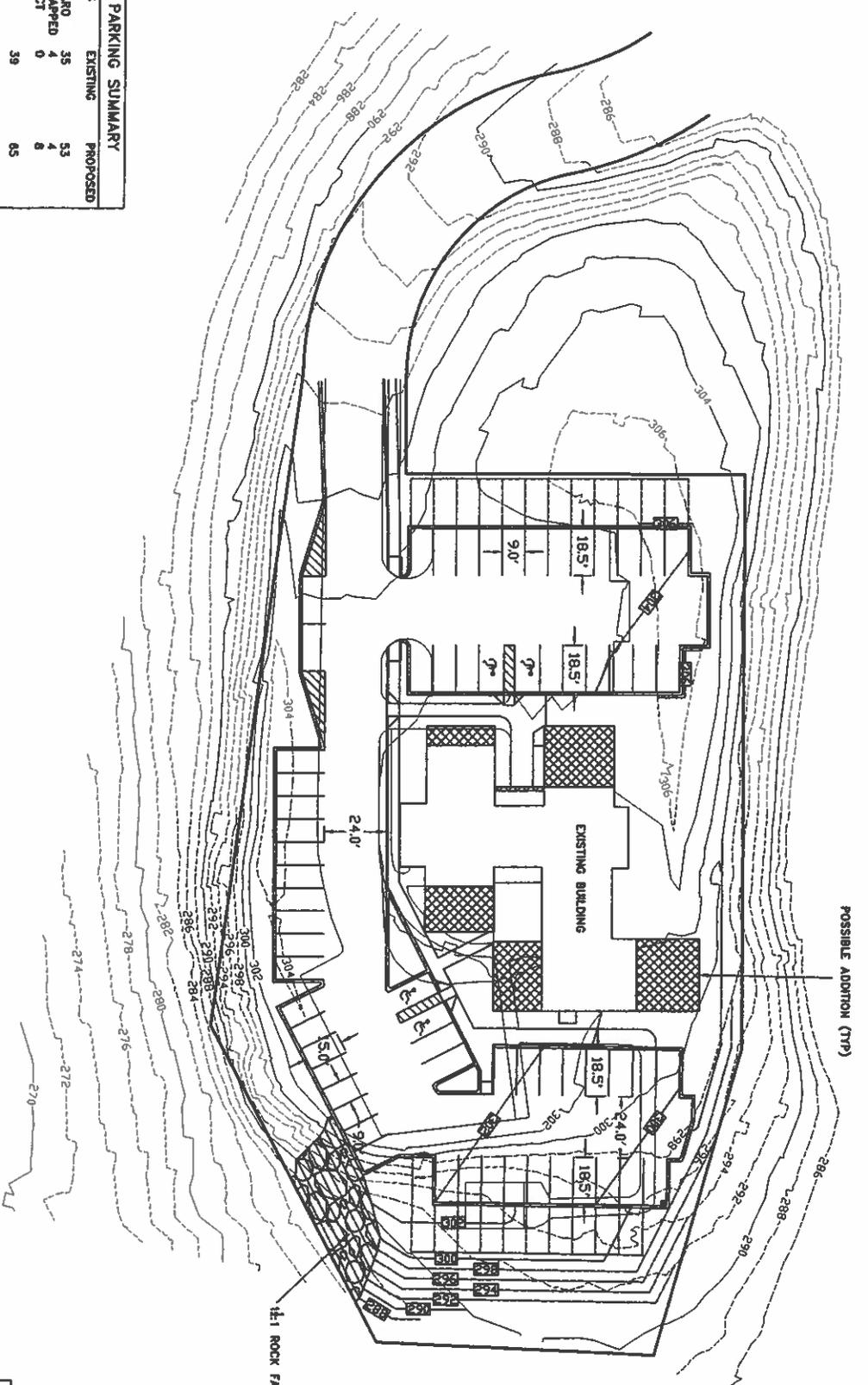
It is possible that another option would be chosen if this project went forward. We would work with the Engineering/ Public Works Dept. to choose the best option for our needs.

COM Tarking Capital Request FY10

PARKING SUMMARY		
SPACES	EXISTING	PROPOSED
STANDARD	35	53
HANDICAPPED	4	4
COMPACT	0	6
TOTAL	39	65

ADDITIONAL "EVENT" PARKING ON GRASS
PAYER BLOCKS = 23

P:\Drawing\Audubon Hill\Audubon Hill.dwg



TOWN OF ACTION ENGINEERING DEPT.
AUDUBON HILL SENIOR CENTER
 EXPANSION - OPTION 1
 SCALE: 1" = 20'
 DATE: 7/1/2008



VEHICLE REQUEST FORM INSTRUCTIONS & INFORMATION

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New NHTSA Calculation:	<u>Gasoline</u>	<u>E-85</u>
• Sedans/station wagons	21mpg City	N/A
• Full size Pick-ups & SUVs 2WD	15 mpg city	11 mpg city
• Full size Pick-ups & SUVs 4WD	14 mpg city	9 mpg city

To determine which vehicles meet the "Smart Way" certifications and mpg standard use the ratings at :

<http://www.epa.gov/greenvehicles/Index.do;jsessionid=82306299f6a3352b137f>

STEP-BY-STEP INSTRUCTIONS TO COMPLETE THE REQUEST FORM

1. Complete Section A with information on the vehicle to be purchased and the vehicle to be replaced (if applicable).
2. Complete Section C if the request is to request purchase an SUV, four wheel drive pickup, full size sedan or a police equipped vehicle.
3. Complete Section D if you are requesting an expansion to the size of your fleet.
4. Obtain signature of Department head or designee in Section B.
5. Please Complete Section 1 of Appendix A
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Asset Code

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2. Vans, Light Duty Trucks and SUVs (GVW of 8500 or less)
3. Vans, Buses, & Trucks (GVW of over 8500 lbs)
4. Alternative Fuel Vehicles
5. Police Pursuit Vehicles



VEHICLE REQUEST FORM (Page 1)

Department/Division <i>Engineering</i>	Contact Name <i>Bruce Stamski</i>
ASSET CODE #	E-MAIL <i>bstamski@acton-ma.gov</i>

SECTION A		
Expansion/Replacement	<input type="checkbox"/> Expansion <input type="checkbox"/> Transfer <input checked="" type="checkbox"/> Replacement <i>(Complete Section D for Expansion Requests)</i>	If to be transferred, identify the receiving entity?
Purchase From:	<input checked="" type="checkbox"/> State Contract <input type="checkbox"/> Surplus <input type="checkbox"/> Quote	Purchase Option (check all that apply) <input checked="" type="checkbox"/> Purchase <input type="checkbox"/> Lease-Purchase
Vehicle Requested <input checked="" type="checkbox"/> New <input type="checkbox"/> Used (Check One)		
VEHICLE DATA	VEHICLE TO BE REPLACED	REQUESTED VEHICLE
Year	<i>1994</i>	
Make	<i>Ford</i>	
Model	<i>E-150</i>	
VIN	<i>1F7EE14NXR4B67306</i>	N/A
License Number	<i>M1877</i>	N/A
Inventory Tag Number	<i>12</i>	N/A
Current Odometer	<i>33,209.4</i>	<i>Estimated</i>
Annual Miles Driven	<i>Prior FY Actual 2372.1</i>	<i>Estimated</i>
Vehicle Value	<i>Use Edmonds.com</i>	
Vehicle Type	<i>van</i>	
Check all that apply	<input type="checkbox"/> 4WD <input type="checkbox"/> Police Equipped	<input type="checkbox"/> 4WD <input type="checkbox"/> Police Equipped
Primary Assignment	<input type="checkbox"/> Individual <input type="checkbox"/> Function <input checked="" type="checkbox"/> Pool	<input type="checkbox"/> Individual <input type="checkbox"/> Function <input type="checkbox"/> Pool
Vehicle Purpose	<input type="checkbox"/> Employee Transportation <input type="checkbox"/> Client Transportation <input type="checkbox"/> Task Specific (describe below) <input type="checkbox"/> Special Purpose (describe below) <i>Eng. Dept use</i>	<input type="checkbox"/> Employee Transportation <input type="checkbox"/> Client Transportation <input type="checkbox"/> Task Specific (describe below) <input type="checkbox"/> Special Purpose (describe below)
Reason for Replacement	<input checked="" type="checkbox"/> Routine (<i>Over 100,000 miles 14 years</i>) <input type="checkbox"/> Other (Complete Section E)	Actual Disposal Date/Miles
Estimated Disposal Date	<i>Fall 2010</i>	

SECTION B: SIGNATURES	
Requesting Person <i>Bruce Stamski</i>	Department Head <i>Russell Robinson</i>
Date: _____	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied
Date: _____	Date: <i>11-12-08</i>

SECTION C: ADDITIONAL JUSTIFICATION FOR CERTAIN VEHICLE TYPES

This section must be completed if a SUV, four wheel drive vehicle, full size sedan or a police equipped vehicle is requested.

Special Requirements: Check all that apply and then describe in detail in the space provided below.

- Regularly driven off road or on unimproved roads
- Equipment/Tool Storage
- Passenger Occupancy
- Utility Features
- Pursuit Vehicle
- Other

Please describe the specific need here. Include justification describing why a lower cost; more fuel-efficient vehicle is not sufficient to meet agency needs.

SECTION D: ADDITIONAL JUSTIFICATION FOR FLEET EXPANSION

This section must be completed for expansion vehicle requests.

Reason for Expansion: Check all that apply and then describe in detail in the space provided below:

- New Statutory Requirements
- Fleet Increase Approved by Town Manager
- Program Changes
- Other

Describe the need to expand the fleet here.

SECTION E: REASON FOR REPLACEMENT

If "Other" was selected as the reason for replacement on page one, please provide additional information below.

14 year old van

See mechanics report

Section F: Projected activity (per vehicle)

	Within Acton	Outside of Acton	Total
miles/year	2300	75	
hours/year			

Revision Date: May 19, 2008

Section G: Incremental cost for vehicle purchase (per vehicle)

Existing annual vehicle cost:	New annual vehicle cost: (purchase price times 12.33% plus cost of fuel and maintenance)	Incremental cost: (baseline - new)
\$	\$	\$

Section H: Vehicle Vendor Information

Contact	Address	
Title	City	State
Company	Zip Code	
E-Mail	Phone	F A X

Section I: Existing Vehicle Information

Fuel Type:	<input type="checkbox"/> CNG	<input type="checkbox"/> Diesel	<input type="checkbox"/> LNG	<input type="checkbox"/> LPG	<input checked="" type="checkbox"/> Gasoline	<input type="checkbox"/> Other
Fuel Usage in miles per gallon:						

Section J: New Vehicle Information

Fuel Type:	<input type="checkbox"/> CNG	<input type="checkbox"/> Diesel	<input type="checkbox"/> LNG	<input type="checkbox"/> LPG	<input type="checkbox"/> Gasoline	<input type="checkbox"/> E85	<input type="checkbox"/> Other
(If utilizing more than one fuel type, indicate which fuels and percentage operating time for each)							
Emissions per vehicle (please indicate units-g/bhp-hr, or g/gallon)							
NOx	VOC			PM2.5			
Emissions certified by:							
<input type="checkbox"/> EPA				<input type="checkbox"/> Alternate certification (specify and attach documentation)			
Vehicle use:		<input type="checkbox"/> On Road	<input type="checkbox"/> Off-road	Type of Equipment:			
Fuel Usage _____mpg							
(use the City rating at http://www.epa.gov/greenvehicles/index.do?sessionid=8230b13c37d76d2451b2)							

ADDITIONAL REQUIRED INFORMATION

Purchase/Lease Information:

Anticipated Cost: _____ Lease period: _____ months/years

Anticipated Annual Mileage: _____

Maximum Annual Mileage (leased vehicles): _____

Cost in Excess of Allowed Annual Mileage (leased vehicles): _____

If You Require This Vehicle for Commuting, Please Detail One-Way Mileage between Employee's Home and Office, Address of Overnight Parking, And the Need for This Vehicle for Commuting Purposes

If You Will Not be Purchasing an AFV, Please Attach Documentation to Explain Why You Will Not be Able to Purchase an AFV.

Over 8500 GVWR



APPENDIX A: VEHICLE PURCHASE REQUEST FORM page 1 of 2

Section 1: Existing Vehicle Information - to be completed by Requestor

Make Ford	Model E-150	Year 1994	Car/ Truck # 12	License Plate # 1M1877
Fuel Type: <input type="checkbox"/> CNG <input type="checkbox"/> Diesel <input type="checkbox"/> LNG <input type="checkbox"/> LPG <input checked="" type="checkbox"/> Gasoline <input type="checkbox"/> Other				

Section 2: Existing Vehicle Condition - to be completed by the Town's Mechanics

GVWR	Fuel Use (m/gal):		
* ENGINE: type	4 cyl	6cyl	8cyl <input checked="" type="checkbox"/>
* TRANSMISSION TYPE	Manual	Automatic <input checked="" type="checkbox"/>	

Condition of Vehicle - to be completed by the Town's Mechanics

	Excellent	Good	Fair	Poor	Date last Repaired
*Engine					
*Transmission					
*Frame					
*Differential					
*Brakes (Power?)					
*Steering (Power?)					
*Suspension					
* Clutch				<input checked="" type="checkbox"/>	NA
*Body					
*Radiator					
*Battery			<input checked="" type="checkbox"/>		
*Air Conditioner		<input checked="" type="checkbox"/>			
*Heater		<input checked="" type="checkbox"/>			
*Lights		<input checked="" type="checkbox"/>			
*Upholstery		<input checked="" type="checkbox"/>			
*Paint		<input checked="" type="checkbox"/>			
*Gless		<input checked="" type="checkbox"/>			
*Jack		NA			NA
*Radio AM/FM		<input checked="" type="checkbox"/>			
*Radio 2-way		<input checked="" type="checkbox"/>			
*TIRES:					
R FRONT		<input checked="" type="checkbox"/>			
L FRONT		<input checked="" type="checkbox"/>			
R REAR		<input checked="" type="checkbox"/>			
L REAR		<input checked="" type="checkbox"/>			
SPARE					



APPENDIX A: VEHICLE PURCHASE REQUEST FORM page 2 of 2

Mechanic's Narrative

The engineering van is 14 yrs old as with any vehicle this age anything can go wrong at any time now, this vehicle has been fairly reliable. The major problem with it is the suspension; it has been overloaded with extra weight. That it can not be overhauled with new springs or shocks. To even up grade suspension would out way the value of this vehicle.

Char L. Willett Jr
Mechanic's Signature

11/13/08
Date

M-H-Q MUNICIPAL VEHICLES

Formerly A-M-I
401 Elm Street
Marlborough, MA 01752

November 10, 2008

Town of Acton
Public Works

Attn : Russell Robinson

Please find below a budget quote for **New Ford Trucks** per a Commonwealth of Massachusetts, Cooperative Procurement Contract. The items offered under this program have been competitively bid and will be subsequently awarded under Massachusetts General Laws, Chapter 7, Section 22B and are available to the Commonwealth's Political Subdivisions.

2009 Ford 15 passenger Club Wagon per spec.	\$21,990.00
5.4 liter Flex Fuel V/8 engine	no charge
Automatic transmission	no charge
Front & rear Air conditioning & heat	no charge
AM/FM stereo	no charge
Vinyl seats & vinyl floor	no charge
Color : Oxford white	no charge
Hinged side cargo doors	no charge
Advance Trac w/ roll stability control	no charge
Contract Price	\$21,990.00

Larry Christensen
Fleet Manager

PLYMOUTH COUNTY COMMISSIONERS COOPERATIVE PROCUREMENT SPECIFICATIONS

FIFTEEN PASSENGER VAN



Manufacturer: **FORD MOTOR COMPANY**
Model Year: **2008 OR CURRENT**
Model Name: **CLUB WAGON**
Specification: **08-15/H2.04**
Contract Price: **\$ 20,701.00**

STANDARD EQUIPMENT SUMMARY

- * 5.4L E.F.I. V8 engine
- * 4 SPD automatic O.D. transmission
- * Auxiliary transmission oil cooler
- * Power steering
- * Maintenance Free 72 Amp Heavy Duty battery
- * 115 AMP high output alternator
- * 4600 pound front axle
- * 6340 pound rear axle
- * Heavy duty suspension and handling
- * Five (5) LT245/75Rx16E all season tires
- * 35 gallon capacity fuel tank
- * Tilt Steering Wheel
- * Intermittent windshield wipers
- * Full factory gauge package
- * Scotchlite reflective lettering
- * AM/FM radio and digital clock
- * Heavy duty full length vinyl floor covering
- * Factory tinted glass windows
- * Front insulation and headliner
- * Driver & right passenger air bags
- * Light and convenience group
- * Fifteen passenger vinyl seating
- * Front & rear air conditioning
- * 4 wheel disc brakes w/ anti-lock
- * Advance Trac w/ Roll Stability Control
- * Aerotype LH, RH manual exterior mirrors
- * Dual Hinged Side Cargo Doors
- * Transfer of Warning Systems
- * Transfer of Radio Equipment

Capital Improvement Program Proposal – Detail

Department Name	FIRE	Project	Engine 24 Replacement	
		Fiscal Year	2010	
Department Head	Chief Craig	Cost	\$525,0000	
		Priority	1	of 2

1. Description - This funding is requested for the replacement of a first-line pumper.

2. Useful Life - 10 Years

3. Purpose (Please 'X' one of the Boxes and Describe, if Applicable)

Schedule Replacement

Increase Personnel Efficiency

New or Expanded Service

**Replace Obsolete or Unsafe Equipment
(Explain Disposal of Old Equipment)**

Other (Please Explain)

4. Justification Insurance Services Office standards require one second line pumper to back up every three (3) first-line pumpers. Currently we have no second line apparatus as two older pumpers were removed from service by State officials. This impacts our ability to provide an adequate number of pumpers for call-back personnel or to provide required second line apparatus that can be utilized when apparatus is out of service for maintenance, repairs or training.

5. How Was this Project's Priority Determined? Current need.

6. Estimated Cost \$525,0000
Less Trade-In (If Applicable)
Net Cost \$525,000

7. Are Non-Town Revenues Available to Reduce Cost? Yes, the ambulance revolving fund.

8. If this Project is Delayed, What will be the Effect on your Department?
 Health and welfare of the citizens may be impaired.

9. Please Describe the Effect of this Project on your Operating Budget.

Personnel Budget
 Increase
 Decrease

Expense Budget
 Increase
 Decrease

10. Attachments, if Applicable.

Capital Improvement Program Proposal – Detail

Department Name	Acton Fire Department	Project	MDT/GPS units – Fire apparatus		
		Fiscal Year	2010		
Department Head	Chief Robert Craig	Cost	\$50,400		
		Priority	2	of	2

1. Description

This request is to purchase mobile data terminals (MDT) and Global positioning devices (GPS) for all fire apparatus. This will allow central command to communicate and deploy forces in a much more efficient and effective manner.

2. Useful Life 10 years

3. Purpose (Please 'X' one of the Boxes and Describe, if Applicable)

Schedule Replacement	X	Increase Personnel Efficiency
New or Expanded Service		Replace Obsolete or Unsafe Equipment
Other (Please Explain)		(Explain Disposal of Old Equipment)

4. Justification

Scheduled vehicle replacement

5. How Was this Project's Priority Determined?

6. Estimated Cost \$50,400
 Less Trade-In (If Applicable)
 Net Cost \$50,400

7. Are Non-Town Revenues Available to Reduce Cost?

Possibly grants could be obtained.

8. If this Project is Delayed, What will be the Effect on your Department?

9. Please Describe the Effect of this Project on your Operating Budget.

<u>Personnel Budget</u>	<u>Expense Budget</u>
Increase	Increase X
Decrease	Decrease

10. Attachments, if Applicable.

**Acton Board of Health
Community Health Assessment**

TECHNICAL PROPOSAL

July 30, 2008

Submitted To:

**Doug Halley, Health Director
Acton Town Hall
472 Main Street
Acton, MA 01720**

Submitted By:

**John Snow, Inc
44 Farnsworth Street
Boston, MA 02210**

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I. OVERVIEW OF JOHN SNOW, INC. QUALIFICATIONS AND EXPERIENCE

A. Overview of JSI

John Snow Inc. (JSI) is a health care research and consulting organization committed to improving the health of individuals and communities, worldwide. Since its inception in 1978, JSI has grown to a staff of more than 400 with expertise in public health, clinical care, research methods, health policy, economics, community development, operations, and information systems. JSI strives to ensure its staff combines cutting-edge academic and scientific knowledge with direct community or health care experience. We feel maintaining this balance enables us to provide our clients with results which are forward-thinking and rigorous but also attuned to the realities of the environments in which we are working.

In pursuit of our mission, JSI has maintained a portfolio of projects that touch upon a wide range of health and health care issues and that have allowed us to work with a highly diverse set of populations. We have worked for academic medical centers, community-based hospitals, community health centers, and other types of community-based providers. We have also worked for community coalitions, state health departments, local boards of health, and for national and international health agencies. We are recognized for our broad public health expertise and have staff who are known for their work in the fields of health promotion, prevention, substance abuse, mental health, chronic disease management, maternal and child health, women's health, elder health, family planning, and infectious disease. We also have worked extensively at the systems-level and have a deep understanding of health care delivery, access to care issues, evaluation, market-level planning, and managed care.

Since our inception, JSI has been assessing community health needs and developing strategic plans to address these needs for communities, health care coalitions, public agencies, private foundations, and provider organizations. Our diverse, multi-disciplinary, multi-cultural pool of technical experts, combined with our management experience, and knowledge of public health issues allows us to conduct the highest quality work effectively and efficiently. Over the past years, we have completed dozens of community needs assessment and strategic planning projects similar in size and scope to what the Town of Acton is proposing. JSI staff, including the proposed Project Team, understand the pitfalls and the opportunities related to these types of projects and we have proven strategies, data collection tools, and other materials that can be drawn on to guide our efforts. We also have a deep understanding of current public health trends, epidemiology, and best practices, as well as current experience in nearly all aspects of health care delivery and prevention. This knowledge and experience will allow us to develop the most appropriate project approach, methods, and data collection tools but will also greatly inform our analysis, and our recommendations with respect to strategic interventions and action steps.

JSI staff have been conducting community health assessments for cities, towns, and health care organizations in and around the Boston area and beyond for decades. This past work has included health assessments for many towns and regions with similar demographic and socio-economic profiles as Acton. Through this experience, we have a good understanding of the area, its geography, and the general community health context. Given our skills, the breadth of our experience and our proven ability to manage complex, highly political processes, we are confident that we will be able to respond to and even exceed the expectations of the Town of Acton. We are eager to join you in your efforts to improve the health status of your community and are excited by the opportunity to work with you on this important initiative.

B. Recent Relevant Project Experience

One of JSI's clear strengths is developing and implementing data collection and needs assessment methodologies that effectively inform and set the stage for successful strategic planning and program development efforts. In recent years, we have conducted dozens of needs assessment and strategic planning projects of all types and sizes. There is significant variation across these projects with respect to the purpose and target population, but nearly all involve roughly the same approach and range of methodologies described in the scope of work proposed below. This experience will be invaluable as we refine our methods, collect and compile data, conduct our analysis, report our findings, and generally work to engage the community. We have conducted community-based needs assessments designed to assess health status, resource gaps, and identify community health needs overall. We have also conducted very focused needs assessments and program planning efforts geared to specific public health topics (e.g., Lyme disease, lead poisoning, child health, HIV, and Hepatitis C) or specific segments of the population (e.g., foreign born populations, older adults, mothers and children, and low income/uninsured populations). Over the years we have learned that relying on a "cookie cutter approach" does not produce the best results. Nonetheless, this experience will allow us to develop methods and a conceptual framework, including community involvement strategies and data collection strategies, that will allow us to complete a high quality assessment and report efficiently.

The following are descriptions of a range of recent needs assessment projects. These projects are categorized into three types. First, there are broad local community, county, or state needs assessments geared to the overall populations in these geographies. Second, there are needs assessments geared to specific segments of the general population. Finally, there are needs assessments geared to specific health conditions or diseases. It should be noted that Alec McKinney, the proposed Project Director for this project, was or is currently involved in ALL of the assessment projects described below. The other members of the project team have also been involved in many of these projects.

1. Broad Community-based, County, or Statewide Assessments

Community Need Assessment and Strategic Planning Project for Beverly Hospital - North Shore Region of MA (Beverly, Boxford, Danvers, Middleton, Peabody, and Topsfield).

Conducted a comprehensive community health needs assessment, program evaluation, and strategic planning project geared to assisting Beverly Hospital to: 1) assess the health service needs and priorities of the major cities and towns in Beverly Hospital's primary service area (Beverly, Boxford, Danvers, Middleton, Peabody, and Topsfield), 2) review the effectiveness/impact of its current community health programs, and 3) assist in the development of a community health strategy to guide the hospital's community health investments over the next 3-5 years. The project team conducted an in-depth secondary data review, a series of key informant interviews across all of the towns, and a consumer mail survey that was sent to a random selection of more than 3,000 residents living in the towns mentioned above. The primary aim of this project was to identify the community health needs and priorities of the hospital's core service area, while also identifying very specific strategic ideas or partnerships that would allow them to further refine and augment their Five-Year Community Health Strategic Plan.

Community Need Assessment and Strategic Planning Project for Lahey Clinic Medical Center - North West Suburban Boston (Burlington and Lexington). Currently in the beginning stages of a comprehensive community health needs assessment and strategic planning project similar to the work described above for Beverly Hospital. The goals of this project are much like the goals described above. The project will: 1) assess the health service needs and priorities of the major towns directly surrounding Lahey's two major facilities (Burlington, Danvers, Lexington, and Peabody), and 2) assist in the development of a comprehensive community health strategy. The project team is in the process of conducting an in-depth secondary data review and a series of key informant interviews. It is also planning to conduct a consumer mail survey that will be sent to approximately 2,000 residents in the areas referenced above, as well as a series of focus groups with community residents to identify health and service needs and priorities.

Community Health Center Planning Project - Portland, ME. JSI recently worked with a broad Community Coalition, convened and facilitated by the City of Portland's Public Health Division, to conduct a targeted community health needs assessment. The goal of this project was to identify the major health disparities, service gaps, and barriers to health care access primarily for the city's low income, underserved populations. A major focus of this work was on Portland's large and growing refugee/immigrant population. The main focus of this work was on compiling and analyzing existing secondary and primary data from local, state, and private sources, including survey data that was collected by the City of Portland in collaboration with a local academic institution. The project team also conducted an extensive series of key informant interviews with community leaders and health care provider organizations. Finally, the project team facilitated a series of coalition meetings to vet the results of the needs assessment and build consensus regarding a targeted community response. The primary purpose of this work was to 1) explore the full range of options to expand access and improve the quality of care for the city's underserved populations, and 2) assess the feasibility of applying for federal funding to support a Federally Qualified Health Center in the City.

Community Needs Assessment Project – Natick, MA. Conducted a comprehensive community health needs assessment for the Town of Natick, Massachusetts and the Natick Community Coalition (NCC). The objectives of the project were to 1) identify the health and social service needs of Natick residents, 2) assess the extent that these needs were being met, 3) identify existing service gaps or barriers to utilizing services, and 4) work with the NCC to develop a community health strategic plan to improve the health and well-being of the town. The Project Team implemented a comprehensive methodology that included a review of existing national, state, and local health data, a town-wide household survey, a series of focus groups, and a set of key informant interviews. The project team also worked with the town to develop their strategy, form a series of community task forces, and to begin the implementation process.

Community Needs Assessment and Engagement Project for Children's Hospital Boston - Boston, MA. Conducted a comprehensive community needs assessment and strategic planning project for the Office of Child Advocacy at Children's Hospital Boston. Much like the hospital work mentioned above, the major goal of the project was to assess the health and social service needs of the hospital's inner-city target population (Dorchester, Roxbury, and Jamaica Plain) and then use this data to refine their community health strategy. As part of this process, the hospital was eager to formally engage the community and the area's major community-based health care providers to ensure that their ideas and interests were incorporated into the assessment and strategic planning process. In addition, the hospital was interested in evaluating the impact of the hospital's current community health programs on the community and reviewing the literature to ensure that there

were not other proven practices or interventions that should be applied across each of the hospital's four community health target areas - asthma, health/nutrition/obesity, violence/injury prevention, and child/adolescent mental health. The project team compiled and analyzed existing secondary data and conducted an extensive array of key informant interviews and focus groups with provider organizations, the general community, and community leaders. The project team also conducted a series of mini-evaluations to assess the impact of its current community health programs and conducted a series of literature reviews on each of CHB's four targeted health areas.

2. Population-specific Needs Assessments

Community Needs and Safety Net Assessment – State of Delaware. JSI implemented a comprehensive needs assessment and strategic planning process for the Delaware Health Care Commission aimed at assessing the health and service needs of the State's low income, uninsured populations. Based on this work, the project team developed a series of policy and program recommendations geared to improving access to care and strengthening the State's health care safety net. The project team worked with a broad stakeholder group to: 1) inventory and assess the State's safety net resources, 2) determine the State's priority health needs, service gaps, and barriers to access, 3) develop a strategic plan to respond to the needs identified, and 4) obtain buy-in from the State's major safety net providers with respect to the major components of the plan. The project team conducted key informant interviews, reviewed existing secondary health-related data, and did GIS mapping analyses. The project team also collected provider financial and service utilization data and convened a series of provider stakeholder meetings.

Maternal and Child Health Needs Assessment - State of Connecticut. Worked with the Connecticut Department of Public Health on a statewide maternal and child health (MCH) needs assessment and strategic planning project. The goal of the project was to determine the priority needs, service gaps, and barriers to access for maternal and child health populations throughout the State. The Project Team compiled and analyzed existing secondary data from a variety of local, state, and federal sources. This information was augmented by qualitative data collected through key informant interviews and a series of eight public forums conducted in communities throughout the State. Once all of the quantitative and qualitative information was collected the Project Team developed and presented a report that characterized the State's high risk MCH populations, identified priority needs, and provided a series of program recommendations. The project team also established a series of performance measures, linked to the priorities identified, that the State could use to track program performance in the future.

Needs Assessment and Service System Analysis for Foreign Born Populations - Howard County, MD. Conducted a needs assessment and strategic planning project for the Center for Community Health Strategies in Howard County, MD aimed at providing information that would allow the County to improve access to health care coverage and health care services for the County's uninsured population. The objectives of this project were to: 1) estimate the number of people in uninsured, foreign born, underserved segments of the population, 2) characterize the major sub-populations within the County's uninsured population, 3) provide detailed demographic information as well as information on health care access and utilization for high-risk groups in the County, and 4) describe the policy and program options available to the County to address expanding health care coverage and improving access for the uninsured.

3. Disease-specific Needs Assessments

Massachusetts Lyme disease Needs Assessment – State of Massachusetts. Currently conducting a comprehensive statewide community health needs assessment on Lyme disease for the Massachusetts Department of Public Health's Office of Communicable Disease Control. There is a growing appreciation and understanding regarding the impact that Lyme disease is having in Massachusetts. Despite this impact, there are major gaps in public awareness and knowledge and significant evidence that primary care providers are not following appropriate diagnosis and treatment protocols. The goal of this project is to collect valid information that will allow the Office of Communicable Disease Control to refine its community awareness, prevention, and education campaigns geared to both the general public and primary care providers throughout the State. The project team has implemented a broad primary care provider mail survey that was sent to more than 4,500 primary care providers throughout the State. It has also conducted a series of in-depth interviews with primary care providers and facilitated a set of regional consumer focus groups throughout the State. Finally, the project team has updated the Office of Communicable Disease Control's literature review on Lyme disease to ensure that it was aware of best practices with respect to diagnosis, treatment, prevention, reporting, and monitoring/evaluation. The project team has completed all of its data collection and is in the process of developing its final report.

County of Santa Clara, Public Health Department, Division of Infectious Disease. JSI conducted a comprehensive needs assessment and strategic planning project designed to assess the need for services and the strengths and weaknesses of the current Hepatitis C services available in Santa Clara County, CA. The project team conducted a series of key informant interviews with health and social service providers and community leaders throughout the County. The project team also conducted a provider survey with the major health and social service provider organizations in the County. Finally, the project team facilitated a series of community meetings with major stakeholders to formally engage the community and refine the county's understanding of community needs, identify gaps in services, pinpoint major barriers to access, and ensure that it had a full inventory of available services. As a result of this work, the County created a broadly represented Hepatitis C Task Force consisting of consumers, clinicians, substance abuse counselors, other community-based service providers, and public health officials that was formally charged with developing and implementing a strategic plan that would strengthen, enhance, and integrate the County's Hepatitis C service system.

Family Planning Needs Assessment – Boston, MA Conducted a needs assessment and strategic planning project for Action for Boston Community Development, Inc. (ABCD). ABCD's Family Planning Program provides comprehensive family planning, HIV/AIDS prevention, and Women's Health Counseling to low income residents in Boston through a network of more than 50 service sites. The needs assessment involved a thorough review of national, state, and local secondary health-related data, including specific data on STDs, vital statistics, unplanned pregnancies, teen pregnancy, abortion, contraception use, and other variables. The project team also collected provider data through a survey, and conducted a series of key informant interviews and focus groups.

II. STATEMENT OF PURPOSE AND UNDERSTANDING

Acton, Massachusetts is a town of 20,586 residents (2006 Census projection estimates) approximately twenty miles outside of Boston to the west. Compared to the Commonwealth of Massachusetts overall, Acton is a largely non-Hispanic, White Caucasian community; however, in

recent years, the Brazilian and Asian (4% Chinese and 3% Asian Indian) populations of Acton have been growing dramatically. The most common places of birth for the foreign-born residents of Acton include India (18%), China (16%), Taiwan (6%), Korea (6%) and Brazil (6%). Additionally, nearly half of Acton's foreign born population has entered the U.S. in the past 10-13 years.

In terms of socioeconomic status, the median household income and percentage of the population with a bachelor's degree or higher are significantly higher in Acton than in the State. Less than three percent of the residents live below the federal poverty level and the unemployment rate is below the state average.

With respect to health care delivery, the major medical centers that serve the Town of Acton include Marlborough Hospital, Tewksbury Hospital and Emerson Hospital. The Acton Board of Health is involved in providing public health nursing to its residents, including home health care and well child visits. Additionally, the Board is dedicated to increasing the health life span, reducing health disparities, responding to emerging health issues/priorities, and achieving universal access to preventive services to those living and working in Acton. To support this commitment, the Acton Board of Health is proposing to conduct a Community Health Assessment that will guide its efforts to evaluate and confirm the health needs of community members. Ultimately, the Acton Board of Health is seeking to: 1) improve the health status of individuals living within its town, 2) evaluate the current health services available to town residents, and 3) develop an action plan around the areas identified as needing improvement in terms of service availability and quality in Acton.

The merit and importance of this effort cannot be understated. An objective, comprehensive assessment of the health care needs and priorities of the communities in the area will serve as the foundation for the Town's long-term community health strategy. The information collected and reported during this project will guide the Board of Health in creating effective community health programs by identifying health care needs, priorities, and unmet needs, informing and motivating the community, highlighting strengths/weaknesses, encouraging dialogue, and leveraging community resources.

Needs assessment and community engagement activities of this kind can be complex and challenging. The following are some of the major challenges that the initiative is likely to confront.

- First, evaluating community health is inherently an emotionally charged and political process. No matter how objective the data, methodology or approach, health issues are multi-faceted, priorities vary, and there will be differences of opinion. In order to encourage full participation and buy-in by different stakeholders, the Project Team will need to implement a comprehensive assessment that is objective and based on quality, reliable, and valid data collected at the local and/or regional level.
- Second, our proposal emphasizes an approach that relies heavily on the collection of existing secondary, quantitative data and primary data collected directly from residents and service organizations in the community. When possible, we will also benchmark the locally collected information against regional, state, and national data so as to clarify how the Town of Acton compares to other areas. In addition, to ensure appropriate buy-in, we will make sure to fully engage the community through a series of meetings/interviews with key stakeholders.

- Third, the Board of Health will need to balance the health-related needs that are drawn objectively from the collected data through the needs assessment with the Board's resources, organizational capacity, and strengths and perhaps even more importantly with the community's stated health care priorities or perceived needs. Data findings matter little if the community at-large does not want or does not have the ability to engage on the issue. In many cases, the Board may be able to bring its own resources to bear on a problem or it may need to work in concert with the community-at large and other organizations to develop community-based efforts or programs.
- Fourth, in many communities, the needs of certain hidden populations such as ethnic/racial minority, low income, and low literacy populations are obscured by the needs of the majority. The impact of this is further compounded by the fact that often these hidden populations have the most significant needs, are more likely to be uninsured, and face other barriers to obtaining services. In order to truly assess and prioritize the needs of a community, an assessment must identify the extent to which there are hidden populations, determine the size of these populations, and develop effective and efficient methodologies to include these voices into the assessment.

Given these challenges and others that have not been articulated, success will depend on:

- Forming an experienced project team at JSI with all of the required expertise and skills
- Recruiting a Steering Committee, comprised of Acton Board of Health, town officials, and other stakeholders (as appropriate) who share a vision for this project and who can guide activities and leverage internal resources.
- Compiling, analyzing, and presenting primary and secondary health-related data in a clear, accessible, comprehensive, and empowering manner
- Creating a process and series of data collection methodologies that fully engages the community and allows the assessment to collect valid, reliable, and actionable data from all segments of the population.
- Identifying an array of compelling health issues that the Board, its major collaborators, and the community at-large are committed to and eager to address.
- Disseminating a report of findings that can guide the Board of Health's community health strategy and lay the foundation for an action plan related to the identified health issues

The following sections outline our approach and provide a detailed work plan.

III. OVERALL APPROACH AND WORK PLAN

A. Overall Approach

JSI has developed this proposal based on our extensive experience conducting projects of similar size and scope. We look forward to reviewing this proposal with the Board of Health to ensure that it is responsive to the intended goals of the project.

In summary, we propose a three-phase approach that will: 1) clearly identify and clarify the health care needs and priorities of Acton residents, including any hidden populations whose needs may be obscured, 2) engage the full range of key stakeholders throughout the town, and 3) present primary and secondary data findings (quantitative and qualitative) in ways that will guide the Board of Health, and help it to target its efforts to improve the health and well-being of Acton residents across the lifespan. We have found in our previous work that a phased approach results in more concrete final recommendations, as well as more solid buy-in among stakeholders.

In Phase I, we will conduct a needs assessment that involves a review and analysis of existing secondary data from local, state, and national sources. We will also begin to engage the community through a series of key informant interviews with community leaders, advocates, and service provider groups. At the end of Phase I, we will bring the Steering Committee and other key stakeholders to the table to present, discuss, and clarify the findings from our preliminary assessment. During this meeting, we will also explore the extent to which additional secondary data sources need to be reviewed and agree on an exact methodology for Phase II of the needs assessment.

In Phase II, we will refine our preliminary analysis by compiling additional secondary data sources; however, the main focus for this phase will be collecting primary data from community residents through a multi-faceted set of methods that will include a community mail survey and a series of focus groups. It will be critical that the exact set of methods be developed carefully with input from the Steering Committee and the data collected in Phase I of the assessment. This information will help to ensure that the effort reaches all components of the population, that all relevant issue areas are addressed in the data collection methods/tools, and that proper buy-in regarding the results are achieved. The culmination of Phase II will be a Preliminary Needs Assessment Report that compiles, integrates, and analyzes data collected in Phases I and II.

In Phase III, the Steering Committee, along with other key stakeholders and the Project Team from JSI, will come together for a Needs Assessment Retreat. The goal of the retreat will be to fully review and discuss the results of the assessment, identify community health priorities in Acton (health topics, special populations), begin to discuss possible interventions, target populations, and finally outline a process for developing a strategic plan and set of action steps to address needs.

Before we move on to a detailed description of our work plan it is important to discuss a number of principles that will guide our efforts on this project.

- **Development of a Clear Work Plan.** Effective team and project management begins with a strong, carefully formulated work plan and timeline that have been developed and agreed upon by the Project Team and Steering Committee. The work plan must detail goals, objectives, tasks, and assign clear roles and responsibilities for the project. This work plan will be refined and approved in concert with the Board of Health at the project's Start-Up Meeting.
- **Close Collaboration with the Acton Board of Health and the project's Steering Committee.** Based on our experience conducting similar projects, it will be important to convene a Steering Committee that the JSI Project Team can work closely with throughout the project. JSI is proposing a phased approach that includes clear deliverables and a series of reports to the Steering Committee. Formal and periodic meetings/conference calls will be

scheduled in order to seek input and keep committee members informed of our progress. At our initial Start-up Meeting, we will identify Steering Committee members and schedule a series of recurring meetings/conference calls with the Committee.

- **Involvement of community residents, community leaders, potential collaborators, and other stakeholders throughout Acton.** Overall success will depend on obtaining feedback and buy-in from the community, potential collaborators, and the range of other health care stakeholders in the area. If the community and stakeholders do not perceive themselves as being partners in this endeavor, then buy-in regarding the project's ultimate recommendations will be difficult and the effectiveness of the activities that arise from this initiative could be limited. The proposed approach involves the community and includes opportunities for more refined community engagement and reporting throughout the process.

B. Discussion of Work Plan

Following is an overview of the objectives, tasks and expected deliverables for each phase.

Initial Start-up and Finalization of Approach

The first activity will be to organize our initial Start-Up Meeting and present a draft work plan. This work plan will detail goals, objectives, and tasks, as well as assign clear roles and responsibilities for the project team. The work plan will also include a listing of expected outcomes and a detailed timeline that will help to ensure that tasks are accomplished according to expectations. This Start-Up Meeting will also be an opportunity for JSI to discuss with the Board the potential key informants to be interviewed. At the culmination of this meeting, the Board of Health and JSI Project Team will have identified individuals to serve on the Steering Committee. Additionally, a set of periodic meetings/conference calls will be scheduled so the Project Team can seek input and update the Steering Committee on the project's progress.

Phase I: Preliminary Needs Assessment and Community Engagement Activities

The activities carried out in this phase will be:

1. Conduct a thorough review of existing secondary data.

The Project Team's first substantive activity will be to compile and analyze existing secondary health-related data from local, state, and federal sources. Data will be compiled at the local level (Town of Acton) whenever possible. The Project Team has extensive experience working with secondary data and is knowledgeable about the strengths and limitations of most major health-related databases. This knowledge will allow us to quickly identify and distill the information we need for this project.

The Massachusetts Department of Public Health (MDPH) does an outstanding job of collecting and compiling data and there is a wealth of relevant, reliable, population-based data available at the state and local levels. The Project Team will rely primarily on data from the US Census Bureau, the Centers for Disease Control and Prevention, and the MDPH Massachusetts Community Health Information Profile (MassCHIP) system. We will collect data from other local, state, and federal

sources as well. Finally, in addition to these standard publicly available health-related data sources, the Project Team will attempt to identify existing reports, articles or media stories, which could help clarify specific community health needs/concerns. Example data sources are listed below:

***Federal Sources:** US Census Bureau; HHS, Centers for Disease Control and Prevention; HHS, Substance Abuse and Mental Health Services Administration (SAMHSA); HHS, Health Resources Service Administration; HHS, Healthy People 2010 and 2020 (Department of Health and Human Services); Annie E. Casey Foundation - Kids Count data; The Kaiser Family Foundation, State Profiles; National Institute for Alcohol Abuse and Addiction*

***State and Local Sources:** Behavioral Risk Factor Survey System (BRFSS); Youth Risk Behavior Surveillance System (YRBS); MDPH Registry of Vital Records and Statistics; MDPH AIDS Surveillance Data; MDPH Bureau of Communicable Disease Control; MDPH Lead Poisoning Prevention Program; State/National Cancer Registry; Massachusetts Department of Education; Massachusetts Department of Housing and Community Development*

These data will allow the Project Team to describe Acton's population demographically in terms of socio-economic status, age, health insurance status, race/ethnicity, citizenship, and other relevant variables. The data will also allow the Project Team to identify sub-populations within the overall population that are particularly at-risk due to high rates of chronic/infectious disease, morbidity or mortality, or other health-related variables, such as teen pregnancy or domestic violence. This analysis combined with our geo-demographic maps, discussed below, will allow us to identify health risks or health needs for specific demographic (i.e. by age, gender, race/ethnicity) or socio-economic (i.e. by income-level or education-level) segments of the population. These data will be summarized by topic area and appended in tabular form as part of a formal Needs Assessment Data Book. The data tables from the secondary data analysis will include not only data for the Town of Acton, but also comparison data (or benchmarks) on the county, state and national levels. These data will be drawn from similar sources in order to show where disparities exist between the Town and other local, state and national areas on key variables.

2. Conduct a series of structured interviews with selected key informants and stakeholders.

In Phase I, the Project Team will begin to formally involve and engage the community through a series of key informant interviews. Key informants will include selected health and public officials from the Town of Acton, as well as community members, including major health care service providers, representatives from advocacy groups, consumers, and other health and community leaders. The purpose of these interviews will be to collect qualitative information that will allow us to confirm and refine our findings from the secondary data review. This information will also provide important community context and allow the project team to gain a clearer picture of the needs and priorities of the community. We will work closely with the Board of Health to develop a list of people to interview. The interviews will be conducted in person or by telephone. While most of the interviews will be one-on-one, group interviews will be scheduled when appropriate. We expect to conduct formal interviews with 25-30 individuals during the course of the project. We anticipate conducting most of the interviews by the end of Phase I, but will likely interview people throughout the needs assessment process as opportunities arise. Additionally, interviews with key informants at later stages of the project will help explain and provide a context in which to interpret the primary and secondary data findings.

The interviews will be conducted using a structured interview guide created by the JSI Project Team with feedback from the Steering Committee. This guide will allow the Project Team to collect consistent information across the series of interviews, but will also promote an open, free flowing discussion. Issues to be addressed in the interviews will include: description/discussion of high priority populations, current population/service utilization trends, description of existing services, identification of service gaps, discussion of barriers to accessing services, and ideas for how the Board of Health could or should be involved in improving community health status.

3. Conduct Geo-demographic/GIS Mapping Analysis.

JSI's experienced map makers will use ArcGIS mapping software to refine and augment our research approach, our analysis, and our reporting. The specific use of GIS mapping technology and the array of formal maps that will be developed will depend on the needs of the project and the results of our data collection efforts. In past projects, we have used mapping technology to refine our sampling and data collection approach. We have also developed service inventory maps that geographically and categorically display the locations of the full range of health and social service providers and/or the town's potential community health collaborators. We have also developed maps that show the geographic variation by Census tract or Census block group with respect to key demographic, socio-economic, and health-related variables drawn from our secondary and primary data collection efforts. It can also be useful to compile state and regional health and health-related data to explore how the target area compares to its neighboring locales and other areas of the State or the State overall.

4. Create Preliminary Needs Assessment Reports and Presentations.

During Phase I, the Project Team will compile and analyze the collected data and develop a Preliminary Needs Assessment Report for the Board and Steering Committee. The Preliminary Report will summarize all study findings to-date and allow the Project Team to begin to identify community needs and community health priority areas. It will also highlight areas where further secondary data analysis could be useful and facilitate the development of the optimal primary data collection methods for Phase II of the project. In addition to a Preliminary Report, the project team will also develop a Town of Acton Health Care Report Card that will formally present 30-40 key health and health-related indicators and show how the Town of Action compares to Middlesex County and the Commonwealth of Massachusetts.

Phase I: Deliverables

- Preliminary Report of Phase I data (Secondary data, key informant interviews, initial mapping, proposed next steps and refined methods for Phase II)
- Summary Health Care Report Card (Comparing Town of Acton to CHNA, County, State, Nation, and Healthy People 2010 goals)
- Secondary Data Tables – Appended in Data Book (Hardcopy and Electronic)
- PowerPoint Presentation with relevant maps

Phase II: Refined or Targeted Needs Assessment and Community Engagement

Based on discussions with the Steering Committee post-Phase I, the Project Team will collect additional secondary data to fill knowledge gaps or explore specific areas of interest. However, the bulk of the work in Phase II will focus on collecting primary data from a targeted set of residents to refine our understanding of the health care needs, priorities, or concerns of these specific demographic or geographic population groups. Activities of Phase II will include:

1. Collect additional secondary data, as needed.

One of the advantages of a phased approach is that it allows the Project Team and Steering Committee to review and analyze data throughout the needs assessment and explore in-depth particular findings. It is likely that, during Phase I, the group will identify particular areas of interest that warrant additional data and analysis. The Project Team will be prepared to respond to these data needs at the outset of Phase II.

2. Collect primary data directly from community residents through focus groups and/or a community survey.

The main activity in Phase II will be to build on the data collected in Phase I and collect primary data from residents of the Acton area. It will be important that we consider this task carefully and develop a targeted methodology that is responsive to the goals of this project and the preliminary findings from Phase I, as well as captures hard-to-reach populations that are often left out of data collection efforts.

The data from Phase I will provide the Board and the Steering Committee with a rigorous, quantitative review of the major health risks and community health needs for the Acton area and describe how these issues compare to the other larger geographies. It will also highlight in a more qualitative way the health needs, priorities, and concerns based on information collected from key community stakeholders. Phase I, however, will not provide us with all of the necessary quantitative or in-depth qualitative information related to the health issues identified by specific population groups. For example, based on the Steering Committee's knowledge of the area, we may know that the elderly population of Acton struggles with access to certain health and social services. However, given the size of this subpopulation in relation to the Town's overall population, it is likely that this high need population would be hidden or obscured in the secondary data review. A targeted focus group and/or community survey could be used to provide valuable information on certain topics or subpopulations that would refine our understanding of these issues or raise awareness about issues that would otherwise remain hidden.

In Phase II, we propose that the Project Team conduct a community health survey and a series of focus groups with specific communities or population groups. The following is a brief description of our methodology. The JSI Project Team will work with the Board and Committee to develop the optimal approach in collecting primary data from community members and will alter its methods and scope of work as appropriate.

Community Health Survey

A community health survey would allow us to collect more detailed information on specific health topics of interest or for certain subpopulations within the Town of Acton. One advantage of a survey is that, if designed correctly, it can gather rigorous, statistically significant data that can be reliably compared to data at other geographies (county, state, national) from other data sources that ask similar questions. If one is questioning the extent to which an issue is affecting the population or the public's perceptions about the most pertinent health topics affecting its community, then a survey is a very effective tool. For example, a survey could be used to collect health information on particular health indicators from a specific group of people that were not specifically addressed or referred to in the secondary data review. In a survey, questions can be asked that address access barriers, service gaps, unmet needs, and priorities, which subsequently provide reliable prevalence estimates for the overall sampled population.

We propose collecting primary data through a community mail survey. We have developed strong survey instruments for local and state governments and major medical centers in the Boston area. We include in our survey instrument previously validated questions (from the BRFSS, National Health Interview Survey, other community health surveys). Survey topic areas include: sociodemographics, self-reported health status (mental, physical), disease status (chronic, infectious), health care access, health and social service need, health and social service utilization, health behaviors, and perceptions of community health problems, among others. By including questions that have been asked on other surveys in the Commonwealth of Massachusetts, we have pre-existing benchmarks to compare the Acton Needs Assessment Survey findings against. We are also very cognizant of how the length of a survey can impact the participation rate. Thus, we will attempt to limit the length of the survey to 7-8 pages (front and back). The survey font type will be easy to read and large enough for those with vision problems to see. Finally, we will take into account the literacy levels of the Acton population in the development of the survey questions, so that all residents will be able to fully understand and respond to the questions. JSI has extensive experience in survey design and development and has a Health Survey Research Group that will assist in the implementation of the mail survey.

While the issues with respect to designing community health surveys are complex and varied, JSI has vast experience in designing effective sampling and survey methodologies. If one is trying to reach a relatively large, homogeneous group in the general population then one can rely on a sample size of roughly 500-600 people and expect to collect rigorous, reliable data. If the analysis requires stratification by age, gender, or race/ethnicity, then this would require a larger sample size and perhaps a more complex methodology. For this project, our budget estimates are based on developing one core survey and collecting data from roughly 800-900 residents total. We propose a two-stage sampling approach: 1) randomly sampling community members from the Town of Acton that are included on the Acton Town List, and 2) accessing a convenience sample of hard-to-reach populations (i.e., low-income, uninsured, Asian and Brazilian subgroups) that have very different needs and experiences with Acton's health and social service network than the majority population.

For the random sample, we hope to randomly select from the Town Resident list a sample of 1,200 people (assuming a 50-60% response rate for a final analytic sample of 600-720). These individuals will receive a prenotification letter alerting them to the purpose of the project and the upcoming receipt of a health survey. Two weeks later they will receive a copy of the health survey; two weeks after that, residents will receive a reminder letter, again alerting them to the purpose of the project

and the importance of their participation. At this point, if response is not meeting our expectations, we may opt to provide sampled residents with a link to an online version of the survey as an alternative method to complete the survey. The methods we routinely use in our survey work (prenotification letter, reminder letter, multi-modes) are all adopted with the goal of ensuring a high response rate (50-60%). The higher the response rate to a survey, the more valid the data and representative the sample of the total population.

In addition to surveying a random sample of Acton residents, we aim to survey a convenience sample of the hard-to-reach populations of Acton (i.e., Asians, Brazilians, low-income, uninsured). We will target specific health and social service providers in the Acton township that primarily serve clients falling into these groups and ask for their participation in the needs assessment. These may be service providers that were originally identified for participation in the key informant interviews. JSI Project staff will visit these service provider locations and attempt to survey between 100-200 persons. The survey can either be completed by the individual or completed one-on-one with the JSI staff member.

As hard copy surveys are returned from our random and convenience samples, they will be scanned using Teleform technology and converted to an analytic dataset. Additionally, if we choose to offer an online survey option, data can easily be downloaded from our web survey tool (SurveyMonkey) and appended to the mail survey analytic dataset. The data will be cleaned and coded in SAS version 9. For categorical variables, prevalence estimates will be reported; for continuous variables, means and ranges will be reported. We will likely want to evaluate health disparities for certain subgroups (low income, racial/ethnic minorities, etc.). Differences between subgroups will be tested using Chi Square statistics for categorical variables and t-tests/ANOVA for continuous variables.

Focus Group Series

Focus groups will augment the findings from the community survey and Phase I by collecting more detailed information from specific geographic or population groups. Clarifying health needs and identifying why services are difficult to access can be difficult because the reasons are often multi-faceted or vary depending on who one is talking to. The focus group process will allow us to 1) collect information from targeted population groups or population groups that are difficult to reach, 2) better understand and characterize the needs, priorities, service gaps, and barriers that hinder health care access, and 3) explore strategic and programmatic options that could address the identified health issues. Well-designed and moderated focus groups allow complex issues to be teased out, develop potential hypotheses about causal relationships, and explore why Acton community members perceive things the way they do.

We propose conducting a series of four focus groups that will last approximately 1.5 hours each. The specific populations recruited to participate could be representative of a specific sociodemographic group or of a specific health issue (e.g. men with diabetes or women with breast cancer). Success will rely on effective and efficient recruitment of focus group participants, strong focus group moderator guides, and skilled group moderation. JSI has extensive experience in all of these areas. With respect to recruitment, we will use a multi-dimensional approach and a screening process to ensure a representative and random selection of participants. Ideally, we aim to recruit roughly 30 willing participants for each group through a variety of methods (i.e., at community locations like grocery stores, libraries, movie theatres; through schools and other community organizations; online using craigslist). We would then randomly select 10-12 people from this list to

participate in each of the planned focus groups with the hope that at least 8 participants would show. All of the participants will receive a \$25 stipend, as well as food and beverage, for participating. We will attempt to identify community-based organizations (e.g. local Dunkin Donuts) that might be willing to provide gift certificates as an additional incentive to participation.

Phase II: Deliverables

- Preliminary Report of Phase II Data (primary data, additional key informant interviews, additional maps, additional secondary data collected during Phase II)
- Primary data tables (survey and summary focus group findings) – Appended in Data Book (Hardcopy and Electronic)
- PowerPoint Presentation with relevant maps

Phase III: Presentation and Interpretation of Findings to Inform Future Strategies

Once all of the primary and secondary data has been collected and compiled, the Project team will conduct a final integrated analysis, facilitate a Community Health Retreat, and create a series of Draft and Final Needs Assessment Reports that will allow the Project Team to fully vet and present all of the findings from our quantitative and qualitative data collection and analysis efforts.

Activities of Phase III will include:

1. Report Development.

Once all of the primary and secondary data have been collected and compiled, the Project Team will conduct a final integrated analysis of the qualitative and quantitative data collected in Phases I and II. Based on this analysis, the project team will develop a written Draft Needs Assessment Report and audio/visual presentation. This report will present findings with respect to the community health care needs, challenges, and priorities, as well as identify areas where Acton does well and stands out against its surrounding communities and the comparison data. The report will also identify service gaps, barriers to access, and highlight risk factors. The data will be reported for the Town overall, as well as for selected subpopulations (e.g., racial/ethnic groups, low income populations, or certain geographic communities).

2. Strategic Planning Retreat

This report will be presented to the Board of Health and Steering Committee and will serve as the basis for discussion at a Data Presentation Retreat. The primary goals of this retreat will be to 1) present our final, integrated findings, 2) interpret these findings with respect to our collective knowledge about the Town of Acton and its residents, and 3) select a number of community health priorities that the Town of Acton Board of Health can potentially focus its future funding and initiatives on. Ultimately, we hope that our findings can provide a foundation on which the Board of Health can design and develop a series of community-based programs that it can implement independently and/or with specific community partners to better the health of its residents in the long-term.

Phase III: Deliverables

- Final Report including Phase I and Phase II Data, incorporating feedback from both Phase I and Phase II Steering committee meetings (primary data, additional key informant interviews, additional maps, proposed next steps and discussion of Phase III)

IV. MANAGEMENT APPROACH

As stated above, one of our first tasks will be to refine and mutually agree on a detailed workplan, which will lay out the project's scope of work, describe the associated deliverables, assign responsibilities, and clarify the project's timeline. Included below on pages 19 and 20 is a detailed timeline and tasklist. Please refer to Section III A. above for a more in-depth discussion of our approach and some of JSI's guiding principles that we apply to manage these types of projects.

The project will be conducted by an experienced, multi-disciplinary Project Team, which will allow us to complete the work effectively and efficiently within the project's limited budget and tight timeframe.

Alec McKinney, MBA will serve as Project Director. Mr. McKinney has extensive experience conducting community-based and primary care-based community health needs assessments for a variety of clients and within a diverse array of settings. He will participate in all aspects of the project and will be responsible for the management of the project, as well as the quality and timeliness of all deliverables.

Mr. McKinney's areas of expertise include program evaluation, strategic planning, community needs assessment, financial analysis, organizational sustainability, and consumer involvement particularly in the areas of primary care planning, access to care/insurance coverage, service delivery, and resource integration. He has worked with an array of underserved, often uninsured populations, but has extensive experience working with foreign born populations, maternal and child health populations, children with special health care needs, elderly populations, the homeless, and those with mental health and substance abuse disorders. Mr. McKinney has spent a majority of his professional career working with state and local agencies as well community-based coalitions and service providers to assist them to expand, strengthen, and/or integrate health care services with the goal of improving access and the quality of care.

His analytic skills include statistical data analysis, geodemographic (GIS/mapping) analysis, and financial modeling, as well as survey research, focus groups, and secondary data analysis. He has facilitated large group meetings and conducted strategic planning sessions with a variety of different groups. One of his strengths is developing and implementing data collection and needs assessment methodologies that effectively inform and set the stage for successful program development, strategic planning, and coalition development efforts.

Karen Schneider, PhD will serve as the Data Analyst on the Acton Community Health Assessment project. She will be primarily responsible for compiling and analyzing local, state and national data sources for the community health profile. Additionally, she will lead the development of the survey methodology and survey instrument. Finally, she will lead the management and analysis of the community survey data, as well as assist in interpreting results. Dr. Schneider has extensive

experience working in these roles on other needs assessment projects at JSI, including the Beverly Hospital Needs Assessment, the Massachusetts DPH Lyme Disease Needs Assessment, and the evaluation of consumer and worker satisfaction with the MassHealth Personal Care Attendant (PCA) program. Dr. Schneider received her doctorate in epidemiology from Brown University

Natalie Truesdell, MBA, MPH will serve as a qualitative Data Analyst on the Acton Community Health Assessment project. Ms. Truesdell will work with Alec McKinney in conducting key informant interviews, organizing and leading focus groups, and working with Ms. Schneider for a combined analysis of secondary data with the qualitative data research. Ms. Truesdell has conducted key informant interviews in several regional needs assessments and evaluations including an ongoing needs assessment for Niagara and Chautauqua Counties in New York. Ms. Truesdell is currently interviewing 50 key informants and community health center providers for an assessment of access to care in six rural communities in Maine for the Maine Health Access Foundation.

Orla Kennedy, BA has been with JSI since November, 2006. Ms. Kennedy will provide support in qualitative and quantitative data collection by assisting in setting up key informant interviews, focus groups, and survey logistics. She provides research and administrative support for needs assessments, quality management projects, and strategic planning initiatives at the local, state, and federal levels. In addition to specific project duties, she provides research support for 330 grant proposals and grant renewals for community health centers. She is currently working with The Maternal and Child Health Bureau of the Health Resources and Services Administration, Division of Services for Children with Special Health Needs (DSCSHN) in providing evaluation services support of the DSCSHN Healthy People 2010 objectives and the President's New Freedom Initiative (NFI). Her previous work on needs assessments lend her experience in survey distribution, data collection and analysis, and key informant interviews.

Other Research and Support Staff. Depending on the needs of the project, the Project Team will be supported by other research and administrative assistants with significant public health, research, and administrative experience. The Project Team will also have access to JSI's pool of specialized senior staff and technical experts. JSI takes pride in its ability to leverage, either formally or informally, staff members who have recognized expertise in nearly any public health area. Given the range of health-related issues that will inevitably be involved in this study, the fact that JSI has formal and informal access to such a large pool of public health experts will be extremely useful and allow the Project Team to incorporate a diversity of knowledge in a cost effective manner.

A detailed draft workplan (*Table 1*) providing a listing of specific project activities along with a timeline is included in Appendix A. It will be important that the JSI Project Team meet with the Acton Board of Health as soon as possible, if and when the contract is awarded, to clarify project expectations, develop a final, detailed work plan, and agree on a set of meetings/conference calls. The JSI Project Team will come to this kick-off prepared with a draft work plan, as well as a list of questions and initial logistical issues to discuss with the full group.

Meetings in each phase of the project will present opportunities for communication and preliminary data sharing between the JSI Project team and the Steering Committee. These meetings will be important for receiving feedback from the Steering Committee and Acton Board of Health on the success of each phase of the project and how the intermediary results should inform the next phase of the project.

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May 8, 2008

Doug Halley, Director of Health
Board of Health
Town of Acton
472 Main Street
Acton, MA 01720

RE: Letter Report
Design Basis Report for Sewer System Extension
Spencer/Tuttle/Flint & West Acton Center A
Acton, Massachusetts

Dear Mr. Halley:

The following letter report details the conceptual layout and preliminary engineering design requirements for the West Acton Center and Spencer, Tuttle, & Flint (STF) sewer extension project as recommended in the Feasibility Study and Conceptual Design Technical Memorandum dated March 26, 2008. The results of this study were presented at a public meeting to the Acton Water Resources Advisory Committee on March 12, 2008. (Woodard & Curran (W&C) presentation is attached). Once reviewed and validated by the Town of Acton, the detailed design phase will commence. This Design Basis Report is a more detailed discussion of the recommended scenario of alternatives which includes STF-1 and WAC-1. There is currently sufficient capacity at the Acton WWTP to receive flow from both of these selected project areas. If these two project areas are combined into one construction project, the project will benefit from cost savings from an economy of scale. A description of the two alternatives that make up this scenario is as follows:

West Acton Center - This alternative is similar to the conceptual layout in the Sewer Extension Proposal from July 2007. A pumping station on West Road will collect sewer flows from all of West Acton Center east of the railroad except for Massachusetts Avenue. This pump station will discharge to a gravity sewer near the final pump station along Massachusetts Avenue. This is the conservative approach including a pumping station at the end of West Road which may be excluded as discussed in the alternative below. The portion of Massachusetts Avenue on the west side of the Brook will gravity feed to the pump station. This final pumping station will discharge to the Massachusetts Avenue Sewer east of Prospect Street. This will include one river crossing. The portion of Massachusetts Avenue east of the river will consist of a low pressure sewer extending to the Massachusetts Avenue Sewer requiring approximately 17 grinder pumps. The sewers in this alternative are positioned within the roadway layout or on Town property, eliminating the need for any easements. The proposed layout is attached in Figure 1: Recommended Alternatives WAC-1 & STF-1.

An option for these alternatives exists along Massachusetts Avenue east of the Brook which will be served by low pressure sewers. If the STF area is sewer first, this option would entail replacing a segment of the low pressure sewer by gravity sewers and connecting directly into the Flint Road gravity sewer. This would eliminate the need for several grinder pumps for the properties located between Flint Road and Prospect Street on Massachusetts Avenue. This option will be reviewed further in the preliminary design phase.

Spencer / Tuttle / Flint - The three cul-de-sacs located off Tuttle Road and Lothrop Road, specifically, Wayside Lane, Tuttle Drive, and Torrington Lane may require low pressure sewers to tie into the gravity sewers. Low pressure systems can consist of a single Town-owned system similar to PS #9 on Clover Hill Road or individually-owned units like High Street. These three low pressure sewers serving the cul-de-sacs will require approximately 13 grinder pumps and allow the STF area to be served by a single pump station. This alternative sites the pump station at the end of Flint Road. Lothrop Road will connect to this station via



an easement across two properties. From the pumping station, sewage would be pumped directly to the Massachusetts Avenue collection system. Once higher resolution topographic information is available, considerations should be made for locating the pumping station on Lothrop Road which was discussed in the Feasibility Study. The more cost effective option for locating the pumping station will be selected.

Siting Constraints – Several sources were used to identify potential constraints within the project area. A search of Massachusetts Department of Environmental Protection (MassDEP) 21E sites is attached. Sites impacted or adjacent to construction activities should be noted in future specifications. There are no habitat areas of rare and endangered species identified within the project areas (see attached figure: 2006 Priority Habitat and Estimated Habitat Natural Heritage & Endangered Species Program). The attached MassDEP Priority Resource Map identifies the wetland areas and nearby Zone II boundary. The project area is located within Zones 3 and 4 of Acton's Aquifer District which are the "aquifer protection area" and "areas outside of the aquifer protection area, recharge protection area, and well protection area respectively are shown on the attached Town of Acton Aquifer Protection map. The FEMA Flood Insurance Rate Maps (FIRMs) have been attached which is used in the design process for locating sewer pumping stations and gravity sewer manholes.

1.0 Initial Pumping Station Equipment List

Equipment List – Typical Pumping Station	
Proposed Equipment	Comments
Electric Service: 250 Amp entrance at 277/480 volt, 3phase, 4 wire, 60Hz	New service
5 KVA Transformer	provides 110v / 220v
Backup Generator	If needed
Automatic Transfer Switch	For backup generator if necessary
Concrete Wet Well	With interior coating system
SCADA System	Conforming to Acton's standard
Pump Control Panel	Conforming to Acton's standard
Pump Station MCC	Conforming to Acton's standard
Alarm System w/ dialer	Conforming to TR-16 requirements
2 or 3 Electric Submersible Non Clog Cutter Pumps	High efficiency
Odor Control / Ventilation	
Water Service	New service
Heat Box	
Bypass connection	
VFDs	To regulate flow rates

2.0 Availability of Electrical and Other Utilities

Power is available in the streets where the pumping stations have been proposed, specifically West Road, Massachusetts Avenue, and Flint Road. Both 120 volt and 240 volt single phase power can be provided by a 5 KVA transformer if higher voltages are available. The electrical requirements of the proposed pumping



stations are expected to range up to 125 KVA under connected load. The table below includes a subset of the applicable Town of Acton Utility Permitting Fees.

Acton Building Department Permit Fees ^{1, 2, 3}	
Wiring (Permit)	\$0.50/\$1,000 building cost; maximum # inspections = permit cost divided by 60
Plumbing/Gas	(\$130-two insp.) \$60 each additional inspection up to 30 fixtures

¹ Administration fee for each permit is \$10.

² The fee schedule based on \$60/hr. for inspectional services

³ The permit fee would be determined by how many inspections are needed

The new electrical service will meet the requirements defined in NSTAR's 2005 Information and Requirements for Electric Service for: Customers, Electricians, Architects, Engineers, Builders, and Inspectors. The fees for such work are as follows:

NSTAR Service Fee Schedule	
Design Deposit for Permanent Service - Small commercial/industrial	\$250
Design Deposit for Permanent Service - Medium commercial/industrial	\$500
Deposit for Permanent Service - Large commercial/industrial	\$1,500

An NSTAR work order application form must be completed for a new service to the proposed pumping stations. Typical information that must be included is:

- Full address (street number and name) of project's location
- Company name (if applicable)
- Contact name
- Phone number(s) where the contact(s) can be reached
- Name of development and lot number (developers only)
- Type of service requested (new, increased, relocated, or temporary service)
- Target completion date for service
- Copy of your site plans (minimum scale of 100 feet = 1 inch)
- Written approval by the authority having jurisdiction (i.e., federal, state or city)

3.0 Architectural Concepts – Pumping Stations

Proposed pumping station buildings should consist of masonry construction with a decorative block exterior consistent with the other station. Masonry block color should match the aesthetics of the area. Clapboard exteriors are possible, but have an elevated maintenance cost. The majority of equipment will be housed within the building or the wetwell causing no degradation in aesthetics. New electrical and control systems will be located inside the existing building. An odor control unit will be installed adjacent to or behind the building. All colors will be natural earth tones or blend with the surrounding area. From an architectural viewpoint, the pumping station consists of mostly below grade buried equipment such as a wet well and influent and force main piping.

4.0 Fire Protection

The 2003 edition of the NFPA 820 Standard for Fire Protection in Wastewater Treatment and Collection Facilities defines the fire protection requirements for pumping stations. The table below summarizes the fire and explosion prevention and protection measures required by NFPA 820 for pumping stations. Automatic



sprinkler systems are not included in the fire protection measure requirements. Fire detection and alarm systems shall be installed and maintained in accordance with NFPA 72: *National Fire Alarm Code*.

Location	Fire Protection Measures Required
Wastewater Pumping Station Wet Wells	Combustible Gas Detection System
Abovegrade Wastewater Pumping Station with access to wet well	Portable Fire Extinguisher
Abovegrade Wastewater Pumping Station without access to wet well	Portable Fire Extinguisher
Odor-Control System Area	Combustible Gas Detection System & Fire Detection System

5.0 Safety & Health¹

Ventilation

General: Adequate ventilation should be provided for all pumping stations. Where the pump pit and influent system are below the ground surface, mechanical ventilation is required, especially when screens or mechanical equipment requiring maintenance or inspection are located in the wetwell. However, the wet and drywell ventilation systems should not be connected. Switches for the operation of ventilation equipment should be marked and located conveniently.

Wetwells: Ventilation may be either continuous or intermittent dependant on the final use of the wet well level. For continuous operation, at least 12 air changes per hour should be provided. For intermittent operation, at least 30 complete air changes per hour should be provided. Although the lower section of the drywell is being reused for other purposes, ventilation should be added. Heating should be maintained in the upper wetwell level given the electrical and control equipment.

Drywells: Ventilation should be continuous. Heating is required and dehumidification is desirable. For continuous operation, at least 6 complete air changes per hour should be provided.

Safety

Adequate provisions should be taken to protect the operator and visitors from hazards. In general, the design and construction of pumping stations should meet all prescribed local, state, and federal safety laws and codes. Areas defined as confined spaces should be avoided to reduce safety risks to personnel during normal operation and maintenance. Safety should include the following:

- Handrails at openings, and stairways.
- Guards around belt drives, gears, rotating shafts, and moving equipment in the building.
- Warning signs as appropriate.
- Provisions for power lockout controls at all pumps and equipment.
- Eye-wash stations if odor control chemicals are used.
- Adequate lighting in all areas of the pumping station.
- Provisions for confined space entry in accordance with OSHA and regulatory agency requirements.
- First aid equipment.
- Fire extinguisher.

¹ Source: NEIWPC. 1998. TR-16: Guides for the Design of Wastewater Treatment Works



6.0 Operation and Maintenance¹

Maintenance programs adopted by the Town of Acton should comply with recommendations in the manufacturer's manuals. It is the function of sustaining or restoring system components so that each component performs its intended work safely, efficiently and economically. Pump station equipment must be maintained in proper working condition for the collection system to operate at peak performance. Breakdown of pump station equipment could cause service disruptions, surcharge into sewer system, and sewer backups into service lines or potential resource areas adjacent to the pump stations. These problems can normally be avoided by establishing a proper maintenance program. A good maintenance management system will reduce breakdowns, extend equipment life and provide more efficient manpower utilization and performance. Therefore the Preventative Maintenance Schedule (attached) will be presented to the Town of Acton Department of Health for assimilation into or comparison with their operation and maintenance protocol.

7.0 Instrumentation Basis of Design

The process controls and required electrical system will be located within the existing Bamum Road building. The control system will align with regulatory requirements, good operation and maintenance practice, and the Town of Acton's standards. The starting order of the three pumps will be automatically alternated to improve pump life spans. Pump run-time meters will be installed and monitored by the control system.

The alarm system for the pump station will also be supported by a separate battery backup. The autodialer will transmit alarm information to the current monitoring location designed by the Treatment Plant Operator. The controls system will be an open architecture type for complete integration with the SCADA. The following alarms are necessary for the safe and successful operation of the station:

- Wet well – high water level
- Wet well – low water level
- Loss of power (monitoring each phase)
- High water level in the drywell sump
- Level sensor malfunction
- Standby power failure or malfunction of the pump
- Low Oxygen level in drywell
- Explosive Gases – (High CH₄) in drywell
- High Hydrogen Sulfide in drywell
- Intrusion alarm
- Loss of alarm transmission line

8.0 Design Standards

Sewer Collection System – The Sewer Collection System shall be designed according to Chapter 2: Sanitary Sewers/Collection Systems of TR-16 Guides for the Design of Wastewater Treatment Works. Sewers, including building sewers and connection should meet the requirements of Acton's Sewer Use Regulations. Sewer pipe should be Poly Vinyl Chloride (PVC) or Cement Lined Ductile Iron (CLDI) pipe as specified in the Sewer Use Regulations. Typical details from Acton's Sewer Use Regulations are included as an attachment. Sewer manholes will be precast or cast-in-place concrete capable of withstanding 8 tons without failure and prevent leakage in excess of one gallon per day per vertical foot of manhole, and provided with a 30-inch cover inscribed with "S" or "SEWER".



Pumping Stations – Pumping stations shall be designed according to Chapter 3: Wastewater Pumping Stations of TR-16 Guides for the Design of Wastewater Treatment Works. Pumping stations should be located outside of the flood plain where possible and should remain operational during the 25-year flood. Pumping stations will be equipped with submersible pumps capable of passing a 3-inch solid and designed to handle the peak design flow with the largest pump offline. Station control and instrumentation will be capable of monitoring the standard eight alarms and be able to communicate this information to operators. Pumping stations shall have run time meters for the pumps as part of the controls & instrumentation system.

Pumping stations will have an outlet for a portable generator. The Town's operation and maintenance (O&M) contractor has a 480 volt, 3 phase portable generator for use in case of an area wide extended power outage.

9.0 Preliminary List of Contract Documents

The contract documents for the detailed design phase of the Sewer System Extension will include the following:

Expected Design Drawings

G-01	General Notes, Index and Abbreviations
C-01	Existing Site Plan and Work Locations
C-02, C-03, C-04	Sewer Plan and Profile (approx. 1000 LF per sheet)
C-05	Sewer System Details
PS-01	Pumping Station Plan and Details
M-01	Pumping Station Mechanical Plans, Sections and Details
M-02	Pumping Station Mechanical Plans, Sections and Details
E-00	Electrical Notes, Legend and General Index
E-01	Barnum Road Pump Station Power Plan and Details
E-02	Barnum Road Pump Station Power Plan and Details
I-01	Instrumentation and Controls Drawing
I-02	Instrumentation and Controls Drawing

Expected Specifications

DIVISION 0 - BIDDING AND CONTRACT REQUIREMENTS

Advertisement For Bids.....	00100
Instructions to Bidders	00200
Form of General Bid	00410
Agreement	00500
Performance Bond	00610
Payment Bond	00615
Certificate of Final Inspection, Release, And Acceptance.....	00630
General Conditions	00700
Supplementary Conditions	00800
State Regulations	00830
Attachment A - Wage Rates	00830
Attachment B - Excerpts from MGL 30, 82 & 149	00830
Attachment C - Change Orders	00830
Permits	00890



DIVISION 1 - GENERAL REQUIREMENTS

01010	Summary	01010-1
01018	Items Provided by Owner	01018-1
01025	Measurement and Payment.....	01025-1
01090	Definitions and Standards.....	01090-1
01155	Schedules, Reports, Payments.....	01155-1
01200	Project Meetings	01200-1
01300	Submittals	01300-1
01400	Procedures and Performances - Quality Control	01400-1
01500	Temporary Facilities	01500-1
01600	Products and Substitutions	01600-1
01700	Project Closeout	01700-1
01800	Operation and Maintenance	01800-1

DIVISION 2 - SITE WORK

02110	Site Clearing	02110-1
02150	Shoring and Bracing	02150-1
02200	Earthwork.....	02200-1
02210	Temporary Erosion Control.....	02210-1
02480	Landscape Work	02480-1
02665	Water Distribution Piping	02665-1
02710	Sewers and Drains	02710-1
02720	Manholes	02720-1

DIVISION 3 - CONCRETE

03010	Concrete	03010-1
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DIVISION 5 - METALS

05500	Metal Fabrications	05500-1
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DIVISION 6 - WOOD AND PLASTICS (If Wood Buildings)

06200	Finish Carpentry	06200-1
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DIVISION 7 - THERMAL AND MOISTURE PROTECTION

07160	Waterproofing, Dampproofing, and Caulking.....	07160-1
07180	Water Repellents	07180-1

DIVISION 8 - DOORS AND WINDOWS

08710	Finish Hardware.....	08710-1
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DIVISION 9 - FINISHES

09900	Painting.....	09900-1
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DIVISION 11 - EQUIPMENT (If Necessary)

11234	Chemical Feed System.....	11234-1
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DIVISION 13 - SPECIAL CONSTRUCTION

13210 Pump Stations Wetwell, Pumps and Appurtenances..... 13210-1
 13650 Control System / Telemetry 13650-1

DIVISION 15 – HEATING & VENTILATION MECHANICAL

15000 Basic Mechanical Requirements..... 15000-1
 15060 Process Pipe and Fittings 15060-1
 15090 Supports, Anchors, and Seals 15090-1
 15100 Process Valves 15100-1
 15191 Fuel Oil / Gas Piping System 15191-1
 15850 Air Outlet and Inlets 15850-1

DIVISION 16 - ELECTRICAL

16010 General Requirements for Electrical Work..... 16010-1
 16030 Electrical Testing 16030-1
 16050 Installation of Electrical Equipment..... 16050-1
 16060 Installation of Wire and Cable 16060-1
 16070 Grounding..... 16070-1
 16110 Raceway and Fittings 16110-1
 16200 600 Volt Wire and Cable 16200-1
 16400 Switchboards 16400-1
 16410 Motor Control Centers 16410-1
 16470 Panelboards..... 16470-1
 16490 Safety Switches 16490-1
 16500 Interior Lighting Fixtures 16500-1
 16540 Interior Transformers 16540-1
 16621 Generator Sets 16621-1
 16700 Fire Alarm System 16700-1

10.0 Schedule

The table below illustrates a standard Conceptual Schedule. The anticipated earliest construction start date is April 2010 with a completion date later that year.

Conceptual Schedule	
Task	Month / Duration
Preliminary Engineering <i>Assuming Project Proceeds</i>	July - Sept. 2008
Funding Application(s) Submitted	August 2008
Special Town Meeting <i>If Necessary</i>	Fall 2008
Finalize Funding Options	January 2009
Approve Design & Construction Funds	ATM Spring 2009
Design & Permitting	July 09 - October 09
Funding Submittal (if appropriate)	October 2009
Advertise for Bid	Winter 2010
Start Construction	April 2010
Finish Construction	December 2010
Start Connections	January 2011



11.0 Draft Scope of Services

A Draft Scope of Services is attached. The Scope of Services includes the following major tasks:

- Preliminary Engineering and Design
- MassDEP & Notice of Intent (NOI) Permitting
- Final Design
- Bid Documents – Plans & Specs
- Bidding Phase Services

A Flowchart describing the typical project sequence is attached.

12.0 Regulatory Components

A key factor in the potential connection of these commercial properties to the Acton WWTF is the required regulatory approvals to authorize the connection, the construction, and the decommissioning of any existing subsurface sewage disposal system (SSDS). The regulatory components have been divided into state/federal and local (Town of Acton) discussions.

State & Federal Permits

MassDEP – A MassDEP Bureau of Resource Protection (BRP) – Sewer Connections/Extensions Permit will be required. BRP WP 71 is required where the extension of the sewer is equal to or greater than 1,000 feet. The permit application consists of a MassDEP form to be completed and signed by both the Town and the Engineer. In addition, the permit application requires the submittal of design drawings showing the collection system including pump stations, sewers, force mains etc. The permit application fee is waived for municipalities, and the approval MassDEP published schedule is as follows:

Activity	Max Duration*
Administrative Comment Period	0 days
Technical review #1	36 days
Technical review #2 (if necessary)	36 days
Public Comment Period	<u>20 days</u>
Total Duration	92 days

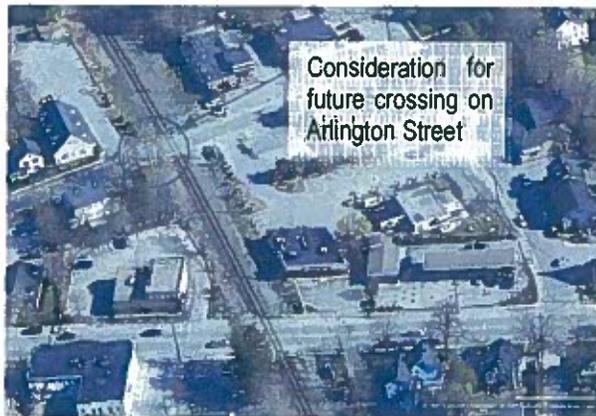
* FY 2008 Timelines Effective October 5, 2007

The key challenge to the Sewer Connection/Extension Permit shall be giving a clear explanation of the existing capacity at the Acton WWTF and justifying why these commercial and residential properties should be allowed to connect. The Town will have to document that by allowing these new properties to connect, they are not precluding existing residential users who are currently in the sewer collection area but who have yet to connect, from someday connecting. The Town must also establish the available capacity created by the difference between the estimated flows used in the original Sewer Connection/Extension permits filed for the Middle Fort Pond Brook Sewer Project and the actual flows being received. A graphic justification for the Town's use in these discussions with the MassDEP is attached (T5 Estimated Flows vs. Actual Flows figure)



Mass Highway – A Massachusetts Highway Department Permit to Access State Highway will be required for all work within the physical layout of a state highway, in this case, Massachusetts Avenue (approximately 3,000 feet from the start of Highway to Prospect Street). The MassHighway 'Application for Permit to Access State Highway' (attached) consists of a two page document to be filled out by the Owner/Applicant. Additionally, engineering plans will need to be submitted identifying the work to be performed.

Future Railroad Crossing – Although this project will not include a railroad crossing, future extension of the sewer to the west would require crossing the railroad. These requirements will be considered to ensure that this project will facilitate any future crossing near the project area. That crossing is envisioned to be on Arlington Street to avoid traffic impacts on Massachusetts Avenue (Route 111).



Local Permits

A number of permits will have to be obtained from the Town of Acton during design and prior to construction. These permits are expected to be:

Notice of Intent Application / Order of Conditions – Issued by Conservation Commission – A NOI application will have to be filed with the Town because approximately 1700 feet of the proposed piping on Massachusetts Avenue is within 100 ft. of a resource area (wetland) under the protective jurisdiction of the Acton Conservation Commission and approximately 1700 feet in the Spencer/Tuttle/Flint Area. An NOI is filed with both the MassDEP and the local Conservation Commission, but it is administered, reviewed and approved at the local level. The NOI is a MassDEP standard form that requires site layout design drawings with sufficient information to establish the limit of the resource area and illustrate the intended impacts, if any, on that resource area. The NOI application fee can be expected to be waived for municipal projects. A typical NOI approval duration is 2 to 3 months for a project this size and requires a public hearing. The approval of the NOI is called an Order of Conditions. The Order of Conditions stipulates the Town standard requirements for work adjacent to a resource area and will include any project specific tasks discussed during the public hearing. The proposed project is not located in an Estimated Habitat of Rare Wildlife as indicated on 2006 NHESP maps and therefore is not subject to the endangered species protection provisions of the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.37, 10.58(4)(b), & 10.59).

Permit to Work in the right of Way ("Road Opening Permit") – Issued by Acton Highway Department - A permit to work in the public right-of-way must be applied for and received prior to the initiation of construction. The permit fee is \$50.00 and a bond, of sufficient value to cover cost of repair(s) to the roadway in case of contractor default, is expected to be required. The bond is to ensure the roadway is



returned to preconstruction conditions. If a contractor defaults on the work or does not perform to the Towns standards for roadway repair, the Town collects on the bond to cover their costs of repair. The Road Opening Permit is easily acquired through the Town Engineer and the bond is typically the responsibility of the selected contractor.

Sewer System Connection Approval – Issued by Board of Health – Connection permits will be prepared by individual property owners prior to connection to the public sewer. Acton’s current Application and inspection costs are shown below:

<u>System Development Charge</u>	<u>Cost</u>
Residential	\$100.00
Multi-Family	\$150.00
Business / Commercial	\$150.00
Plumbing	\$10.00 per connection

Acton Water District Notification - A formal permit from the Acton Water District is not required for the work; however the Water District may have a water transmission main from the Whit-Clapp Wellfield located to the west of the project area. The proposed sewer piping will be separated by a minimum of 10 feet from the existing water main. Due to these concerns we recommend that the Acton Water District be notified of the project.

Town of Acton Easement(s) - It is Town of Acton policy that all wastewater infrastructures under their ownership and control be located on and inside permanent easements which allow the Town access for operation, maintenance and monitoring of their infrastructure. Typically the easements have been of sufficient size for pumping stations and buildings and 20 ft. wide over the length of piping in the ground. The owners of properties where easements are required must arrange an easement agreement with the Town of Acton.

13.0 Opinion of Probable Costs

Probable costs were subdivided into direct and indirect construction costs. Direct costs include the actual construction work to build and install the new sewer system. Indirect costs include design engineering and other ancillary costs such as permitting, procurement, and administration. Assumptions for these costs are included below:

- The pumping station \$400,000 cost estimate is based upon bid costs for pumping stations in Devens, Groton and others and the station having future capacity for other properties in the sewershed. Conceptual costs should be revised once actual equipment is selected. For example, currently undetermined equipment which will impact cost include permanent auxiliary power generator, odor control pumps and manner of installation (public bid with state wages or private installation).
- 15% of total sewer length will be used for water main relocation and 5% for drainage pipe relocation. These lengths have been included in the estimates to account for the possibility of encountering these existing utilities. 10% of total sewer length was estimated for ledge removal based on previous sewer projects in Acton. No estimates have been carried for cable, telephone, or gas.



The Opinion of Probable Costs Summary is included below. The detailed Cost Comparison of Alternatives table is attached.

Opinion of Probable Costs Summary*				
Direct Costs	WAC-t		STF-t	
	Low	High	Low	High
Conceptual Construction Costs	\$3,382,000	\$3,865,000	\$3,769,000	\$4,307,000
Indirect Costs				
Design & Permitting (10% of Construction)	\$338,200	\$386,500	\$376,900	\$430,700
Procurement & Constr. Engineering (15%)	\$507,300	\$579,750	\$565,350	\$646,050
Administration (Police, Financing, Legal, etc. - 10%)	\$338,200	\$386,500	\$376,900	\$430,700
Indirect Contingency - 5%		\$193,250		\$215,350
Subtotal Indirect Costs	\$1,184,000	\$1,546,000	\$1,319,000	\$1,723,000
Total Project Conceptual Costs Low	\$4,566,000	\$5,411,000	\$5,088,000	\$6,030,000
Estimated SBUs	t30	t00	t30	t20
Conceptual Project Costs per SBU*	\$35,000	\$54,000	\$39,000	\$50,000

* ENR Construction Cost Index = 8,094 (February 2008)

** Conceptual project costs may not represent actual sewer betterment fees

Soil contamination issues and other non-listed cost impacts are not included in this Opinion of Probable Costs for Sewer Extension.

Sincerely,

WOODARD & CURRAN INC.

Jack Troidl, P.E.
Project Engineer

JCT/l
Project No. 212761

Enclosure(s)

cc: Joe Shea, Vice President, Woodard & Curran



Figures / Attachments

In order of reference

- March 12, 2008 Acton WRAC Presentation by W&C
- Figure 1: Recommended Alternatives WAC-1 & STF-1
- MassDEP 21E Search Results – August 27, 2007
- 2006 Priority Habitat and Estimated Habitat Areas
- Sewer Extension - MassDEP Priority Resource Area Map
- Aquifer Protection Map – Acton, Massachusetts
- FEMA – 1988 Flood Insurance Rate maps
- Preventive Maintenance Schedule
- Standard Sewer Details (Town of Acton Sewer Use Regulations)
- Draft Scope of Services & Responsibilities
- Sewer Extension – Typical Flowchart of Events
- Graphic: Town of Acton: T5 Estimated Flows vs. Actual Flows
- MassHighway – Application for Permit to Access State Highway
- West Acton Sewer Extension Project – Cost Comparison of Alternatives



West Acton Sewer Extension Project: Feasibility Study

Acton Water Resources Advisory
Committee Meeting
March 12, 2008

COMMITMENT & INTEGRITY DRIVE RESULTS



West Acton Sewer Extension Project

Why West Acton?

- Two areas identified in 2004 CWRMP as "Needs" areas requiring off-site wastewater solutions

 - Area 10: Spencer/Tuttle/Flint

 - Area 12: West Acton Center

- Goal of Study

 - Understand critical aspects of the project evaluation

 - Understand order of magnitude costs

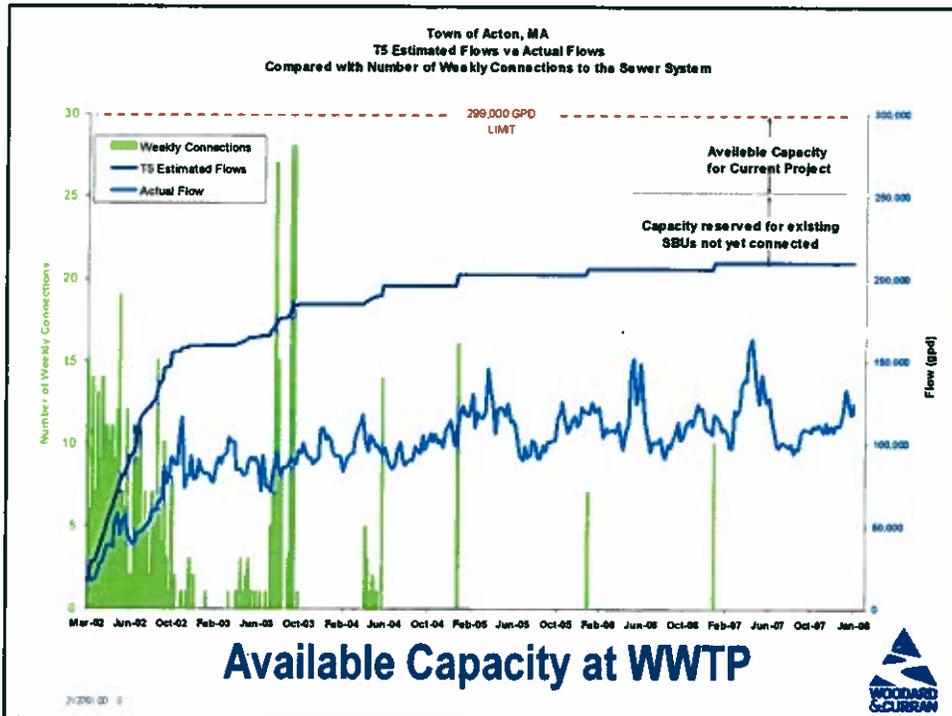
 - Codify consensus with the Town and AWRAC

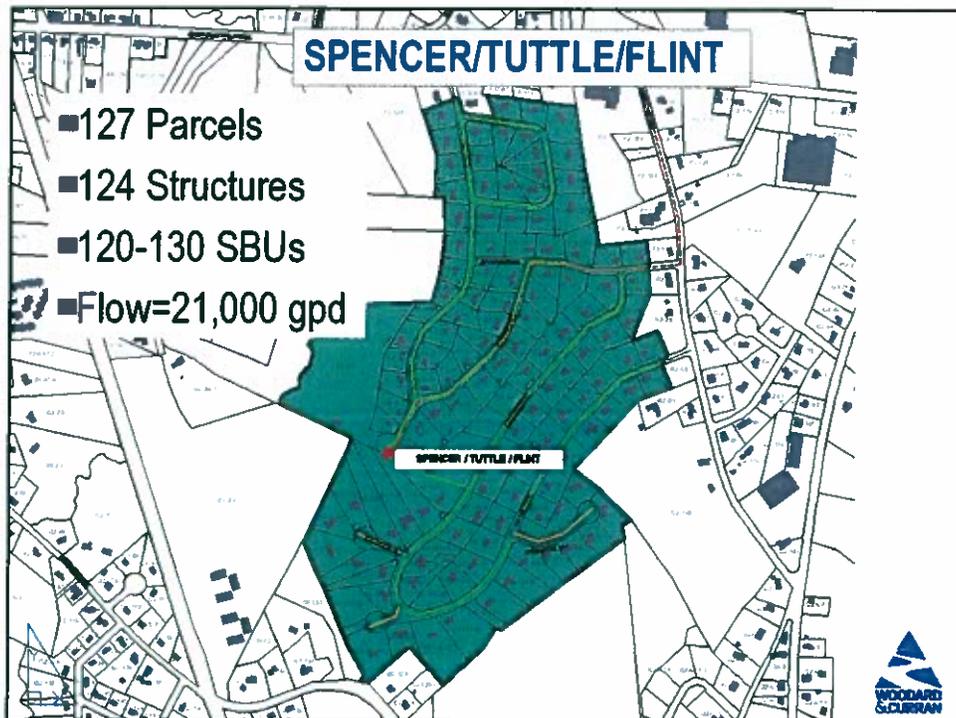
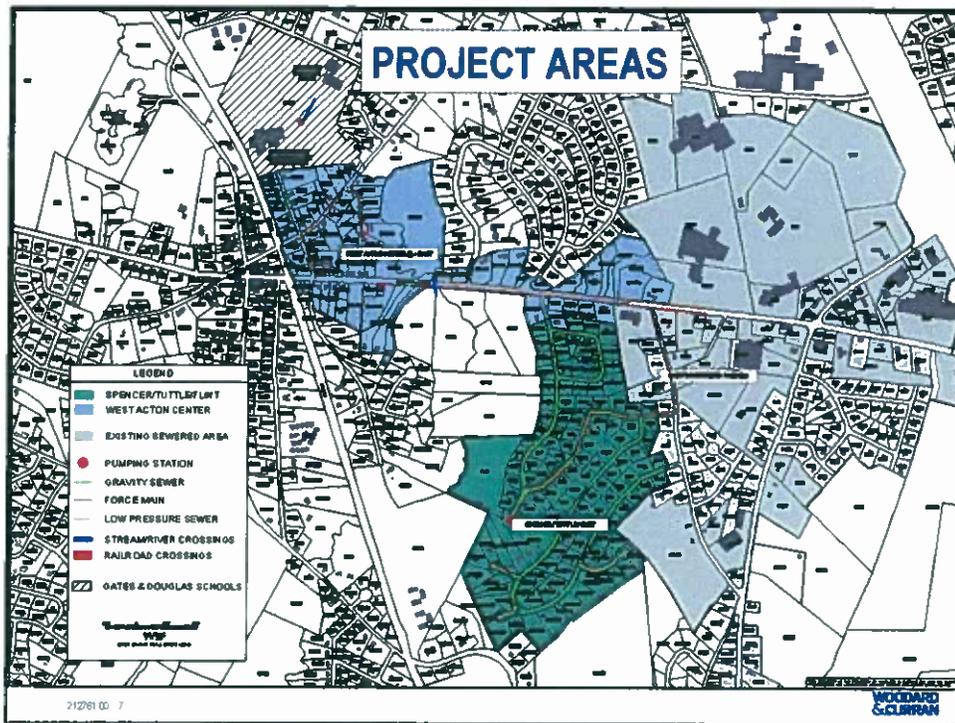
COMMITMENT & INTEGRITY DRIVE RESULTS

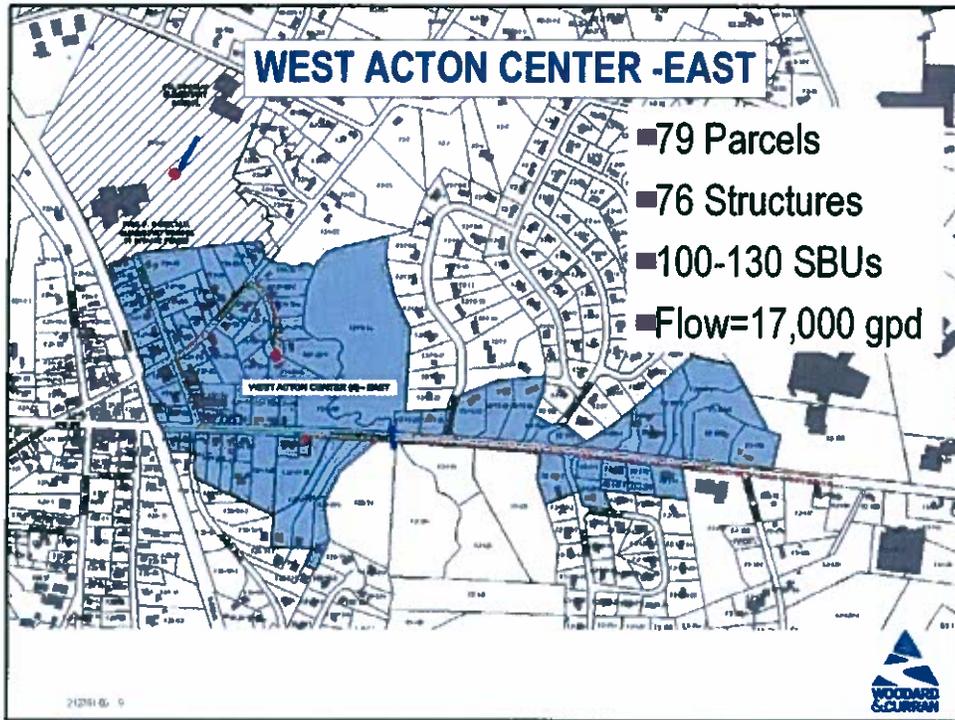
Available Wastewater Capacity



- WWTF Effluent Capacity = 299,000 gpd
- Current Average Daily Flow = 115,000 gpd
- Capacity unallocated and available = 49,000 gpd








Sewer Layout Criteria

- Areas defined in Scope of Work (excluding Douglas & Gates Schools)
- Current Zoning limits – “West Acton Village Zoning” & “Village Residential”
- Natural Topography – sewer depth/rivers
- Available Capacity up to 49,000 gpd
(based upon actual winter water use)



Conceptual Design

15% Concept Design for Alternatives

- General areas of benefit (subject to changed based on site survey & detailed information)
- Rough sewer system layout
- Key design features (pump stations, river crossings)
- Typically $\pm 15\%$ accuracy on concepts



Direct Costs: Construction Cost Categories at Concept Level

- 8" PVC Sewer – varying depths
- 6" PVC Service Stubs per structure
- PVC Low Pressure Sewer
- Pumping Stations
- Paving Trenches – Local & State roads
- Paving Overlay – Local & State roads
- Water main & drain pipe replacement
- Ledge & Rock Removal
- Construction Contingency - 5% to 20%



Indirect Cost Categories at Concept Level

Based on Construction Costs

- Design & Permitting – 10%
- Procurement & Construction Engineering – 15%
- Administration (Police, Financing, Legal) – 10%
- Contingency – 5%



Table 9 - West Acton Sewer Extension Project - Comparison of Alternatives

Items	Unit	Unit Cost	Alt. 1 (WAC)		Alt. 2 (SFC)	
			Quantity	Cost	Quantity	Cost
Direct Costs						
12" PVC Sewer (8-17 feet)	L.F.	135	2,225	\$342,225	7,260	\$969,780
12" PVC Sewer (12-16 feet)	L.F.	150	1,005	\$153,750	2,140	\$281,300
12" PVC Sewer (16-20 feet)	L.F.	180	53	\$9,540	300	\$39,600
12" PVC Sewer (2-10 feet)	L.F.	225	7	\$1,237	1	\$13
12" PVC Sewer (Stubs (6" dia))	L.F.	85	1,710	\$254,100	3,000	\$401,100
PVC Manholes	L.F.	60	4,500	\$754,500	4,000	\$520,000
PVC Manhole Sewer	L.F.	30	7650	\$184,500	650	\$82,500
Finings - Trenches in Local Streets (12" depth)	Sq. Yd	15	1,914	\$287,117	10,536	\$157,967
Finings - Trenches in State Roads (12" depth)	Sq. Yd	15	3,854	\$57,813	0	\$0
Finings - C&F in Local Roads	Cu. Yd	118	0	\$0	1,000	\$118,000
Finings - C&F in State Roads	Cu. Yd	118	3,461	\$519,153	0	\$0
Finings - Overlay Local Roads (2")	Sq. Yd	10	4,811	\$72,165	31,344	\$313,444
Finings - Overlay State Roads (2")	Sq. Yd	10	14,733	\$147,333	0	\$0
Water Main Relocation (12" dia) sewer (1)	L.F.	85	345	\$29,325	1,200	\$156,000
Obstacle Sign Relocation (Obst) sewer (1)	L.F.	30	225	\$67,500	540	\$70,200
Leak Removal (Physical cover II, in budget)	Cu. Yd	85	1,360	\$185,200	2,367	\$307,365
Grinder Pumps	Each	4,200	11	\$11,820	15	\$19,500
Pump Stations	Each	400,000	2	\$800,000	1	\$400,000
Estimate	L.F.	100	0	\$0	50	\$5,000
Sum of Sewer Construction	Each	200,000	1	\$200,000	0	\$0
Construction Contingency (Low- 5%)	---	5%	---	\$10,000	---	\$10,000
Subtotal - Conceptual Construction Costs Low				\$3,327,000		\$3,715,000
Subtotal - Conceptual Construction Costs High				\$3,365,000		\$4,377,000
Indirect Costs						
Design & Permitting (8% of Construction)	Des. Cost	10%	---	\$332,700	---	\$332,700
Procurement & Const. Engineering (15%)	Con. Cost	15%	---	\$504,900	---	\$557,250
Administration (Police, Financing, Legal, etc. - 10%)	Con. Cost	10%	---	\$332,700	---	\$332,700
Indirect Contingency - 5%	Ind. Cost	5%	---	\$166,350	---	\$166,350
Subtotal - Conceptual Indirect Costs Low				\$1,336,650		\$1,388,300
Subtotal - Conceptual Indirect Costs High				\$1,544,000		\$1,722,300
Total Project Construction Costs Low				\$4,663,650		\$5,103,300
Total Project Construction Costs High				\$4,919,000		\$5,637,300
Cost of Collection Sewer (SFC)				\$0		\$10,000
Cost of Sewer Low				\$4,663,650		\$5,113,300
Cost of Sewer High				\$4,919,000		\$5,647,300
Estimated SBU Low			100		100	
Estimated SBU High			100		100	
Density (1/1000)			6.3		10.9	
SBU Density Low (\$BU per 1000 LF of sewer)			15.9		11.1	
SBU Density High (\$BU per 1000 LF of sewer)			28.6		12.0	
Conceptual Construction Costs per SBU Low			\$35,133		\$50,130	
Conceptual Construction Costs per SBU High			\$49,190		\$56,730	
Estimated Price (2-year order item average)	GPD		17,341		29,369	
1.5 ft. S. Flow	GPD		54,525		89,130	
2.0 ft. Construction Cost Index (February 2016)			1.004			



Lessons Learned

- Need to account for price escalations prior to construction (2 years in this case)
- Include sufficient contingency
- Concept Designs may change slightly as design details become available
- Financial Models for Costs are key
 - Betterments
 - Operation costs
 - Working capital
 - Connection costs

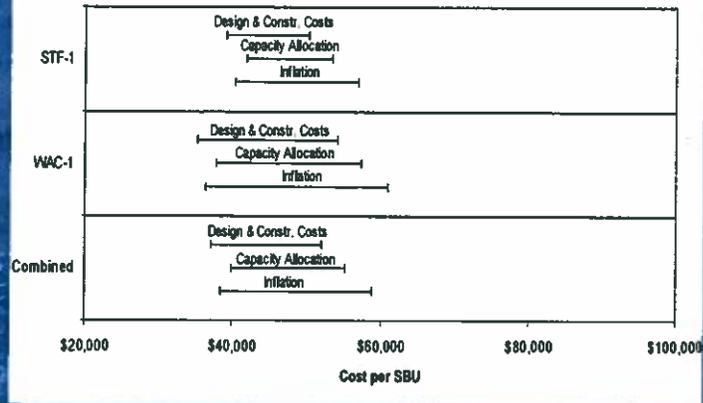


Financial Impacts at the Feasibility Study level

- **Design & Construction Costs**
Based upon current construction climate
- **Capacity Allocation Costs**
Governed by Acton Sewer Bylaw
- **Inflation/Escalation Costs**



Conceptual Sewer Betterment Costs



COMMITMENT & INTEGRITY DRIVE RESULTS



Financial Impacts at the Feasibility Study Level – Sewer Betterments

- **Spencer / Tuttle / Flint**
\$40k to \$57k per SBU
- **West Acton Center**
\$36k to \$61k per SBU
- **Combined Project**
\$38k to \$59k per SBU

COMMITMENT & INTEGRITY DRIVE RESULTS



Economy of Scale - If both areas are Combined

- Reduced Indirect Costs
 - i.e., One round of permitting
- Optimize Design
 - i.e. Replace portion of low pressure sewer with gravity sewer along Mass Ave
- One Bid Cycle and Post Bid Review
- Reduced mobilization and oversight costs during Construction



Moving Forward

West Acton Sewer Extension Project

Conceptual Schedule

Task	Date
Feasibility / Design Basis	April 2008
Preliminary Engineering	July - Sept. 2008
Funding Applications	August 2008
Special Town Meeting	Fall 2008
Determining Funding Options	January 2009
Approve Design & Construction Funds	Spring ATM 2009
Detailed Design & Permitting	July 2009 - October 2009
SRF Submittal (if appropriate)	October 2009
Advertise for Bid	Winter 2010
Start Construction	April 2010
Finish Construction	December 2010
Start Connections	January 2011

DEP 21E SEARCH - AUGUST 27, 2007

RTN	Town	Release Address	Site Name/Location Aid	Reporting Category	Notification Date	Compliance Status	Date	Phase	RAO Class	Chemical Type
2-0012850	ACTON	68 CENTRAL ST	CONCORD OIL CO	72 HR	6/29/1999	TIER 2	10/23/2000	PHASE III	A2	Oil
2-0013132	ACTON	68 CENTRAL ST	CONCORD OIL CO	72 HR	1/27/2000	RTN	10/23/2000	PHASE III	A2	OHM
2-0014428	ACTON	68 CENTRAL ST	CONCORD OIL CO FACILITY	120 DY	8/5/2002	CLOSED	8/18/2005	PHASE II	A2	Oil
2-0014429	ACTON	68 CENTRAL ST	CONCORD OIL CO FACILITY	120 DY	8/5/2002	RTN	9/12/2003		A2	Oil
2-0014673	ACTON	CENTRAL ST AND MAIN ST	AMTRAK CONRAIL RAILWAY RELEASE	TWO HR	2/20/2003	CLOSED	4/29/2003		A1	Oil
2-0012037	ACTON	3 DURKEE RD	NORTH ACTON WWTP	TWO HR	12/19/1997	RAO	5/6/1998		A2	Oil
2-0011113	ACTON	MASSACHUSETTS AVE	PIPER ROAD	TWO HR	2/16/1996	RAO	4/6/1996		A1	Oil
2-0013519	ACTON	MASSACHUSETTS AVE	INTERSECTION OF RT 111 AND RT 27	120 DY	10/12/2000	URAM	10/20/2000		A1	OHM
2-0000836	ACTON	408 MASSACHUSETTS AVE	SHELL STATION	NONE	5/9/1991	RAO	12/17/1997	PHASE II	A2	Oil
2-0012157	ACTON	408 MASSACHUSETTS AVE	FORMER SHELL STATION	TWO HR	3/23/1998	TIER 2	5/26/1999	PHASE III	A2	Oil
2-0011201	ACTON	421 MASSACHUSETTS AVE	SUNOCO STATION	TWO HR	4/18/1996	RAO	5/23/1996		A1	Oil
2-0010079	ACTON	428 MASSACHUSETTS AVE	NEW ENGLAND TELEPHONE CENTRAL OFFICE	TWO HR	11/11/1993	RAO	10/21/1994		A2	Oil
2-0000754	ACTON	553 MASSACHUSETTS AVE	MOBIL SERVICE STATION	NONE	5/31/1990	RAO	5/13/2005		A2	Oil
2-0011241	ACTON	553 MASSACHUSETTS AVE	MOBIL STATION	72 HR	5/22/1996	RTN	11/10/1997		A2	Oil
2-0014590	ACTON	75 SPRUCE ST	PAUL B GATES ELEMENTARY SCHOOL	TWO HR	12/12/2002	CLOSED	2/19/2003		A2	Oil

The search returned 0 results. Search Keywords >> Town: "ACTON" Address: "Arlington St" | Sorted by: "Town, Address, RTN"
 The search returned 0 results. Search Keywords >> Town: "ACTON" Address: "Flint Rd" | Sorted by: "Town, Address, RTN"
 The search returned 0 results. Search Keywords >> Town: "ACTON" Address: "Lothrop Rd" | Sorted by: "Town, Address, RTN"
 The search returned 0 results. Search Keywords >> Town: "ACTON" Address: "Mallard Rd" | Sorted by: "Town, Address, RTN"
 The search returned 0 results. Search Keywords >> Town: "ACTON" Address: "Prospect St" | Sorted by: "Town, Address, RTN"
 The search returned 0 results. Search Keywords >> Town: "ACTON" Address: "Spencer Rd" | Sorted by: "Town, Address, RTN"
 The search returned 0 results. Search Keywords >> Town: "ACTON" Address: "Torrington Ln" | Sorted by: "Town, Address, RTN"
 The search returned 0 results. Search Keywords >> Town: "ACTON" Address: "Tuttle Dr" | Sorted by: "Town, Address, RTN"
 The search returned 0 results. Search Keywords >> Town: "ACTON" Address: "West Rd" | Sorted by: "Town, Address, RTN"
 The search returned 0 results. Search Keywords >> Town: "ACTON" Address: "Wayside Ln" | Sorted by: "Town, Address, RTN"

Site Information		
Site Number:	2-0013132	Category: 72 HR
Site Name:	CONCORD OIL CO	Release Type: RAONR
Address:	68 CENTRAL ST	Current date: 10/23/2000
Town:	ACTON	Phase: PHASE III
Zipcode:	01720-0000	RAO class:
Official notification date:	1/27/2000	Location type: COMMERCIAL
Initial status date:	1/27/2001	Source: UST

Response Action Information	
Response Action Type:	TCLASS - Tier Classification
Status:	T2EXT - Tier 2 Extension
Submittal Date:	10/31/2006
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	PHASE II - Phase 2
Status:	REVRCD - Revised Statement or Transmittal Received
Submittal Date:	4/20/2005
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	PHASE I - Phase 1
Status:	ACTAUD - Level III-Comprehensive Audit
Submittal Date:	3/15/2002
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RAONR - RAO Not Required
Status:	RTCLSS - Linked to a Tier Classified Site
Submittal Date:	10/23/2000
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	IRA - Immediate Response Action
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	3/31/2000
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RNF - Release Notification Form Received
Status:	Image of Release Notification Form Received
Submittal Date:	3/27/2000
RAO class:	
Activity & Use Limitation:	

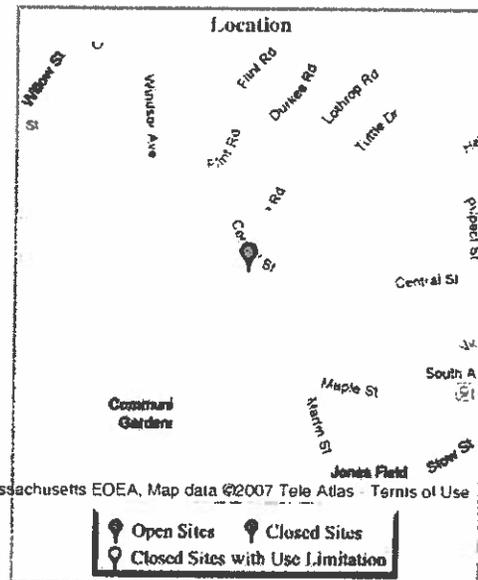
Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	1/27/2000
RAO class:	
Activity & Use Limitation:	

Chemicals		
Chemical	Amount	Units
BENZENE, METHYL-	.64	MG/KG

LSPs	
LSP#	Name
5463	WOZMAK, RICHARD J

Linked RTNs	
Primary RTN	Secondary RTNs
2-0012850	2-0013132

Tier Classification Detail								
NRS	II	III	IV	V	VI	Zone	Imminent Hazard	Permit/Tier II Expiration Date
Totals	2							10/23/2005
316	95	101	20	100	0	N	N	



Site Information			
Site Number:	2-0014428	Category:	120 DY
Site Name:	CONCORD OIL CO FACILITY	Release Type:	RAO
Address:	68 CENTRAL ST	Current date:	8/18/2005
Town:	ACTON	Phase:	PHASE II
Zipcode:		RAO class:	A2
Official notification date:	8/5/2002	Location type:	COMMERCIAL
Initial status date:	8/5/2003	Source:	AST

Response Action Information	
Response Action Type:	RAO - Response Action Outcome - RAO
Status:	TSAUD - Level 1 - Technical Screen Audit
Submittal Date:	9/20/2005
RAO class:	A2
Activity & Use Limitation:	NONE

Response Action Information	
Response Action Type:	TCLASS - Tier Classification
Status:	LNKVTG - RTN Linked to TCLASS Via Tier Classification Submittal
Submittal Date:	9/12/2003
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	PHASEI - Phase I
Status:	TSAUD - Level 1 - Technical Screen Audit
Submittal Date:	9/2/2003
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RAM - Release Abatement Measure
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	8/12/2003
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RNF - Release Notification Form Received
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	8/9/2002
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	8/5/2002
RAO class:	
Activity & Use Limitation:	

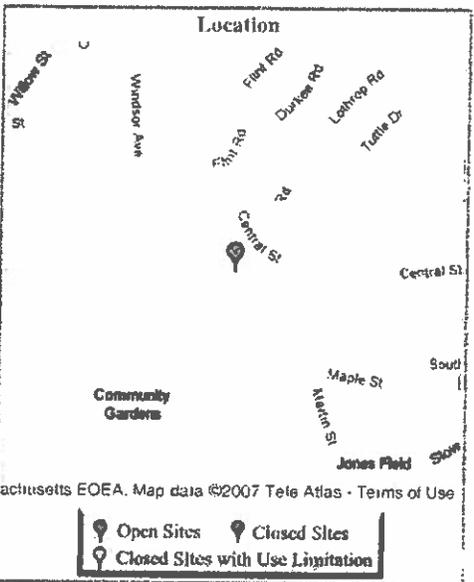
Chemicals		
Chemical	Amount	Units
FUEL OIL #2		

LSPs	
LSP#	Name
4829	TRAINER, KEVIN D
5463	WOZMAK, RICHARD J

Secondary RTNs
2-0014429

RAO Detail			
Class	Method	GW Category	Soil Category
A2	3	3	3

Tier Classification Detail						
NRS	II	III	IV	V	VI	Zone
						Imminent
Totals	11	11	106	20	120	0
						Hazard
						Permit/Tier II
						Expiration Date
326	80	106	20	120	0	N N 8/12/2008



Site Information			
Site Number:	2-0014429	Category:	120 DY
Site Name:	CONCORD OIL CO FACILITY	Release Type:	RAONR
Address:	68 CENTRAL ST	Current date:	9/12/2003
Town:	ACTON	Phase:	
Zipcode:	01720-0000	RAO class:	
Official notification date:	8/5/2002	Location type:	COMMERCIAL
Initial status date:	8/5/2003	Source:	AST

Response Action Information	
Response Action Type:	TCLASS - Tier Classification
Status:	LNKVTC - RTN Linked to TCLASS Via Tier Classification Submittal
Submittal Date:	9/12/2003
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RAONR - RAO Not Required
Status:	RTCLSS - Linked to a Tier Classified Site
Submittal Date:	9/12/2003
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RAM - Release Abatement Measure
Status:	PLANWR - Written Plan Received
Submittal Date:	10/16/2002
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RNF - Release Notification Form Received
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	8/9/2002
RAO class:	
Activity & Use Limitation:	

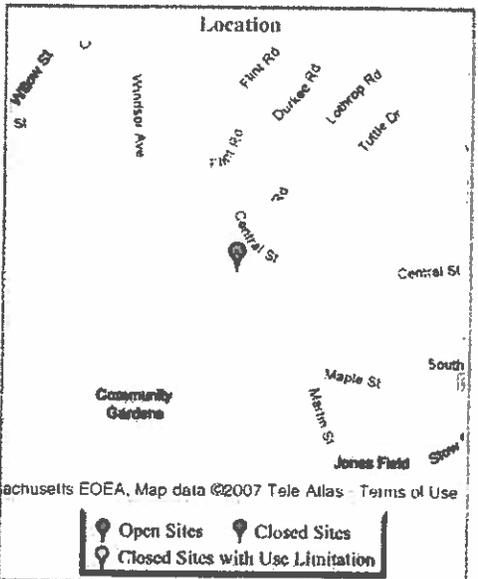
Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	8/5/2002
RAO class:	
Activity & Use Limitation:	

Chemicals		
Chemical	Amount	Units
FUEL OIL #2		

LSPs	
LSP#	Name
5463	WOZMAK, RICHARD J

Linked RTNs	
Primary RTN	Secondary RTNs
2-0014428	2-0014429

Tier Classification Detail								
NRS	II	III	IV	V	VI	Zone	Imminent	Permit/Tier I
Totals							Hazard	Expiration Date
326	80	106	20	120	0	N	N	8/12/2008



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Site Information			
Site Number:	2-0014673	Category:	TWO HR
Site Name:	AMTRAK-CONRAIL RAILWAY RELEASE	Release Type:	RAO
Address:	CENTRAL ST AND MAIN ST	Current date:	4/29/2003
Town:	ACTON	Phase:	
Zipcode:	01720-0000	RAO class:	A1
Official notification date:	2/20/2003	Location type:	OTHER
Initial status date:	2/20/2004	Source:	VEHICLE

Response Action Information	
Response Action Type:	RAO - Response Action Outcome - RAO
Status:	TSAUD - Level 1 - Technical Screen Audit
Submittal Date:	5/1/2003
RAO class:	A1
Activity & Use Limitation:	NONE

Response Action Information	
Response Action Type:	RNF - Release Notification Form Received
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	4/29/2003
RAO class:	
Activity & Use Limitation:	

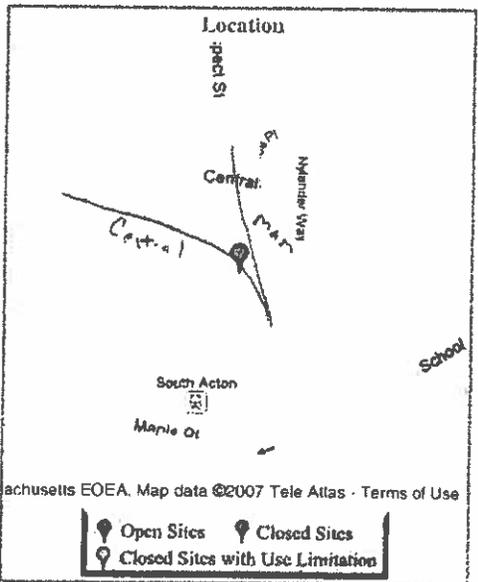
Response Action Information	
Response Action Type:	IRA - Immediate Response Action
Status:	APORAL - Oral Approval of Plan or Action
Submittal Date:	2/20/2003
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	2/20/2003
RAO class:	
Activity & Use Limitation:	

Chemicals		
Chemical	Amount	Units
UNKNOWN CHEMICAL OF TYPE - OIL	40	GAL

LSPs	
LSP#	Name
2122	HENRY, KIM M

RAO Detail			
Class	Method	GW Category	Soil Category
A1	N	3	



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Site Information			
Site Number:	2-0012037	Category:	TWO HR
Site Name:	NORTH ACTON WWTP	Release Type:	RAO
Address:	3 DURKEE RD	Current date:	5/6/1998
Town:	ACTON	Phase:	
Zipcode:		RAO class:	A2
Official notification date:	12/19/1997	Location type:	COMMERCIAL
Initial status date:	12/19/1998	Source:	AST. PIPE

Response Action Information	
Response Action Type:	RAO - Response Action Outcome - RAO
Status:	RAORCD - RAO Statement Received
Submittal Date:	5/6/1998
RAO class:	A2
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RNF - Release Notification Form Received
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	2/17/1998
RAO class:	
Activity & Use Limitation:	

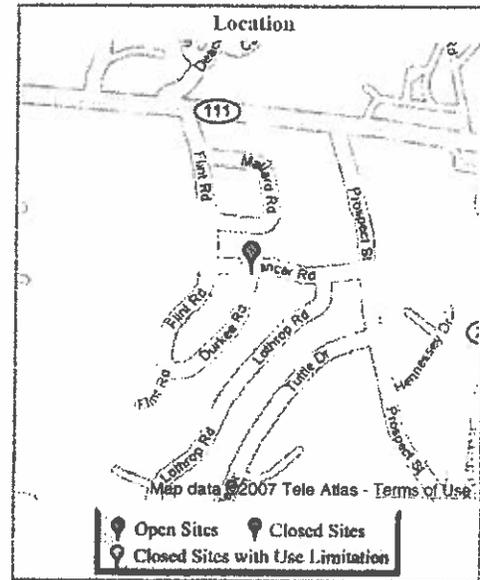
Response Action Information	
Response Action Type:	IRA - Immediate Response Action
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	2/17/1998
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	12/19/1997
RAO class:	
Activity & Use Limitation:	

Chemicals		
Chemical	Amount	Units
FUEL OIL #2	300	GAL

LSPs	
LSP#	Name
6508	DOHERTY, RICHARD E

RAO Detail			
Class	Method	GW Category	Soil Category
A2	3	2	2



Site Information			
Site Number:	2-0011113	Category:	TWO HR
Site Name:	PIPER ROAD	Release Type:	RAO
Address:	MASSACHUSETTS AVE	Current date:	4/6/1996
Town:	ACTON	Phase:	
Zipcode:	01719-0000	RAO class:	A1
Official notification date:	2/16/1996	Location type:	ROADWAY
Initial status date:	2/16/1997	Source:	VEHICLE

Response Action Information	
Response Action Type:	RAO - Response Action Outcome - RAO
Status:	RAORCD - RAO Statement Received
Submittal Date:	4/6/1996
RAO class:	A1
Activity & Use Limitation:	NONE

Response Action Information	
Response Action Type:	RNF - Release Notification Form Received
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	4/6/1996
RAO class:	
Activity & Use Limitation:	

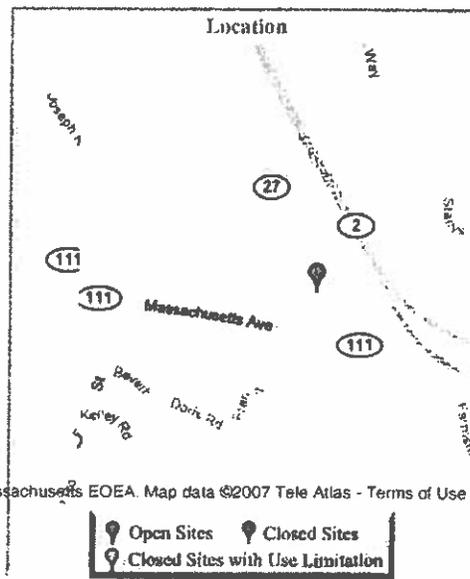
Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	2/16/1996
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	IRA - Immediate Response Action
Status:	APORAL - Oral Approval of Plan or Action
Submittal Date:	2/16/1996
RAO class:	
Activity & Use Limitation:	

Chemicals		
Chemical	Amount	Units
GASOLINE	20	GAL
UNKNOWN CHEMICAL OF UNKNOWN TYPE	20	GAL

LSPs	
LSP#	Name
0097	IRWIN, J ANDREW

RAO Detail			
Class	Method	GW Category	Soil Category
A1	N		



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Site Information			
Site Number:	2-0013519	Category:	120 DY
Site Name:	INTERSECTION OF RT 111 AND RT 27	Release Type:	URAM
Address:	MASSACHUSETTS AVE	Current date:	10/20/2000
Town:	ACTON	Phase:	
Zipcode:	01720-0000	RAO class:	
Official notification date:	10/12/2000	Location type:	ROADWAY
Initial status date:	10/12/2001	Source:	UNKNOWN

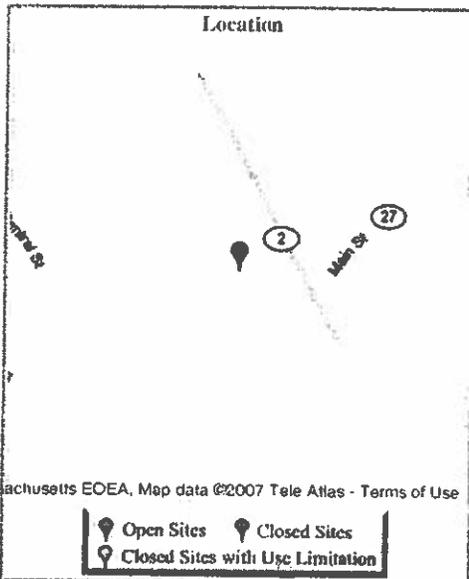
Response Action Information	
Response Action Type:	URAM - Utility-related Abatement Measure
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	1/8/2001
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RNF - Release Notification Form Received
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	10/20/2000
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	10/12/2000
RAO class:	
Activity & Use Limitation:	

Chemicals		
Chemical	Amount	Units
TOTAL PETROLEUM HYDROCARBONS (TPH)	320	PPM
NAPHTHALENE	4.58	PPM

LSPs	
LSP#	Name
3760	BLAKE, CRAIG E



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Site Information			
Site Number:	2-0000836	Category:	NONE
Site Name:	SHELL STATION	Release Type:	RAO
Address:	408 MASSACHUSETTS AVE	Current date:	12/17/1997
Town:	ACTON	Phase:	PHASE II
Zipcode:	01718	RAO class:	A2
Official notification date:	5/9/1991	Location type:	GASSTATION
Initial status date:	8/2/1997	Source:	

Response Action Information	
Response Action Type:	RAO - Response Action Outcome - RAO
Status:	RAORCD - RAO Statement Received
Submittal Date:	12/17/1997
RAO class:	A2
Activity & Use Limitation:	NONE

Response Action Information	
Response Action Type:	TCLASS - Tier Classification
Status:	TIER (1 - Tier 2 Classification
Submittal Date:	8/11/1997
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	PHASE I - Phase I
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	8/11/1997
RAO class:	
Activity & Use Limitation:	

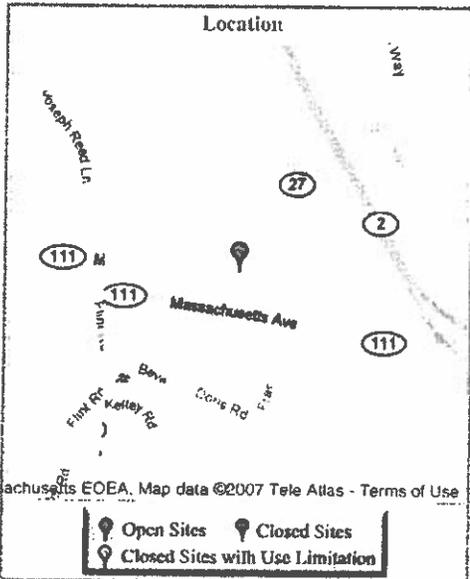
Response Action Information	
Response Action Type:	RAO-P - Partial RAO for this RTN
Status:	RAORCD - RAO Statement Received
Submittal Date:	8/11/1997
RAO class:	NC
Activity & Use Limitation:	NONE

Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	TCTRNS - Tier Classified Transition Sites
Submittal Date:	5/9/1991
RAO class:	
Activity & Use Limitation:	

Chemicals		
Chemical	Amount	Units
UNKNOWN CHEMICAL OF TYPE - OIL		

RAO Detail			
Class	Method	GW Category	Soil Category
NC	N		
A2	1	2	3

Tier Classification Detail							
NRS	II	III	IV	V	VI	Zone	Imminent Permit/Tier II
Totals						2	Hazard Expiration Date
91	15	61	15	0	0	N	N 8/11/2002



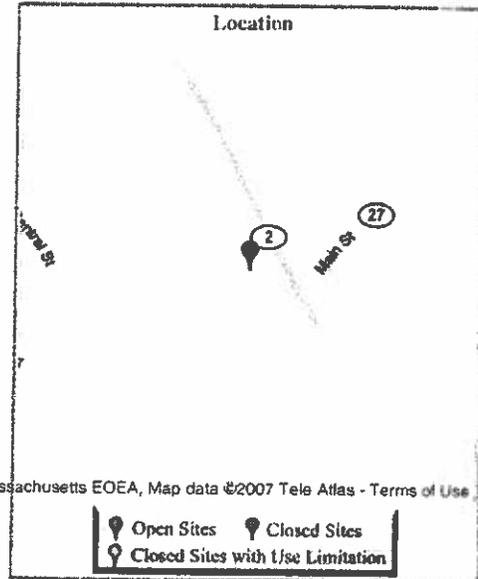
Site Information			
Site Number:	2-0012157	Category:	TWO HR
Site Name:	FORMER SHELL STATION	Release Type:	TIERII
Address:	408 MASSACHUSETTS AVE	Current date:	5/26/1999
Town:	ACTON	Phase:	PHASE III
Zipcode:		RAO class:	
Official notification date:	3/23/1998	Location type:	COMMERCIAL
Initial status date:	3/23/1999	Source:	PIPE, UST

Response Action Information	
Response Action Type:	TCLASS - Tier Classification
Status:	DNPREX - Permit or Tier 2 Extension Denied
Submittal Date:	6/20/2006
RAO class:	
Activity & Use Limitation:	
Response Action Information	
Response Action Type:	PHASEII - Phase 2
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	6/4/2001
RAO class:	
Activity & Use Limitation:	
Response Action Information	
Response Action Type:	RAM - Release Abatement Measure
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	7/19/1999
RAO class:	
Activity & Use Limitation:	
Response Action Information	
Response Action Type:	PHASEI - Phase 1
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	5/26/1999
RAO class:	
Activity & Use Limitation:	
Response Action Information	
Response Action Type:	RNF - Release Notification Form Received
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	5/22/1999
RAO class:	
Activity & Use Limitation:	
Response Action Information	
Response Action Type:	IRA - Immediate Response Action
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	5/22/1998
RAO class:	
Activity & Use Limitation:	
Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	3/23/1998
RAO class:	
Activity & Use Limitation:	

Chemicals		
Chemical	Amount	Units
GASOLINE	280000	PPB

LSPs	
LSP#	Name
4813	SHEEHAN, KEVIN C
1698	SIMMONS, THOMAS P

Tier Classification Detail								
NRS	II	III	IV	V	VI	Zone	Imminent Hazard	Permit/TierII Expiration Date
Totals						2		5/26/2006
186	35	111	20	20	0	N	N	



Site Information			
Site Number:	2-0011201	Category:	TWO HR
Site Name:	SUNOCO STATION	Release Type:	RAO
Address:	421 MASSACHUSETTS AVE	Current date:	5/23/1996
Town:	ACTON	Phase:	
Zipcode:	01720-0000	RAO class:	A1
Official notification date:	4/18/1996	Location type:	COMMERCIAL
Initial status date:	4/18/1997	Source:	TANKER

Response Action Information	
Response Action Type:	RNF - Release Notification Form Received
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	5/23/1996
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RAO - Response Action Outcome - RAO
Status:	RAORCD - RAO Statement Received
Submittal Date:	5/23/1996
RAO class:	A1
Activity & Use Limitation:	NONE

Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	4/18/1996
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	IRA - Immediate Response Action
Status:	APORAL - Oral Approval of Plan or Action
Submittal Date:	4/18/1996
RAO class:	
Activity & Use Limitation:	

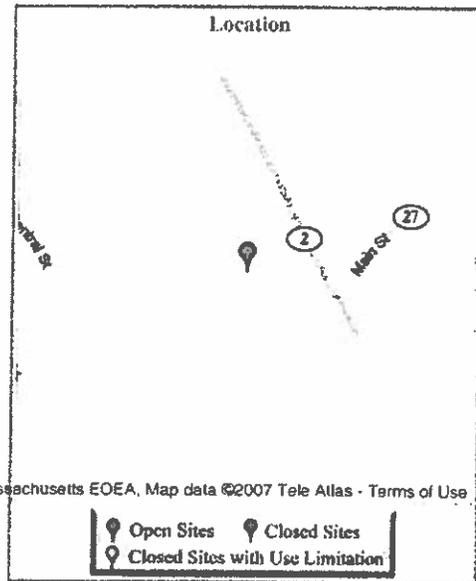
Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	4/18/1996
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	4/18/1996
RAO class:	
Activity & Use Limitation:	

Chemicals		
Chemical	Amount	Units
GASOLINE	40	GAL

LSPs	
LSP#	Name
7610	KAVANAUGH, KEVIN J

RAO Detail			
Class	Method	GW Category	Soil Category
A1	N		



Site Information			
Site Number:	2-0010079	Category:	TWO HR
Site Name:	NEW ENGLAND TELEPHONE CENTRAL OFFICE	Release Type:	RAO
Address:	428 MASSACHUSETTS AVE	Current date:	10/21/1994
Town:	ACTON	Phase:	
Zipcode:	01720	RAO class:	A2
Official notification date:	11/11/1993	Location type:	COMMERCIAL
Initial status date:	11/11/1994	Source:	UST

Response Action Information	
Response Action Type:	RAO - Response Action Outcome - RAO
Status:	FEEREC - Fee Received - TFS Use Only
Submittal Date:	10/24/1994
RAO class:	A2
Activity & Use Limitation:	NONE

Response Action Information	
Response Action Type:	IRA - Immediate Response Action
Status:	CSRCVD - Completion Statement Received (includes Pl 3 RIP)
Submittal Date:	10/21/1994
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RNF - Release Notification Form Received
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	1/5/1994
RAO class:	
Activity & Use Limitation:	

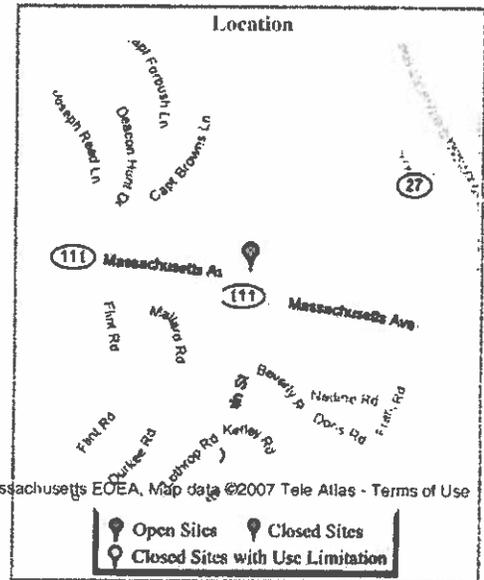
Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	11/11/1993
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	11/11/1993
RAO class:	
Activity & Use Limitation:	

Chemicals		
Chemical	Amount	Units
DIESEL FUEL	2500	PPM
FUEL OIL #2		

LSPs	
LSP#	Name
8316	WORTHINGTON, MARK A

RAO Detail			
Class	Method	GW Category	Soil Category
A2	1	2	1



Site Information			
Site Number:	2-0000754	Category:	NONE
Site Name:	MOBIL SERVICE STATION	Release Type:	RAO
Address:	553 MASSACHUSETTS AVE	Current date:	5/13/2005
Town:	ACTON	Phase:	
Zipcode:		RAO class:	A2
Official notification date:	5/31/1990	Location type:	COMMERCIAL, GASSTATION
Initial status date:	6/24/1995	Source:	UST

Response Action Information	
Response Action Type:	RAO - Response Action Outcome - RAO
Status:	TSAUD - Level 1 - Technical Screen Audit
Submittal Date:	10/21/2005
RAO class:	A2
Activity & Use Limitation:	NONE
Response Action Information	
Response Action Type:	PHASEV - Phase 5
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	5/13/2005
RAO class:	
Activity & Use Limitation:	
Response Action Information	
Response Action Type:	PHSIII - Phase 3
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	9/23/2004
RAO class:	
Activity & Use Limitation:	
Response Action Information	
Response Action Type:	RAM - Release Abatement Measure
Status:	TSAUD - Level 1 - Technical Screen Audit
Submittal Date:	4/8/2003
RAO class:	
Activity & Use Limitation:	
Response Action Information	
Response Action Type:	PHASIV - Phase 4
Status:	PLANWR - Written Plan Received
Submittal Date:	3/31/2003
RAO class:	
Activity & Use Limitation:	
Response Action Information	
Response Action Type:	PHASII - Phase 2
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	1/23/2002
RAO class:	
Activity & Use Limitation:	
Response Action Information	
Response Action Type:	TCLASS - Tier Classification
Status:	PEREXT - Permit Extension Received
Submittal Date:	7/13/2001
RAO class:	
Activity & Use Limitation:	
Response Action Information	
Response Action Type:	RAM - Release Abatement Measure
Status:	PLANWR - Written Plan Received
Submittal Date:	4/4/1994
RAO class:	

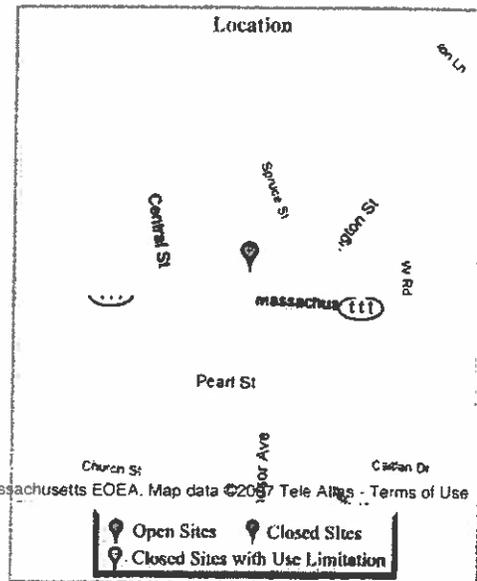
Chemicals		
Chemical	Amount	Units
GASOLINE		

LSPs	
LSP#	Name
4003	SOKOL, STEFAN C
6406	SWANSON, WILLIAM R

Secondary RTNs
2-0011241

RAO Detail			
Class	Method	GW Category	Soil Category
A2	3	3	3

Tier Classification Detail								
NRS	II	III	IV	V	VI	Zone	Imminent Hazard	Permit/TierII Expiration Date
Totals	-32	15	3	0	0	2	N	4/1/2003
						50		



Activity & Use Limitation:

Response Action Information

Response Action Type: REL - Potential Release or Threat of Release

Status: TCTRNS - Tier Classified Transition Sites

Submittal Date: 5/31/1990

RAO class:

Activity & Use Limitation:

Site Information			
Site Number:	2-0011241	Category:	72 HR
Site Name:	MOBIL STATION	Release Type:	RAONR
Address:	553 MASSACHUSETTS AVE	Current date:	11/10/1997
Town:	ACTON	Phase:	
Zipcode:	01720-0000	RAO class:	
Official notification date:	5/22/1996	Location type:	COMMERCIAL
Initial status date:	5/22/1997	Source:	UNKNOWN

Response Action Information	
Response Action Type:	RAONR - RAO Not Required
Status:	RTCLSS - Linked to a Tier Classified Site
Submittal Date:	11/10/1997
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	TCLASS - Tier Classification
Status:	LNKVTG - RTN Linked to TCLASS Via Tier Classification Submittal
Submittal Date:	11/10/1997
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	IRA - Immediate Response Action
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	11/10/1996
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RNF - Release Notification Form Received
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	7/22/1996
RAO class:	
Activity & Use Limitation:	

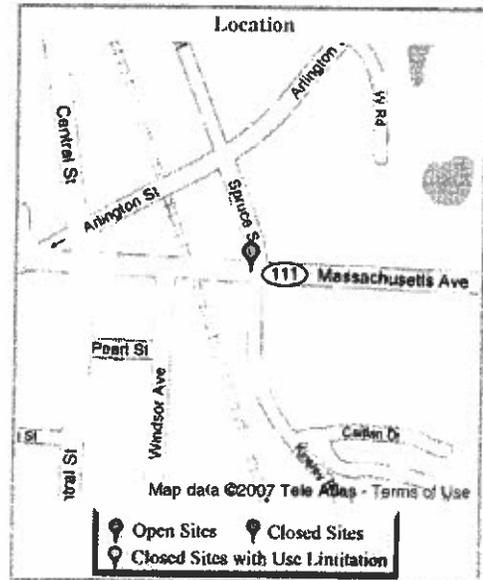
Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	5/22/1996
RAO class:	
Activity & Use Limitation:	

Chemicals		
Chemical	Amount	Units
GASOLINE	12	INCH

LSPs	
LSP#	Name
7610	KAVANAUGH, KEVIN J

Linked RTNs	
Primary RTN	Secondary RTNs
2-0000754	2-0011241

Tier Classification Detail								
NRS	II	III	IV	V	V1	Zone	Imminent	Permit/Tier II
Totals						2	Hazard	Expiration Date
-32	15	3	0	0	0	N	N	4/1/2003
						50		



Site Information			
Site Number:	2-0014590	Category:	TWO HR
Site Name:	PAIJL B GATES ELEMENTARY SCHOOL	Release Type:	RAO
Address:	75 SPRUCE ST	Current date:	2/19/2003
Town:	ACTON	Phase:	
Zipcode:	01720-2497	RAO class:	A2
Official notification date:	12/12/2002	Location type:	SCHOOL
Initial status date:	12/12/2003	Source:	OTHER

Response Action Information	
Response Action Type:	RAO - Response Action Outcome - RAO
Status:	RAORCD - RAO Statement Received
Submittal Date:	2/19/2003
RAO class:	A2
Activity & Use Limitation:	NONE

Response Action Information	
Response Action Type:	RNF - Release Notification Form Received
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	2/10/2003
RAO class:	
Activity & Use Limitation:	

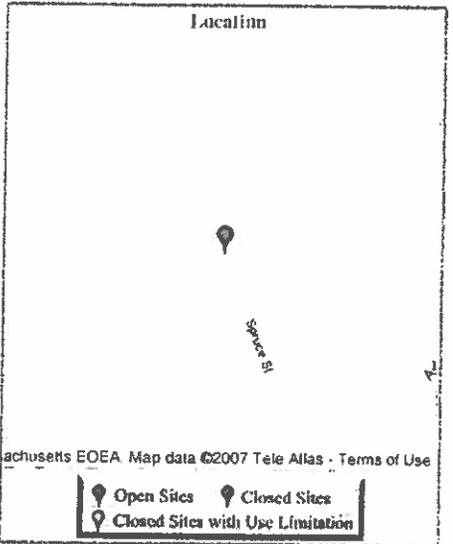
Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	12/12/2002
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	IRA - Immediate Response Action
Status:	APORAL - Oral Approval of Plan or Action
Submittal Date:	12/12/2002
RAO class:	
Activity & Use Limitation:	

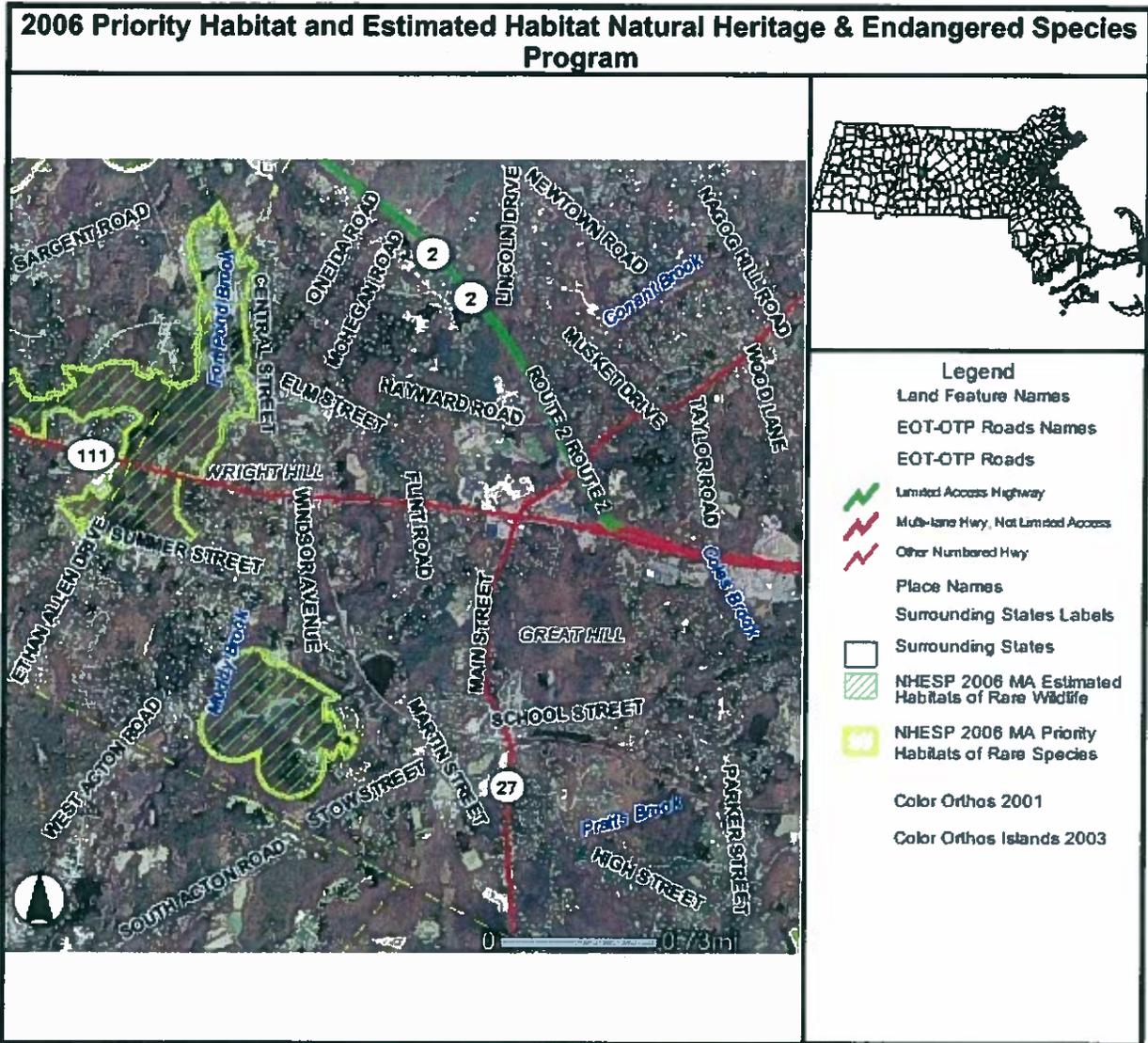
Chemicals		
Chemical	Amount	Units
UNKNOWN CHEMICAL OF UNKNOWN TYPE	15	GAL

LSPs	
LSP#	Name
3497	SIMPSON, DANA A

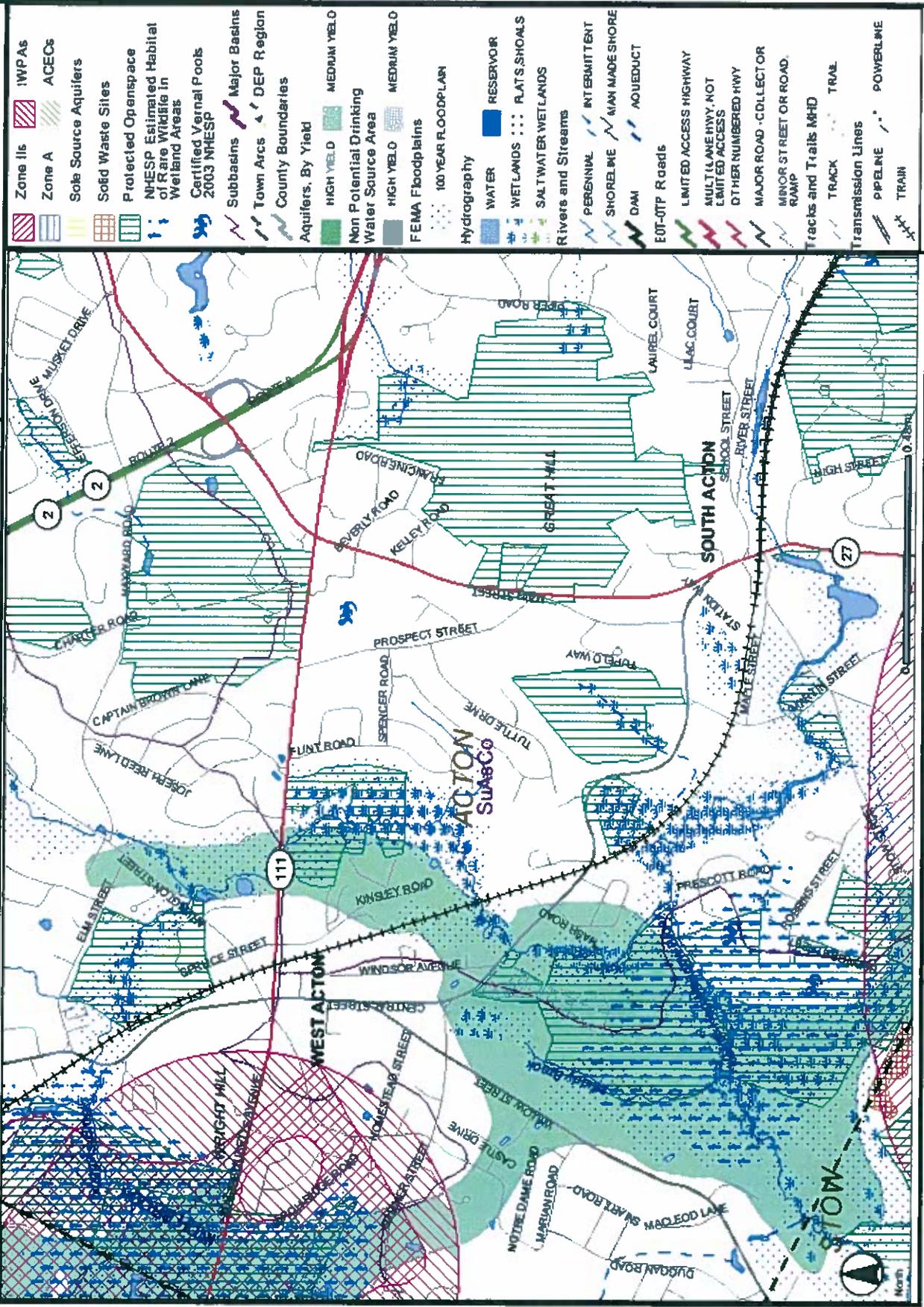
RAO Detail			
Class	Method	GW Category	Soil Category
A2	1	2	1



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Sewer Extension - DEP Priority Resource Map



GROUNDWATER PROTECTION DISTRICT MAP
OF THE TOWN OF
ACTON, MASSACHUSETTS

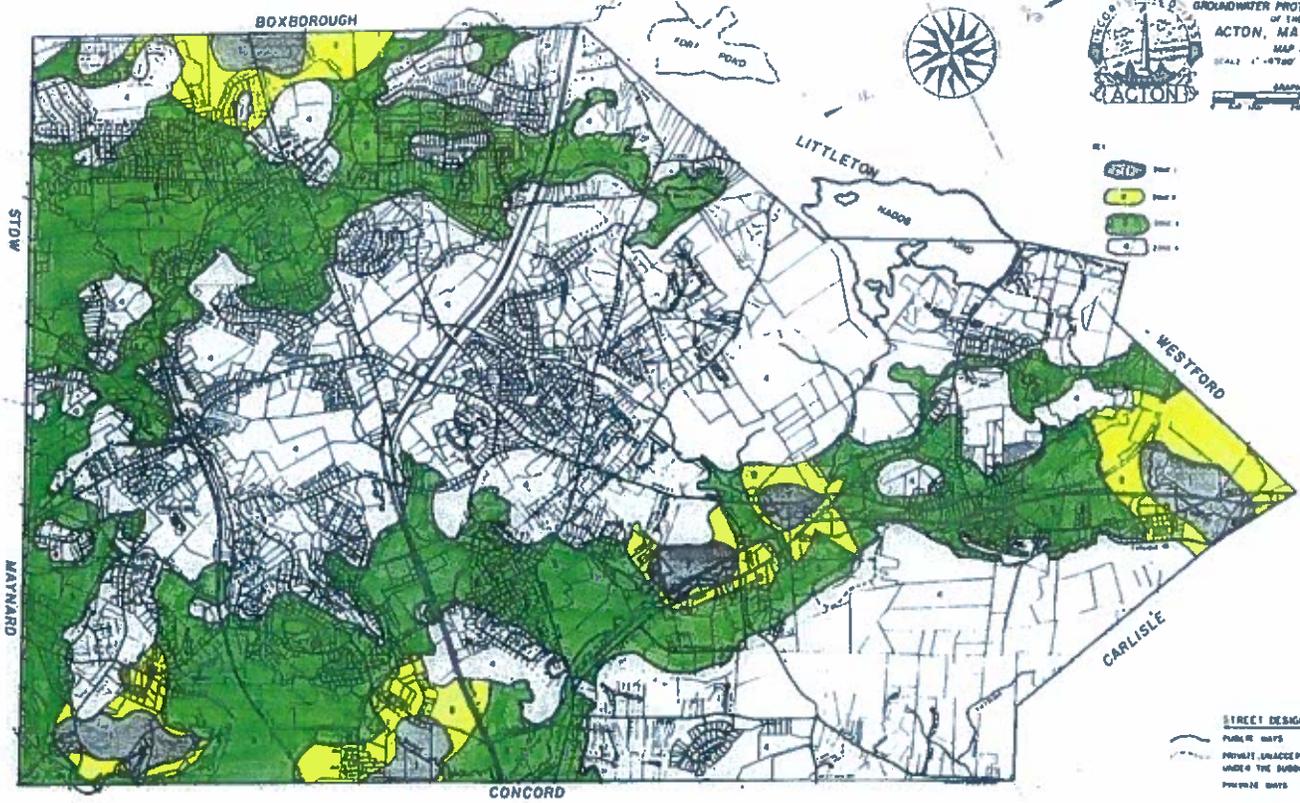
MAP No. 34

SCALE 1" = 4700'

JANUARY 1988



- KEY
- Zone 1
 - Zone 2
 - Zone 3
 - Zone 4



STREET DESIGNATIONS

PUBLIC ROADS

PRIVATE UNACCEPTED OR BE APPROXIMATE UNDER THE SUBDIVISION CONTROL ACT

PROPOSED ROADS

MAP PREPARED FOR THE ACTON PLANNING BOARD
BY THE ACTON ENGINEERING DEPARTMENT
STAFFED BY THE ACTON PLANNING BOARD
JANUARY 1988

AQUIFER PROTECTION ACTON, MASS.	TOWNWIDE MAP JANUARY 1988
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NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

TOWN OF
ACTON, MASSACHUSETTS
MIDDLESEX COUNTY

PANEL 1 OF 8
(SEE MAP INDEX FOR PANELS NOT PRINTED)

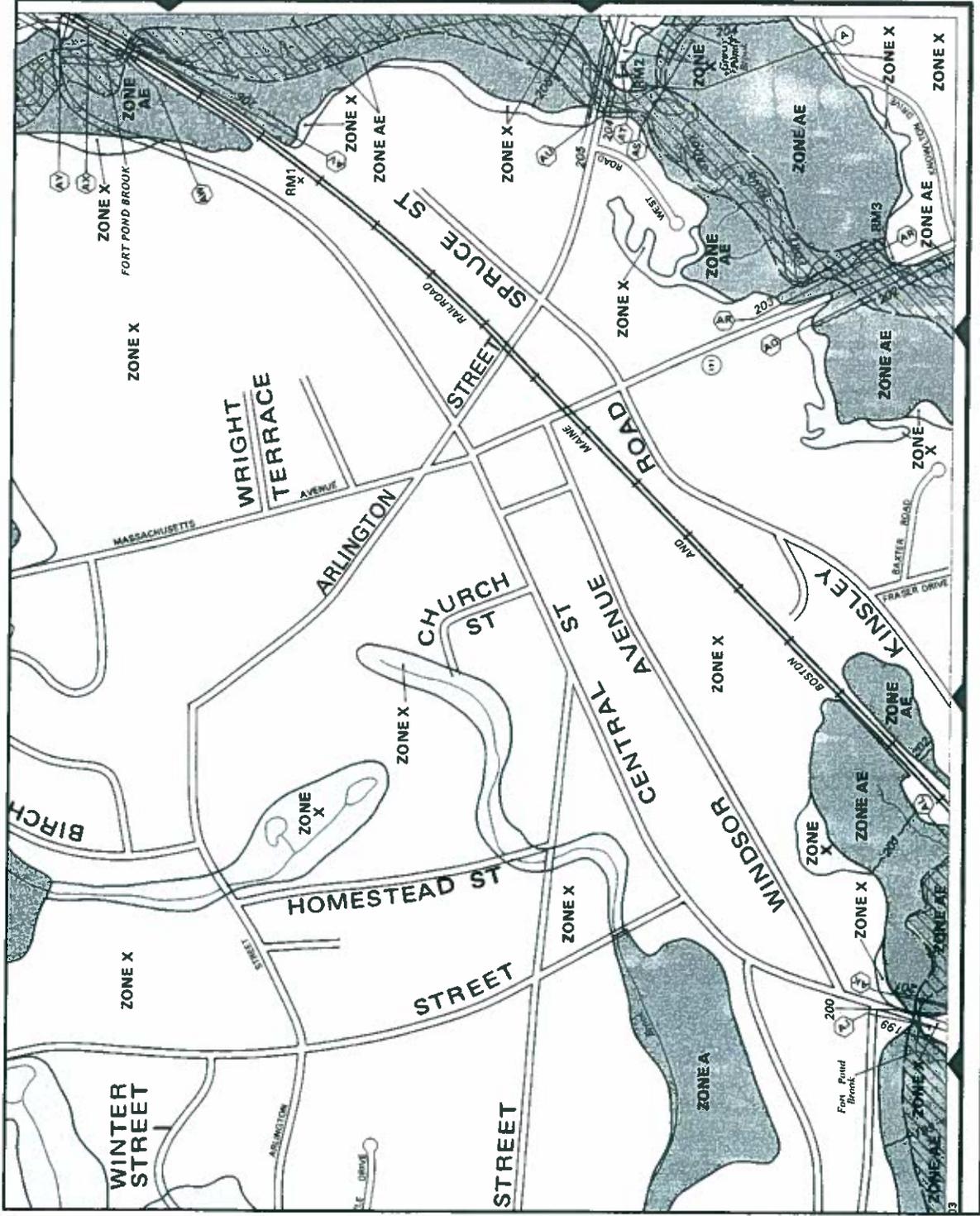


COMMUNITY PANEL NUMBER
250176 0001C
MAP REVISED:
JANUARY 6, 1988



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was prepared using 2-DIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the map. For the most current information on the National Flood Insurance Program, flood maps check the FEMA Flood Map Store at www.fema.gov.





LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

- ZONE A** No base flood elevations determined.
- ZONE AE** Base flood elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- ZONE AG** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined; in areas of littoral (sea flood) flow, velocities are determined.
- ZONE A99** To be protected from 100-year flood by separate flood protection systems under construction; base flood elevations determined.
- ZONE V** Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- ZONE VE** Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

- ZONE X** Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with damage potential less than \$100 per 100-year flood.
- OTHER AREAS** Areas determined to be outside 500-year flood plain.
- ZONE D** Areas in which flood hazards are undetermined.

Flood Boundary

Floodway Boundary

Zone D Boundary

Boundary, Dividing Special Flood Hazard Zones, and Boundary Delineating Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones.

Base Flood Elevation Line; Elevation in Feet*

Cross Section Line

Base Flood Elevation in Feet Where Uniform Within Zone*

Elevation Reference Mark

*Referenced to the National Geodetic Vertical Datum of 1929

NOTES

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local or regional sources. The amount or approximate nature of special flood hazard areas. The constant danger of flooding from every other source, including those identified by the National Weather Service for hurricane evacuation planning.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the Federal Emergency Management Agency.

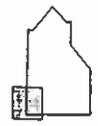
NATIONAL FLOOD INSURANCE PROGRAM

FIRM FLOOD INSURANCE RATE MAP

TOWN OF ACTON, MASSACHUSETTS MIDDLESEX COUNTY

PANEL 1 OF 8

SEE MAP INDEX FOR PANELS NOT PRINTED



PANEL LOCATION

COMMUNITY-PANEL NUMBER 250176 0001C

MAP REVISED: JANUARY 6, 1968



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced Flood Insurance Rate Map. It was prepared by the Federal Emergency Management Agency. It is not to be used for any purpose other than that for which it was prepared. The map does not reflect changes or amendments which may have been made subsequent to the date on the map. For more information on the National Flood Insurance Program, flood maps, or other information, check the FEMA Flood Map Store at www.msc.fema.gov.



APPROXIMATE SCALE
400 0 400 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM FLOOD INSURANCE RATE MAP

TOWN OF ACTON, MASSACHUSETTS
MIDDLESEX COUNTY

PANEL 3 OF 8

(SEE MAP INDEX FOR PANELS NOT PRINTED)



PANEL LOCATION

COMMUNITY-PANEL NUMBER
250178 0003 C

MAP REVISED:
JANUARY 6, 1988



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map, as was enclosed using a self-inking pen. This map does not reflect any amendments which may have been made subsequent to the date on the map. For more information on the National Flood Insurance Program, flood maps check the FEMA Flood Map Store at www.fema.gov.

LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

ZONE A No base flood elevations determined.

ZONE AE Base flood elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.

ZONE AD Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined; for areas of elevated base flood, velocities also determined.

ZONE A99 To be protected from 100-year flood by Federal flood protection system under construction; no base elevations determined.

ZONE V Coastal flood with velocity hazard (wave attack); no base flood elevations determined.

ZONE VE Coastal flood with velocity hazard (wave attack); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 100 acres; areas protected by levees from 100-year flood.

OTHER FLOOD AREAS

ZONE X Areas determined to be outside 500-year flood plain.

ZONE D Areas in which flood hazards are undetermined.

OTHER AREAS

ZONE X Areas determined to be outside 500-year flood plain.

ZONE D Areas in which flood hazards are undetermined.

Other Areas

Zone X Areas determined to be outside 500-year flood plain.

Zone D Areas in which flood hazards are undetermined.

Other Areas

Zone X Areas determined to be outside 500-year flood plain.

Zone D Areas in which flood hazards are undetermined.

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Zone X Areas determined to be outside 500-year flood plain.

Zone D Areas in which flood hazards are undetermined.

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Zone X Areas determined to be outside 500-year flood plain.

Zone D Areas in which flood hazards are undetermined.

Other Areas

Zone X Areas determined to be outside 500-year flood plain.

Zone D Areas in which flood hazards are undetermined.

Other Areas

Zone X Areas determined to be outside 500-year flood plain.

Zone D Areas in which flood hazards are undetermined.

Other Areas

Zone X Areas determined to be outside 500-year flood plain.

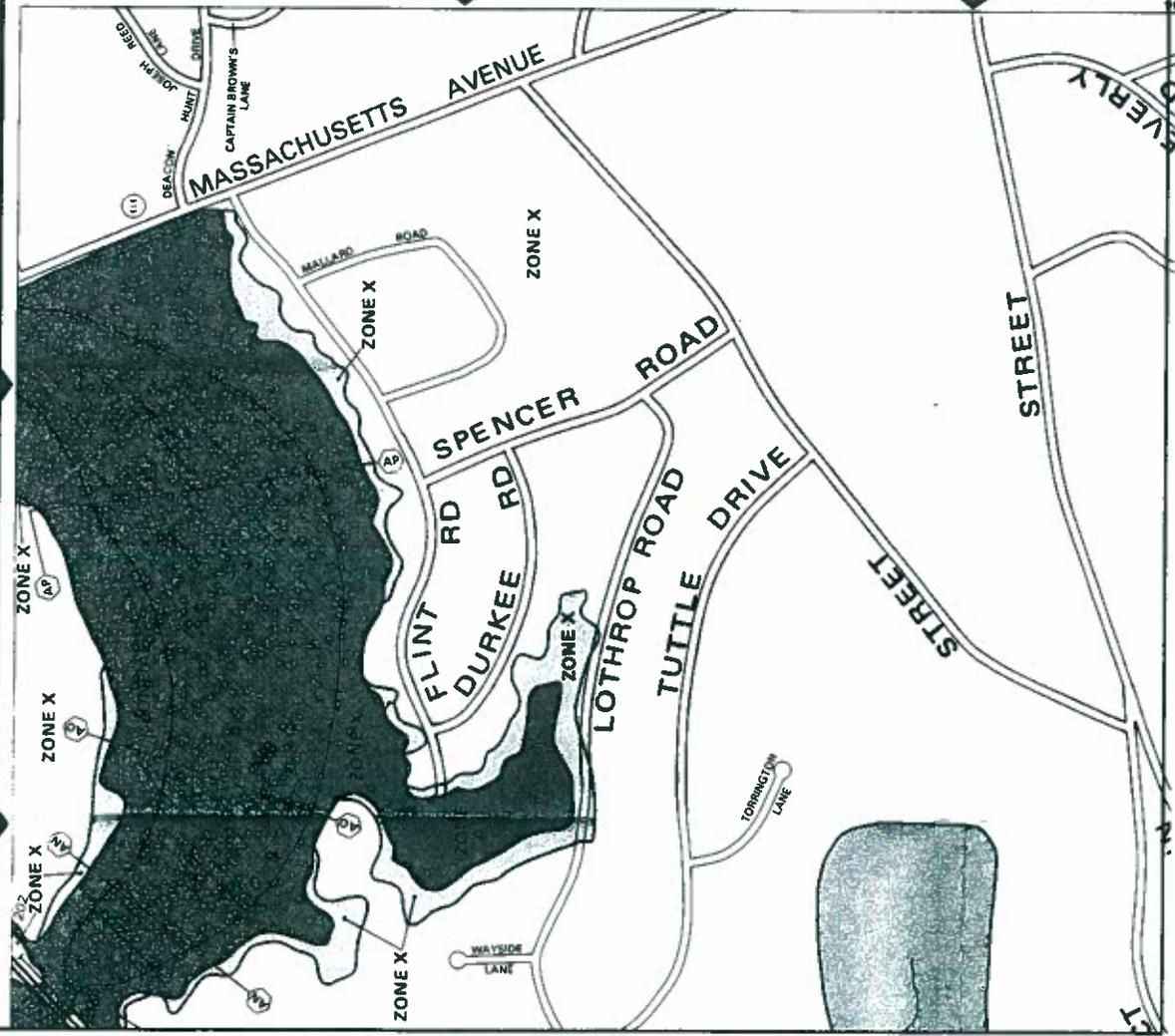
Zone D Areas in which flood hazards are undetermined.

Other Areas

Zone X Areas determined to be outside 500-year flood plain.

Zone D Areas in which flood hazards are undetermined.

Other Areas



NOTES

This map is for use in administering the National Flood Insurance Program; it does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size, or all areas subject to flooding from tidal flood hazard areas. The coastal flooding elevations shown are not necessarily significantly from those developed by the National Weather Service for hurricane evacuation planning.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydrologic data available at the time of the map. For more information on the National Flood Insurance Program, flood maps check the FEMA Flood Map Store at www.fema.gov.

IEL 9831

RM7 X

*Referenced to the National Geodetic Vertical Datum of 1929

PREVENTATIVE MAINTENANCE SCHEDULE

Pump Station Preventative Maintenance Schedule¹:

Action	Frequency
1. Inspect station.	Daily
2. Run each sewage pump in sequence on "Hand," observing wet well level, make sure the level is pumped down with each pump.	Daily
3. Listen to each sewage pump operating. Unusual sounds, vibrations, or odors must be investigated and corrective action taken as noted.	Daily
4. Check level control/float switch operation in "Auto" position; adjust if necessary.	Daily
5. Fill out daily Report on lift station status; record hour-meter reading.	Daily
6. Check operation of alarm system.	Weekly
7. Close and reopen discharge valves (one at a time) to make sure that these valves can be closed when needed.	Monthly
8. Operate Standby Power Generator and check station function under load conditions.	Weekly
9. Inspect wet well and remove obvious debris.	Twice per year

Pumps

Operational Problems

Failure of a pump to start.

If a pump will not start with the selector switch in the "hand" or "auto" position (after making sure that the circuit breaker is in the "on" position and that the thermal overload heaters are not tripped), the probable causes are that electrical power is not being delivered to the pump motor, that there is a "short" in the circuitry, or that the pump motor has burned up.

This is caused by excessive amperage draw. Electrically, it may be caused by loose connections, contact in bad condition and/or grounded wiring or motor windings. Mechanically, an excessive amperage draw will be due to excessive friction in with the pump or the motor. However, it can also be caused by improper impeller clearance, defective mechanical seal, and sometimes by a clogged pump.

Pump runs, but will not pump.

The most probable causes are a valve closed that should be open, a clogged pump, the impeller off the shaft, a broken shaft, and the possibility the pump is airbound. Check discharge valves to make sure that they are fully open.

¹ Source: NEIWPCC. 1998. TR-16: Guides for the Design of Wastewater Treatment Works

PREVENTATIVE MAINTENANCE SCHEDULE

Clogged Pump

Stop pump and shut off circuit breaker for the pump. Close discharge valves. Remove pump from wet well using winch and chain. After pump has been removed from wet well and drained, the inlet port may be visually inspected for extraneous materials.

Rags, leaves, etc. that are clogging the pump may be removed by reaching through the inlet port. The pump can then be dropped into position, discharge valves reopened and restored to service.

Impeller off the shaft, or broken shaft

Basically this problem can be detected only by dismantling the pump and performing a visual inspection; this work should only be done by a trained technician with proper equipment.

Pump Motors - Motors should be inspected daily for unusual noises or vibrations. They should be kept clean of excess oil, dirt, dust, water and chemicals. Once a year, the motor should be completely inspected, including lubricating the bearings, inspect motor-starter contacts for coating, remove end shield and vacuum windings, inspect windings for deterioration and overheating signs, remove bearing and flush out housing with approved solvent, check insulation resistance with megohmmeter, check resistance between motor frame (ground) and winding, and check resistance between windings.

Compressors - Maintain the compressor as indicated in the manufacturer's operation and maintenance manual. Make sure the compressor is free of excess oil, dirt, dust, water and chemicals. The air pressure should be checked daily as an indicator that the compressor is working properly.

Valves - All valves should be exercised once a month to prevent them from becoming frozen open.

Plug Valves - The stems should be checked monthly for leakage and replaced and repaired as required, also the valves should be exercised. Once a year, lubricate the wormdrive per manufacturer's instructions, inspect the stem seal and adjust or replace as necessary, and do a general inspection of the valve.

Check Valves - Once a year, inspect the disc facing, check pin wear on balanced disc and lubricate per manufacturer's instructions.

Wet Wells - The wet wells should be cleaned of grit build-up as needed by a truck mounted vacuum system. The wet well level should be dropped as much as possible during this operation, allowing for inspection and maintenance of submerged components of the wet well.

Instrumentation - Maintenance on the instrumentation for the pumping stations is minimal, as most major tasks need to be performed by a manufacturer's representative or other qualified electrical consultant. The enclosures should be kept clean of dust and dirt, vacuuming twice a year. Also, the unit should be checked for faulty gaskets, loose connections, contact conditions, etc., and repair the items as necessary.

Alarm System - It is vital that the alarm system for the pump stations be checked regularly to ensure that they are operating properly. Failure of the system to activate could have serious results.

Standby Generators - The frequency of servicing and inspection on this unit will depend upon the amount of time that the unit is operated; therefore, frequency of maintenance items is noted in hours of operation. The "Stop-Manual-Auto" switch on the cranking panel should be set at "Stop" or "Stop/Reset" prior to performing maintenance or repair work on this set.

PREVENTATIVE MAINTENANCE SCHEDULE

Action	Frequency
1. Before starting unit:	
a. Check that engine and radiator are free of debris, foreign objects, or loose or broken parts.	10 hours (weekly)
b. Check engine oil and water level; check that block heater is working properly (90 degree temp.)	10 hours (weekly)
c. Check fuel level in tank.	10 hours (weekly)
d. Check battery water level; clean top of batteries.	10 hours (weekly)
e. Check battery terminal for corrosion and tightness of connectors.	10 hours (weekly)
f. Check governor oil level.	10 hours (weekly)
g. Correct problems before starting.	10 hours (weekly)
2. Engine running:	
a. Check oil pressure, fuel pressure, RPM, generator voltage.	10 hours (weekly)
b. Check oil levels; add as required.	10 hours (weekly)
c. Check for proper opening of the radiator louvers.	10 hours (weekly)
d. Check for leaks or strange noises.	10 hours (weekly)
Run engine for approximately five minutes while performing the above checks. If required, engine may be operated for as long as 30 minutes – longer periods of operation only with the engine loaded.	
3. After stop:	
a. Check that all switches are in the proper position for auto start.	10 hours (weekly)
b. Check fuel level in tank; fill when below three-fourths.	10 hours (weekly)

Equipment Lubrication

Preventative maintenance consists of performing certain predetermined tests, checks, inspection and/or lubrication at predetermined intervals. Preventative maintenance will ensure maximum life and reliability of equipment. The manufacturers supply lubrication recommendations for most items of equipment. Operators should consult the equipment manuals to determine lubrication requirements.

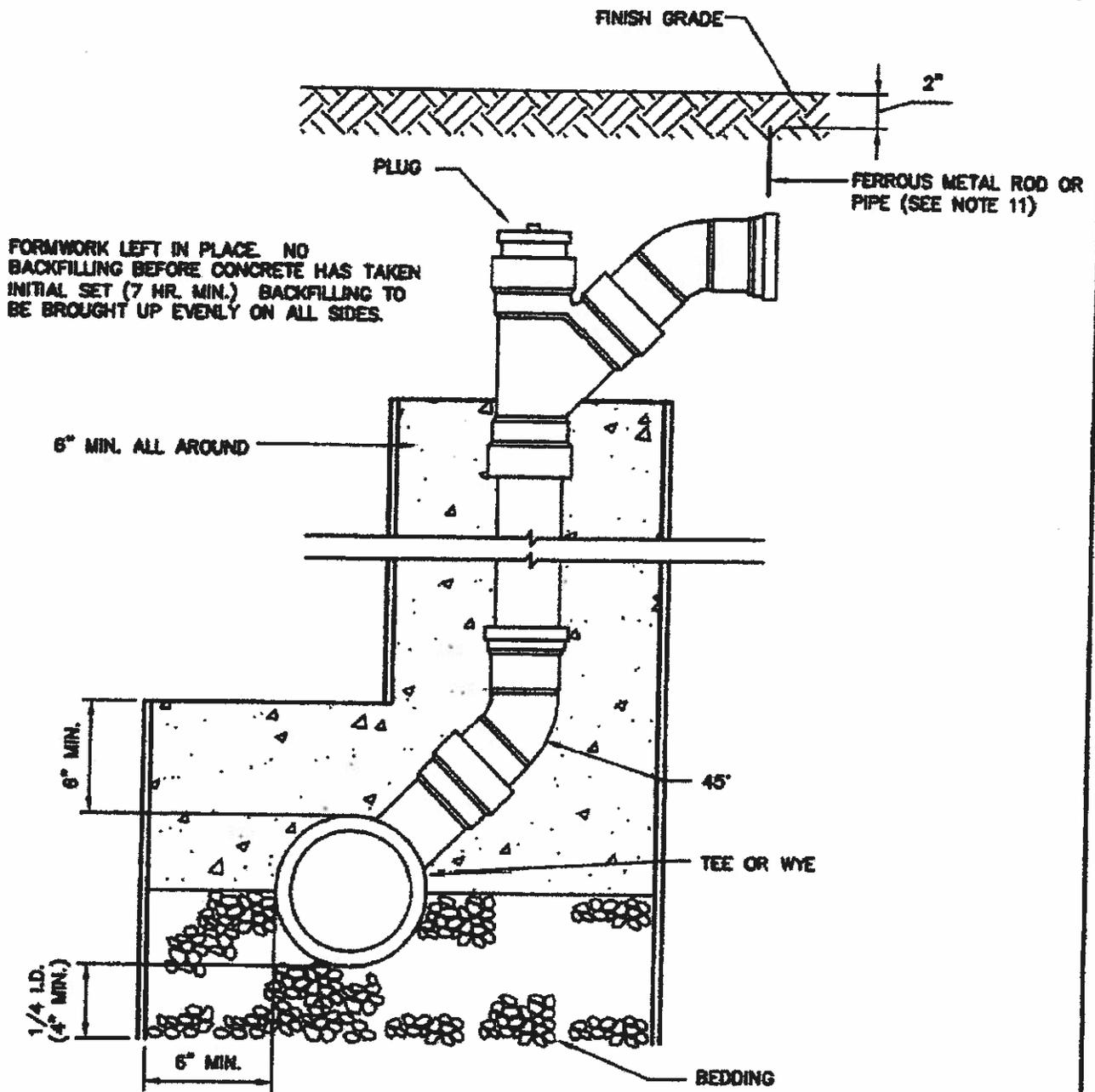
There are numerous considerations to be noted regarding the utilization of lubricants. Keep oil and grease containers covered when not in use. Clean off containers of oil or grease before opening them. Wipe off grease fittings and grease gun nozzle before and after each use. Motors and other equipment to be grease-lubricated should be stopped before adding grease, unless otherwise noted.

PREVENTATIVE MAINTENANCE SCHEDULE

On many bearing installations there is a plug installed 180 degrees from the grease fitting. Remove this plug and remove any hard grease with a piece of wire or small driver blade. Grease should be added slowly, forcing out the old grease. When only clean grease is being extruded, stop adding grease. Start the unit and permit it to run one hour to extrude all excess grease before reinstalling the plug.

On bearing installations which do not have plugs opposite the grease fittings extreme care must be exercised to avoid over greasing. Add grease to those bearings slowly and do not force grease into the bearings if any resistance develops. A general rule to follow, unless directed otherwise, is to apply one shot of grease per quarter per bearing. More than this will usually mean that the bearing is being over lubricated.

The method of protection is quite simple – Keep all parts and surfaces made of iron or steel painted. All painted surfaces should be routinely inspected periodically. All surfaces should be repainted every three to five years. Surfaces coated with epoxy coating should be able to last for a longer period without recoating.

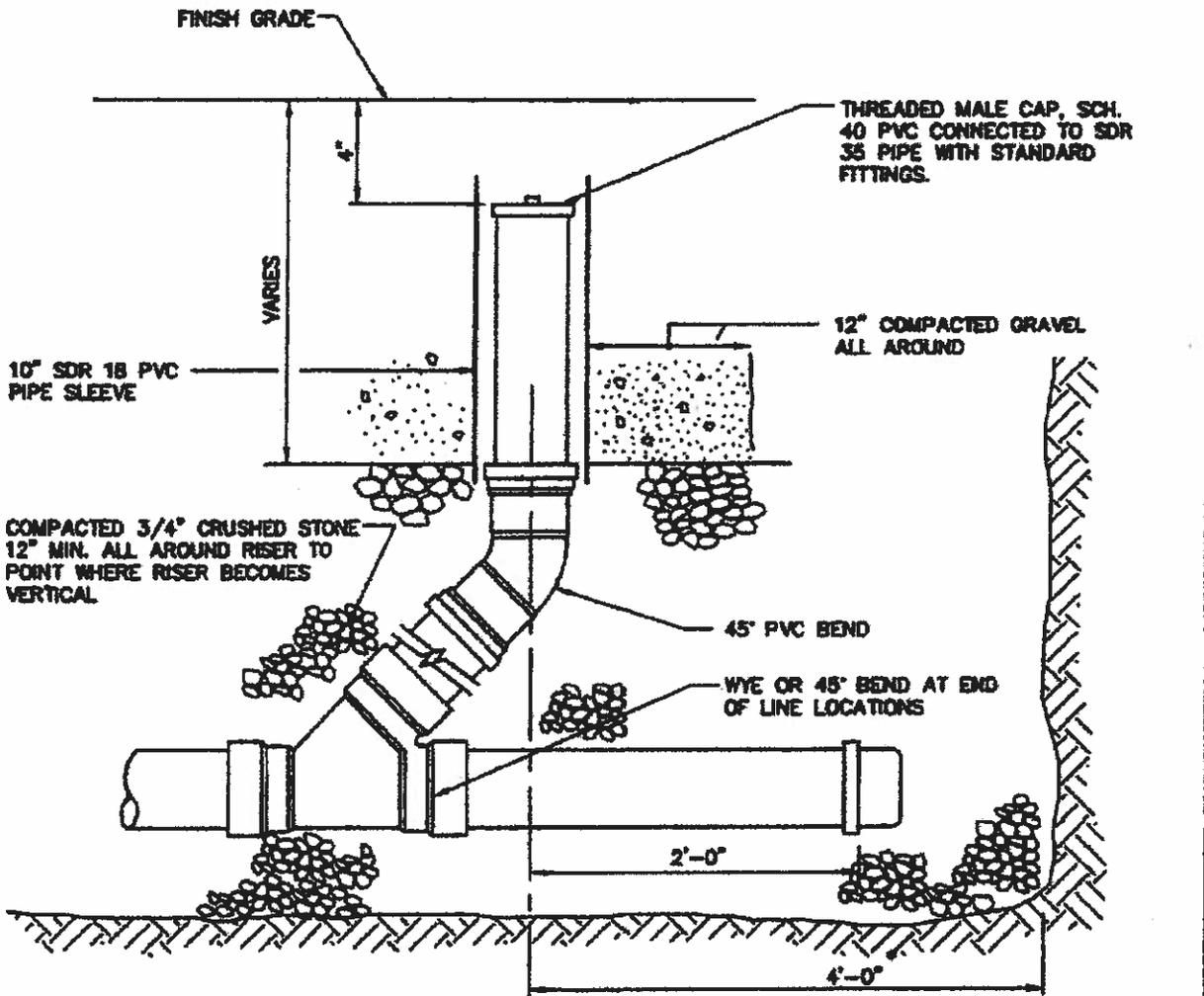


CHIMNEY DETAIL

N.T.S.

CHIMNEY DETAIL

JUNE 2001



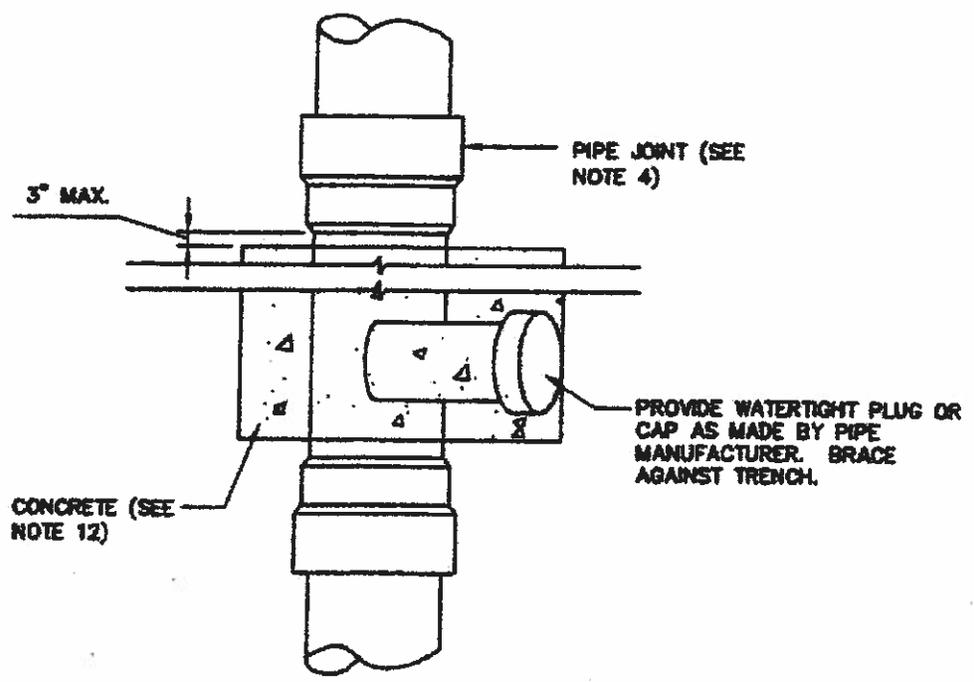
* PAYMENT LIMIT FOR SERVICES INSTALLED IN LEDGE

CLEANOUT DETAIL

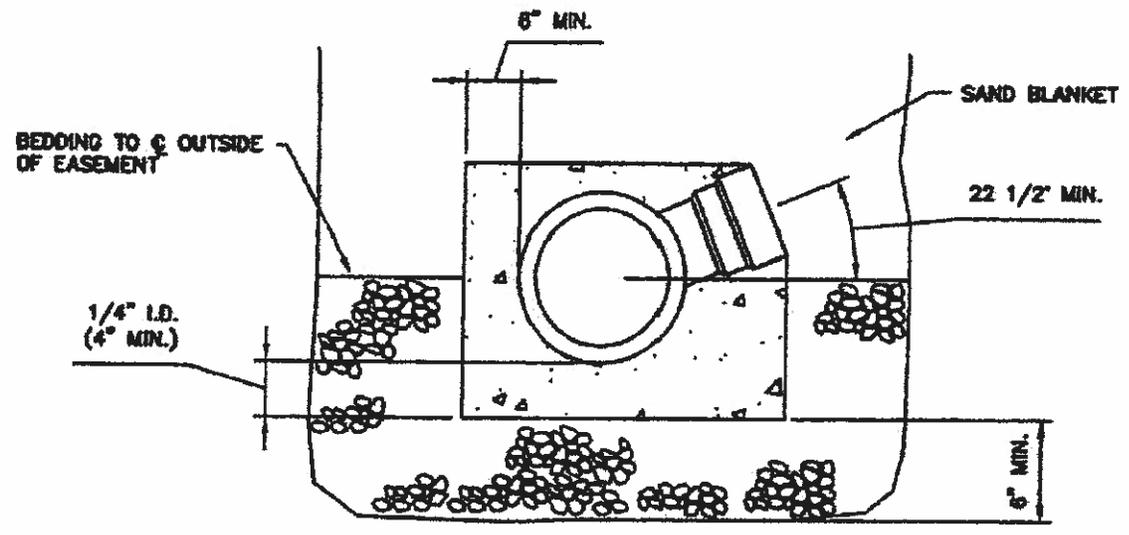
N.T.S.

CLEANOUT DETAIL

JUNE 2001



PLAN



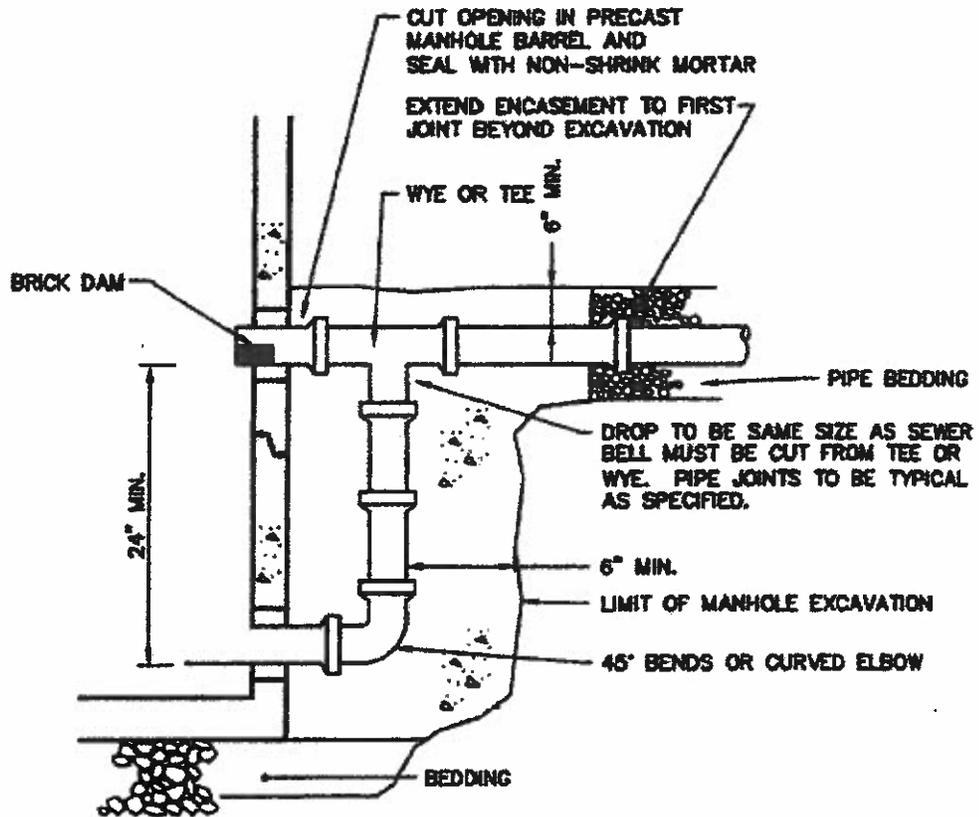
SECTION

CONCRETE FULL ENCASEMENT DETAILS

N.T.S.

**CONCRETE
FULL ENCASEMENT
DETAILS** JUNE 2001

NOTE:
 DIMENSIONS AND CONSTRUCTION OF
 DROP MANHOLE TO BE SIMILAR TO
 TYPICAL MANHOLE EXCEPT AS SHOWN.

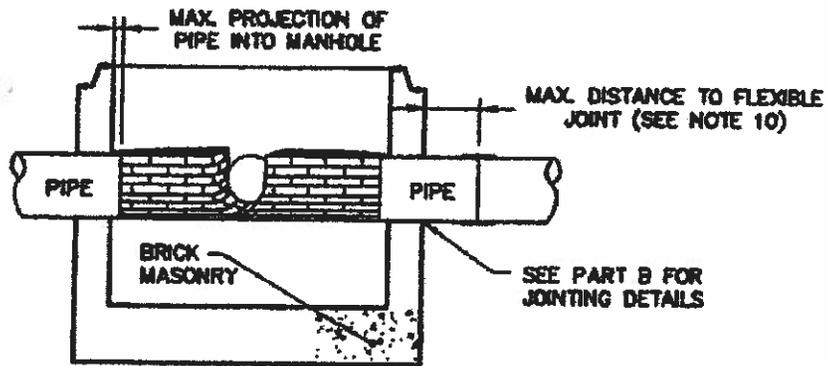
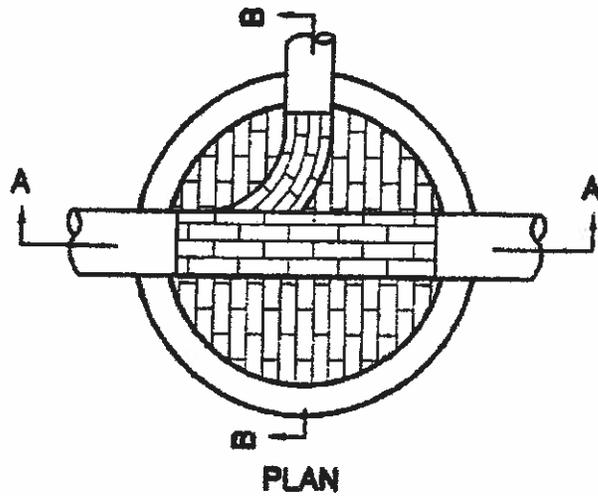


DROP MANHOLE DETAIL

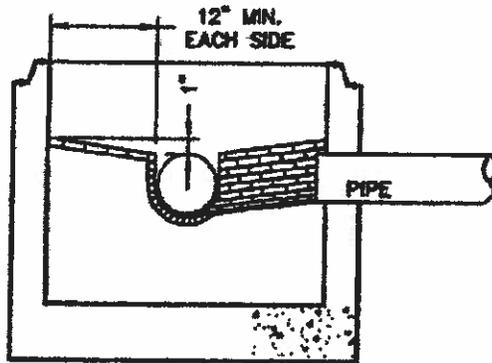
N.T.S.

**DROP MANHOLE
 DETAIL**

JUNE 2001



SECTION A-A



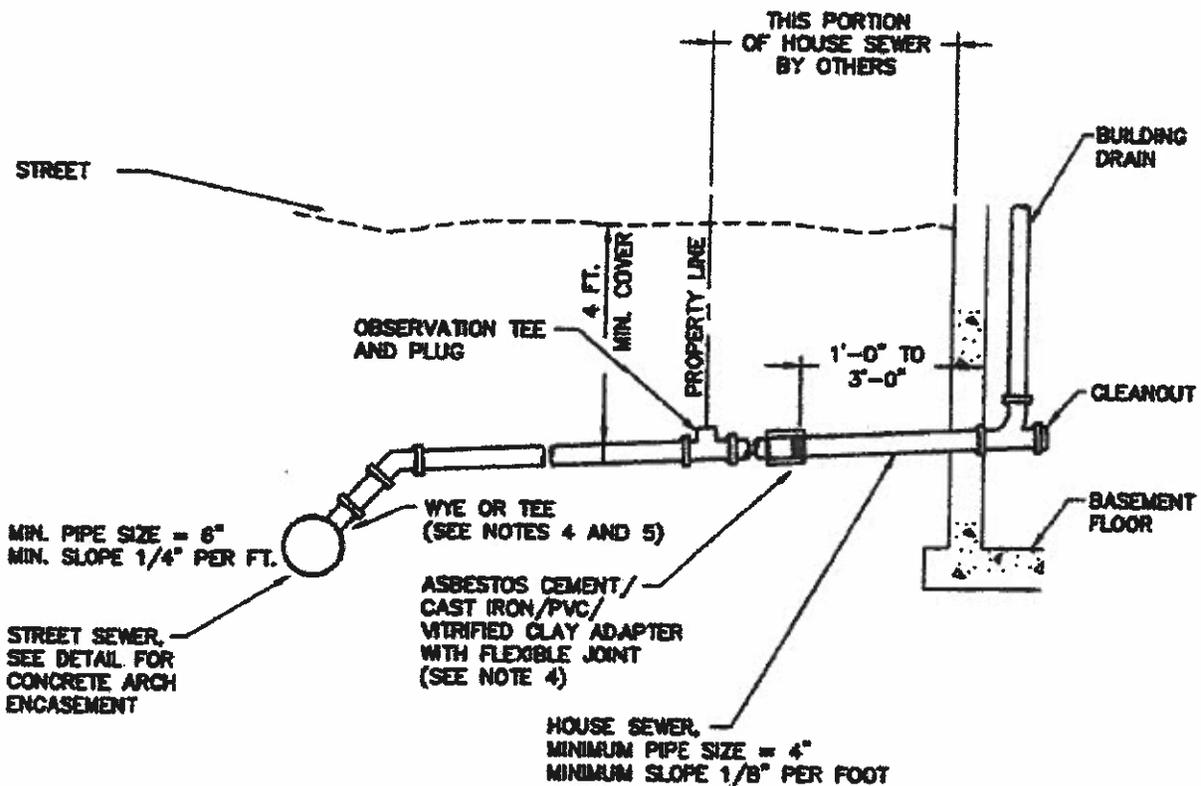
SECTION B-B

NOTES:

- TOP OF SHELF SHALL BE 1" ABOVE CROWN OF HIGHEST PIPE
- CARE SHALL BE TAKEN TO INSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE SEWER INVERT. INVERT BRICKS SHALL BE LAID ON EDGE.
- INVERT AND SHELF TO BE PLACED AFTER LEAKAGE TEST.

**STANDARD MANHOLE
INVERT**

JUNE 2001



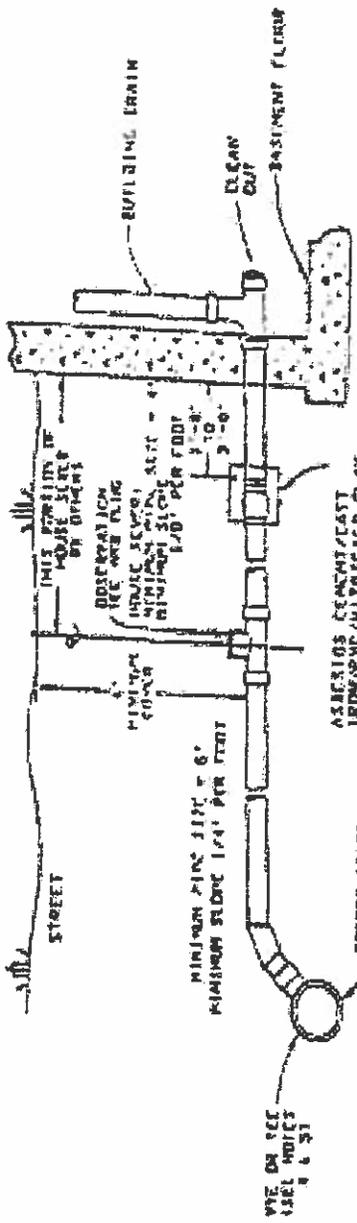
NOTE:
HOUSE SEWER MAY ALSO BE LOCATED
BELOW BASEMENT FLOOR WHEN REQUIRED.

TYPICAL HOUSE SERVICE DETAIL

N.T.S.

**TYPICAL HOUSE
SEWER DETAIL**

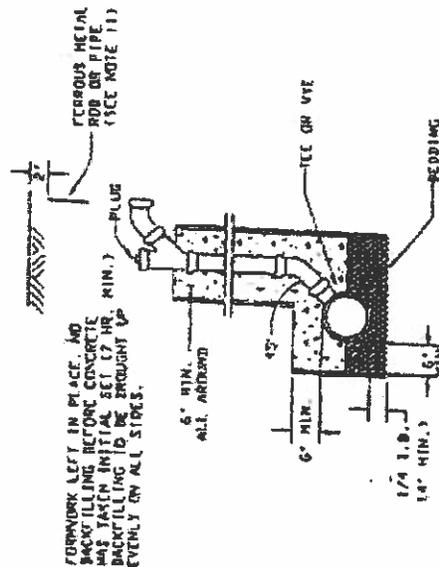
JUNE 2001



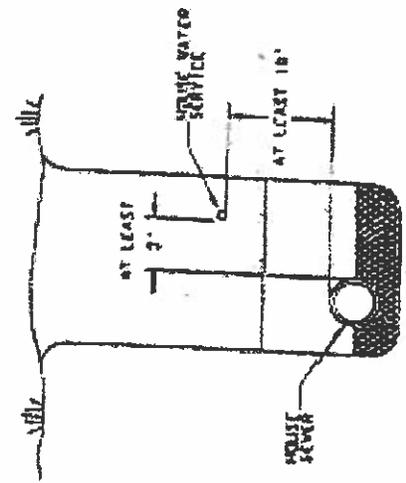
NOTE: HOUSE SEWER HAS ALSO BE LOCATED BELOW BASEMENT FLOOR WHEN REQUIRED

TYPICAL HOUSE SEWER

ASBESTOS CEMENT/CAST IRON/PPVC/VITRIFIED CLAY ADAPTER WITH FLEXIBLE JOINTS (SEE NOTE 6)



FORMWORK LEFT IN PLACE, AND BACKFILLING BEFORE CONCRETE HAS TAKEN INITIAL SET (7 HR. MIN.). BACKFILLING TO BE BROUGHT UP EVENLY ON ALL SIDES.



WATER AND SEWER IN SAME TRENCH
(SEE NOTE 9)

HOUSE SEWER DETAILS

Draft Scope of Services & Responsibilities

Services & Responsibilities

Article 1 of this Attachment focuses on the services and responsibilities ENGINEER shall provide as set forth below.

PART 1 -- BASIC SERVICES

A1.01 Study and Report Phase - completed

A1.02 Preliminary Design Phase

A. After acceptance by OWNER of the Report, selection by OWNER of a recommended solution and indication of any specific modifications or changes in the scope, extent, character, or design requirements of the Project desired by OWNER, and upon written authorization from OWNER, ENGINEER shall:

1. On the basis of the above acceptance, selection, and authorization, prepare Preliminary Design Phase documents consisting of final design criteria, preliminary drawings, outline specifications and written descriptions of the Project.
2. Provide necessary field surveys and topographic and utility mapping for design purposes. Utility mapping will be based upon information obtained from utility owners.
3. Advise OWNER if additional reports, data, information, or services are necessary and assist OWNER in obtaining such reports, data, information, or services.
4. Based on the information contained in the Preliminary Design Phase documents, submit a revised opinion of probable Construction Cost and any adjustments to Total Project Costs known to ENGINEER.
5. Perform or provide the following additional Preliminary Design Phase tasks or deliverables:
 - a. MassDEP Sewer System Extension Permit Application
 - b. MassDEP WPA-3 Notice of Intent Application
 - c. Review of the Preliminary Design Documents with Third Party Reviewers as directed by the Town.
6. Furnish the Preliminary Design Phase documents to and review them with OWNER.
7. Submit to OWNER two final copies of the Preliminary Design Phase documents and revised opinion of probable Construction Cost within six (10) weeks after authorization to proceed with this phase.

- B. ENGINEER's services under the Preliminary Design Phase will be considered complete on the date when final copies of the Preliminary Design Phase documents have been delivered to OWNER.

A1.03 Final Design Phase

A. After acceptance by OWNER of the Preliminary Design Phase documents and revised opinion of probable Construction Cost as determined in the Preliminary Design Phase, but subject to any OWNER-directed modifications or changes in the scope, extent, character, or design requirements of or for the Project, and upon written authorization from OWNER, ENGINEER shall:

1. On the basis of the above acceptance, direction, and authorization, prepare final Drawings indicating the scope, extent, and character of the Work to be performed and furnished by Contractor. Specifications will be prepared, where appropriate, in general conformance with the 16-division format of the Construction Specifications Institute.
2. Provide technical criteria, written descriptions, and design data for OWNER's use in filing applications for permits from or approvals of governmental authorities having jurisdiction to review or approve the final design of the Project and assist OWNER in consultations with appropriate authorities.
3. Advise OWNER of any adjustments to the opinion of probable Construction Cost and any adjustments to Total Project Costs known to ENGINEER.
4. Perform or provide the following additional Final Design Phase tasks or deliverables:
 - A. Review of the Final Design Documents with Third Party Reviewers as directed by the Town.
5. Prepare and furnish Bidding Documents for review and approval by OWNER, its legal counsel, and other advisors, as appropriate, and assist OWNER in the preparation of other related documents.
6. Submit two (2) final copies of the Bidding Documents and a revised opinion of probable Construction Cost to OWNER within six (6) weeks after approval of the Preliminary Design Phase efforts.

B. In the event that the Work designed or specified by ENGINEER is to be performed or furnished under more than one prime contract, or if ENGINEER's services are to be separately sequenced with the work of one or more prime Contractors (such as in the case of fast-tracking), OWNER and ENGINEER shall, prior to commencement of the Final Design Phase, develop a schedule for performance of ENGINEER's services during the Final Design, Bidding or Negotiating, Construction, and Post-Construction Phases in order to sequence and coordinate properly such services as are applicable to the work under such separate prime contracts. This schedule is to be prepared and included in or become an

amendment to Exhibit A whether or not the work under such contracts is to proceed concurrently.

C. The number of prime contracts for Work designed or specified by ENGINEER upon which the ENGINEER's compensation has been established under this Agreement is one (1).

D. ENGINEER's services under the Final Design Phase will be considered complete on the date when the submittals required by paragraph A1.03.A.6 have been delivered to OWNER.

A1.04 *Bidding or Negotiating Phase*

A. After acceptance by OWNER of the Bidding Documents and the most recent opinion of probable Construction Cost as determined in the Final Design Phase, and upon written authorization by OWNER to proceed, ENGINEER shall:

1. Assist OWNER in advertising for and obtaining bids or negotiating proposals for the Work and, where applicable, maintain a record of prospective bidders to whom Bidding Documents have been issued, attend pre-Bid conferences, if any, and receive and process Contractor deposits or charges for the Bidding Documents.
2. Issue Addenda as appropriate to clarify, correct, or change the Bidding Documents.
3. Consult with OWNER as to the acceptability of subcontractors, suppliers, and other individuals and entities proposed by Contractor for those portions of the Work as to which such acceptability is required by the Bidding Documents.
4. Perform or provide the following additional Bidding or Negotiating Phase tasks or deliverables: None
5. Attend the Bid opening, prepare Bid tabulation sheets, and assist OWNER in evaluating Bids or proposals and in assembling and awarding contracts for the Work.

B. The Bidding or Negotiating Phase will be considered complete upon commencement of the Construction Phase or upon cessation of negotiations with prospective Contractors.

OWNER's Responsibilities

Article 2 of this Attachment focuses on the OWNER's Responsibilities.

B2.01 In addition to other responsibilities of OWNER as set forth in this Agreement, OWNER shall:

A. Provide ENGINEER with all criteria and full information as to OWNER's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility, and expandability, and any budgetary limitations; and furnish copies of all design and construction standards which OWNER will require to be included in the Drawings and Specifications; and furnish copies of OWNER's standard forms, conditions, and related documents for ENGINEER to include in the Bidding Documents, when applicable.

B. Furnish to ENGINEER any other available information pertinent to the Project including reports and data relative to previous designs, or investigation at or adjacent to the Site.

C. Following ENGINEER's assessment of initially-available Project information and data and upon ENGINEER's request, furnish or otherwise make available such additional Project related information and data as is reasonably required to enable ENGINEER to complete its Basic Services. Such additional information or data would generally include the following:

1. Property descriptions.
 2. Zoning, deed, and other land use restrictions.
 3. Property, boundary, easement, right-of-way, and other special surveys or data, including establishing relevant reference points.
 4. Explorations and tests of subsurface conditions at or contiguous to the Site, drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site, or hydrographic surveys, with appropriate professional interpretation thereof.
 5. Environmental assessments, audits, investigations and impact statements, and other relevant environmental or cultural studies as to the Project, the Site, and adjacent areas.
 6. Data or consultations as required for the Project but not otherwise identified in the Agreement or the Exhibits thereto.
- D. Give prompt written notice to ENGINEER whenever OWNER observes or otherwise becomes aware of a Hazardous Environmental Condition or of any other development that affects the scope or time of performance of ENGINEER's services, or any defect or nonconformance in ENGINEER's services or in the work of any Contractor.

E. Arrange for safe access to and make all provisions for ENGINEER to enter upon public and private property as required for ENGINEER to perform services under the Agreement.

F. Examine all alternate solutions, studies, reports, sketches, Drawings, Specifications, proposals, and other documents presented by ENGINEER (including obtaining advice of an attorney, insurance counselor, and other advisors or consultants as OWNER deems appropriate with respect to such examination) and render in writing timely decisions pertaining thereto.

G. Provide reviews, approvals, and permits from all governmental authorities having jurisdiction to approve all phases of the Project designed or specified by ENGINEER and such reviews, approvals, and consents from others as may be necessary for completion of each phase of the Project.

H. Provide, as required for the Project:

1. Legal services with regard to issues pertaining to the Project as OWNER requires, Contractor raises, or ENGINEER reasonably requests.

2. Placement and payment for advertisement for Bids in appropriate publications.

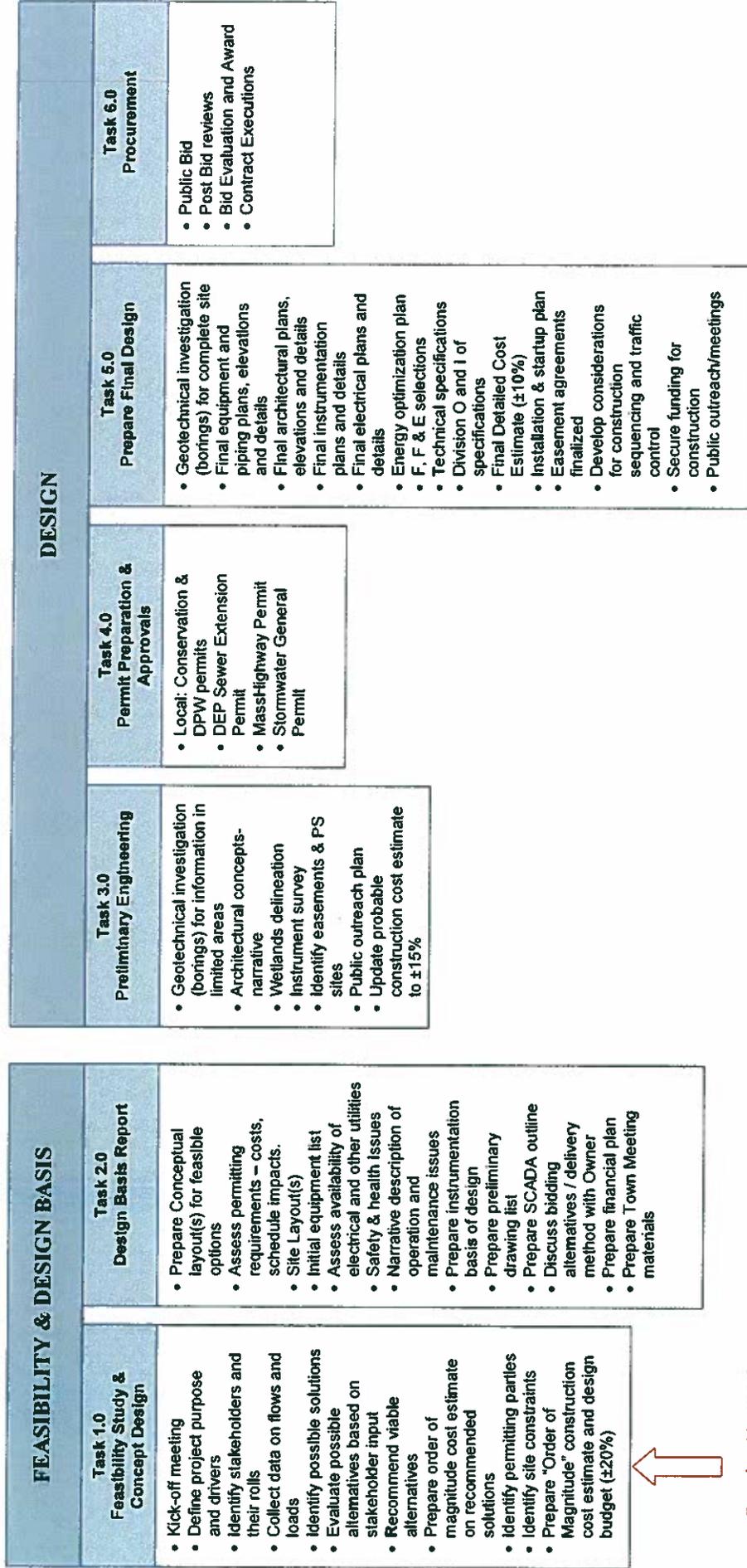
- I. Advise ENGINEER of the identity and scope of services of any independent consultants employed by OWNER to perform or furnish services in regard to the Project, including, but not limited to, cost estimating, project peer review, value engineering, and constructability review.

- J. Furnish to ENGINEER data as to OWNER's anticipated costs for services to be provided by others for OWNER so that ENGINEER may make the necessary calculations to develop and periodically adjust ENGINEER's opinion of Total Project Costs.

- K. If OWNER designates a construction manager or an individual or entity other than, or in addition to, ENGINEER to represent OWNER at the Site, define and set forth as an attachment to this Exhibit B the duties, responsibilities, and limitations of authority of such other party and the relation thereof to the duties, responsibilities, and authority of ENGINEER.

- L. Attend the pre-bid conference, bid opening, pre-construction conferences, construction progress and other job related meetings, and Substantial Completion and final payment inspections.

ACTON MASSACHUSETTS SEWER EXTENSION – TYPICAL FLOWCHART OF EVENTS

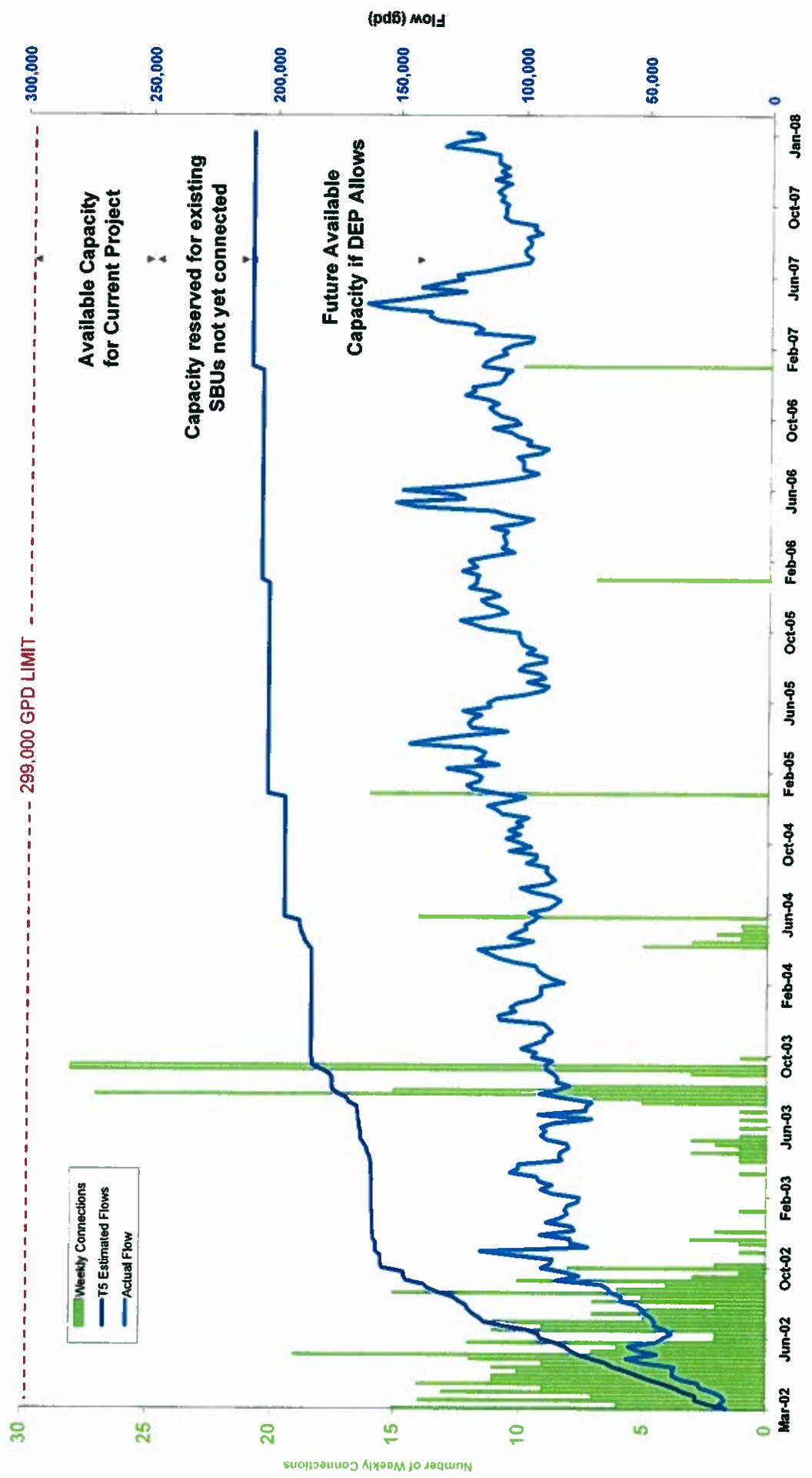


Completed by W&C
in Feasibility Report
May 2008



Notes:
1. Tasks can run concurrently; however they are generally performed in this sequential order

Town of Acton, MA
T5 Estimated Flows vs Actual Flows
Compared with Number of Weekly Connections to the Sewer System



\\hpc\hpc\p0312781 Acton MA\pww Estimation\p0306-03-12 AMRAC\HAK\MENEA_San_Flow.xls



Massachusetts Highway Department

Application for Permit to Access State Highway

To be completed by the Applicant. See reverse for instructions.

1. Town/City _____

2. State Highway route numbers and/or name _____

3. Description of property and/or facility for which access is sought (attach additional sheets if necessary).

4. Description of work to be performed within State Highway Layout (attach additional sheets if necessary).

5. Dig Safe Number: _____

6. Applicant Information

7. Property Owner

Name _____

Name _____

Mailing Address _____

Mailing Address _____

Telephone Number _____

Telephone Number _____

Fax Number _____

Fax Number _____

E-Mail Address _____

E-Mail Address _____

Signature _____

Signature _____

Print Name _____

Print Name _____

Date _____

Date _____

Return completed application to District Highway Director for your Town/City. Refer to reverse side for appropriate address

For office use only ♦ Do not write below this line

- 1. Application number
2. Date received
3. Fee amount
4. MEPA required
ENF-EOEA Cert.
EIR-EOEA Cert.
Other - EOEA Cert.

- 5. Section 61 finding
6. Mass Historic action
7. Plans returned
Revision submitted
8. Application complete
9. Permit issued
10. Permit denied

Instructions for Completing Application for Permit to Access State Highway

General

The MHD is granted authority to issue State Highway Access Permits by M.G.L. Chapter 81, Section 21. Access is defined as:

- I. Any physical work performed within the State Highway Layout; and/or,
- II. Provisions for motor vehicles to enter or exit a State Highway facility from abutting properties.
 - A. Application for residential developments of 5 units or less shall include a sketch which indicates lot size, frontage along the State Highway, building location(s), and proposed driveway location(s) with respect to State Highway baseline.
 - B. Application for all non-residential developments and residential developments greater than 5 units must include engineered access plans (minimum of 2 copies) at an appropriate scale (1 inch = 20 or 40 feet) which clearly show all proposed work and:
 1. State Highway Layout line and baseline
 2. Property corners and dimension and bearings of lot lines.
 3. Location and dimensions of proposed drive(s).
 4. Location of existing drive(s).
 5. Complete details of existing and proposed drainage.

Fee

A check payable to the Commonwealth of Massachusetts for the appropriate permit application fee must accompany the permit application.

Fee Schedule for Access and Utility Permits

Residential Access Permits	
5 or less units	\$25.00
From 6 to 49 units	\$100.00
Greater than 49 units	\$2,000.00
Non-Residential Access Permits	
Less than 25,000 square feet	\$500.00
From 25,000 to 300,000 square feet	\$1,000.00
From 300,000 to 750,000 square feet	\$2,000.00
Greater than 750,000 square feet	\$3,000.00
Non-Municipal Utility Permits Not in Conjunction with Access Permits	
Annual blanket utility permit	\$500.00
Capital improvements to a utility	\$500.00

Specific Instructions (print or type)

- Line 1.**
List name of municipality in which access is sought.
- Line 2.**
List name or number of State Highway Route(s) to which access is sought.
- Line 3.**
If access is sought under Definition II above, briefly describe facility for which access is sought.
 Example 1:
Private single family residence at 100 State Road. Approximate size of proposed building 2,500 s f.
Approximate lot size 0.75 acres.
 Example 2:
500,000 s f. enclosed shopping mall adjacent to State Route 1-290 and Route 20.
Approx. lot size 67 acres.
- Line 4.**
Briefly describe the proposed work to be performed within the State Highway Layout.
 Example 1:
Remove 50 feet of existing granite curb on south side of highway in order to construct driveway access and modify the roadway geometry to accommodate left-turn lane.
 Example 2:
Excavate 10 foot x 10 foot section of roadway at Station 100+00 in westbound lane in order to install water service to residence at 100 State Street.
- Line 5.**
A Dig Safe number must be obtained by calling 1-888-DIG-SAFE, 1-888-(344-7233).
- If construction within the State Highway Layout does not commence within the period allowed by Dig Safe, a new number must be obtained prior to beginning construction.

- Line 6.**
Individual or business making application must complete the required information, including date of application and signature.
- Line 7.**
Complete this section only if the individual or business making application is other than the property owner of the land for which access is sought.

Return completed application and fee to appropriate District Office listed below. Please contact the Permit Engineer at this address if additional information is required.

District One
270 Pittsfield Road
Lenox, MA 01201
(413) 637-1750
fax # (413) 637-0309

District Two
811 North King Street
Northampton, MA 01060
(413) 584-1611
fax # (413) 584-8194

District Three
403 Belmont Street
Worcester, MA 01604
(508) 754-7204
fax # (508) 799-9763

Patricia A. Leavenworth, P.E.
District Highway Director
District Four
519 Appleton Street
Arlington, MA 02174
(781) 641-8300
fax # (781) 646-5115

District Five
1000 County Street
Taunton, MA 02780
(508) 824-6633
fax # (508) 880-6102

Table 1: West Acton Sewer Extension Project - Cost Comparison of Alternatives						
Items	Unit	Unit Cost	Alt. 1: WAC-1		Alt 5: STF-1	
			Quantity	Cost	Quantity	Cost
Direct Costs						
8" PVC Sewer (8-12 feet)	L.F.	135	2535	\$342,225	7260	\$980,100
8" PVC Sewer (12-16 feet)	L.F.	150	1065	\$159,750	2140	\$321,000
8" PVC Sewer (16-20 feet)	L.F.	180	50	\$9,000	600	\$108,000
8" PVC Sewer (>20 feet)	L.F.	220	0	\$0	0	\$0
6" PVC Service Stubs (40 lf each)	L.F.	85	3160	\$268,600	5080	\$431,800
PVC Forcemain	L.F.	60	4900	\$294,000	4000	\$240,000
PVC Low Pressure Sewer	L.F.	70	2650	\$185,500	850	\$59,500
Paving - Trenches in Local Streets (3" depth)	Sq Yd.	15	1,914	\$28,717	10,198	\$152,967
Paving - Trenches in State Roadway (3" depth)	Sq Yd.	15	3,356	\$50,333	0	\$0
Paving - CDF in Local Roads	Cu.Yd	110	0	\$0	1,000	\$110,000
Paving - CDF in State Roads	Cu.Yd	110	3,461	\$380,722	0	\$0
Paving - Overlay Local Roads (3")	Sq Yd.	10	6,933	\$69,333	31,344	\$313,444
Paving - Overlay State Roads (3")	Sq Yd.	10	14,733	\$147,333	0	\$0
Water Main Relocation (15% total sewer l.f.)	L.F.	85	945	\$80,325	1,628	\$138,338
Drainage Pipe Relocation (5% total sewer l.f.)	L.F.	50	315	\$15,750	543	\$27,125
Ledge Removal (10% total sewer l.f. in ledge)	Cu. Yd.	85	1,386	\$117,810	2,387	\$202,895
Grinder Pumps	Each	4,200	17	\$71,400	13	\$54,600
Pump Stations	Each	400,000	2	\$800,000	1	\$400,000
Easements	L.F.	100	0	\$0	500	\$50,000
Stream and/or Railroad Crossings	Each	200,000	1	\$200,000	0	\$0
Construction Contingency Low - 5%	--	5%		\$161,040		\$179,488
Subtotal - Conceptual Construction Costs Low				\$3,382,000		\$3,769,000
Subtotal - Conceptual Construction Costs High				\$3,865,000		\$4,307,000
Indirect Costs						
Design & Permitting (10% of Construction)	Des. Cost	10%	--	\$338,200	--	\$376,900
Procurement & Constr. Engineering (15%)	Con. Cost	15%	--	\$507,300	--	\$565,350
Administration (Police, Financing, Legal, etc. - 10%)	Con. Cost	10%	--	\$338,200	--	\$376,900
Indirect Contingency - 5%	Ind. Cost	5%	--	\$193,250	--	\$215,350
Subtotal - Conceptual Indirect Costs Low				\$1,183,700		\$1,319,150
Subtotal - Conceptual Indirect Costs High				\$1,546,000		\$1,722,800
Total Project Conceptual Costs Low				\$4,566,000		\$5,088,000
Total Project Conceptual Costs High				\$5,411,000		\$6,030,000
Total LF of Collection Sewer (LF)				\$6,300		\$10,850
\$/Ft of Sewer Low				\$725		\$469
\$/Ft of Sewer High				\$859		\$556
Estimated SBUs Low			100		120	
Estimated SBUs High			130		130	
Sewers1 (x1000 ft)			6.3		10.9	
SBU Density Low (SBUs per 1000 LF of sewer)			15.9		11.1	
SBU Density High (SBUs per 1000 LF of sewer)			20.6		12.0	
Conceptual Construction Costs per SBU Low			\$35,000		\$39,000	
Conceptual Construction Costs per SBU High			\$54,000		\$50,000	
Estimated Flow (5-year winter flow average)	GPD		17,081		20,668	
Title 5 Flows	GPD		54,925		49,610	
ENR Construction Cost Index (February 2008)			8,094			



TECHNICAL MEMORANDUM

TO: Doug Halley, Director of Health, Acton
FROM: Joe Shea, P.E. & Jack Troidl, P.E.
DATE: May 8, 2008
RE: Spencer/Tuttle/Flint & West Acton Center A Sewer System Extension
Feasibility Study and Conceptual Design Memo

Woodard and Curran (W&C) conducted a preliminary review of the feasibility to connecting the Spencer/Tuttle/Flint (STF), Area 10, and the West Acton Center A (WACA), Area 12, to the municipal sewer system. This report does not detail every required task, nor does it guarantee the commercial and residential properties may join the sewer collection system, but it identifies those issues that W&C sees as the key concerns and issues to be considered if the properties are to connect to the sewer collection system. This study entails the preliminary assessment into the technical, regulatory, and construction components required for sewerage these project areas.

Existing Conditions and Disposal Systems

W&C has reviewed the expected average daily flows (ADF) and peak daily flows (PDF) from the properties in both project areas. There are currently no sewer system connections within the study limits. The residential property wastewater flows are based on both Acton Water District records for winter water consumption and Title 5 flow rates. There are 120-130 residential properties in Area 10 and 55-65 residential properties in Area 12.

The STF sewershed is an existing residential neighborhood. The sewer flow from the STF area will have typical residential waste characteristics. The new collection system will be a tight sewer system preventing infiltration.

The waste characteristics of West Acton Center are expected to be typical of standard sanitary waste since the Town of Acton does not allow industrial or process waste, such as oil, solvent, or lubricants. Existing oil/water separators and floor drain systems at the school properties and gas stations are assumed to be properly maintained to separate out these products. The funeral home property on Massachusetts Avenue will require a pretreatment system prior to discharging to the municipal system.

A summary of the influent flows and loadings based upon this analysis are as follows:

Parameter	STF-Area 10	WAC A-Area 12	WAC A-Area 12
	Residential Properties	Commercial Properties	Residential Properties
Current ADF	20,668 gpd	17,081 gpd	
Historic PDF	NA	NA	
Estimated Future PDF Flow	62,004 gpd*	51,243 gpd*	
Average Biochemical Oxygen Demand (BOD)	300 mg/l**	300 mg/l**	300 mg/l**
Average Total Suspended Solids (TSS)	300 mg/l**	300 mg/l**	300 mg/l**

*Based on peaking factor of 3 (TR-16)

**Based upon typical value due to site specific information not being available.



Acton Wastewater Treatment Facility

The Acton Waste Water Treatment Facility (WWTF) is a 299,000 gallon per day (gpd) ADF Sequence Batch Reactor (SBR) facility, with a 500,000 gpd PDF permit limitation via Groundwater Discharge Permit GW#0-656-T#W003143. The specific discharge limitations of the permit are as follows:

- Biochemical Oxygen Demand (BOD), 5 Day, 20 C = 20 mg/l
- Total Suspended Solids (TSS)= 20 mg/l
- Oil and Grease = 15 mg/l
- Fecal Coliform = 200 org/100 ml
- Total Nitrate-Nitrogen = 10 mg/l
- Total Nitrogen (TKN + NO₃ + NO₂) = 10 mg/l
- Total Phosphorus = 0.2 mg/l average monthly limit with a 0.5 mg/l maximum daily limit.

To achieve these effluent characteristics the Acton WWTF contains the following process capabilities and equipment:

- Influent screening
- Grit removal
- SBRs and associated components
 - Chemical Feed Systems
 - Aeration System
 - Pre and Post -Equalization
- Filtration via cloth media
- Ultraviolet (UV) Disinfection
- Sludge handling and disposal
- Process Instrumentation and Controls via a SCADA system

Effluent from the Acton WWTF is pumped to one of six rapid infiltration basins (RIBs) located adjacent to the facility on Adams Street near High Street. Discharge from the facility is controlled via a flow distribution vault on the RIBs site where the effluent is routed to the "active" basin(s).

The Acton WWTF has been operating since February 2002. The facility services approximately 15% of the Town of Acton (the Town), which equates to approximately 380 active connections (678 total including not connected) and 1,092 sewer betterment unit equivalents (SBUE)'s (1,841 total including not connected). The flow for those 1,841 connections, based upon Title 5 estimates prepared during the design and permitting of the WWTF and sewer collection system, was 250,000 gpd. It is this 250,000 gpd ADF limit that defined the original extent of the sewer collection area and the Town was not permitted to add more connections due to the potential of allowing more than 250,000 gpd average flow into the facility. Based on discussions with the Massachusetts Department of Environmental Protection (MassDEP), the MassDEP has allowed actual flow data to be used for certain areas and the Contract 3 section was later added to the sewershed in 2002 and 2003. With the capacity of the WWTF being expanded to 299,000 gpd by the MassDEP in April 2004, 49,000 gpd ADF of additional unallocated capacity exists.

Since the WWTF started-up in February 2002 the actual flows have been less than the Title 5 estimated flows. In reality, now that approximately 1,092 SBUE's have been connected, it is clear that the Title 5 estimated flows are very conservative. The expected flows based upon the Town's database of users connected as of December 31, 2007 versus the actual ADF being received at the facility were recorded on a week-by-week basis since February 2002. As illustrated in the attached T5 Estimated Flows vs. Actual Flows figure, the expected flows, as based upon Title 5 estimates, are conservative and actual flows have been 25% to 40% lower. For example, in the month of October 2007 the estimated Title 5 flow was 210,000



gpd while the actual daily flow from ranged from 105,000 gpd to 115,000 gpd with an ADF of 109,500 gpd for the month.

Currently the influent loadings and effluent characteristics at the Acton WWTF are within the following ranges:

Parameter	Typical Influent Range	Average Influent Concentration	Permitted Effluent Concentration	Average Effluent Concentration
BOD (mg/l)	240 – 310	250	30 or below	Below 5
TSS (mg/l)	70 – 260	200	30 or below	Below 5
Ammonia Nitrogen (mg/l)	15 – 50	40	10 or below	Below 5
Phosphorus (mg/l)	5 – 10	7	0.5 or below	Below 0.2

The potential impacts of Area 10 and Area 12 loading on the Acton WWTF are not expected to be significant assuming the proper industrial pretreatment program (IPP) systems are in place for gas stations, funeral homes, etc. The facility is operating well within its design parameters and is consistently meeting permit limits for effluent quality. The additional BOD and TSS will not adversely affect the WWTFs ability to meet discharge permit limitations in the future.

Existing Nearby Infrastructure

Massachusetts Avenue Sewer – extends from the east up to approximately 400 feet on the east side of Prospect Street. This sewer gravity drains to the east to Pump Station #4.

Prospect Street Sewer – extends from the intersection with Prospect Street to the south. This gravity sewer drains to the south to Pump Station #3.

Pump Station #3 (Prospect Street) – is located on Prospect Street about 700 feet from Massachusetts Avenue. It collects sewage from Prospect Street and side streets and discharges to the Massachusetts Avenue Sewer where it is conveyed by gravity sewers to Pump Station #4 then on to the WWTF.

Pump Station #4 (Massachusetts Avenue) – is located on Massachusetts Avenue. This pump station receives flow from Pump Station #3 and Pump Station #5 (Charter Road) as well as gravity sewer along Massachusetts Avenue and nearby side streets. The pump stations pump along Main Street towards South Acton.

Several sources were used to identify potential constraints within the project area. A search of Massachusetts Department of Environmental Protection (MassDEP) 21E sites is attached. Sites impacted or adjacent to construction activities should be noted in future specifications. There are no habitat areas of rare and endangered species identified within the project areas (see attached figure: 2006 Priority Habitat and Estimated Habitat Natural Heritage & Endangered Species Program). The project areas are located within Zones 3 and 4 of Acton’s Aquifer District which are the “aquifer protection area” and “areas outside of the aquifer protection area, recharge protection area, and well protection area respectively are shown on the attached Town of Acton Aquifer Protection map. The FEMA Flood Insurance Rate Maps (FIRMs) have been attached to be used in the design process for locating sewer pumping stations and gravity sewer manholes.



Future Wastewater Flows

The estimated future PDFs are approximately 62,000 gpd for STF and 51,000 gpd for WAC as shown in the table on Page 1. These flows are based on approximately 120 to 130 sewer betterment units (SBUs) for STF and 100 to 130 SBUs for WAC.

Alternatives Analysis

Four conveyance system alternatives were conceptually reviewed prior to forming a recommendation for the connection of the subject properties. Each alternative had both advantages and challenges, and each had factors that were more technically, economically, or socially beneficial. The alternatives were reviewed for factors making a best fit alternative. The screening criteria for reviewing alternatives include the following:

- Regulatory expectations concerning the needs areas – Project areas will need to align with the results of the CWRMP to ensure that needs areas are addressed.
- Capacity of Acton WWTF – Adequate capacity must be available at the WWTF in order to sewer new areas. Currently there is 49,000 gpd of unallocated capacity in the existing Groundwater Discharge Permit.
- Technical/Topography – Extending a sewer to service parcels based upon the existing topography for example may require an additional pump station or significantly increase costs and may not be advantageous.
- Sewer Betterment Unit Density – The SBU density allows the alternatives to be compared based on the historic betterment costs for the original connections and the relative estimated betterment costs to future users.
- Total Project Cost – Project areas and alternatives will be compared based on the cost to sewer the respective areas.
- Construction impacts to local businesses, traffic, or environment – West Acton Center is the primary area of focus for this criteria as several businesses could be affected by construction. The impact on the business community should be discussed.
- Ability to obtain easements or acquire land – Several locations exist where crossing a few properties may significantly reduce both construction costs and future operation and Maintenance (O&M) costs by reducing unnecessary infrastructure. This would be dependent on the Town being able purchasing the land or obtaining a permanent sewer easement.

A brief summary of each alternative for collection and conveyance systems is detailed below.

Alternative WAC-1: East of Railroad (Two Pump Stations)

This alternative is similar to the conceptual layout in the Sewer Extension Proposal from July 2007. A pumping station on West Road will collect sewer flows from all of West Acton Center east of the railroad except for Massachusetts Avenue. This pump station will discharge to a gravity sewer near the final pump station along Massachusetts Avenue. This is the conservative approach including a pumping station at the end of West Road which may be excluded as discussed in the alternative below. The portion of Massachusetts Avenue on the west side of the Brook will gravity feed to the pump station. This final pumping station will discharge to the Massachusetts Avenue Sewer east of Prospect Street. This will include one river crossing. It may be possible to cross the river using directional drilling or suspending the force main on the existing bridge. These methods will reduce impacts to the river compared to excavating which requires temporary dams across portions of the river. The portion of Massachusetts Avenue east of the river will consist of a low pressure sewer extending to the Massachusetts Avenue Sewer requiring approximately 17 grinder pumps. The sewers in this alternative are positioned within the roadway layout or on Town



property eliminating the need for any easements. The proposed layout is included in the attached Figure 1: Alternatives WAC-1 & WAC-2 West Acton Center "A".

The Gates and Douglas schools are not included in this analysis. The installation of a hollow pipe on Spruce Street should be considered which would allow future flow from the schools to flow directly to the pumping station proposed along Massachusetts Avenue, removing the need to repump flow from the pumping station on West Road.

Alternative WAC-2: East of Railroad (One Pump Station)

This alternative is similar to WAC-1 except that it does not include a pumping station at West Road. With more accurate topographical data, it may be possible to obtain an easement, eliminating a pumping station and having gravity flow from West Road to Massachusetts Avenue. This direct approach removes nearly 2,000 linear feet of force main.

By reducing O&M costs, this alternative should be reviewed for feasibility if this area is selected as it may provide cost savings compared to Alternative WAC-1. The proposed layout is included in Figure 1.

Options for WAC-1 & WAC-2

An option for these alternatives exists along Massachusetts Avenue east of the Brook which will be served by low pressure sewers. If the Spencer/Tuttle/Flint area is sewerred first, then this option would entail replacing a segment of the low pressure sewer by gravity sewers and connecting directly into the Flint Road gravity sewer. This would eliminate the need for several grinder pumps for the properties located between Flint Road and Prospect Street on Massachusetts Avenue.

Alternative STF-1: Pump Station at Flint Road

The three cul-de-sacs located off Tuttle Road and Lothrop Road, specifically, Wayside Lane, Tuttle Drive, and Torrington Lane may require low pressure sewers to tie into the gravity sewers. Low pressure systems can consist of a single town-owned system similar to Pumping Station #9 on Clover Hill Road or individually-owned units like High Street. These three low pressure sewers serving the cul-de-sacs will require approximately 13 grinder pumps and allow the STF area to be served by a single pump station. This alternative sites the pump station at the end of Flint Road. Lothrop Road will connect to this station via an easement across two properties. From the pumping station, sewage would be pumped directly to the Massachusetts Avenue collection system. The proposed layout is included in the attached Figure 2: Alternative STF-1 & STF-2 Spencer / Tuttle / Flint.

Alternative STF-2: Pump Station at Lothrop Road

The Town of Acton currently owns a parcel where this proposed pump station could be located. It will serve nearly the entire STF project area except for a section along Tuttle Road which will connect directly to Prospect Street, similar to STF-1. The pump station will pump directly to the existing gravity sewer along Massachusetts Avenue via Prospect Street. In order to connect the Flint Road cul-de-sac to Lothrop Road, an easement along two residential properties is necessary. The remaining three cul-de-sacs will be addressed similar to STF-1. The proposed layout is included in Figure 2.

Option for STF-1 & STF-2

An option for these alternatives is to route flow to the south along Central Street. Central Street would need to be sewerred. This project area could connect Flint Road to Central Street with a gravity sewer along a large wetlands area. Easements along three properties are required for this alternative. A preliminary review of this option indicated that a force main would be required for nearly the entire length along Central



Street to connect into the existing collection system. Due to excessive potential costs, this option was not evaluated at this time.

SBU Evaluation

The original Middle Fort Pond Brook Project (Contract 1, 2 and 3) installed 66,317 linear feet (LF) of sewer (62,542 LF of gravity pipe and 775 LF of low pressure sewer) to service 1,383 SBUs. This is an SBU density of 20.8 SBUs/1000 LF of pipe.

The original Middle Fort Pond Brook Project (Contract 1, 2 and 3) resulted in 1,383 SBUs with an actual betterment cost of \$12,311.52 per SBU. This betterment cost excluded incremental cost required by the Town by-law for built-in future capacity. The incremental cost for future capacity was estimated at \$1,166,200 in September 2004. A portion of this incremental cost was recovered during the High Street Sewer Extension Project.

Zoning

West Acton Center – Village Residential (VR), West Acton Village (WAV), and Residence 2 (R-2) zoning districts are within the project area. (see attached Town of Acton Zoning Map). Eighteen parcels within this project area are located within the West Acton Historic District (see attached West Acton Historic District Map).

Spencer/Tuttle/Flint – The STF area lies nearly 100% within the R-2 zoning district with only two parcels in the Agriculture Recreation Conservation (ARC) district.

“Supersizing”

“Supersizing” is the informed term used in Acton to describe the design of a sewer collection system capable of serving the entire sewershed, not just the specific areas that are being connected into the collection system as part of a specific project. SBUs are assessed to projects, by determining breakdown of the project costs to be incurred by both proposed and eventual future users. Each alternative will include the supersizing design to provide the ultimate flow capacity. This will include both areas west of the railroad tracks and to the north such as Indian Village. The STF area does not have any properties that would convey sewer flow through the area and therefore will not include supersizing.

Both projects areas will require connection through the existing sewer system to connect to the Acton WWTF. The additional costs incurred by the previous projects for supersizing was \$1,166,000. Therefore, this project is required to pay for a portion of these costs where it has benefited from supersizing, approximately \$707,000. The following analysis estimates the supersizing cost per SBU based on the estimated SBUs in each project area and the combined project.

Supersizing Costs			
	WAC	STF	Combined Project
Estimated SBUs Low	100	120	220
Estimated SBUs High	130	130	260
Supersizing Cost	\$707,000	\$707,000	\$707,000
Supersizing-Low	\$2,719	\$2,719	\$2,719
Supersizing-High	\$2,678	\$3,856	\$3,214



Recommended Conceptual Collection and Conveyance System

The recommended scenario of alternatives includes STF-1 and WAC-1. There is currently sufficient capacity at the Acton WWTP to receive flow from both of these project areas. If these two project areas are combined into one construction project, the project will benefit from cost savings from an economy of scale as well as the reduction of grinder pumps along Massachusetts Avenue. This scenario is shown in the attached Figure 3: Recommended Alternatives WAC-1 & STF-1.

Opinion of Probable Costs

Probable costs were subdivided into direct and indirect construction costs. Direct costs include the actual construction work to build and install the new sewer system. Indirect costs include design engineering and other ancillary costs such as permitting, procurement, and administration. Assumptions for these costs are included below:

- The pumping station \$400,000 cost estimate is based upon bid costs for pumping stations in Devens, Groton and others and the station having future capacity for other properties in the sewershed. Conceptual costs should be revised once actual equipment is selected. For example, currently undetermined equipment which will impact cost include permanent auxiliary power generator, odor control pumps and manner of installation (public bid with state wages or private installation).
- 15% of total sewer length will be used for water main relocation and 5% for drainage pipe relocation. These lengths have been included in the estimates to account for the possibility of encountering these existing utilities. 10% of total sewer length was estimated for ledge removal based on previous sewer projects in Acton. No estimates have been carried for cable, telephone, or gas.

The Opinion of Probable Costs Summary is included below. The detailed Cost Comparison of Alternatives table is attached.

Opinion of Probable Costs Summary*				
Direct Costs	WAC-1		STF-1	
	Low	High	Low	High
Conceptual Construction Costs	\$3,382,000	\$3,865,000	\$3,769,000	\$4,307,000
Indirect Costs				
Design & Permitting (10% of Construction)	\$338,200	\$386,500	\$376,900	\$430,700
Procurement & Constr. Engineering (15%)	\$507,300	\$579,750	\$565,350	\$646,050
Administration (Police, Financing, Legal, etc. - 10%)	\$338,200	\$386,500	\$376,900	\$430,700
Indirect Contingency - 5%		\$193,250		\$215,350
Subtotal Indirect Costs	\$1,184,000	\$1,546,000	\$1,319,000	\$1,723,000
Total Project Conceptual Costs Low	\$4,566,000	\$5,411,000	\$5,088,000	\$6,030,000
Estimated SBUs	130	100	130	120
Conceptual Project Costs per SBU*	\$35,000	\$54,000	\$39,000	\$50,000

* ENR Construction Cost Index = 8,094 (February 2008)

** Conceptual project costs may not represent actual sewer betterment fees

Funding Options

Below is a brief summary of typical funding options and their relevance to the sewer extension to each area.



- **State Revolving Fund (SRF) Loans**
The STF project area focuses on public health and environmental protection which are key criteria for competitive Project Evaluation Form (PEF) scores. The SRF cycle for FY08 is closed and the FY09 PEF applications are due August 30, 2008. This project could be partially funded by applying for an SRF 2% interest loan with a 20 year pay back.
- **Grants**
Community Development Action Grant (CDAG), Public Works Economic Development (PWED) grants, and other Economic Development / Job Creation based funding opportunities should be aggressively pursued for the project's capital costs.
- **Annual Budgeting Cycle**
Assuming the Town of Acton FY08 Budget, which opened on July 1, 2007 did not include budget line items for \$11.4M of West Acton Sewer Extension, it may be difficult to reallocate the required magnitude of funds.
- **Public / Private Partnership**
Private property owners and businesses in West Acton Center with onsite disposal issues or a need to connect to the sewer should be considered as a potential funding source.
- **Below Market Rate Funding**
Other below market rate funding avenues could be evaluated for a funding opportunity.

Conceptual Schedule

The Conceptual Schedule for future phases of this project is shown below. A summary of the design process can be seen in the attached 'Sewer Extension – Typical Flowchart of Events'.

Conceptual Schedule	
Task	Month / Duration
Feasibility / Design Basis Report	Finish May 2008
Preliminary Engineering (Assuming Project Proceeds)	July - Sept. 2008
Funding Application(s) Submitted	August 2008
Special Town Meeting (if Necessary)	Fall 2008
Finalize Funding Options	January 2009
Approve Design & Construction Funds	ATM Spring 2009
Design & Permitting	July 2009 - October 2009
Funding Submittal (if appropriate)	October 2009
Advertise for Bid	Winter 2010
Start Construction	April 2010
Finish Construction	December 2010
Start Connections	January 2011



Recommendations:

There are several key tasks that the Town should complete for this project. These future tasks include:

- The Town of Acton to meet with state regulators to present the justification to expand the Acton sewer collection system without exceeding the permitted ADF or limiting any of the preexisting approved connections.
- The Town should submit the required SRF application to be eligible for funding under this program.
- Acton should initiate a Preliminary Engineering Contract.
- The Communities Interest in this project is critical to its success. Acton should continue public outreach to gain support for this project
- Opportunities for public /private partnerships should be explored which may supplement the need for working capital and ultimately reduce the per user cost of the project.

We appreciate the opportunity to support the Town with this draft design basis letter report and are available to assist with the next set of tasks moving forward. If you have any questions or comments, please do not hesitate to contact our office.



Figures / Attachments

In order of reference

T5 Estimated Flows Vs. Actual Flows: Title 5 Estimates Feb 2002 – Feb 2008
MassDEP 21E Search Results – August 27, 2007
2006 Priority Habitat and Estimated Habitat Areas
Aquifer Protection Map – Acton, Massachusetts
FEMA – 1988 Flood Insurance Rate maps
Figure 1: Conceptual Alternative Site Plan: WAC-1 & WAC-2
Figure 2: Conceptual Alternative Site Plan: STF-1 & STF-2
Town of Acton Zoning Map April 2006
West Acton Historic District Map
Figure 3: Recommended Alternatives WAC-1 & STF-1
Table 1: West Acton Sewer Extension Project – Cost Comparison Alternatives
Sewer Extension – Typical Flowchart of Events

DEP 21ESEARCH - AUGUST 27, 2007

RTN	Town	Release Address	Site Name/Location Aid	Reporting Category	Notification Date	Compliance Status	Date	Phase	RAO Class	Chemical Type
2-0012850	ACTON	68 CENTRAL ST	CONCORD OIL CO	72 HR	6/29/1999	TIER 2	10/23/2000	PHASE III		Oil
2-0013132	ACTON	68 CENTRAL ST	CONCORD OIL CO	72 HR	1/27/2000	RTN	10/23/2000	PHASE III		OHM
2-0014428	ACTON	68 CENTRAL ST	CONCORD OIL CO FACILITY	120 DY	8/5/2002	CLOSED	8/18/2005	PHASE II	A2	Oil
2-0014429	ACTON	68 CENTRAL ST	CONCORD OIL CO FACILITY	120 DY	8/5/2002	RTN	9/12/2003			Oil
2-0014673	ACTON	CENTRAL ST AND MAIN ST	AMTRAK-CONRAIL RAILWAY RELEASE	TWO HR	2/20/2003	RAO	4/29/2003		A1	Oil
2-0012037	ACTON	3 DURKEERD	NORTH ACTON WWTP	TWO HR	12/19/1997	RAO	5/6/1998		A2	Oil
2-0011113	ACTON	MASSACHUSETTS AVE	PIPER ROAD	TWO HR	2/16/1996	RAO	4/6/1996		A1	Oil
2-0013519	ACTON	MASSACHUSETTS AVE	INTERSECTION OF RT 111 AND RT 27	120 DY	10/12/2000	URAM	10/20/2000			OHM
2-0000836	ACTON	408 MASSACHUSETTS AVE	SHELL STATION	NONE	5/9/1991	RAO	12/17/1997	PHASE II	A2	Oil
2-0012157	ACTON	408 MASSACHUSETTS AVE	FORMER SHELL STATION	TWO HR	3/23/1998	TIER 2	5/26/1999	PHASE III		Oil
2-0011201	ACTON	421 MASSACHUSETTS AVE	SUNOCO STATION	TWO HR	4/18/1996	RAO	5/23/1996		A1	Oil
2-0010079	ACTON	428 MASSACHUSETTS AVE	NEW ENGLAND TELEPHONE CENTRAL OFFICE	TWO HR	11/11/1993	RAO	10/21/1994		A2	Oil
2-0000754	ACTON	553 MASSACHUSETTS AVE	MOBIL SERVICE STATION	NONE	5/31/1990	FAO	5/13/2005		A2	Oil
2-0011241	ACTON	553 MASSACHUSETTS AVE	MOBIL STATION	72 HR	5/22/1996	RTN	11/10/1997			Oil
2-0014590	ACTON	75 SPRUCE ST	PAUL B GATES ELEMENTARY SCHOOL	TWO HR	12/12/2002	RAO	2/19/2003		A2	

The search returned 0 results. Search Keywords >> Town: "ACTON" Address: "Arlington St" | Sorted by: "Town, Address, RTN"
 The search returned 0 results. Search Keywords >> Town: "ACTON" Address: "Flint Rd" | Sorted by: "Town, Address, RTN"
 The search returned 0 results. Search Keywords >> Town: "ACTON" Address: "Lothrop Rd" | Sorted by: "Town, Address, RTN"
 The search returned 0 results. Search Keywords >> Town: "ACTON" Address: "Mallard Rd" | Sorted by: "Town, Address, RTN"
 The search returned 0 results. Search Keywords >> Town: "ACTON" Address: "Prospect St" | Sorted by: "Town, Address, RTN"
 The search returned 0 results. Search Keywords >> Town: "ACTON" Address: "Spencer Rd" | Sorted by: "Town, Address, RTN"
 The search returned 0 results. Search Keywords >> Town: "ACTON" Address: "Torrington Ln" | Sorted by: "Town, Address, RTN"
 The search returned 0 results. Search Keywords >> Town: "ACTON" Address: "Tuttle Dr" | Sorted by: "Town, Address, RTN"
 The search returned 0 results. Search Keywords >> Town: "ACTON" Address: "West Rd" | Sorted by: "Town, Address, RTN"
 The search returned 0 results. Search Keywords >> Town: "ACTON" Address: "Wayside Ln" | Sorted by: "Town, Address, RTN"

Site Information			
Site Number:	2-0013132	Category:	72 HR
Site Name:	CONCORD OIL CO	Release Type:	RAONR
Address:	68 CENTRAL ST	Current date:	10/23/2000
Town:	ACTON	Phase:	PHASE III
Zipcode:	01720-0000	RAO class:	
Official notification date:	1/27/2000	Location type:	COMMERCIAL
Initial status date:	1/27/2001	Source:	UST

Response Action Information	
Response Action Type:	TCLASS - Tier Classification
Status:	T2EXT - Tier 2 Extension
Submittal Date:	10/31/2006
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	PHASEI - Phase 2
Status:	REVRCD - Revised Statement or Transmittal Received
Submittal Date:	4/20/2005
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	PHASEI - Phase 1
Status:	ACTAUD - Level III-Comprehensive Audit
Submittal Date:	3/15/2002
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RAONR - RAO Not Required
Status:	RYCLSS - Linked to a Tier Classified Site
Submittal Date:	10/23/2000
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	IRA - Immediate Response Action
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	3/31/2000
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RNF - Release Notification Form Received
Status:	RELEASE - Release
Submittal Date:	3/27/2001
RAO class:	
Activity & Use Limitation:	

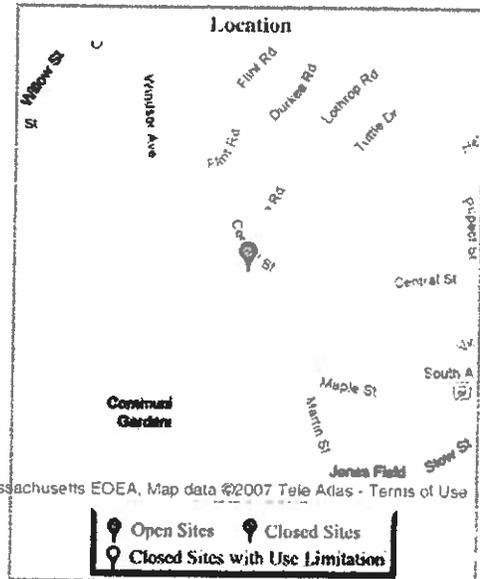
Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	1/27/2000
RAO class:	
Activity & Use Limitation:	

Chemicals		
Chemical	Amount	Units
BENZENE, METHYL-	.64	MG/KG

LSPs	
LSP#	Name
5463	WOZMAK, RICHARD J

Linked RTNs	
Primary RTN	Secondary RTNs
2-0012850	2-0013132

Tier Classification Detail								
NRS	II	III	IV	V	VI	Zone	Imminent Hazard	Permit/Tier-II Expiration Date
Totals	2							
316	95	101	20	100	0	N	N	10/23/2005



Site Information			
Site Number:	2-0014428	Category:	120 DY
Site Name:	CONCORD OIL CO FACILITY	Release Type:	RAO
Address:	68 CENTRAL ST	Current date:	8/18/2005
Town:	ACTON	Phase:	PHASE II
Zipcode:		RAO class:	A2
Official notification date:	8/5/2002	Location type:	COMMERCIAL
Initial status date:	8/5/2003	Source:	AST

Response Action Information	
Response Action Type:	RAO - Response Action Outcome - RAO
Status:	TSAUD - Level 1 - Technical Screen Audit
Submittal Date:	9/20/2005
RAO class:	A2
Activity & Use Limitation:	NONE

Response Action Information	
Response Action Type:	TCLASS - Tier Classification
Status:	LNKVTC - RTN Linked to TCLASS Via Tier Classification Submittal
Submittal Date:	9/12/2003
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	PHASE I - Phase I
Status:	TSAUD - Level I - Technical Screen Audit
Submittal Date:	9/2/2003
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RAM - Release Abatement Measure
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	8/12/2003
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RNF - Release Notification Form Received
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	8/9/2002
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	8/5/2002
RAO class:	
Activity & Use Limitation:	

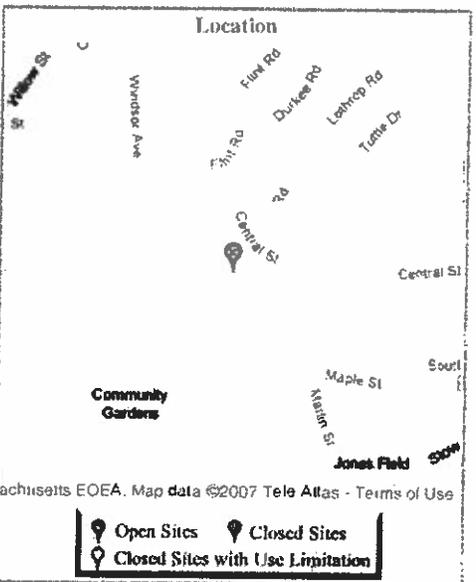
Chemicals		
Chemical	Amount	Units
FUEL OIL #2		

LSPs	
LSP#	Name
4829	TRAINER, KEVIN D
5463	WOZMAK, RICHARD J

Secondary RTNs
2-0014429

RAO Detail			
Class	Method	GW Category	Soil Category
A2	3	3	3

Tier Classification Detail								
NRS	II	III	IV	V	VI	Zone	Imminent Hazard	Permit/Tier II Expiration Date
Totals	2					N	N	8/12/2008
326	80	106	20	120	0	N	N	



Site Information			
Site Number:	2-0014429	Category:	130 DY
Site Name:	CONCORD OIL CO FACILITY	Release Type:	RAONR
Address:	68 CENTRAL ST	Current date:	9/12/2003
Town:	ACTON	Phase:	
Zipcode:	01720-0000	RAO class:	
Official notification date:	8/5/2002	Location type:	COMMERCIAL
Initial status date:	8/5/2003	Source:	AST

Response Action Information	
Response Action Type:	TCLASS - Tier Classification
Status:	LNKVTC - RTN Linked to TCLASS Via Tier Classification Submittal
Submittal Date:	9/12/2003
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RAONR - RAO Not Required
Status:	RTCLSS - Linked to a Tier Classified Site
Submittal Date:	9/12/2003
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RAM - Release Abatement Measure
Status:	PLANWR - Written Plan Received
Submittal Date:	10/16/2002
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RNF - Release Notification Form Received
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	8/9/2002
RAO class:	
Activity & Use Limitation:	

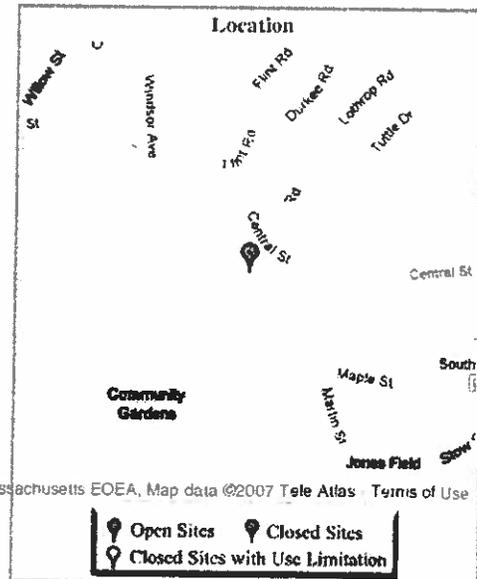
Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	8/5/2002
RAO class:	
Activity & Use Limitation:	

Chemicals		
Chemical	Amount	Units
FUEL OIL #2		

LSPs	
LSP#	Name
5463	WOZMAK, RICHARD J

Linked RTNs	
Primary RTN	Secondary RTNs
2-0014428	2-0014429

Tier Classification Detail							
NRS	II	III	IV	V	VI	Zone	Imminent Permt/TierII Hazard Expiration Date
Totals	2						8/12/2008
326	80	106	20	120	0	N N	



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Site Information			
Site Number:	2-0014673	Category:	TWO HR
Site Name:	AMTRAK-CONRAIL RAILWAY RELEASE	Release Type:	RAO
Address:	CENTRAL ST AND MAIN ST	Current date:	4/29/2003
Town:	ACTON	Phase:	
Zipcode:	01720-0000	RAO class:	A1
Official notification date:	2/20/2003	Location type:	OTHER
Initial status date:	2/20/2004	Source:	VEHICLE

Response Action Information	
Response Action Type:	RAO - Response Action Outcome - RAO
Status:	TSAUD - Level I - Technical Screen Audit
Submittal Date:	5/1/2003
RAO class:	A1
Activity & Use Limitation:	NONE

Response Action Information	
Response Action Type:	RNF - Release Notification Form Received
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	4/29/2003
RAO class:	
Activity & Use Limitation:	

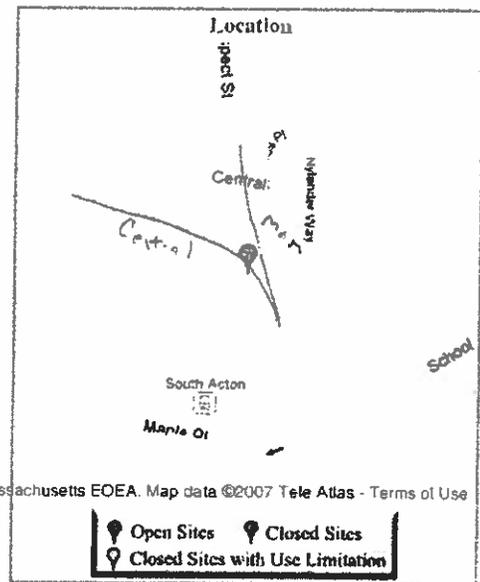
Response Action Information	
Response Action Type:	IRA - Immediate Response Action
Status:	APORAL - Oral Approval of Plan or Action
Submittal Date:	2/20/2003
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	2/20/2003
RAO class:	
Activity & Use Limitation:	

Chemicals		
Chemical	Amount	Units
UNKNOWN CHEMICAL OF TYPE - OIL	4(1)	GAL

LSPs	
LSP#	Name
7122	HENRY, KIM M

RAO Detail			
Class	Method	GW Category	Soil Category
A1	N	3	



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Site Information			
Site Number:	2-0011113	Category:	TWO HR
Site Name:	PIPER ROAD	Release Type:	RAO
Address:	MASSACHUSETTS AVE	Current date:	4/6/1996
Town:	ACTON	Phase:	
Zipcode:	01719-0000	RAO class:	A1
Official notification date:	2/16/1996	Location type:	ROADWAY
Initial status date:	2/16/1997	Source:	VEHICLE

Response Action Information	
Response Action Type:	RAO - Response Action Outcome - RAO
Status:	RAORCD - RAO Statement Received
Submittal Date:	4/6/1996
RAO class:	A1
Activity & Use Limitation:	NONE

Response Action Information	
Response Action Type:	RNF - Release Notification Form Received
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	4/6/1996
RAO class:	
Activity & Use Limitation:	

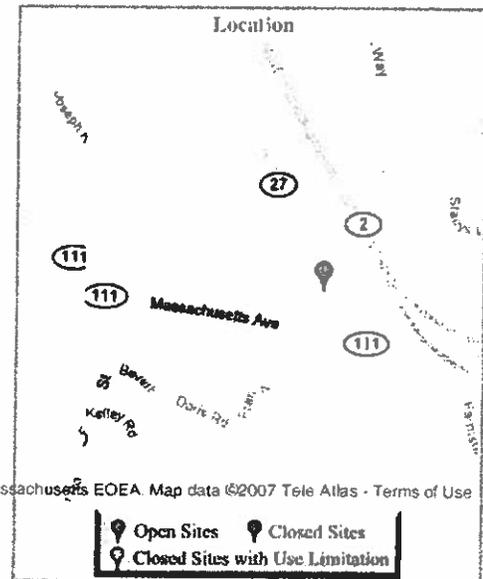
Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	2/16/1996
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	IRA - Immediate Response Action
Status:	APORAL - Oral Approval of Plan or Action
Submittal Date:	2/16/1996
RAO class:	
Activity & Use Limitation:	

Chemicals		
Chemical	Amount	Units
GASOLINE	20	GAL
UNKNOWN CHEMICAL OF UNKNOWN TYPE	20	GAL

LSPs	
LSP#	Name
9997	IRWIN, J ANDREW

RAO Detail			
Class	Method	GW Category	Soil Category
A1	N		



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Site Information			
Site Number:	2-0013519	Category:	120 DY
Site Name:	INTERSECTION OF RT 111 AND RT 27	Release Type:	URAM
Address:	MASSACHUSETTS AVE	Current date:	10/20/2000
Town:	ACTON	Phase:	
Zipcode:	01720-0000	RAO class:	
Official notification date:	10/12/2000	Location type:	ROADWAY
Initial status date:	10/12/2001	Source:	UNKNOWN

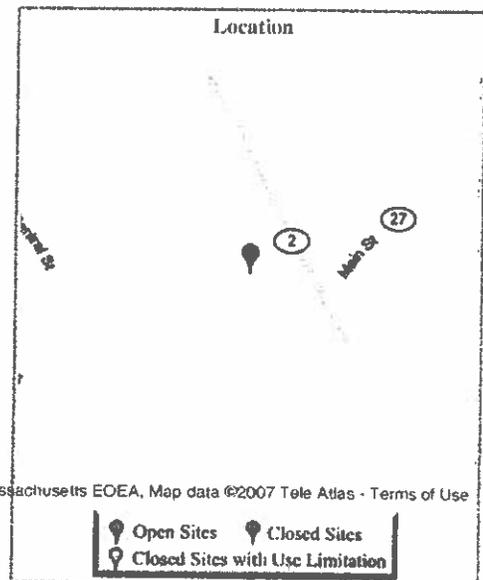
Response Action Information	
Response Action Type:	URAM - Utility-related Abatement Measure
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	1/8/2001
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RNF - Release Notification Form Received
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	10/20/2000
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	10/12/2000
RAO class:	
Activity & Use Limitation:	

Chemicals		
Chemical	Amount	Units
TOTAL PETROLEUM HYDROCARBONS (TPH)	320	PPM
NAPHTHALENE	4.58	PPM

LSPs	
LSP#	Name
3769	BLAKE, CRAIG E



Site Information			
Site Number:	2-0000836	Category:	NONE
Site Name:	SHELL STATION	Release Type:	RAO
Address:	408 MASSACHUSETTS AVE	Current date:	12/17/1997
Town:	ACTON	Phase:	PHASE II
Zipcode:	01718	RAO class:	A2
Official notification date:	5/9/1991	Location type:	GASSTATION
Initial status date:	8/2/1997	Source:	

Response Action Information	
Response Action Type:	RAO - Response Action Outcome - RAO
Status:	RAORCD - RAO Statement Received
Submittal Date:	12/17/1997
RAO class:	A2
Activity & Use Limitation:	NONE

Response Action Information	
Response Action Type:	TCLASS - Tier Classification
Status:	TIERII - Tier 2 Classification
Submittal Date:	8/11/1997
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	PHASEI - Phase I
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RLP)
Submittal Date:	8/11/1997
RAO class:	
Activity & Use Limitation:	

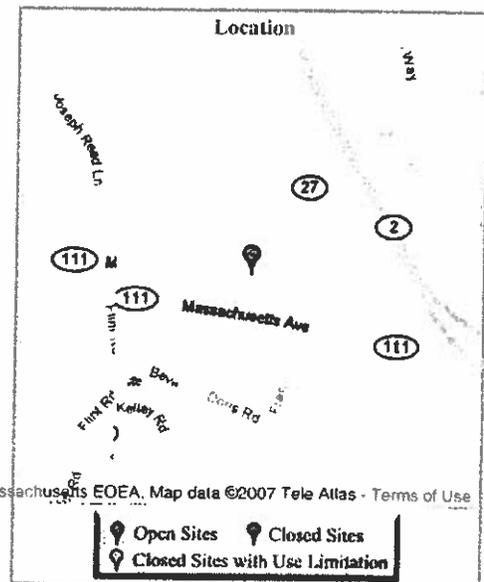
Response Action Information	
Response Action Type:	RAO-P - Partial RAO for this RTN
Status:	RAORCD - RAO Statement Received
Submittal Date:	8/11/1997
RAO class:	NC
Activity & Use Limitation:	NONE

Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	TCTRNS - Tier Classified Transition Sites
Submittal Date:	5/9/1991
RAO class:	
Activity & Use Limitation:	Imagery ©2007 DigitalGlobe, MassGIS, Commonwealth of Massachusetts

Chemicals		
Chemical	Amount	Units
UNKNOWN CHEMICAL OF TYPE - OIL		

RAO Detail			
Class	Method	GW Category	Soil Category
NC	N		
A2	1	2	3

Tier Classification Detail							
NRS	II	III	IV/V	VI	Zone	Imminent	Permit/Tier II
Totals					2	Hazard	Expiration Date
91	15	61	15	0	N	N	8/11/2002



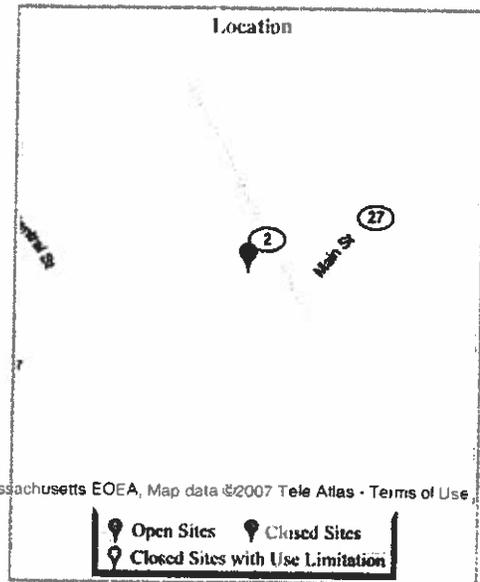
Site Information			
Site Number:	2-0012157	Category:	TWO HR
Site Name:	FORMER SHELL STATION	Release Type:	TIERII
Address:	408 MASSACHUSETTS AVE	Current date:	5/26/1999
Town:	ACTON	Phase:	PHASE III
Zipcode:		RAO class:	
Official notification date:	3/23/1998	Location type:	COMMERCIAL
Initial status date:	3/23/1999	Source:	PIPE, UST

Response Action Information	
Response Action Type:	TCLASS - Tier Classification
Status:	DNPREX - Permit or Tier 2 Extension Denied
Submittal Date:	6/20/2006
RAO class:	
Activity & Use Limitation:	
Response Action Information	
Response Action Type:	PHASEII - Phase 2
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	6/4/2001
RAO class:	
Activity & Use Limitation:	
Response Action Information	
Response Action Type:	RAM - Release Abatement Measure
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	7/19/1999
RAO class:	
Activity & Use Limitation:	
Response Action Information	
Response Action Type:	PHASEI - Phase 1
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	5/26/1999
RAO class:	
Activity & Use Limitation:	
Response Action Information	
Response Action Type:	RNF - Release Notification Form Received
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	5/27/1997
RAO class:	
Activity & Use Limitation:	
Response Action Information	
Response Action Type:	IRA - Immediate Response Action
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	5/22/1998
RAO class:	
Activity & Use Limitation:	
Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	3/23/1998
RAO class:	
Activity & Use Limitation:	

Chemicals		
Chemical	Amount	Units
GASOLINE	280000	PPB

LSPs	
LSP#	Name
4813	SHEEHAN, KEVIN C
1698	SIMMONS, THOMAS P

Tier Classification Detail								
NRS	II	III	IV	V	VI	Zone	Imminent	Permit/TierII
Totals						2	Hazard	Expiration Date
186	35	111	20	20	0	N	N	5/26/2006



Site Information			
Site Number:	2-0011201	Category:	TWO HR
Site Name:	SUNOCO STATION	Release Type:	RAO
Address:	421 MASSACHUSETTS AVE	Current date:	5/23/1996
Town:	ACTON	Phase:	
Zipcode:	01720-0000	RAO class:	A1
Official notification date:	4/18/1996	Location type:	COMMERCIAL
Initial status date:	4/18/1997	Source:	TANKER

Response Action Information	
Response Action Type:	RNF - Release Notification Form Received
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	5/23/1996
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RAO - Response Action Outcome - RAO
Status:	RAORCD - RAO Statement Received
Submittal Date:	5/23/1996
RAO class:	A1
Activity & Use Limitation:	NONE

Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	4/18/1996
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	IRA - Immediate Response Action
Status:	APORAL - Oral Approval of Plan or Action
Submittal Date:	4/18/1996
RAO class:	
Activity & Use Limitation:	

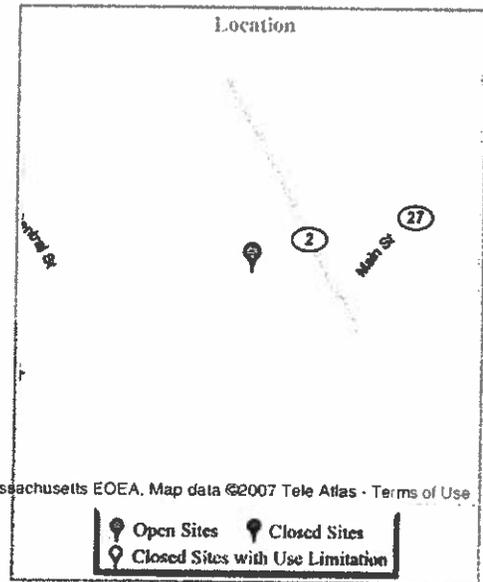
Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	4/18/1996
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	4/18/1996
RAO class:	
Activity & Use Limitation:	

Chemicals		
Chemical	Amount	Units
GASOLINE	40	GAL

LSPs	
LSP#	Name
7610	KAVANAUGH, KEVIN J

RAO Detail			
Class	Method	GW Category	Soil Category
A1	N		



Site Information			
Site Number:	2-0000754	Category:	NONE
Site Name:	MOBIL SERVICE STATION	Release Type:	RAO
Address:	553 MASSACHUSETTS AVE	Current date:	5/13/2005
Town:	ACTON	Phase:	
Zipcode:		RAO class:	A2
Official notification date:	5/31/1990	Location type:	COMMERCIAL, GASSTATION
Initial status date:	6/24/1995	Source:	UST

Response Action Information	
Response Action Type:	RAO - Response Action Outcome - RAO
Status:	TSAUD - Level 1 - Technical Screen Audit
Submittal Date:	10/21/2005
RAO class:	A2
Activity & Use Limitation:	NONE

Response Action Information	
Response Action Type:	PHASEV - Phase 5
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	5/13/2005
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	PHSIII - Phase 3
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	9/23/2004
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RAM - Release Abatement Measure
Status:	TSAUD - Level 1 - Technical Screen Audit
Submittal Date:	4/8/2003
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	PHASIV - Phase 4
Status:	PLANWR - Written Plan Received
Submittal Date:	3/31/2003
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	PHASII - Phase 2
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	1/23/2002
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	TCLASS - Tier Classification
Status:	PEREXT - Permit Extension Received
Submittal Date:	7/13/2001
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RAM - Release Abatement Measure
Status:	PLANWR - Written Plan Received
Submittal Date:	4/4/1994
RAO class:	

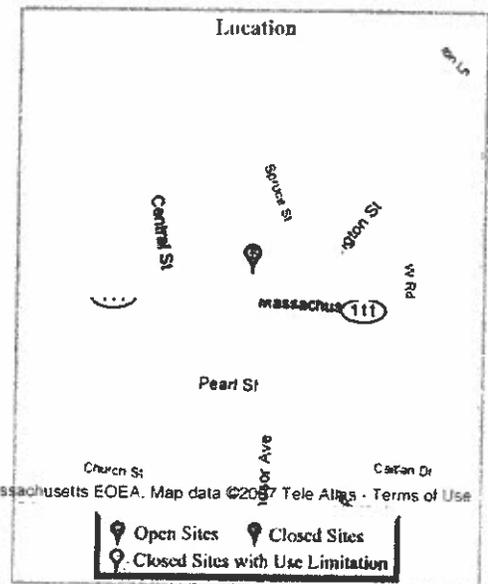
Chemicals		
Chemical	Amount	Units
GASOLINE		

LSPs	
LSP#	Name
4003	SOKOL, STEFAN C
6406	SWANSON, WILLIAM R

Secondary RTNs
2-0011241

RAO Detail			
Class	Method	GW Category	Soil Category
A2	3	3	3

Tier Classification Detail								
NRS	II	III	IV	V	VI	Zone	Imminent Hazard	Permit/Tier II Expiration Date
Totals	2							4/1/2003
-32	15	3	0	0		N	N	50



Activity & Use Limitation:	
Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	TCTRNS - Tier Classified Transition Sites
Submittal Date:	5/31/1990
RAO class:	
Activity & Use Limitation:	

Site Information			
Site Number:	2-0011241	Category:	72 HR
Site Name:	MOBIL STATION	Release Type:	RAONR
Address:	553 MASSACHUSETTS AVE	Current date:	11/10/1997
Town:	ACTON	Phase:	
Zipcode:	01720-0000	RAO class:	
Official notification date:	5/22/1996	Location type:	COMMERCIAL
Initial status date:	5/22/1997	Source:	UNKNOWN

Response Action Information	
Response Action Type:	RAONR - RAO Not Required
Status:	RTCLASS - Linked to a Tier Classified Site
Submittal Date:	11/10/1997
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	TCLASS - Tier Classification
Status:	LNKVTC - RTN Linked to TCLASS Via Tier Classification Submittal
Submittal Date:	11/10/1997
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	IRA - Immediate Response Action
Status:	CSRCVD - Completion Statement Received (includes Ph 3 RIP)
Submittal Date:	11/10/1996
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	RNF - Release Notification Form Received
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	7/22/1996
RAO class:	
Activity & Use Limitation:	

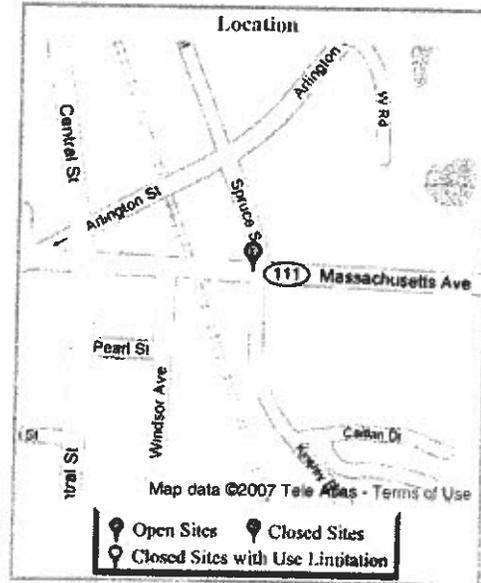
Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	5/22/1996
RAO class:	
Activity & Use Limitation:	

Chemicals		
Chemical	Amount	Units
GASOLINE	12	INCH

LSPs	
LSP#	Name
7610	KAVANAUGH, KEVIN J

Linked RTNs	
Primary RTN	Secondary RTNs
2-0000754	2-0011241

Tier Classification Detail								
NRS Totals	II	III	IV	V	V1	Zone	Imminent Hazard	Permit/Tier II Expiration Date
32	15	3	0	0	-	N	N	4/1/2003
						50		



Site Information			
Site Number:	2-0014590	Category:	TWO HR
Site Name:	PAUL B GATES ELEMENTARY SCHOOL	Release Type:	RAO
Address:	75 SPRUCE ST	Current date:	2/19/2003
Town:	ACTON	Phase:	
Zipcode:	01720-2497	RAO class:	A2
Official notification date:	12/12/2002	Location type:	SCHOOL
Initial status date:	12/12/2003	Source:	OTHER

Response Action Information	
Response Action Type:	RAO - Response Action Outcome - RAO
Status:	RAORCD - RAO Statement Received
Submittal Date:	2/19/2003
RAO class:	A2
Activity & Use Limitation:	NONE

Response Action Information	
Response Action Type:	RNF - Release Notification Form Received
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	2/10/2003
RAO class:	
Activity & Use Limitation:	

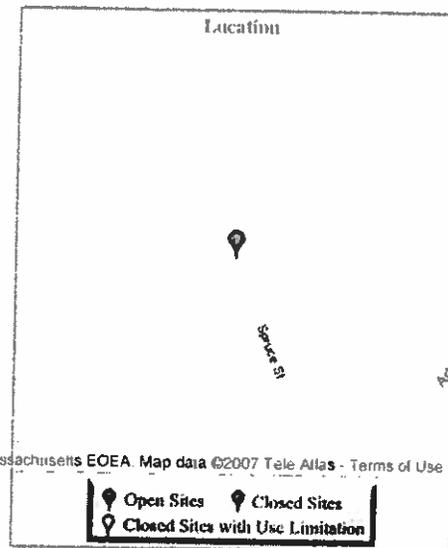
Response Action Information	
Response Action Type:	REL - Potential Release or Threat of Release
Status:	REPORT - Reportable Release or Threat of Release
Submittal Date:	12/12/2002
RAO class:	
Activity & Use Limitation:	

Response Action Information	
Response Action Type:	IRA - Immediate Response Action
Status:	APORAL - Oral Approval of Plan or Action
Submittal Date:	12/12/2002
RAO class:	
Activity & Use Limitation:	

Chemicals		
Chemical	Amount	Units
UNKNOWN CHEMICAL OF UNKNOWN TYPE	15	GAL

LSPs	
LSP#	Name
3497	SIMPSON, DANA A

RAO Detail			
Class	Method	GW Category	Soil Category
A2	1	2	1



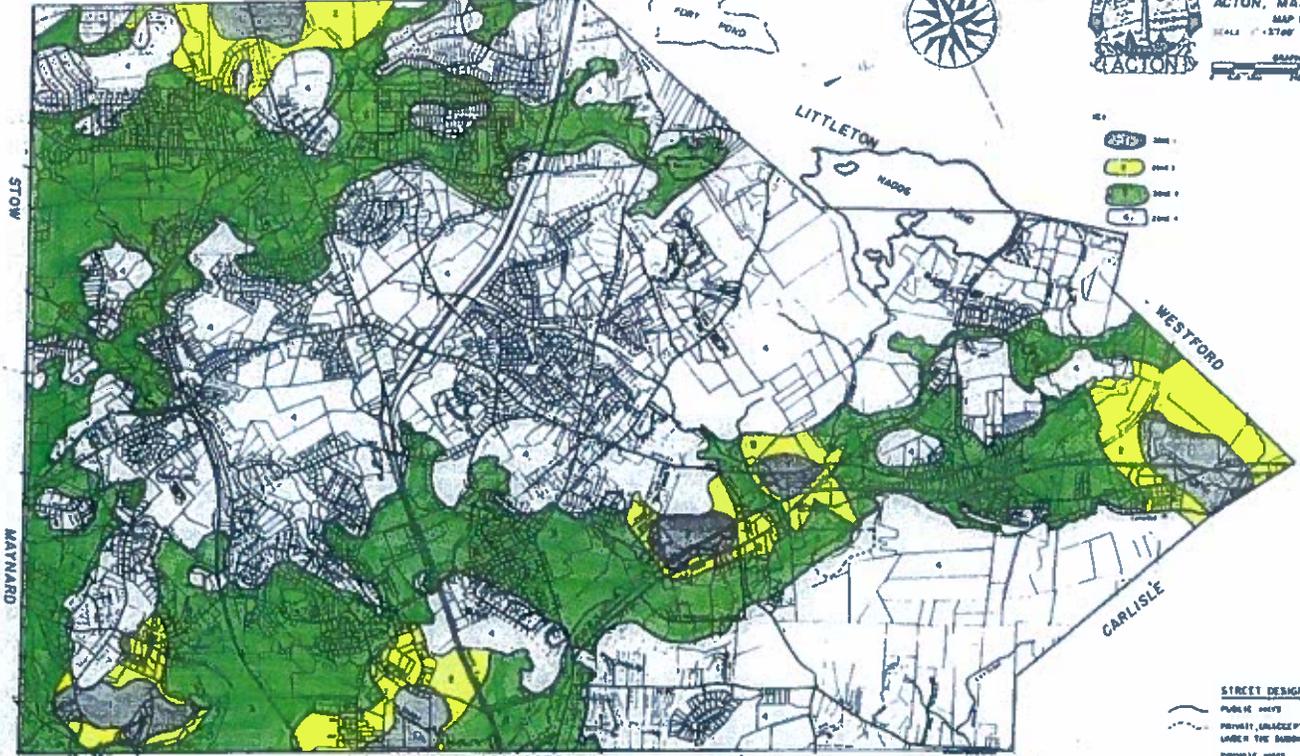
BOXBOROUGH



GROUNDWATER PROTECTION DISTRICT MAP
OF THE TOWN OF
ACTON, MASSACHUSETTS
MAP No. 3A
SCALE 1" = 1700'

JANUARY 1980
GRAPHIC SCALE
0 100 200 300 400 500

- AS15 ZONE 1
- AS10 ZONE 2
- AS5 ZONE 3
- AS0 ZONE 4



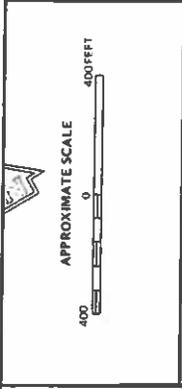
STREET DESIGNATIONS
 PUBLIC ROADS
 PRIVATE UNACCEPTED ROAD APPROVED UNDER THE SUBDIVISION CONTROL LAW
 PRIVATE ROADS

MAP PREPARED FOR THE ACTON PLANNING BOARD
 BY THE ACTON ENGINEERING DEPARTMENT
 SHEETS NUMBERED TO AND 3, 000
 DESIGN APPROVED JUNE 15, 1979

FILE NO. 0-10987



AQUIFER PROTECTION ACTON, MASS.	TOWNWIDE MAP JANUARY 1980	FIGURE No. 1
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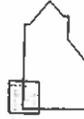
NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

TOWN OF
ACTON, MASSACHUSETTS
MIDDLESEX COUNTY

PANEL 1 OF 8

(SEE MAP INDEX FOR PANELS NOT PRINTED)



PANEL LOCATION

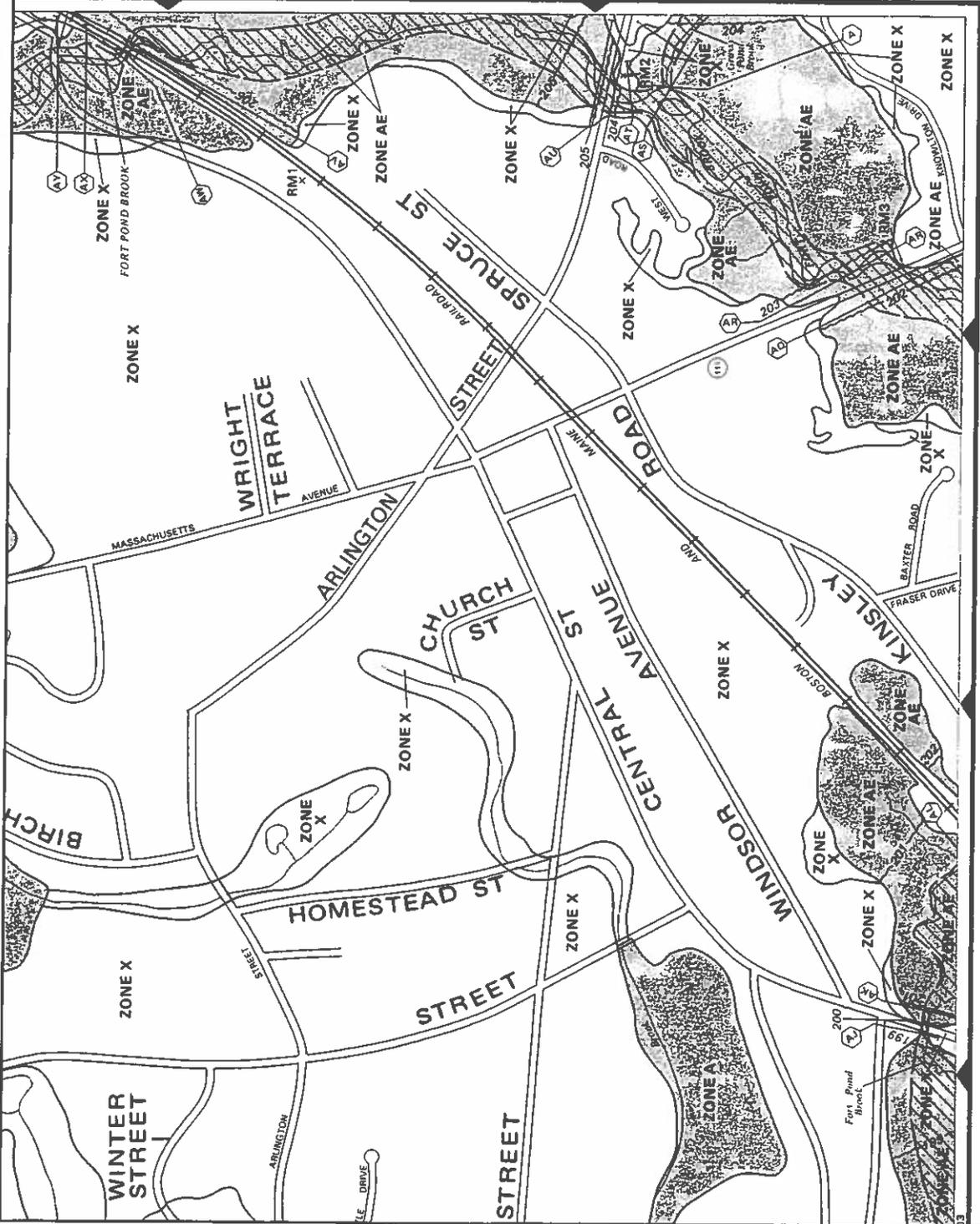
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250178 0001C

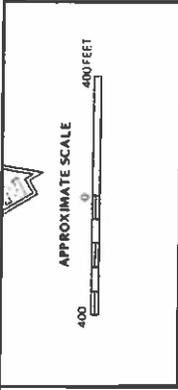
MAP REVISED:
JANUARY 6, 1988



Federal Emergency Management Agency

This is an official map of the Federal Emergency Management Agency. It is not to be used for any other purpose. The information on this map is derived from the Flood Insurance Rate Study (FIRS) and is subject to change without notice. For the latest product information about National Flood Insurance Program, see the Flood Insurance Manual, FEMA Form 10-100, or write to: FEMA, 1215 Jefferson Davis Highway, Alexandria, VA 22304.





NATIONAL FLOOD INSURANCE PROGRAM

FIRM FLOOD INSURANCE RATE MAP

TOWN OF ACTON, MASSACHUSETTS MIDDLESEX COUNTY

PANEL 1 OF 8

SEE MAP INDEX FOR PANELS NOT PAINTED

PANEL LOCATION

COMMUNITY-PANEL NUMBER 250176 0001C

MAP REVISED: JANUARY 6, 1986

Federal Emergency Management Agency

This is an official copy of a portion of the master inventory of flood maps. It was prepared using F-4111 One-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the map. For more information on the National Flood Insurance Program flood maps, direct the FEMA Flood Map Store at 1215 Wisconsin Avenue, N.W., Washington, D.C. 20004.

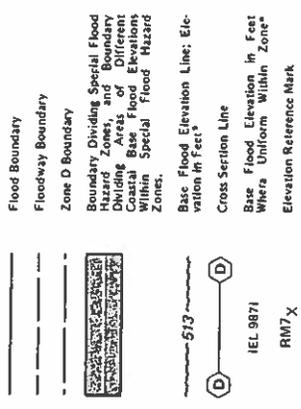
LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

- ZONE A** No base flood elevations determined.
- ZONE AE** Base flood elevations determined.
- ZONE AH** Flood depth of 1 to 3 feet (usually areas of ponds); base flood elevations determined.
- ZONE AD** Flood depth of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flood- ing, velocities have determined.
- ZONE A99** To be protected from 100-year flood by Federal flood protection system under construction; no base elevations determined.
- ZONE V** Casual flood with velocity hazard (wave action); no base flood elevation deter- mined.
- ZONE VE** Casual flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

- OTHER FLOOD AREAS**
- ZONE X** Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas of less than 1 square mile; flood areas protected by levees from 100-year flood.
- OTHER AREAS**
- ZONE X** Areas determined to be outside 500-year flood plain.
- ZONE D** Areas in which flood hazard are undetermined.



*Referenced to the National Geodetic Vertical Datum of 1929

NOTES

This map is for use in administering the National Flood Insurance Program. It does not constitute a contract. It is not intended to be used as a basis for local drainage surveys or for other engineering features outside special flood hazard areas. The coastal flooding elevations may differ significantly from those developed by the National Weather Service for hurricane evacuation planning.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the Federal Emergency Management Agency.



NATIONAL FLOOD INSURANCE PROGRAM

FIRM FLOOD INSURANCE RATE MAP

TOWN OF ACTON, MASSACHUSETTS MIDDLESEX COUNTY

PANEL 3 OF 8

USE MAP INDEX FOR PANELS NOT PRINTED

COMMUNITY-PANEL NUMBER 250176 0083 C

MAP REVISED: JANUARY 6, 1968

Federal Emergency Management Agency

LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

ZONE A No base flood elevations determined.

ZONE AE Base flood elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.

ZONE AD Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities are determined.

ZONE AS9 To be protected from 100-year flood by Federal flood protection system under construction; base elevations determined.

ZONE V Coastal flood with velocity hazard (wave action); no base flood elevations determined.

ZONE VE Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

ZONE X Areas of 500-year flood; areas of 100-year flood with average depths in excess of 1 foot or with drainage areas protected by levees from 100-year flood.

OTHER AREAS

ZONE X Areas determined to be outside 500-year flood plain.

ZONE D Areas in which flood hazards are undetermined.

Flood Boundary (solid line)

Floodway Boundary (dashed line)

Zone D Boundary (dotted line)

Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones. (thick solid line)

Base Flood Elevation Line: Elevation in Feet (line with 'D' markers)

Cross Section Line (line with 'S13' markers)

Base Flood Elevation in Feet Where Uniform Within Zone (line with 'IEL 9831' markers)

Elevation Reference Mark (line with 'RM7 X' markers)

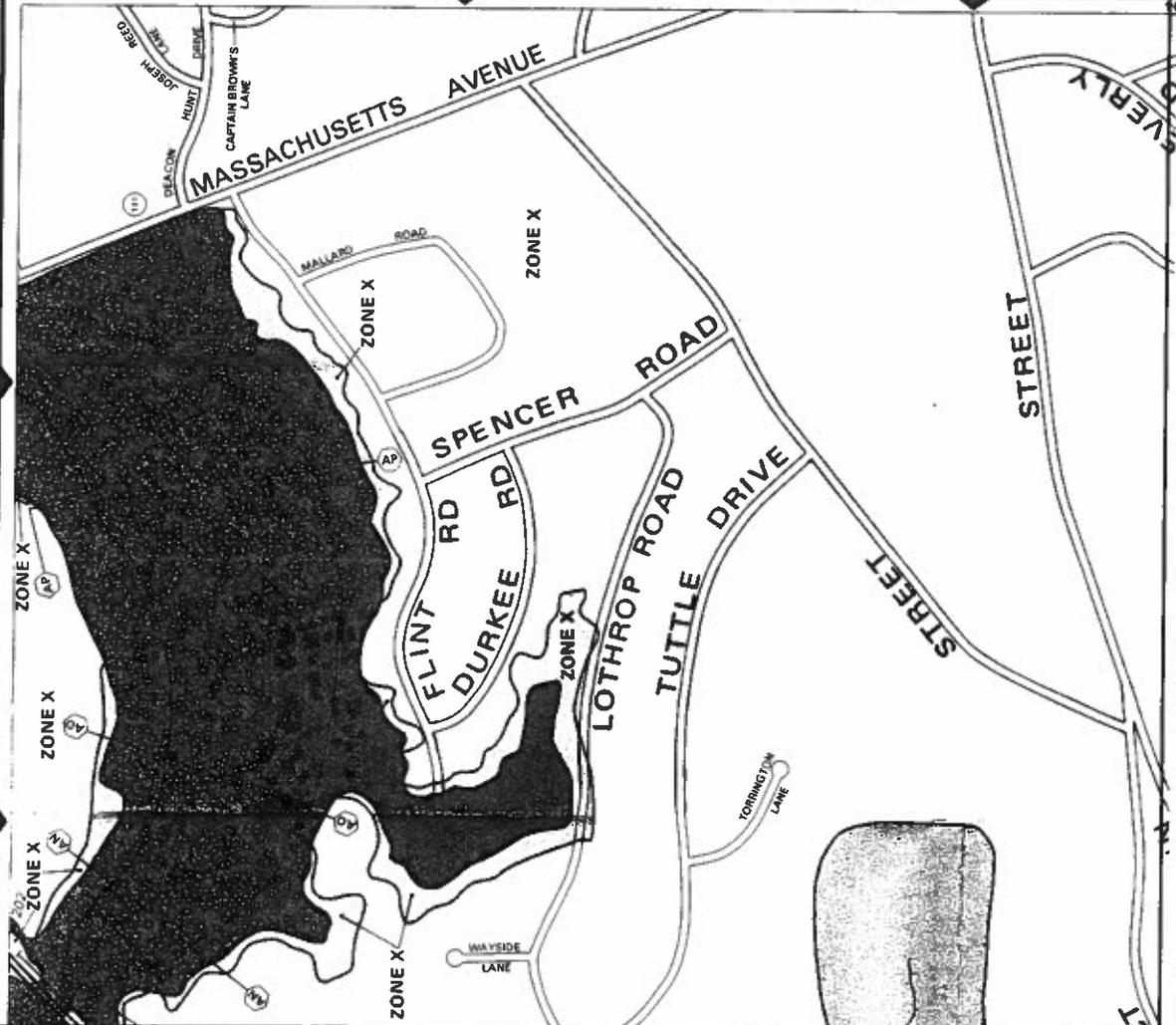
NOTES

This map is for use in administering the National Flood Insurance Program; it does not necessarily identify all areas to be protected, particularly from local drainage sources of small size or alluvial fans. It does not show special flood hazard areas. The coastal flooding elevations shown are not significantly from those developed by the National Weather Service for hurricane evacuation planning.

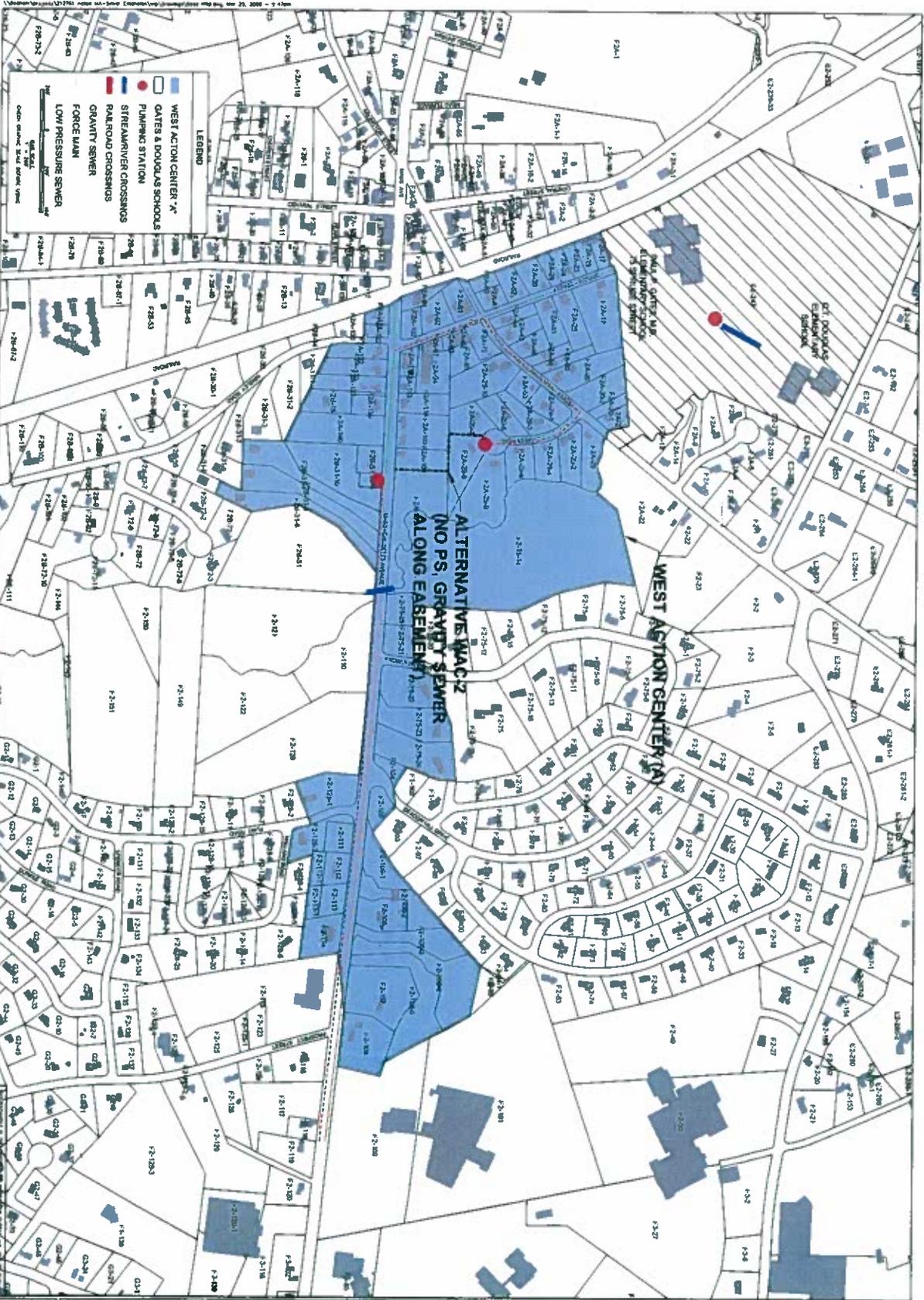
Certain areas not in Special Flood Hazard Areas may be protected by flood control structures.

Boundaries of the floodways were compiled at cross sections and interpolated between cross sections. The floodways were based on hydrologic and hydraulic studies with regard to requirements of the Federal Emergency Management Agency.

*Referenced to the National Geodetic Vertical Datum of 1929



This is an official copy of a map on file with the Federal Emergency Management Agency. It was prepared under the authority of the Federal Flood Insurance Act of 1968. It is not to be used for any other purpose without the express written consent of the Federal Emergency Management Agency.



TOWN OF ACTON
 472 MAIN STREET, ACTON, MA
 WEST ACTON SEWER EXTENSION

**ALTERNATIVES WAC-1 & WAC-2
 WEST ACTON CENTER "A"**


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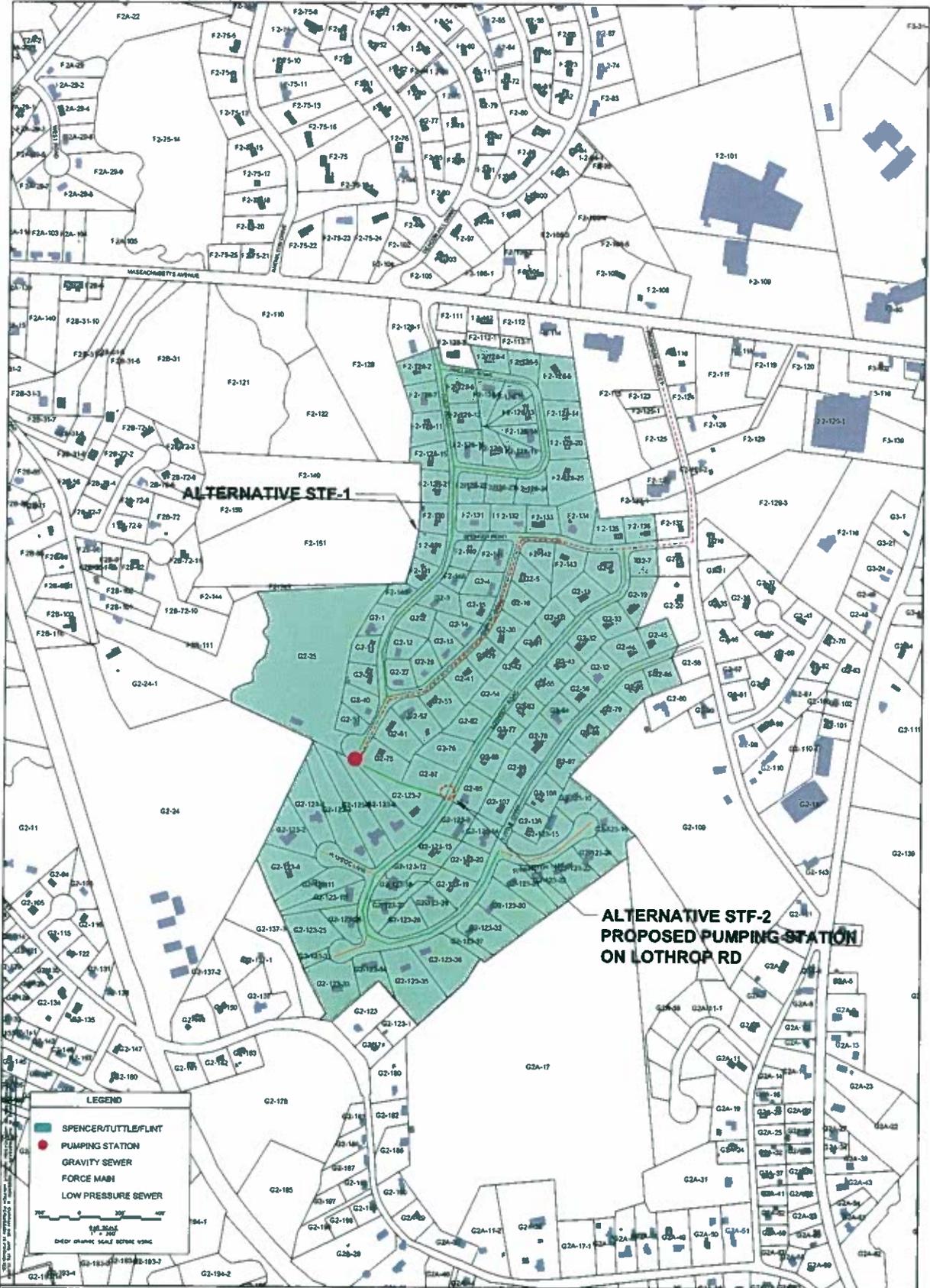
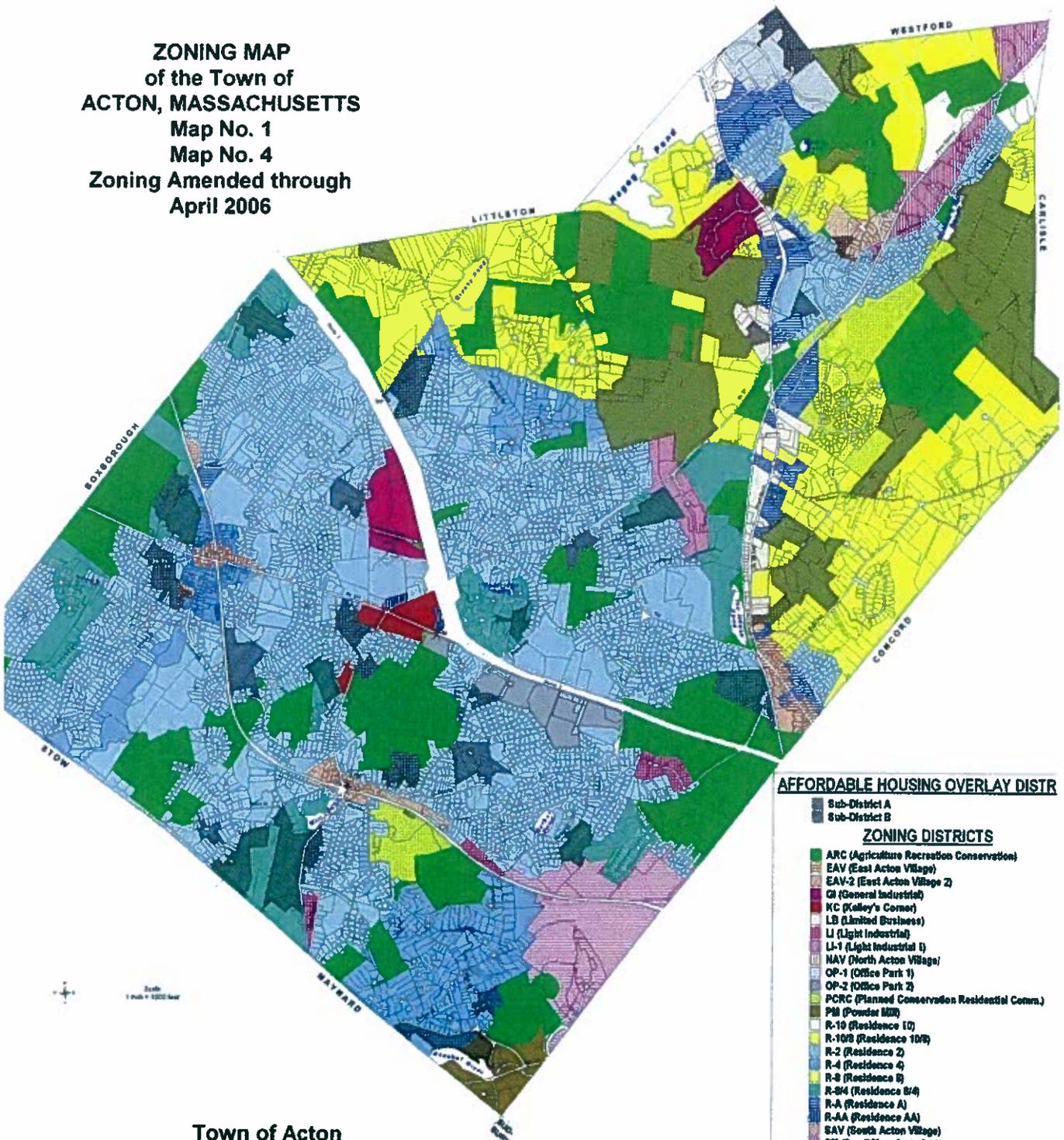


FIGURE 2	TOWN OF ACTON #72 MAIN STREET, ACTON, MA	ALTERNATIVE STF-1 & STF-2 SPENCER / TUTTLE / FLINT	DATE: 03/20/08 DRAWN BY: JLT CHECKED BY: JLT	 WOODWARD & CURRAN www.woodcurran.com COMMITMENT & INTEGRITY DRIVE RESULTS
	WEST ACTON SEWER EXTENSION			

ZONING MAP
of the Town of
ACTON, MASSACHUSETTS
Map No. 1
Map No. 4
Zoning Amended through
April 2006



Scale
1 inch = 1000 feet

Town of Acton
Planning Department, 2006
(parcel amended through 2003)

- AFFORDABLE HOUSING OVERLAY DISTR**
- Sub-District A
 - Sub-District B
- ZONING DISTRICTS**
- ARC (Agriculture Recreation Conservation)
 - EAV (East Acton Village)
 - EAV-2 (East Acton Village 2)
 - GI (General Industrial)
 - KC (Kelley's Corner)
 - LB (Limited Business)
 - LI (Light Industrial)
 - LI-1 (Light Industrial 1)
 - NAV (North Acton Village)
 - OP-1 (Office Park 1)
 - OP-2 (Office Park 2)
 - PCRC (Planned Conservation Residential Comm.)
 - PM (Powder Mill)
 - R-10 (Residence 10)
 - R-10B (Residence 10B)
 - R-2 (Residence 2)
 - R-4 (Residence 4)
 - R-8 (Residence 8)
 - R-84 (Residence 8/4)
 - R-A (Residence A)
 - R-AA (Residence AA)
 - SAV (South Acton Village)
 - SM (Small Manufacturing)
 - TD (Technology District)
 - VR (Village Residential)
 - WAV (West Acton Village)

West Acton Historic District



**Local Historic District
Map of the
Town of Acton,
Sheet 3 - 1990**

**Adopted: Nov. 28, 1990
Effective:**

 **Buildings**

 **Stone Walls**

 **Streets**

 **Private Ways**

 **Lot Lines**

 **West Acton
Local
Historic
District
Boundary**



**Scale
1" = 350'**

**Town of Acton
Planning Department
1992**

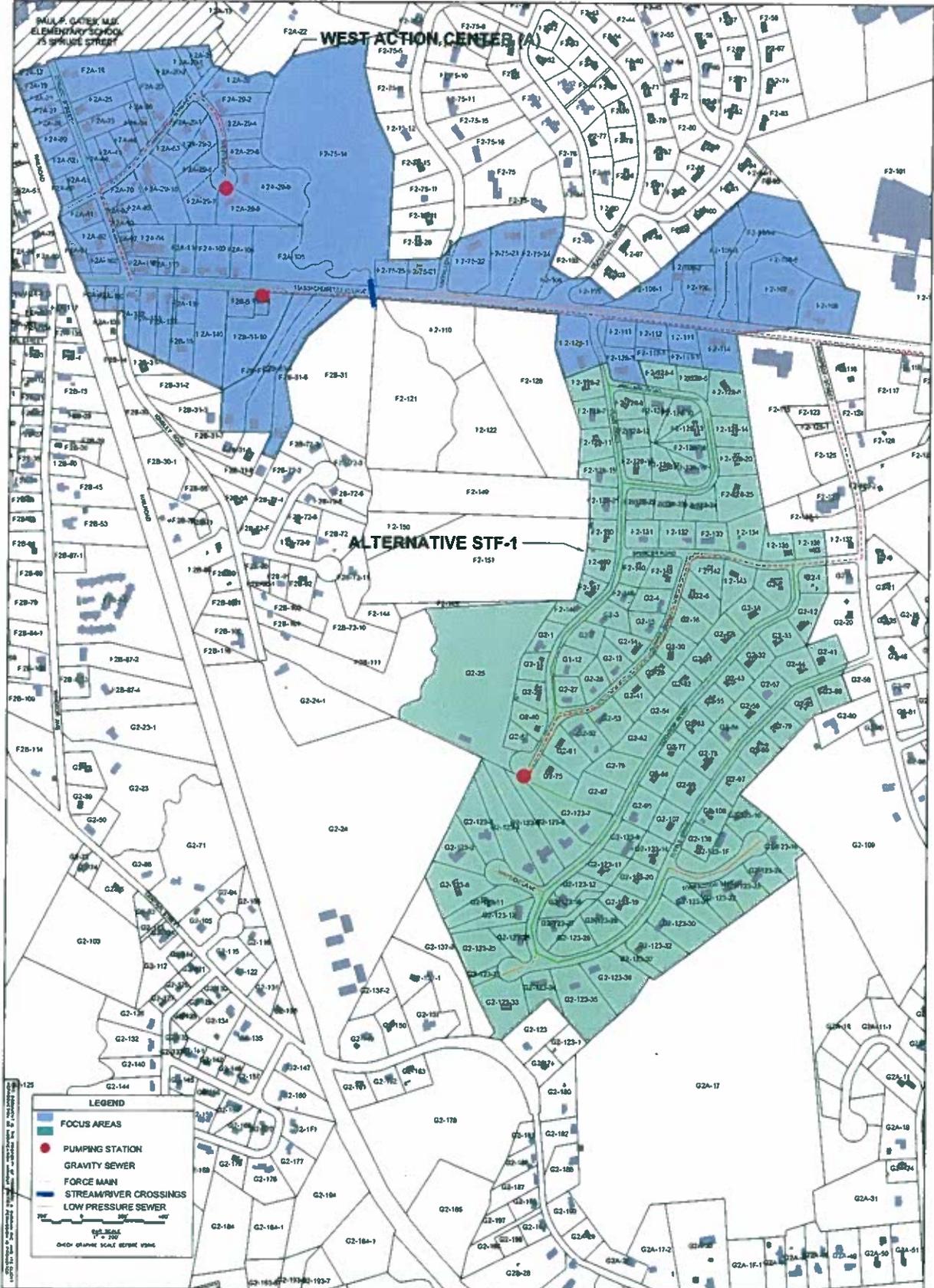


FIGURE 3

TOWN OF ACTION
 872 MAIN STREET, ACTION, MA
 WEST ACTION SEWER EXTENSION

**RECOMMENDED ALTERNATIVES
 WAC-1 & STF-1**

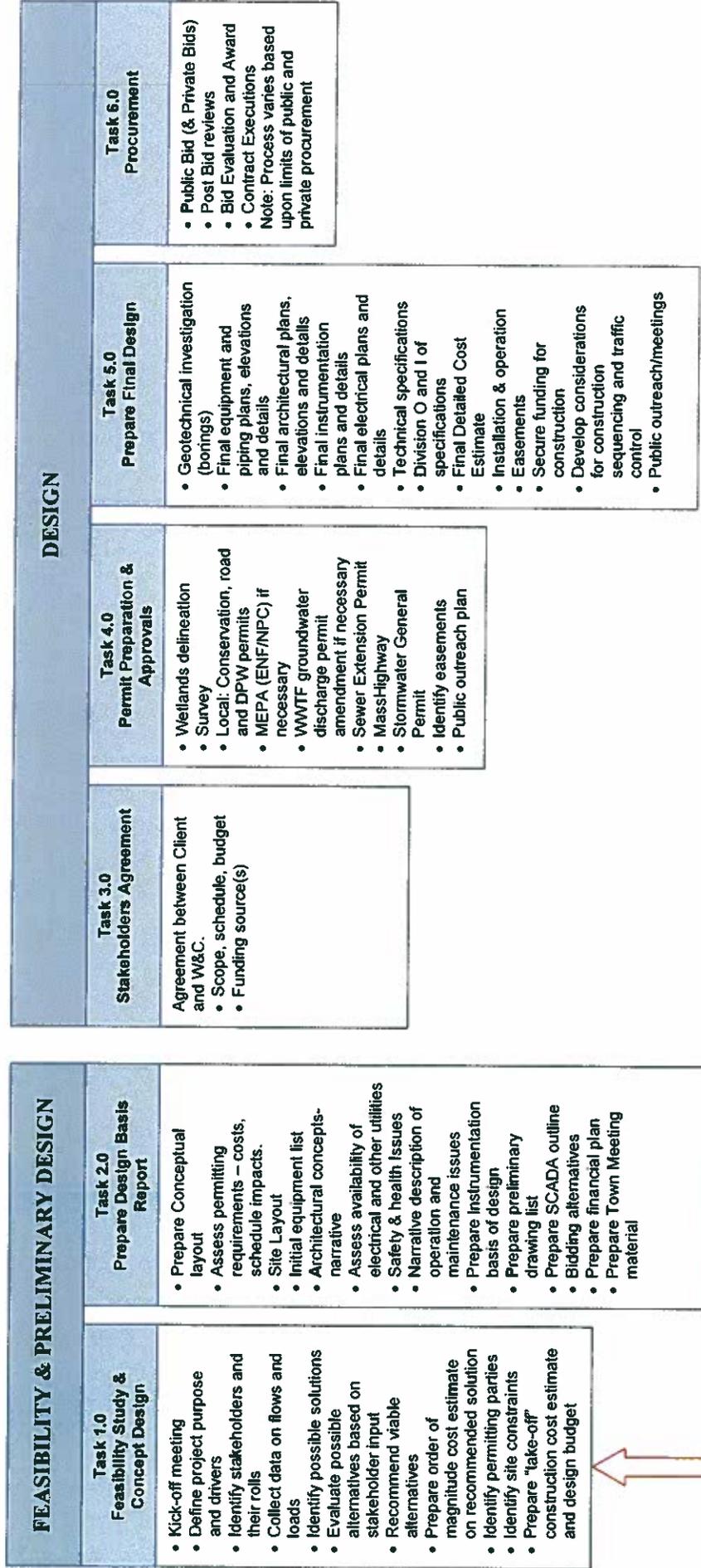
NO.	DESCRIPTION	DATE

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Table 1: West Acton Sewer Extension Project - Cost Comparison of Alternatives

Items	Unit	Unit Cost	Alt. 1: WAC-1		Alt 5: STF-1	
			Quantity	Cost	Quantity	Cost
Direct Costs						
8" PVC Sewer (8-12 feet)	L.F.	135	2535	\$342,225	7260	\$980,100
8" PVC Sewer (12-16 feet)	L.F.	150	1065	\$159,750	2140	\$321,000
8" PVC Sewer (16-20 feet)	L.F.	180	50	\$9,000	600	\$108,000
8" PVC Sewer (>20 feet)	L.F.	220	0	\$0	0	\$0
6" PVC Service Stubs (40 lf each)	L.F.	85	3160	\$268,600	5080	\$431,800
PVC Forcemain	L.F.	60	4900	\$294,000	4000	\$240,000
PVC Low Pressure Sewer	L.F.	70	2650	\$185,500	850	\$59,500
Paving - Trenches in Local Streets (3" depth)	Sq Yd.	15	1,914	\$28,717	10,198	\$152,967
Paving - Trenches in State Roadway (3" depth)	Sq Yd.	15	3,356	\$50,333	0	\$0
Paving - CDF in Local Roads	Cu.Yd	110	0	\$0	1,000	\$110,000
Paving - CDF in State Roads	Cu.Yd	110	3,461	\$380,722	0	\$0
Paving - Overlay Local Roads (3")	Sq Yd.	10	6,933	\$69,333	31,344	\$313,444
Paving - Overlay State Roads (3")	Sq Yd.	10	14,733	\$147,333	0	\$0
Water Main Relocation (15% total sewer l.f.)	L.F.	85	945	\$80,325	1,628	\$138,338
Drainage Pipe Relocation (5% total sewer l.f.)	L.F.	50	315	\$15,750	543	\$27,125
Ledge Removal (10% total sewer l.f. in ledge)	Cu. Yd.	85	1,386	\$117,810	2,387	\$202,895
Grinder Pumps	Each	4,200	17	\$71,400	13	\$54,600
Pump Stations	Each	400,000	2	\$800,000	1	\$400,000
Easements	L.F.	100	0	\$0	500	\$50,000
Stream and/or Railroad Crossings	Each	200,000	1	\$200,000	0	\$0
Construction Contingency Low - 5%	--	5%		\$161,040		\$179,488
Subtotal - Conceptual Construction Costs Low				\$3,382,000		\$3,769,000
Subtotal - Conceptual Construction Costs High				\$3,865,000		\$4,307,000
Indirect Costs						
Design & Permitting (10% of Construction)	Des. Cost	10%	--	\$338,200	--	\$376,900
Procurement & Constr. Engineering (15%)	Con. Cost	15%	--	\$507,300	--	\$565,350
Administration (Police, Financing, Legal, etc. - 10%)	Con. Cost	10%	--	\$338,200	--	\$376,900
Indirect Contingency - 5%	Ind. Cost	5%	--	\$193,250	--	\$215,350
Subtotal - Conceptual Indirect Costs Low				\$1,183,700		\$1,319,150
Subtotal - Conceptual Indirect Costs High				\$1,546,000		\$1,722,800
Total Project Conceptual Costs Low				\$4,566,000		\$5,088,000
Total Project Conceptual Costs High				\$5,411,000		\$6,030,000
Total LF of Collection Sewer (LF)				\$6,300		\$10,850
\$/Ft of Sewer Low				\$725		\$469
\$/Ft of Sewer High				\$859		\$556
Estimated SBUs Low			100		120	
Estimated SBUs High			130		130	
Sewers1 (x1000 ft)			6.3		10.9	
SBU Density Low (SBUs per 1000 LF of sewer)			15.9		11.1	
SBU Density High (SBUs per 1000 LF of sewer)			20.6		12.0	
Conceptual Construction Costs per SBU Low				\$35,000		\$39,000
Conceptual Construction Costs per SBU High				\$54,000		\$50,000
Estimated Flow (5-year winter flow average)	GPD		17,081		20,668	
Title 5 Flows	GPD		54,925		49,610	
ENR Construction Cost Index (February 2008)			8,094			

ACTON MA
SEWER EXTENSION – FEASIBILITY STUDY & CONCEPTUAL DESIGN
FEASIBILITY AND DESIGN SERVICES FLOWCHART



Notes:

1. Tasks can run concurrently; however they are generally performed in this sequential order

Completed this
Report May 2008



08/03/07

COMMITMENT & INTEGRITY
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www.woodardcurran.com

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T 781.251.0200
F 781.251.0847

June 14, 2007



Mr. Doug Halley, Director
Board of Health
Main Street
Acton, MA 01720-3995

RE: EPA NPDES Stormwater Phase II Update
Agreement for Engineering Services

Dear Mr. Halley:

Woodard & Curran has been in contact with the Environmental Protection Agency (EPA) to discuss their plans for the Phase II MS4 permits. Their goal is to have a final General Permit in place by the end of calendar year 2007 which would coincide with the current permit expiration date. This means that the draft would be out for public notice early fall 2007 with public notice period closing late fall 2007. They are currently envisioning that the Final Annual Report for the previous five year permit will be required to include a Notice of Intent to comply with the new permit requirements.

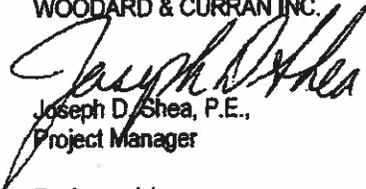
So What is Coming?

Currently the plan is that the new General Permit will push communities farther and be more specific than the first five year permit. The next permit will focus on the illicit discharge detection program and good housekeeping. For example the general permit would require that communities of a certain size would have to clean catch basins on a specific frequency. The Massachusetts Department of Environmental Protection will be utilizing the results of the annual plans to assess what communities are currently doing and what activities do not put undo pressure on communities to expend funds, but achieve the goals of the permit which is to improve water quality.

Based on the EPA's direction we have prepared a Scope of Services to assess the six minimum controls in relationship to actual results, and to retool illicit discharge and the good housekeeping programs where needed. We have attached an Agreement for Engineering Services, including a detailed scope of work and estimated fee budgets.

Sincerely,

WOODARD & CURRAN INC.


Joseph D. Shea, P.E.,
Project Manager

Enclosure(s)

cc: Brent Reagor, Asst. Director, BOH
Helen T. Gordon, P.E., Senior Project Manager, W&C
Bob Rafferty, P.E., Technical Leader, W&C

ENGINEERING SERVICES AGREEMENT

Between Town of Acton and Woodard & Curran
for the
EPA NPDES Phase II Stormwater Permit Update



1.0 Scope of Services

In December 1999 the Environmental Protection Agency (EPA) issued the Phase II Final Rule which required the Town of Acton to submit a Notice of Intent (NOI) to EPA indicating how they would comply with the EPA National Pollutant Discharge Elimination System (NPDES) Phase II Permit. The NOI consisted of a Stormwater Management Plan indicating how each of the six minimum controls would be addressed over the 5 year period of the permit. The 5 year period is ending and the NPDES Phase II General Permit will be reissued with changes based on EPA's assessment of the annual updates to the MS4 Management Plans. An NOI must be reissued by the Town to EPA. Currently EPA is planning that the NOI be submitted with the 2008 Annual Management Plan Update required of each MS4 each year of the permit. The recommended Scope of Services to meet the new permit requirements are as follows:

1.1 Evaluation of the Initial Phase II Stormwater Management Plan (Not to Exceed \$2,500)

The evaluation will consist of a review of each of the Minimum Controls (#1 – Public Education and Outreach, #2 – Public Involvement/Participation, #3 – Illicit Discharge Detection and Elimination, #4 – Construction Site Stormwater Runoff Control, #5 Post-Construction Stormwater Management and #6 Pollution Prevention/Good Housekeeping for Municipal Operations). This evaluation will consist of:

- 1.1.1 Review original Stormwater Management Plan and Annual Reports of 2004, 2005, 2006 and 2007 to determine conformance with regulatory requirements. As part of this review the department heads will be requested to fill out the Program Output and Accomplishment (POA) form which is considered an optional part of the annual reporting and which the Town has to date not filled out. (Task Fee = \$1,100).
- 1.1.2 Meet with appropriate department heads for a workshop presenting findings of the summary of the plan, annual reports and the POA; and finalize recommendations for 2008 Annual Report and NOI submission for all six Minimum Controls. (Task Fee = \$1,400).

1.2 Minimum Control #3 – Illicit Discharge Detection and Elimination (Not to Exceed \$20,800)

Since EPA will be focusing on Minimum Control #3 at a minimum the Town should complete the development of a storm sewer system map and begin in depth study of the highest priority areas with a high likelihood of illicit discharges.

- 1.2.1 GPS location of the remaining un-located outfalls with the Town's purview. Determine approximate locations of stormwater outfalls. We will then field locate and document up to 200 outfalls (estimated 10 outfalls per day can be inspected) with a GPS receiver with meter accuracy and document dry weather flow, outfall size, outfall condition, invert elevation, and outfall receiving water. Woodard & Curran (W&C) will deliver the GPS location information to the Town in ARCView/ARCInfo GIS format compatible with the Town's GIS system. (Task Fee = \$12,400).



1.2.2 The Town has a wealth of information regarding water quality monitoring. The next step is to prioritize areas with a focus on eliminating illicit discharges if they exist. W&C will review monitoring program results and finalize and confirm priority areas likely to have illicit discharges. Identify one watershed to focus on for the five year permit period outlining procedures for tracing the source of an illicit discharge, procedures for removing the source of the discharge and procedures for program evaluation and assessment. The plan would be scheduled for implementation and funding over the five year period of the new permit 2009 to 2013. Create an Illicit Detection and Elimination plan and distribute data collection into a five-year timeline with appropriate minimum control measures. This plan will address storm water sampling, hydrologic/hydraulic modeling, capital improvement programming. (Task Fee = \$6,900).

1.2.2.1 Run three workshops with department heads. Workshop One will review available information to confirm data. Workshop Two will consist of a review of the plan for input from the Town. The third workshop will be a rollout of the final proposed plan based on comments received during Workshop Two. (Sub Task Fee = \$4,200).

1.2.2.2 Deliver six (6) Draft MC#3 – Five Year Plan (2008 to 2013). (Sub Task Fee = \$1,900).

1.2.2.3 Deliver six (6) Final MC#3 – Five Year Plan (2008 to 2013) and a CD with PDF format of the final plan. (Sub Task Fee = \$800).

1.3 Minimum Control - #6 Pollution Prevention/Good Housekeeping for Municipal Operations (Not to Exceed \$6,000)

Based on a preliminary assessment of the annual reports for 2005 and 2006, it appears that the focus for the PP/GH during the next five year permit should be in the area of Training and Education of staff.

The programs which have been implemented for the Town of Acton over the first NPDES Phase II Permit life have focused on the areas of physical inspections and operations of paved roadways. For example, reduction of the use of sand without the increase of the use of salt on roadways for snow and ice treatment has significantly reduced sand runoff to the catchbasins. This along with a dedicated catchbasin and outfall cleaning and inspection program which has positioned Acton for meeting future permit requirements early on and at less cost to the community. W&C will assist the town in the creation of a five year training program for the staff which will include a combination of one in-house training program and off site programs to expand beyond the reduction of sand and expand into pesticide, herbicide and fertilizer application program (i.e. obtaining state certified pesticide licensing etc).

1.4. Project Execution

During the completion of the above listed tasks, Woodard & Curran will also perform the following ongoing tasks:

1.4.1 Weekly Project Reports – Woodard & Curran will develop a project status report on a weekly basis and share it with the town's team via email. These reports will describe the progress made during the previous week and tasks anticipated for the coming week. They will also describe any issues identified in completing the tasks on schedule and identify suggested solutions to those issues. A budget update will also be included monthly to give the team the information necessary to assess our compliance with the schedule and budget for the project.



2.0 Fee Budget

The estimated fee budget to complete this Scope of Services is Not to Exceed \$29,300 without prior written authorization. Each Phase, Task and SubTask will be invoiced separately on a one time basis. Final payment is expected within 30 days of each phase, task or subtask completion and/or final deliverable to the town.

3.0 Terms & Conditions

The Acton specific Terms and Conditions already in use between Woodard & Curran and the Town of Acton in the Adams Street RIBs Capacity Assessment shall remain in effect for this project.

IN WITNESS WHEREOF, the parties have executed this Agreement on the date set forth below:

ENGINEER: WOODARD & CURRAN INC

CLIENT: TOWN OF ACTON,

By: Joseph D. Shea

By: _____

Printed: Joseph D. Shea, PE

Printed: _____

Title: Vice President

Title: _____

Date: June 14, 2007

Date: _____, 2007

Address for Giving Notices:

Joseph D. Shea, PE
Project Manager
Woodard & Curran, Inc.
980 Washington Street, Suite 325
Dedham, MA 02026

Doug Halley
Director of Health
Town of Acton, Board of Health
472 Main Street
Acton, MA 01720

Capital Improvement Program Request Summary

Department/ Board: Health Department

Name: Doug Halley

Phone: (978) 264-9634

Proposed Capital	Priority #	FY 2010	Priority #	FY 2011	Priority #	FY 2012	Priority #	FY 2013	Priority #	FY 2014
Stormwater	1	NPDES compliance \$50,000	2	NPDES compliance \$25,000	2	NPDES compliance \$25,000	2	NPDES compliance \$25,000	2	NPDES compliance \$25,000
Wastewater	2	Spencer/Tuttle/Flint \$6,030,000								
Design & Construct										
Wastewater	3	West Acton Area \$5,411,000								
Design & Construct										
Community Health Assessment	4	Public Health Protection \$57,000	4	Public Health Program \$15,000	3	Public Health Program \$15,000	3	Public Health Program \$15,000	3	Public Health Program \$15,000
Wastewater	5	SCADA \$53,100	3	Spare Inventory & Roof Modification \$30,800	4	RIBs \$25,000				
Treatment Plant										
Wastewater			1	Education/Pumping 30,000	1	Education/Pumping 32,500	1	Education/Pumping 35,000	1	Education/Pumping 37,500
Management										
		\$11,548,000		\$70,000		\$72,500		\$75,000		\$77,500

Capital Improvement Program Proposal – Detail

Department Name HEALTH

Project Treatment Plant SCADA upgrade

Fiscal Year 2010

Department Head Doug Halley

Cost \$53,100

Priority 5 of 5

1. Description

Upgrades and new equipment needed for the Supervisory Control and Data Acquisition (SCADA) system essential for the operation of the wastewater operations.

2. Useful Life 20 years

3. Purpose (Please 'X' one of the Boxes and Describe, if Applicable)

Schedule Replacement

Increase Personnel Efficiency

New or Expanded Service

**Replace Obsolete or Unsafe Equipment
(Explain Disposal of Old Equipment)**

Other (Please Explain)

Upgrade of existing system

4. Justification

The SCADA system controls all of the operations at the wastewater facility and the pump stations. It allows both on-site and remote monitoring and response to any changes in wastewater flow quality or quantity.

5. How Was this Project's Priority Determined?

The Town's consultant Woodard & Curran has developed a capital improvement program for the wastewater system and has determined that this project is the highest priority.

6. Estimated Cost \$53,100

Less Trade-In (If Applicable) N/A

Net Cost \$53,100

7. Are Non-Town Revenues Available to Reduce Cost?

The project will be funded from the Sewer Enterprise Fund.

8. If this Project is Delayed, What will be the Effect on your Department?

Loss of any one component on the SCADA system results in loss of control of that portion of the facility the component controls.

9. Please Describe the Effect of this Project on your Operating Budget.

Personnel Budget

Increase No affect
Decrease No affect

Expense Budget

Increase No affect
Decrease No affect

10. Attachments, if Applicable.

See Attached.

**COMMITMENT & INTEGRITY
DRIVE RESULTS**

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Dedham, Massachusetts 02026
www.woodardcurran.com

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T 781.251.0200
F 781.251.0847

July 7, 2008



Mr. Doug Halley, Director of Public Health
Town of Acton
472 Main Street
Acton, MA 01720

RE: SCADA Upgrades Proposed Scope of Work

Dear Mr. Halley:

Enclosed is our proposal for a SCADA upgrade for the Town of Acton's Wastewater Treatment Plant. This proposal is an update to the April 2007 proposal that has been carried on the CIP for over a year. Based upon the events at the plant over the past week, we have updated this proposal to focus on immediate needs and repairs. Also included are the Terms and Conditions previously agreed to between Woodard & Curran and the Town of Acton.

The fee budget for this work is a fixed price (lump sum) of \$53,100.00 (Fifty-Three Thousand, One Hundred Dollars). Billing will be monthly and payment terms are Net 30 days.

Please examine the enclosed proposal, and if accurate, indicate your approval and acceptance in the space provided. Please return one copy of this signed acceptance to our office and keep the other copy for your files. If necessary, please reference a purchase order number if required for billing purposes.

We appreciate the opportunity to present this proposal to you. We are happy to discuss the scope and fee budget with you further and can be available for a meeting or a conference call at your convenience. As always, contact any of our staff if you have any questions.

Sincerely,

WOODARD & CURRAN INC.



Douglas Tirrell
Service Area Manager

#P221881.00

Enclosure(s)

cc: Joe Shea, W&C
Leroy Kendricks, W&C
Bill Luksha, W&C Contract Operations
John Parkhurst, W&C Contract Operations

Town of Acton, MA

Wastewater Treatment Facility

SCADA UPGRADE

BACKGROUND

The Town of Acton's Wastewater Treatment Facility (WWTF) was designed and bid in the late 1990s, and construction was substantially completed in late 2001. The SCADA system user interfaces, software, hardware, and communication system was purchased in 2001 using then current models and technology. It is important that the Town change-out and upgrade this computer on a routine basis. The Town has been very proactive in keeping the communication system current with the Metropolitan I-Net fiber project started in 2003. At this point the Town should continue to maintain its investment by evolving to current models and technology for the hardware and user-interface components on the SCADA system. Recent failures of the system make this work a priority as the system is currently running on temporary setup. This proposal includes the recommended work required at this time.

The main system computer is a server class machine that is failing. This computer contains the database and required software that allows other computers at the site to function. Without the server machine the other computers will not operate the system. Recent failures and lockup conditions force the staff to restart the machine. At times the machine will not restart without several attempts and a prolonged starting sequence. Additionally the server will not dial out critical plant alarms, forcing staff to man the plant all hours.

Bringing the system up to current standards will require hardware and software changes. The system is currently configured with a main client server and four panel mount PC's running Windows NT, which is no longer supported by Microsoft. In addition, all the interface and programming software on these machines are no longer supported.

Our proposed solution is to replace the server machine with two desktop PC's loaded with database, development and runtime software packages. The database will reside in each machine allowing a redundant type setup each with alarm notification capability. We will also replace three of the four existing panel mount PC's with new machines running Window XP and loaded with updated software. The fourth PC will be removed as it has now become antiquated and its functions will be performed by other PC's.

At Woodard & Curran, the commitment and integrity of our people drive results for you. You experience this power every day in our actions, solutions, and promises kept.

BASIS FOR THIS STATEMENT OF WORK

This Statement of Work is based upon the following:

- Recent failures of the controlling server computer
- Knowledge of the design and maintenance of the current SCADA system
- Conversations with the Plant Manager and Client Manager

SPARE PARTS

The SCADA system includes an Allen-Bradley PLC-based system. There are no spare parts onsite for this system. The system consists of processors, power supplies, input/output modules and communications cards. Maintaining spare parts onsite as is done with critical mechanical components will allow quick recovery from of a plant or pump station PLC component failure.

SYSTEM UPS

The SCADA system consists of a PLC-based controls networked together and tied into the main computer. The electronic equipment is typically protected and backed up by Uninterruptible Power Supplies (UPS). The UPS's protect expensive control equipment from surge and other transient voltages. Additionally, if electrical power is lost a UPS would provide enough power to keep the system active and alarm out the failure. UPS's should be installed in order to protect and back up the system.

WORK OVERVIEW

Reconfigure the existing computer setup for redundancy, support, and alarm capability.

Task 1 – Replace SCADA Server

The work under this task will include the following:

- Define and procure two new desktop PC's, upgrade the Allen-Bradley RSView Development software package, provide new WIN-911, Dialogic card and software upgrades with one year support
- Replace the existing server machine with two desktop PC's
- Install, set up, and convert the current HMI application to the new machines
- Install, setup, configure, and test the WIN-911 alarming package
- Install RSView32 server package
- Install and test pcAnywhere dial-in connection

By combining the engineering functions of a multidisciplinary consulting engineering firm with the implementation expertise of control systems integrators, Woodard & Curran has the right combination of expertise to seamlessly complete your project.

Task 2 – Replace Three (3) Panel Mount PC's

The work under this task will include the following:

- Define and procure replacement PC's for three (3) panel mount Advantech NT computers, upgrade all Allen-Bradley software packages with one year support, purchase WIN-911 and a Dialogics card
- Remove and replace three (3) PC's
- Remove and discard one (1) PC and provide a blank cover plate
- Install and load three (3) PC's with updated software
- Configure and install software applications on all PC's and test communications through the network
- Install, set up, configure, and test WIN-911 alarm notification software

Task 3 – Procurement of Spare Parts

The work under this task will include the following:

- Identify and provide PLC spare parts, include the following:
 - (1) SLC 5/03 processor
 - (1) digital input module
 - (1) digital output module
 - (1) power supply
 - (1) analog input module
 - (1) analog output module
 - (1) Devicenet scanner module

Task 4 – Procure and Install UPS's

The work under this task will include the following:

- Replace eight (8) pump station UPS's (500va) as the existing are at the end of their dependable lifecycle (pumping station #11 on High Street does not need replacement)
- Replace two (2) plant UPS's with 1000va units as they are at the end of their dependable life cycle

SUMMARY OF FEE BUDGETS

The fees for the work described herein are as follows and include labor, materials, purchase, and expenses:

Task 1 – Replace server machine and panel mount PC's	\$24,300.00
Task 2 – Replace three (3) panel mount PC's	\$14,800.00
Task 3 – Procurement of spare parts	\$7,500.00
Task 4 – Procure and install UPS's at the site	<u>\$6,500.00</u>
Total	\$53,100.00

This Fee Budget is a fixed price (lump sum) and is valid for 60 days from the date of this proposal and will be billed on a percent complete monthly.

SCHEDULE

Given that time is of the essence for these repairs, W&C will be ready to initiate work within one week of your written authorization to proceed. Based upon current procurement durations, we expect to be completed within 45 days.

Please examine this proposal, and if accurate, indicate your approval and acceptance in the space provided below. Please return one copy of this signed proposal to our office and keep the other copy for your files. If necessary, please reference a purchase order number if required for billing purposes.

Date: July 7, 2008

By: 

Title: Senior Vice President

Accepted:

The undersigned hereby states that they are the person or duly authorized agent of the person or organization contracting for the above services on the above described project; and that the terms and conditions stated are understood and herewith agreed to and accepted. Woodard & Curran is hereby authorized to proceed with the services outlined above.

Date: _____

By: _____

Name: Doug Halley

Title: Director of Health, Town of Acton

CERTIFICATION OF AVAILABILITY OF FUNDS FOR THIS PROJECT:

By: _____

Title: _____



Capital Improvement Program Proposal – Detail

Department Name	Highway	Project	Excavator
		Fiscal Year	2010
Department Head	Russell Robinson	Cost	\$185,000
		Priority	1 of 5

1. Description

The next phase in the transfer station recycling & composting program includes this excavator to collect brush and trees from the streets, job sites, post-storm woody debris and efficiently feed the mulching machine at the recycling center.

Tree stumps, for which we presently pay to dispose, would be broken up and also fed into the mulching machine.

Using its rotating coupler, the excavator can quickly turn mulch piles with the grapple. This is a feature not well-performed by existing loader equipment.

The excavator can be used to pack trash and recycling transfer trailers to obtain more tonnage per trailer, reducing trips to the North Andover receiving facility. Each 80-mile round trip takes two hours. At six to eight trips per week, considerable fuel savings and labor efficiencies could be realized.

The excavator would also be used on highway, sidewalk, drainage and grading projects in much more efficient and maneuverable ways than loaders and backhoes can perform. For example, a truck/trailer and the excavator can be placed in line (one lane of a street) as opposed to side-by-side (or two lanes) with a backhoe.

2. Useful Life 20 years

3. Purpose (Please 'X' one of the Boxes and Describe, if Applicable)

<input type="checkbox"/> Schedule Replacement	<input checked="" type="checkbox"/> Increase Personnel Efficiency
<input checked="" type="checkbox"/> New or Expanded Service	<input type="checkbox"/> Replace Obsolete or Unsafe Equipment
<input type="checkbox"/> Other (Please Explain)	<input type="checkbox"/> (Explain Disposal of Old Equipment)

4. Estimated Cost	\$185,000
Less Trade-In (If Applicable)	
Net Cost	\$185,000

5. Are Non-Town Revenues Available to Reduce Cost?

Recycling/Transfer Station Enterprise Fund and Chapter 90 funds could be used.

6. If this Project is Delayed, What will be the Effect on your Department?

Current inefficiencies would continue. Recycling program would continue but not at optimum levels. Projects requiring this device would be subcontracted to vendors.

7. Please Describe the Effect of this Project on your Operating Budget.

	<u>Personnel Budget</u>		<u>Expense Budget</u>
Increase	No Impact		Increase <input checked="" type="checkbox"/>
Decrease			Decrease

Milton



Southworth-Milton, Inc.
www.miltoncat.com

July 8, 2008

Mr. Russell Robinson
Superintendent

Acton Public Works
14 Forest Road
Acton, MA 01720

Mr. Robinson,

The following is your budgetary quotation for a new CAT M313D Rubber Tire Excavator and requested H100 Hammer Attachment.

Please see the attached specifications for your review.

(1) New CAT M313D Rubber Tire Excavator Includes: Hydraulic Coupler, Auxiliary Hydraulics, and Jaw Bucket.	\$150,000.00
(1) New CAT H100 Hydraulic Hammer	\$34,200.00

Please contact me with any questions.

Thank you for your consideration,

Dennis Head
Milton CAT
100 Quarry Drive
Milford, MA 01757
Municipal Sales
508-981-4653 Mobile Phone

Corporate Headquarters
100 Quarry Drive
Milford, MA 01757
508.634.3400

14 Kendrick Road, Rt. 28
Wareham, MA 02571

2158 Plainfield Pike
Cranston, RI 02920
401.946.6350

1-89 Exit 6
Mail to: 554 Maple St.
Hopkinton, NH 03229
603.746.4611

Rt. 103, 1-89 Exit 7
Waver, NH 03278
603.746.4671

79 Robertson Boulevard
Brewer, ME 04412
207.989.1890

16 Pleasant Hill Road
Scarborough, ME 04070
207.883.9586

One Cat Lane, Rt. 2
Richmond, VT 05477
802.434.4228

500 Commerce Drive
Clifton Park, NY 12065
518.877.8000

294 Ainsley Drive
Syracuse, NY 13205
315.476.9981

2140 Military Road
Buffalo, NY 14150
716.694.7200

275 Market Place Drive
Rochester, NY 14623
585.475.1330

55 Industrial Park Drive
Binghamton, NY 13904
607.772.6500

Capital Improvement Program Proposal – Detail

Department Name	Highway	Project	Replace 2 1987 Dump Trucks		
Department Head	Russell Robinson	Fiscal Year	2010		
		Cost	\$270,000		
		Priority	2	of	5

1. Description

Replace 2 1987 Mack dump trucks with new similar models.

2. Useful Life 20 years

3. Purpose (Please 'X' one of the Boxes and Describe, if Applicable)

Schedule Replacement

New or Expanded Service

Other (Please Explain)

Increase Personnel Efficiency

**Replace Obsolete or Unsafe Equipment
(Explain Disposal of Old Equipment)**

Old vehicles will be traded toward the purchase of new.

4. Justification

These vehicles are a major part of the department infrastructure and are used in all aspects of highway work year round. During the winter months the dump trucks are converted to sanders that are used to apply deicing chemicals and are assigned to snow removal routes.

5. How Was this Project's Priority Determined?

By the age and condition of the existing vehicle. This will be the first year in a five year plan to begin replacing two of our front line trucks annually.

6. Estimated Cost

Less Trade-In (If Applicable)

Net Cost

\$270,000

Unknown at this time

\$270,000

7. Are Non-Town Revenues Available to Reduce Cost?

Possible state funding for road building equipment.

8. If this Project is Delayed, What will be the Effect on your Department?

We will continue repairs as necessary. After 20 years of use, deicing chemicals have taken a toll on these vehicles and they are becoming more costly to maintain.

9. Please Describe the Effect of this Project on your Operating Budget.

Personnel Budget
 Increase No Impact
 Decrease

Expense Budget
 Increase
 Decrease X

10. Attachments, if Applicable.



CHASSIS SPECIFICATIONS SUMMARY

August 25, 2008

2009 MACK GU712

SNOW PLOW. Inner City
STRAIGHT TRUCK WITHOUT TRAILER

Engine	MACK MP7-325M 325HP	Transmission	4500-RDS-6
		Clutch	EATON/FULLER "SOLO" CL(S)798S
Front Axle	14,600# FXL14.6	Rear Axle	30,000# RS-30-185 Ratio 4.89
Suspension	14,600#	Suspension	30,000# MULTILEAF
Tires	Front: 12R24.5 Rear: 12R24.5	Wheels	24.5x8.25 STEEL DISC (10-HOLE) 24.5x8.25 CAST SPOKE
Ratings	GVW: 43,240#	Fuel Tanks	LH: 66gal
Fifth Wheel		Sleeper	

PRICING SUMMARY

	Total Price
SELLING PRICE (Excluding Taxes/Fees/Trade)	\$129,744.52
Material Surcharge	\$950.00
Net FRET or Canadian GST Taxes	\$0.00
Tire Tax Credit (Municipal Only)	(\$245.52)
Sales/Usage Taxes	\$0.00
License/Title/Etc.	
Misc Fees	
Trade	\$0.00
ACQUISITION COST (Include Trade if applies)	\$130,449.00
Less Down Payment	
BALANCE DUE Per Unit	\$130,449.00
PRICE (Total Order)	\$260,898.00
BALANCE DUE (Total Order)	\$260,898.00

2009 MACK GU713 HEAVY DUTY 6WD CHASSIS PER CUSTOM SPEC.

" Built Like a Mack Truck "

PLEASE NOTE; THIS FIGURE IS BASED ON A FACTORY ORDERED TRUCK WITH IN THE NEXT 30-45 DAYS. FOR NEXT YEARS BGT, PLEASE ADD 5% (\$6,522.00)-FOR 2010 MODEL YEAR CHASSIS*

Total Quantity: 2	Estimated Total Weight: 13,033#	Reference#: ACAL269809C
--------------------------	--	--------------------------------

X _____
Customer Signature Date

X _____
Dealer Signature Date

Prepared For:
TOWN OF ACTON HIGHWAY DEPT.
14 FOREST ROAD
ACTON, MA 01720
Phone: 978-264-9624
Fax: --

Presented By:
ROBERT DOW
McDevitt Mack Sales
939A East Street
Tewksbury, MA 01876
(978)851-9902



VEHICLE REQUEST FORM INSTRUCTIONS & INFORMATION

The Town of Acton is voluntarily complying with The Federal Energy Policy Act of 1992, which requires governmental fleets to meet the following standard -- 75% of new Light-Duty Vehicles (LDVs) acquisitions to be Alternative Fueled Vehicles (AFV). LDVs are defined as 8500 GVWR or less. Off-road, non-administrative emergency vehicles, and vehicles acquired solely for research or testing purposes are exempt from this standard. All new vehicles must be an EPA certified "Smart Way" or "Smart Way Elite" vehicle. Acton's minimum miles per gallon standard for all new LDV purchases are as follows:

New NHTSA Calculation:	<u>Gasoline</u>	<u>E-85</u>
• Sedans/station wagons	21mpg City	N/A
• Full size Pick-ups & SUVs 2WD	15 mpg city	11 mpg city
• Full size Pick-ups & SUVs 4WD	14 mpg city	9 mpg city

To determine which vehicles meet the "Smart Way" certifications and mpg standard use the ratings at :

<http://www.epa.gov/greenvehicles/Index.do;jsessionid=82306299f6a3352b137f>

STEP-BY-STEP INSTRUCTIONS TO COMPLETE THE REQUEST FORM

1. Complete Section A with information on the vehicle to be purchased and the vehicle to be replaced (if applicable).
2. Complete Section C if the request is to request purchase an SUV, four wheel drive pickup, full size sedan or a police equipped vehicle.
3. Complete Section D if you are requesting an expansion to the size of your fleet.
4. Obtain signature of Department head or designee in Section B.
5. Please Complete Section 1 of Appendix A
6. Make an appointment with the Town Mechanics (1) to review the existing vehicle and (2) complete Appendix A prior to submission

Asset Code

Departments must use one of the following commodity codes when processing a request:

1. Sedans & Station Wagons
2. Vans, Light Duty Trucks and SUVs (GVW of 8500 or less)
3. Vans, Buses, & Trucks (GVW of over 8500 lbs)
4. Alternative Fuel Vehicles
5. Police Pursuit Vehicles



VEHICLE REQUEST FORM (Page 1)

Department/Division <u>Highway Dept.</u>	Contact Name <u>Russell Robinson</u>
ASSET CODE #	E-MAIL <u>rrobinson@acton-ma.gov</u>

SECTION A		
Expansion/Replacement	<input type="checkbox"/> Expansion <input type="checkbox"/> Transfer <input checked="" type="checkbox"/> Replacement <small>(Complete Section D for Expansion Requests)</small>	If to be transferred, identify the receiving entity?
Purchase From:	<input type="checkbox"/> State Contract <input type="checkbox"/> Surplus <input type="checkbox"/> Quote <u>Bid</u>	Purchase Option (check all that apply) <input checked="" type="checkbox"/> Purchase <input type="checkbox"/> Lease-Purchase
Vehicle Requested <input checked="" type="checkbox"/> New <input type="checkbox"/> Used (Check One)		
VEHICLE DATA	VEHICLE TO BE REPLACED	REQUESTED VEHICLE
Year	<u>1987</u>	<u>new</u>
Make	<u>Mack</u>	<u>Mack</u>
Model	<u>RD 685</u>	
VIN	<u>1M2P129C1ha011918</u>	N/A
License Number	<u>M 55100</u>	N/A
Inventory Tag Number	<u>60</u>	N/A
Current Odometer		Estimated
Annual Miles Driven	Prior FY Actual	Estimated
Vehicle Value	Use Edmonds.com	
Vehicle Type	<u>6 wheel dump</u>	
Check all that apply	<input type="checkbox"/> 4WD <input type="checkbox"/> Police Equipped	<input type="checkbox"/> 4WD <input type="checkbox"/> Police Equipped
Primary Assignment	<input type="checkbox"/> Individual <input type="checkbox"/> Function <input checked="" type="checkbox"/> Pool	<input type="checkbox"/> Individual <input type="checkbox"/> Function <input checked="" type="checkbox"/> Pool
Vehicle Purpose	<input type="checkbox"/> Employee Transportation <input type="checkbox"/> Client Transportation <input type="checkbox"/> Task Specific (describe below) <input type="checkbox"/> Special Purpose (describe below) <u>Hwy Dept. use</u>	<input type="checkbox"/> Employee Transportation <input type="checkbox"/> Client Transportation <input type="checkbox"/> Task Specific (describe below) <input type="checkbox"/> Special Purpose (describe below) <u>Hwy Dept. use</u>
Reason for Replacement	<input checked="" type="checkbox"/> Routine (Over 120,000 miles) <input type="checkbox"/> Other (Complete Section E)	Actual Disposal Date/Miles
Estimated Disposal Date	<u>Winter 2010</u>	

SECTION B: SIGNATURES	
Requesting Person <u>Russell Robinson</u> Date: <u>11-7-08</u>	Department Head <u>Russell Robinson</u> <input checked="" type="checkbox"/> Approved Date: <u>11-7-08</u> <input type="checkbox"/> Denied

SECTION C: ADDITIONAL JUSTIFICATION FOR CERTAIN VEHICLE TYPES

This section must be completed if a SUV, four wheel drive vehicle, full size sedan or a police equipped vehicle is requested.

Special Requirements: Check all that apply and then describe in detail in the space provided below.

- Regularly driven off road or on unimproved roads
- Equipment/Tool Storage
- Passenger Occupancy
- Utility Features
- Pursuit Vehicle
- Other

Please describe the specific need here. Include justification describing why a lower cost; more fuel-efficient vehicle is not sufficient to meet agency needs.

SECTION D: ADDITIONAL JUSTIFICATION FOR FLEET EXPANSION

This section must be completed for expansion vehicle requests.

Reason for Expansion: Check all that apply and then describe in detail in the space provided below:

- New Statutory Requirements
- Fleet Increase Approved by Town Manager
- Program Changes
- Other

Describe the need to expand the fleet here.

SECTION E: REASON FOR REPLACEMENT

If "Other" was selected as the reason for replacement on page one, please provide additional information below.

Over 20 years old

Has numerous mechanical problems (see mechanic report.)

Section F: Projected activity (per vehicle)

	Within Acton	Outside of Acton	Total
miles/year	3000		
hours/year			

Section G: Incremental cost for vehicle purchase (per vehicle)

New annual vehicle cost: (purchase price times 12.33% plus cost of fuel and maintenance)	Incremental cost: (baseline - new)
\$	\$

Section H: Vehicle Vendor Information

Contact	Address
Title	City State
Company	Zip Code
E-Mail	Phone

Section I: Existing Vehicle Information

Fuel Type: CNG Diesel LNG LPG Gasoline Other

Fuel Usage in miles per gallon:

Section J: New Vehicle Information

Fuel Type: CNG Diesel LNG LPG Gasoline E85 Other

(if utilizing more than one fuel type, indicate which fuels and percentage operating time for each)

Emissions per vehicle (please indicate units-g/bhp-hr, or g/gallon)

NOx	VOC	PM2.5
-----	-----	-------

Emissions certified by:
 EPA Alternate certification (specify and attach documentation)

Vehicle use: On Road Off-road | Type of Equipment:

Fuel Usage _____mpg

(use the City rating at <http://www.epa.gov/greenvehicles/index.do.jsessionid=8230b13c37d76d2451b2>)

ADDITIONAL REQUIRED INFORMATION

Purchase/Lease Information:

Anticipated Cost: _____ Lease period: _____ months/years

Anticipated Annual Mileage: _____

Maximum Annual Mileage (leased vehicles): _____

Cost in Excess of Allowed Annual Mileage (leased vehicles): _____

If You Require This Vehicle for Commuting, Please Detail One-Way Mileage between Employee's Home and Office, Address of Overnight Parking, And the Need for This Vehicle for Commuting Purposes

If You Will Not be Purchasing an AFV, Please Attach Documentation to Explain Why You Will Not be Able to Purchase an AFV.

Over 8500 GVWR



APPENDIX A: VEHICLE PURCHASE REQUEST FORM page 1 of 2

Section 1: Existing Vehicle Information - to be completed by Requestor

Make <i>Mack</i>	Model <i>RD685</i>	Year <i>1987</i>	Car/ Truck # <i>60</i>	License Plate # <i>M55-100</i>
Fuel Type: <input type="checkbox"/> CNG <input checked="" type="checkbox"/> Diesel <input type="checkbox"/> LNG <input type="checkbox"/> LPG <input type="checkbox"/> Gasoline <input type="checkbox"/> Other				

Section 2: Existing Vehicle Condition - to be completed by the Town's Mechanics

GVWR		Fuel Use (m/gal):
* ENGINE type	4 cyl	6 cyl <input checked="" type="checkbox"/> 8 cyl
* TRANSMISSION TYPE:	Manual <input checked="" type="checkbox"/> Automatic	

Condition of Vehicle - to be completed by the Town's Mechanics

	<u>Excellent</u>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>Date last Repaired</u>
*Engine				✓	
*Transmission				✓	
*Frame				✓	
*Differential				✓	
*Brakes (Power?)			✓	✓	
*Steering (Power?)			✓		
*Suspension				✓	
*Clutch				✓	
*Body			✓	✓	
*Radiator				✓	
*Battery			✓		
*Air Conditioner					NA
*Heater			✓		
*Lights			✓		
*Upholstery			✓		
*Paint			✓	✓	
*Glass				✓	
*Jack					NA
*Radio AM/FM			✓		
*Radio 2-way			✓		
*TIRES:					
R FRONT		✓			
L FRONT		✓			
R REAR		✓			
L REAR		✓			
SPARE					



APPENDIX A: VEHICLE PURCHASE REQUEST FORM page 2 of 2

Mechanic's Narrative

Truck #60 is our other oldest vehicle at 21 yrs. Also this truck started out as a dump truck and was converted to a sandor. Also you will notice that this truck has similar problems as #61 this is all related to the age of the vehicle and use as a sandor. The problems with this truck are similar to truck #61 except. It will need a radiator and this truck was a lot more unreliable during the winter it was out of service ~~more than~~ #61. Several times last winter. The expense's to repair this vehicle out way keeping it.


Mechanic's Signature

11/7/08
Date



VEHICLE REQUEST FORM INSTRUCTIONS & INFORMATION

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New NHTSA Calculation:

	<u>Gasoline</u>	<u>E-85</u>
• Sedans/station wagons	21mpg City	N/A
• Full size Pick-ups & SUVs 2WD	15 mpg city	11 mpg city
• Full size Pick-ups & SUVs 4WD	14 mpg city	9 mpg city

To determine which vehicles meet the "Smart Way" certifications and mpg standard use the ratings at :

<http://www.epa.gov/greenvehicles/Index.do;jsessionid=82306299f6a.3352b137f>

STEP-BY-STEP INSTRUCTIONS TO COMPLETE THE REQUEST FORM

1. Complete Section A with information on the vehicle to be purchased and the vehicle to be replaced (if applicable).
2. Complete Section C if the request is to request purchase an SUV, four wheel drive pickup, full size sedan or a police equipped vehicle.
3. Complete Section D if you are requesting an expansion to the size of your fleet.
4. Obtain signature of Department head or designee in Section B.
5. Please Complete Section 1 of Appendix A
6. Make an appointment with the Town Mechanics (1) to review the existing vehicle and (2) complete Appendix A prior to submission

Asset Code

Departments must use one of the following commodity codes when processing a request:

1. Sedans & Station Wagons
2. Vans, Light Duty Trucks and SUVs (GVW of 8500 or less)
3. Vans, Buses, & Trucks (GVW of over 8500 lbs)
4. Alternative Fuel Vehicles
5. Police Pursuit Vehicles



VEHICLE REQUEST FORM (Page 1)

Department/Division <u>Highway Dept.</u>	Contact Name <u>Russell Robinson</u>
ASSET CODE #	E-MAIL <u>r.robinson@acton-ma.gov</u>

SECTION A		If to be transferred, identify the receiving entity?
Expansion/Replacement	<input type="checkbox"/> Expansion <input type="checkbox"/> Transfer <input checked="" type="checkbox"/> Replacement (Complete Section D for Expansion Requests)	
Purchase From:	<input type="checkbox"/> State Contract <input type="checkbox"/> Surplus <input type="checkbox"/> Quote <u>Bid</u>	Purchase Option (check all that apply) <input checked="" type="checkbox"/> Purchase <input type="checkbox"/> Lease-Purchase
Vehicle Requested <input checked="" type="checkbox"/> New <input type="checkbox"/> Used (Check One)		
VEHICLE DATA	VEHICLE TO BE REPLACED	REQUESTED VEHICLE
Year	<u>1987</u>	<u>new</u>
Make	<u>Mack</u>	<u>Mack</u>
Model	<u>RD 685P</u>	
VIN	<u>1m2P129c6ha011915</u>	N/A
License Number	<u>m 55-028</u>	N/A
Inventory Tag Number	<u>61</u>	N/A
Current Odometer	<u>61,750 mi. / 5836 hr.</u>	Estimated
Annual Miles Driven	<u>Prior FY Actual</u>	Estimated
Vehicle Value	<u>Use Edmonds.com</u>	
Vehicle Type	<u>6 wheel Dump</u>	<u>6 wheel Dump</u>
Check all that apply	<input type="checkbox"/> 4WD <input type="checkbox"/> Police Equipped	<input type="checkbox"/> 4WD <input type="checkbox"/> Police Equipped
Primary Assignment	<input type="checkbox"/> Individual <input type="checkbox"/> Function <input checked="" type="checkbox"/> Pool	<input type="checkbox"/> Individual <input type="checkbox"/> Function <input checked="" type="checkbox"/> Pool
Vehicle Purpose	<input type="checkbox"/> Employee Transportation <input type="checkbox"/> Client Transportation <input type="checkbox"/> Task Specific (describe below) <input type="checkbox"/> Special Purpose (describe below) <u>Hwy Dept. use</u>	<input type="checkbox"/> Employee Transportation <input type="checkbox"/> Client Transportation <input type="checkbox"/> Task Specific (describe below) <input type="checkbox"/> Special Purpose (describe below) <u>Hwy Dept. use</u>
Reason for Replacement	<input checked="" type="checkbox"/> Routine (Over 100,000 miles) years <input type="checkbox"/> Other (Complete Section E)	Actual Disposal Date/Miles
Estimated Disposal Date	<u>Winter 2010</u>	

SECTION B: SIGNATURES

Requesting Person <u>Russell W Robinson</u>	Department Head <u>Russell Robinson</u>	<input checked="" type="checkbox"/> Approved
Date: <u>11-7-08</u>	Date: <u>11-7-08</u>	<input type="checkbox"/> Denied

SECTION C: ADDITIONAL JUSTIFICATION FOR CERTAIN VEHICLE TYPES

This section must be completed if a SUV, four wheel drive vehicle, full size sedan or a police equipped vehicle is requested.

Special Requirements: Check all that apply and then describe in detail in the space provided below.

- Regularly driven off road or on unimproved roads
- Equipment/Tool Storage
- Passenger Occupancy
- Utility Features
- Pursuit Vehicle
- Other

Please describe the specific need here. Include justification describing why a lower cost; more fuel-efficient vehicle is not sufficient to meet agency needs.

SECTION D: ADDITIONAL JUSTIFICATION FOR FLEET EXPANSION

This section must be completed for expansion vehicle requests.

Reason for Expansion: Check all that apply and then describe in detail in the space provided below:

- New Statutory Requirements
- Fleet Increase Approved by Town Manager
- Program Changes
- Other

Describe the need to expand the fleet here.

SECTION E: REASON FOR REPLACEMENT

If "Other" was selected as the reason for replacement on page one, please provide additional information below.

truck 61 is over 20 years old
Has numerous mechanical problems (see mechanic report)

Section F: Projected activity (per vehicle)

	Within Acton	Outside of Acton	Total
miles/year	3000		
hours/year			

Section G: Incremental cost for vehicle purchase (per vehicle)

Existing annual vehicle cost:	New annual vehicle cost: (purchase price times 12.33% plus cost of fuel and maintenance)	Incremental cost: (baseline - new)
\$	\$	\$

Section H: Vehicle Vendor Information

Contact	Address	State
Title	City	
Company	Zip Code	
E-Mail	Phone	F A X

Section I: Existing Vehicle Information

Fuel Type: CNG Diesel LNG LPG Gasoline Other

Fuel Usage in miles per gallon:

Section J: New Vehicle Information

Fuel Type: CNG Diesel LNG LPG Gasoline E85 Other

(if utilizing more than one fuel type, indicate which fuels and percentage operating time for each)

Emissions per vehicle (please indicate units-g/bhp-hr, or g/gallon)

NOx	VOC	PM2.5
-----	-----	-------

Emissions certified by:
 EPA Alternate certification (specify and attach documentation)

Vehicle use: On Road Off-road | Type of Equipment:

Fuel Usage _____ mpg

(use the City rating at <http://www.epa.gov/greenvehicles/index.do?sessionId=8230b13c37d76d2451b2>)

ADDITIONAL REQUIRED INFORMATION

Purchase/Lease Information:

Anticipated Cost: _____ Lease period: _____ months/years

Estimated Annual Mileage: _____

Maximum Annual Mileage (leased vehicles): _____

Cost in Excess of Allowed Annual Mileage (leased vehicles): _____

You Require This Vehicle for Commuting, Please Detail One-Way Mileage between Employee's Home and Office, Address of Overnight Parking, And the Need for This Vehicle for Commuting Purposes

If Will Not be Purchasing an AFV, Please Attach Documentation to Explain Why You Will Not be Able to Purchase an AFV.

Over 8500 GVWR



APPENDIX A: VEHICLE PURCHASE REQUEST FORM page 1 of 2

Section 1: Existing Vehicle Information - to be completed by Requestor

Make	Model	Year	Car/ Truck #	License Plate #
Mack	RD685P	1987	61	M55028
Fuel Type:	<input type="checkbox"/> CNG	<input checked="" type="checkbox"/> Diesel	<input type="checkbox"/> LNG	<input type="checkbox"/> LPG
			<input type="checkbox"/> Gasoline	<input type="checkbox"/> Other

Section 2: Existing Vehicle Condition - to be completed by the Town's Mechanics

GVWR		Fuel Use (mi/gal):
* ENGINE: type	4 cyl	6cyl <input checked="" type="checkbox"/> 8cyl
* TRANSMISSION TYPE:	Manual <input checked="" type="checkbox"/> Automatic	

Condition of Vehicle - to be completed by the Town's Mechanics

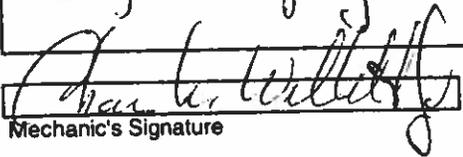
	Excellent	Good	Fair	Poor	Date last Repaired
*Engine				✓	
*Transmission				✓	
*Frame				✓	
*Differential				✓	
*Brakes (Power?)				✓	
*Steering (Power?)			✓		
*Suspension				✓	
* Clutch			✓		
*Body			✓		
*Radiator				✓	
*Battery		✓			
*Air Conditioner					NA
*Heater		✓			
*Lights		✓			
*Upholstery			✓		
*Paint		✓			
*Glass			✓		
*Jack					NA
*Radio AM/FM				✓	
*Radio -2-way				✓	
*TIRES:					
R FRONT		✓			
L FRONT		✓			
R REAR		✓			
L REAR		✓			
SPARE					

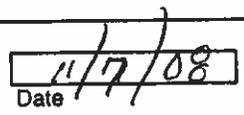


APPENDIX A: VEHICLE PURCHASE REQUEST FORM page 2 of 2

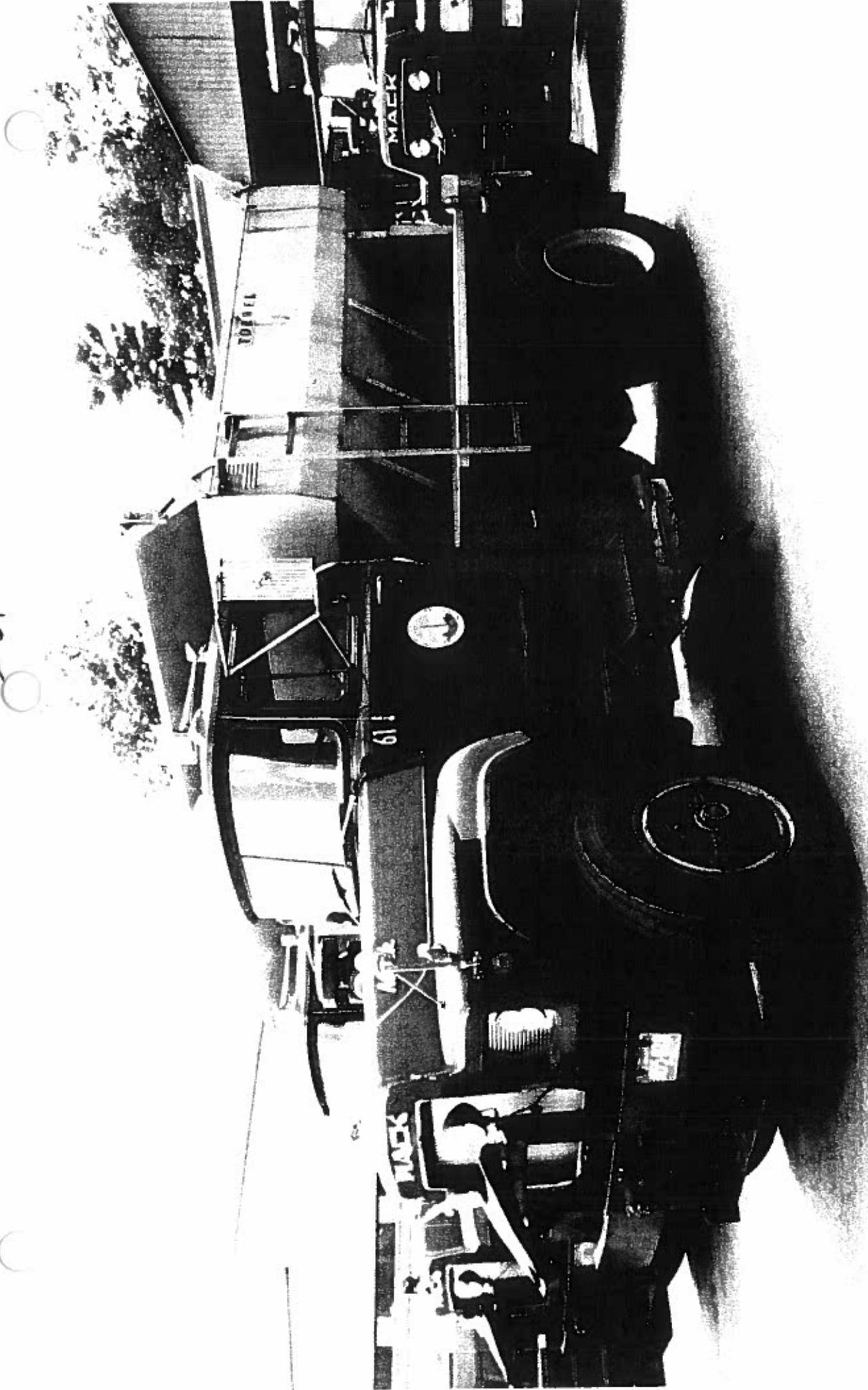
Mechanic's Narrative

TRUCK #61 is one of oldest trucks in the fleet 21 yrs old. It started out as a dump truck after a number of years it was converted to a sander. It's a major vehicle in the snow plowing and sanding during the winter. It has 21 hand years on it. In the very near future it is going to need major work done to it, such as transmission work - clutch work. Also the engine has had a very hard time getting through the last couple of state emission tests. This is going to be a major cost because the engine will either have to be rebuilt or replaced. Body is sound. Frame is sound, but components attached to frame are rusting away such as springs - spring hangers - frame crossover mounts and brackets. This truck should be replaced now before all these problems have to be repaired. Expenses would cut way keeping the vehicle

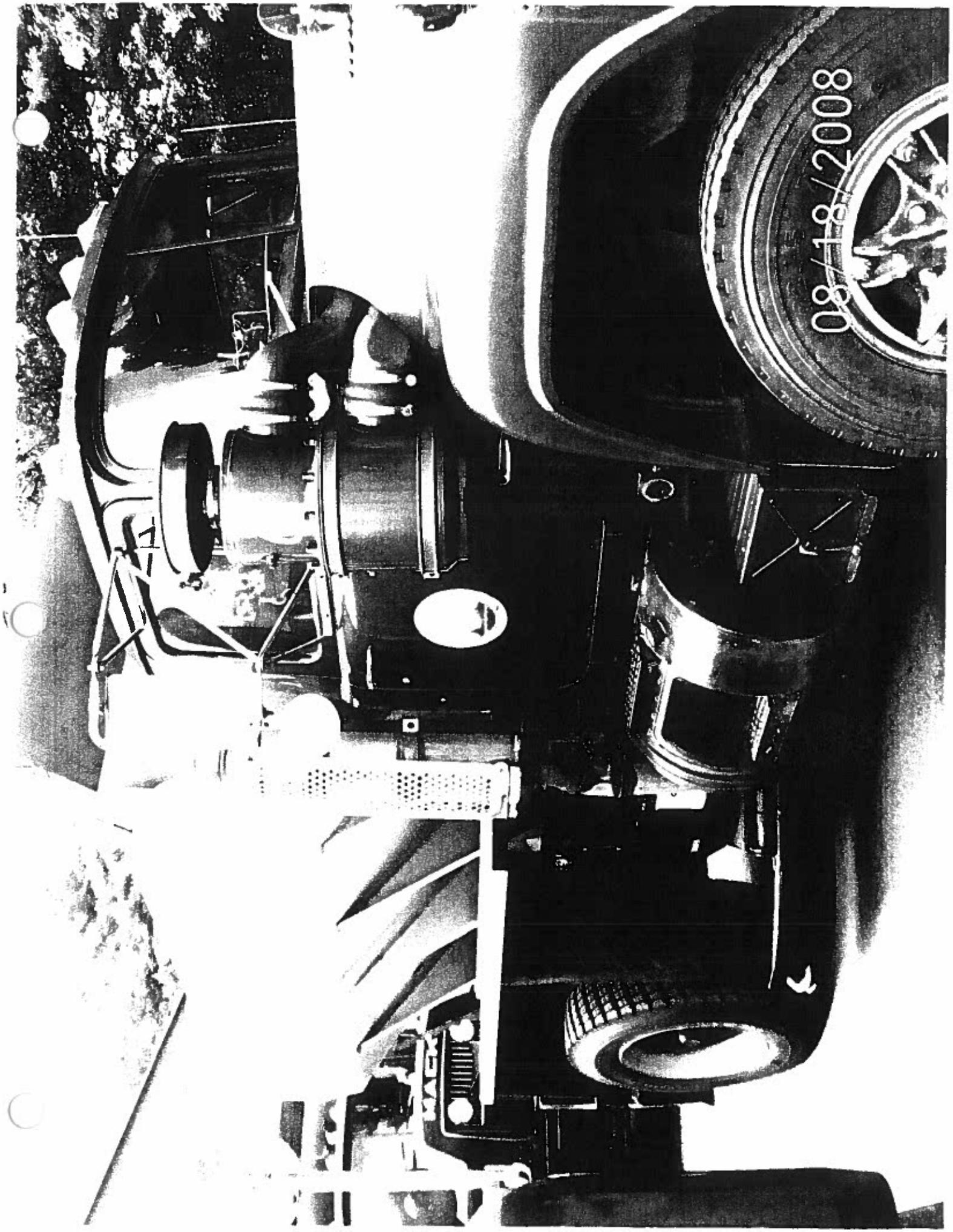

Mechanic's Signature


Date

91



08/18/2008

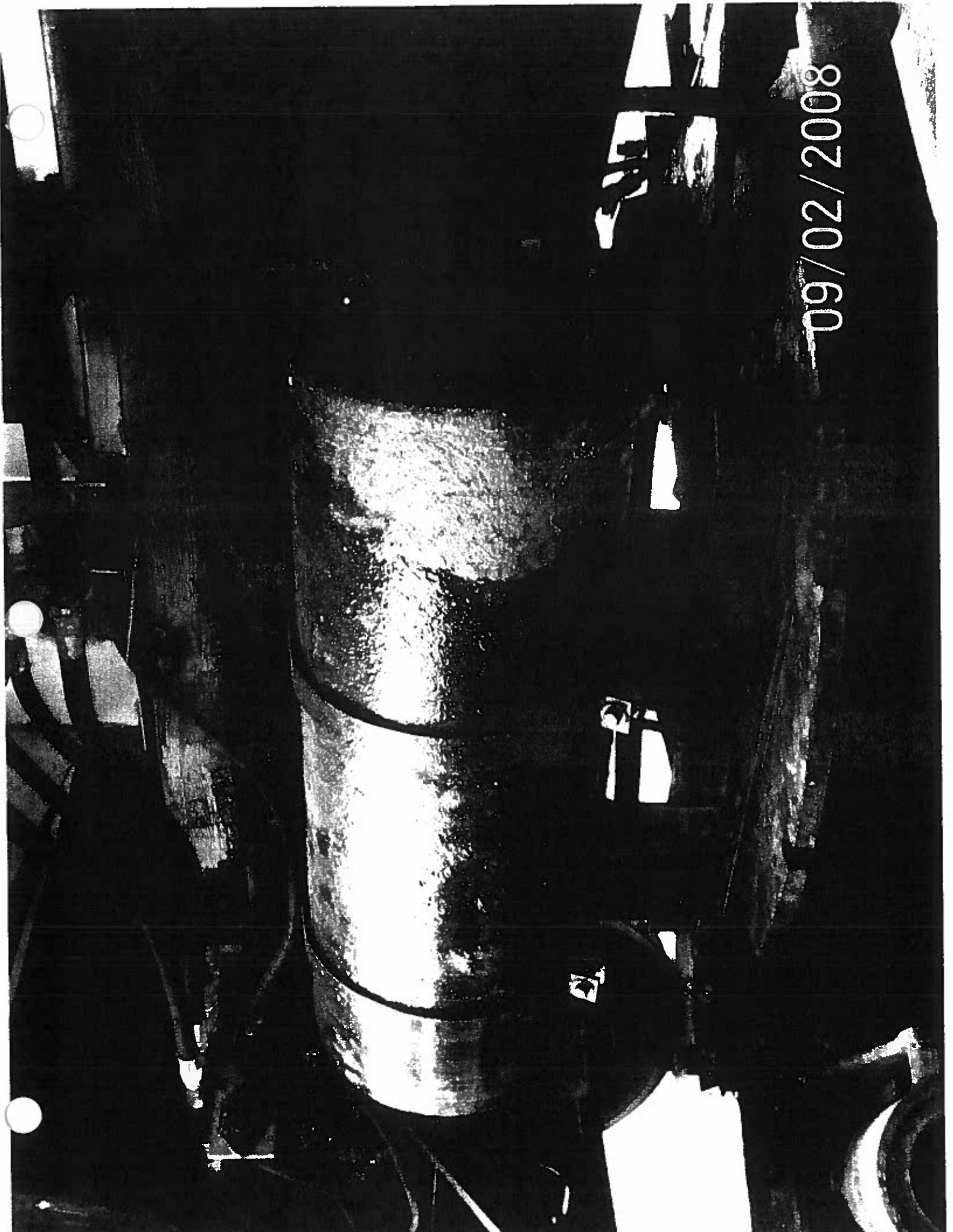


08/18/2008

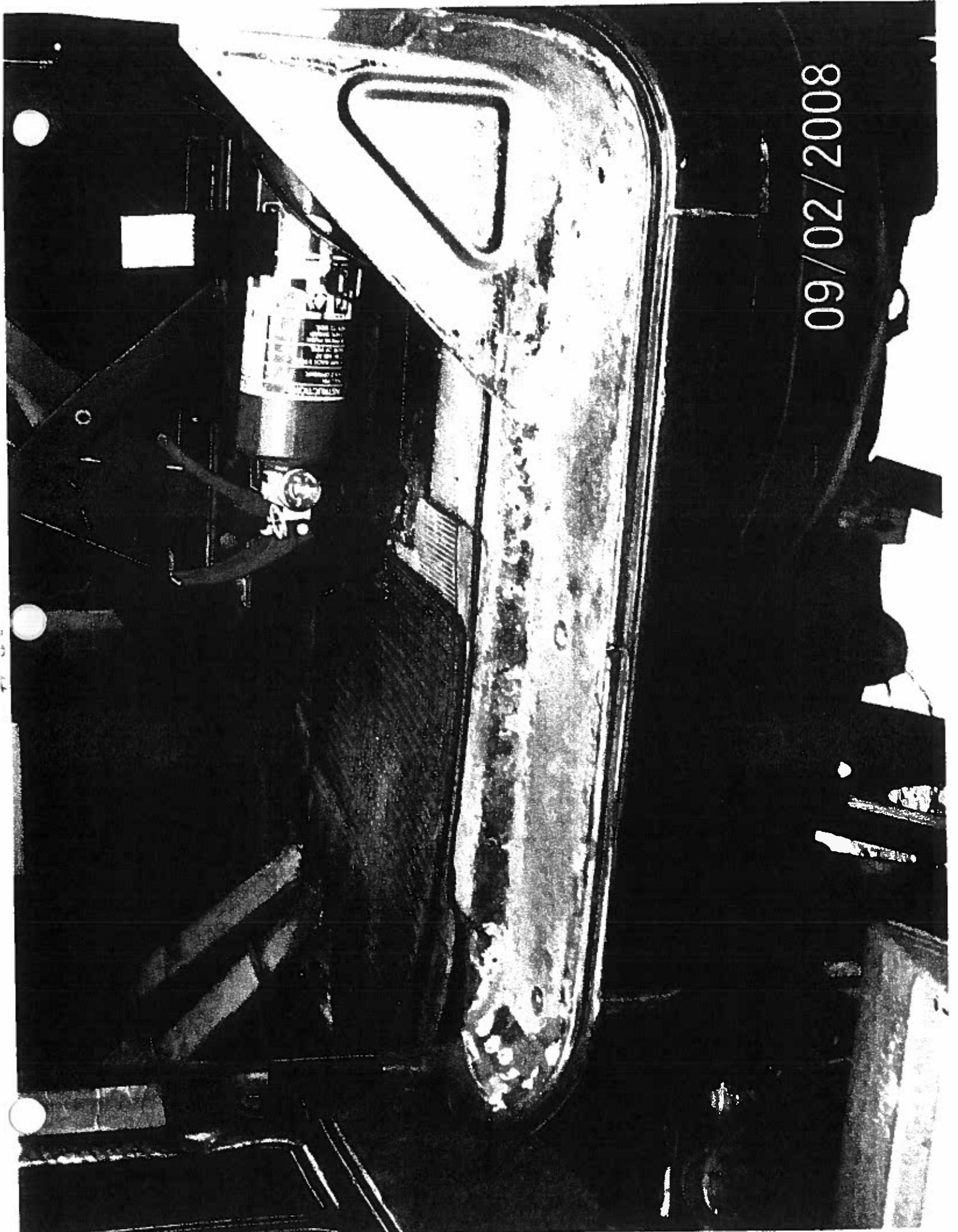


MAK

09/02/2008



09/02/2008



08/18/2008



Capital Improvement Program Proposal – Detail

Department Name	Highway	Project	Asphalt Recycler		
		Fiscal Year	2010		
		Cost	\$45,000		
Department Head	Russell Robinson	Priority	3	of	5

1. Description

Recycle unused and old hot top for winter use.

2. Useful Life 20 years

3. Purpose (Please 'X' one of the Boxes and Describe, if Applicable)

<input type="checkbox"/> Schedule Replacement	Increase Personnel Efficiency
<input checked="" type="checkbox"/> New or Expanded Service	Replace Obsolete or Unsafe Equipment
<input type="checkbox"/> Other (Please Explain)	(Explain Disposal of Old Equipment)

4. Justification

This would recycle the remaining unused portion of hot top loads as well as broken pavement and berm to make a more permanent patch in the winter. Currently, in the winter months cold patch is used but is only a temporary fix and needs to be replaced in the spring when the plants are making hot top.

5. How Was this Project's Priority Determined?

The necessity to make a more permanent patch in the winter.

6. Estimated Cost	\$45,000
Less Trade-In (If Applicable)	
Net Cost	\$45,000

7. Are Non-Town Revenues Available to Reduce Cost?

No

8. If this Project is Delayed, What will be the Effect on your Department?

We will keep using cold patch and discarding the unused hot top.

9. Please Describe the Effect of this Project on your Operating Budget.

<u>Personnel Budget</u>	<u>Expense Budget</u>
Increase No Impact	Increase
Decrease	Decrease X

10. Attachments, if Applicable.

HOWARD P. FAIRFIELD, LLC

BUDGET # 123082



"MUNICIPAL SPECIALISTS"

PHONE: 603-225-9576 FAX: 603-228-5246

E-mail: sales@hpfairfield.com
<http://www.hpfairfield.com>

FROM:

Mike Harbour
94 Sheep Davis Road
Pembroke, NH 03275

QUOTED TO: Town Of Acton

DATE: August 15, 2008

Acton, MA

CUSTOMER PHONE: 978-264-9624

ATTN: Russ

CUSTOMER FAX: 978-264-9610

COMMENTS:

QTY	DESCRIPTION	PRICE	EXT. PRICE
1	* 4-TON FALCON RME ASPHALT HOT PATCHER RECLAIMER TRIPLE WALL CONSTRUCTION AUTOMATIC TEMPERATURE CONTROL DIESEL FUEL SOURCE 12 VOLT BATTERY PACK ELECTRIC BRAKES SPASH-RESISTANT SOLVENT TANK REAR LED LIGHTING UPGRADE BATTERY CHARGER PACKAGE	\$43,261.00	\$43,281.00

FIRE EXTINGUISHER (5 POUND)
SOLID RIM 8-BOLT AXLES
REAR 50/550 THERMOMETER
ARROW STICK
24-HOUR TIMER
COMPACTOR MOUNTING BASKET
VIBRATORY ROLLER
WINTERIZATION PACKAGE
* OPERATOR'S, PARTS AND SERVICE MANUAL
* 1-YEAR WARRANTY

SIGNED Mike Harbour

ACKNOWLEDGED

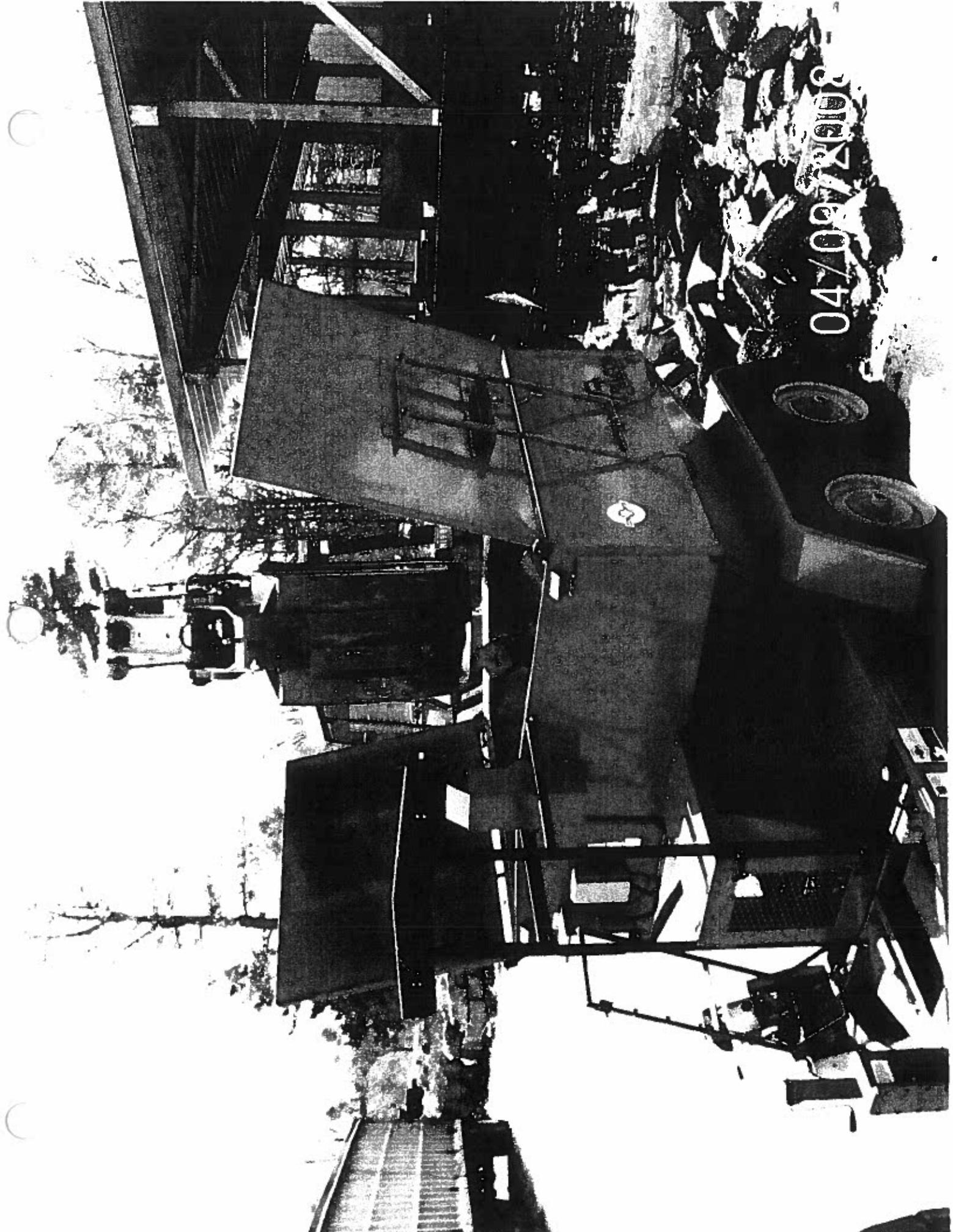
QUOTE TOTAL \$43,261.00

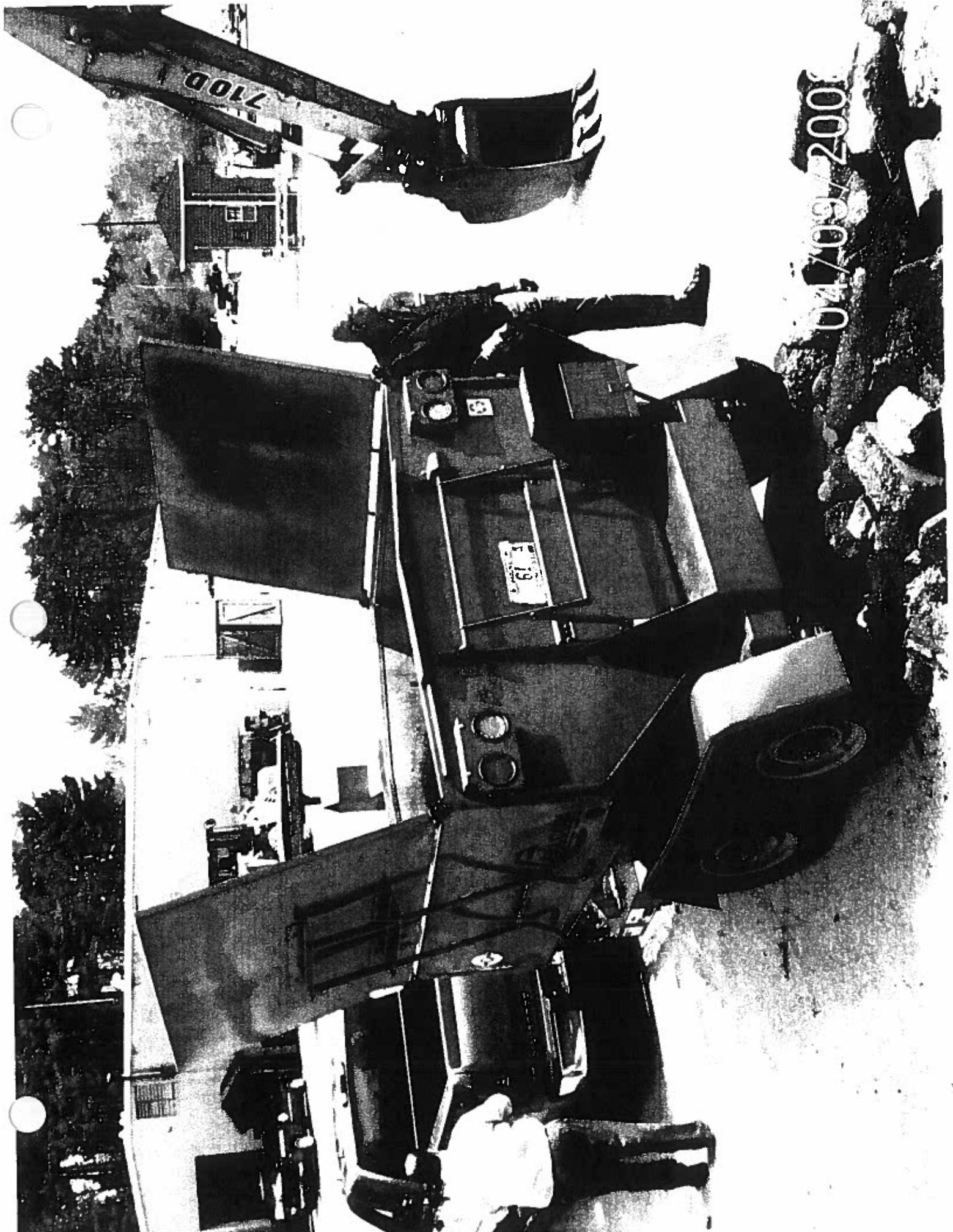
Please note the following regarding installation quotes:
A clean truck frame without obstruction is assumed in the pricing of our quote. Re-positioning of air tanks, fuel tanks, exhaust, battery box or other obstacles for the ease of installation may be necessary and require additional charges. H.P. Fairfield, LLC will notify you before modification if this occurs.



04/10/2008

04/09/2008





7100

19

04/09/2001

Capital Improvement Program Proposal – Detail

Department Name	Highway	Project	Replace 1984 Low Bed Trailer	
Department Head	Russell Robinson	Fiscal Year	2010	
		Cost	\$46,000	
		Priority	4	of 5

1. Description

Replace the 1984 low bed equipment transport trailer.

2. Useful Life 20 - 25 years

3. Purpose (Please 'X' one of the Boxes and Describe, if Applicable)

- | | |
|---|--|
| <p><input checked="" type="checkbox"/> Schedule Replacement</p> <p><input type="checkbox"/> New or Expanded Service</p> <p><input type="checkbox"/> Other (Please Explain)</p> | <p>Increase Personnel Efficiency</p> <p>Replace Obsolete or Unsafe Equipment (Explain Disposal of Old Equipment)</p> |
|---|--|

Old trailer will be traded toward new purchase or auctioned as surplus equipment.

4. Justification

This trailer was purchased used many years ago to transport town equipment from one site to another. It does not meet today's standards for safety and should be replaced with a new model capable of transporting equipment safely.

5. How Was this Project's Priority Determined?

By the age and condition of the existing trailer.

6. Estimated Cost

Less Trade-In (If Applicable)	\$46,000
Net Cost	Unknown
	\$46,000

7. Are Non-Town Revenues Available to Reduce Cost?

No

8. If this Project is Delayed, What will be the Effect on your Department?

We will work with what we have. If the trailer fails we will have to hire a contractor to make the necessary moves from location to location.

9. Please Describe the Effect of this Project on your Operating Budget.

<u>Personnel Budget</u>	<u>Expense Budget</u>
Increase	Increase
Decrease	Decrease <input checked="" type="checkbox"/>
No Impact	

10. Attachments, if Applicable.



(Rte 20) 80 Southbridge Road
 PO Box 578
 North Oxford MA 01537
 (508) 987-8786
 (800) 922- 8295
 Fax: (508) 987-3578

To: SAM BELL Fax #: 978-264-9610

From: SCHMIDT EQUIPMENT

Date: SEPT 8th Time: 2:18 PM

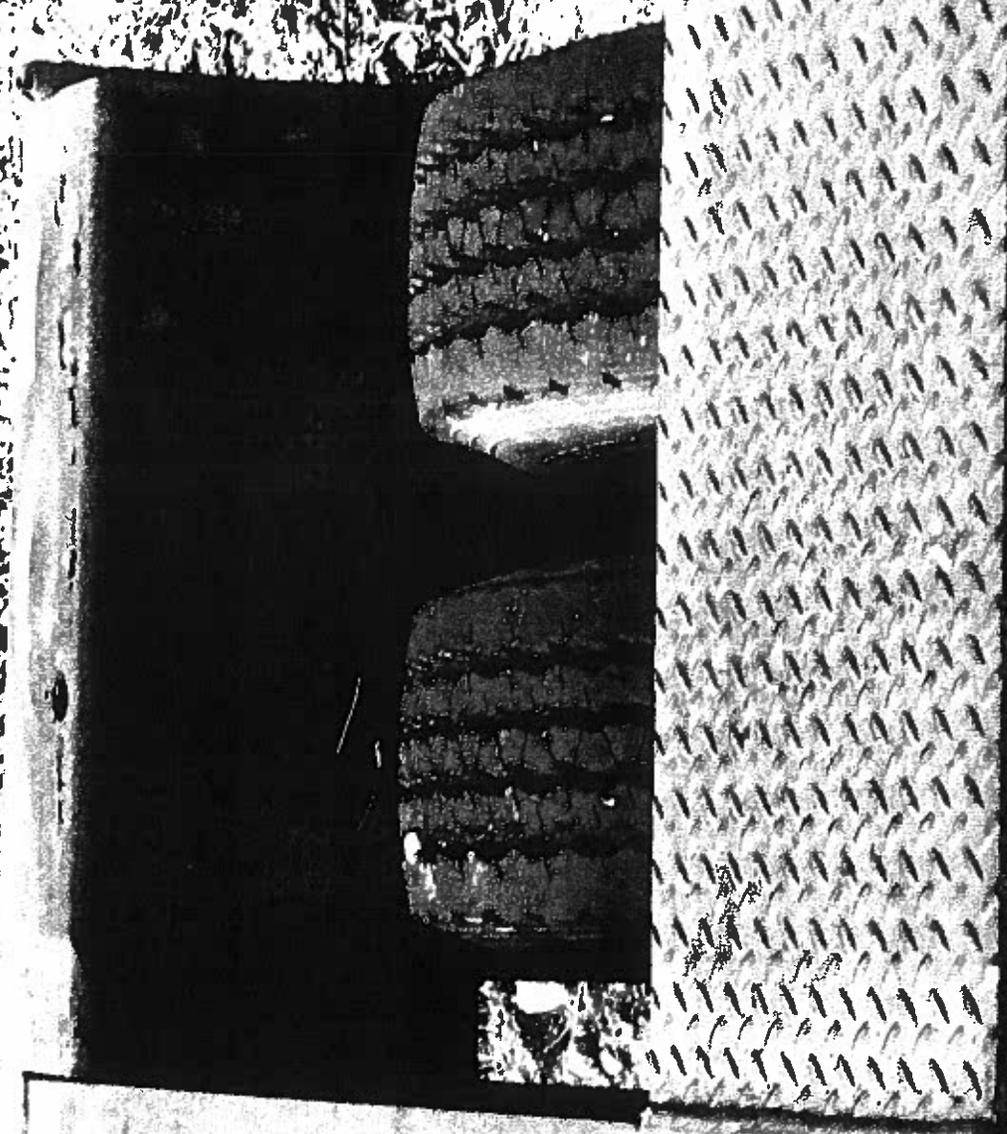
Total number of pages including cover 4

Message: SAM - I JUST RECEIVED THIS
PRICING FROM INTERSTATE TRAILERS!
Budget Price NOW - \$45,175.00
Please note the Price INCREASE
AS OF 9/19/08. - Will follow up
this deal in PERSON -

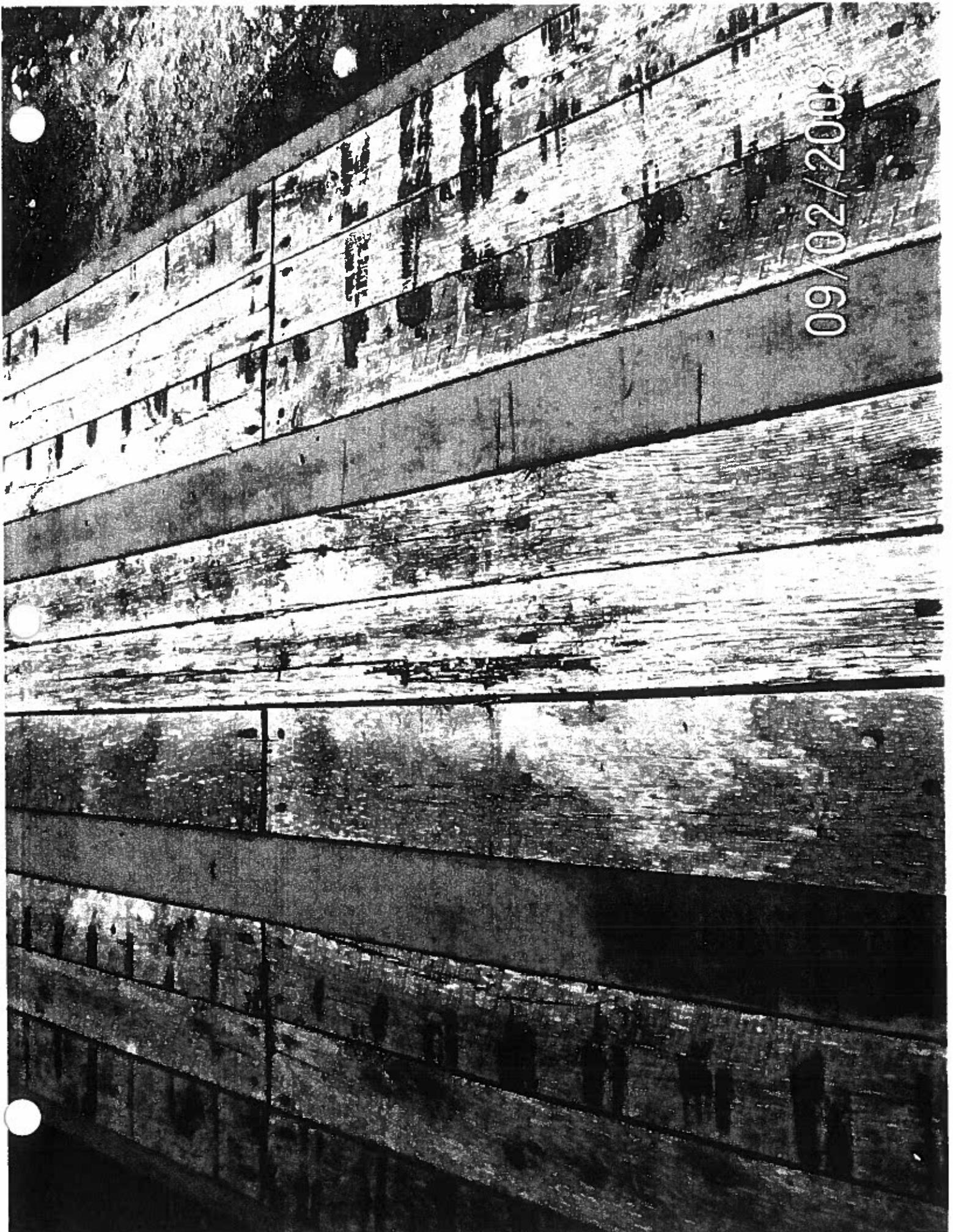
Thanks,
 Bob Teraminet
 401-413-0333



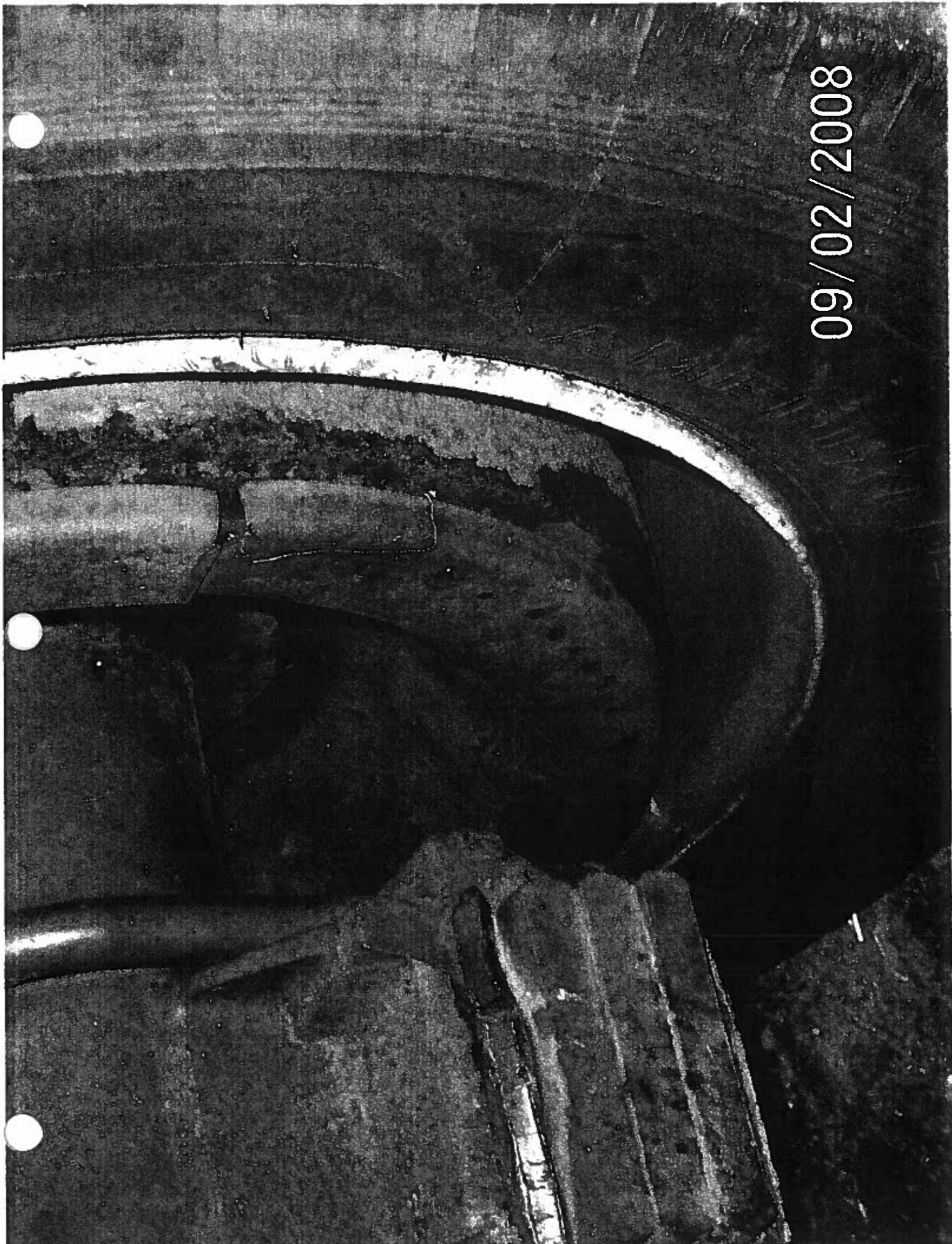
09/02/2008



09/02/2008



09/02/2008





Capital Improvement Program Proposal – Detail

Department Name	Highway	Project	Replace 1994 Ford Tempo Inspection Vehicle		
		Fiscal Year	2010		
Department Head	Russell Robinson	Cost	\$22,000		
		Priority	5	of	5

1. Description

Replace the existing 1994 inspection vehicle with a four wheel drive extended cab pickup.

2. Useful Life 10 years

3. Purpose (Please 'X' one of the Boxes and Describe, if Applicable)

<input checked="" type="checkbox"/> Schedule Replacement	Increase Personnel Efficiency
<input type="checkbox"/> New or Expanded Service	Replace Obsolete or Unsafe Equipment
<input type="checkbox"/> Other (Please Explain)	(Explain Disposal of Old Equipment)

Old vehicle will be auctioned.

4. Justification

This vehicle is used daily by the DPW Director for inspections year round. During the winter months, this vehicle will be used by Highway personnel to supervise snow removal operations. The current 1994 sedan is constantly in the shop for repairs. It has broken down several times in the last year and the underside is rusting beyond repair. It should be replaced at this time.

5. How Was this Project's Priority Determined?

By the age and condition of the existing vehicle.

6. Estimated Cost	\$22,000
Less Trade-In (If Applicable)	
Net Cost	\$22,000

7. Are Non-Town Revenues Available to Reduce Cost?

No

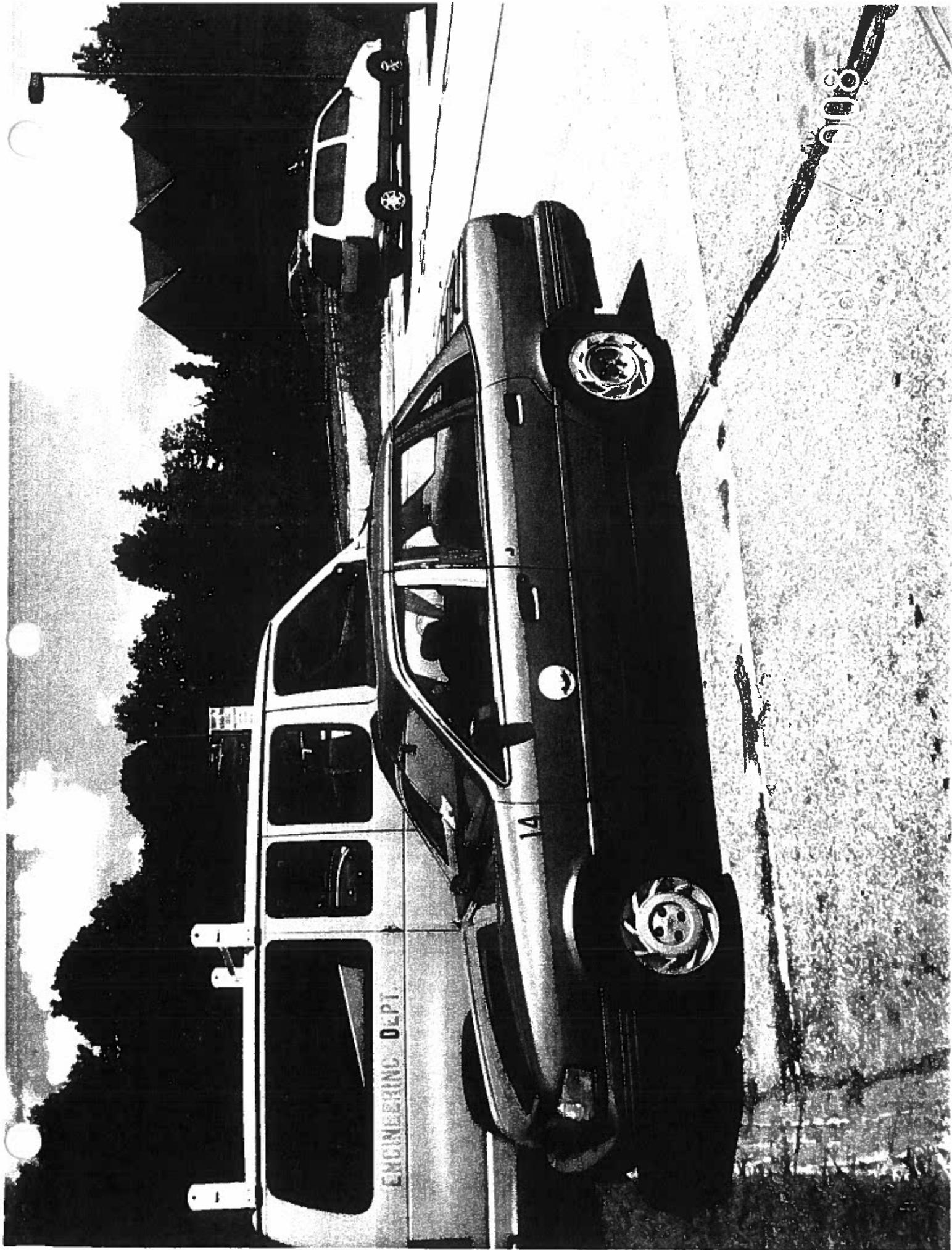
8. If this Project is Delayed, What will be the Effect on your Department?

We will try to keep the existing vehicle road worthy.

9. Please Describe the Effect of this Project on your Operating Budget.

<u>Personnel Budget</u>	<u>Expense Budget</u>
Increase No Impact	Increase
Decrease	Decrease X

10. Attachments, if Applicable.



01/01/2008



VEHICLE REQUEST FORM INSTRUCTIONS & INFORMATION

The Town of Acton is voluntarily complying with The Federal Energy Policy Act of 1992, which requires governmental fleets to meet the following standard -- 75% of new Light-Duty Vehicles (LDVs) acquisitions to be Alternative Fueled Vehicles (AFV). LDVs are defined as 8500 GVWR or less. Off-road, non-administrative emergency vehicles, and vehicles acquired solely for research or testing purposes are exempt from this standard. All new vehicles must be an EPA certified "Smart Way" or "Smart Way Elite" vehicle. Acton's minimum miles per gallon standard for **all new** LDV purchases are as follows:

New NHTSA Calculation:

	<u>Gasoline</u>	<u>E-85</u>
• Sedans/station wagons	21mpg City	N/A
• Full size Pick-ups & SUVs 2WD	15 mpg city	11 mpg city
• Full size Pick-ups & SUVs 4WD	14 mpg city	9 mpg city

To determine which vehicles meet the "Smart Way" certifications and mpg standard use the ratings at :

<http://www.epa.gov/greenvehicles/Index.do;jsessionid=82306299f6a3352b137f>

STEP-BY-STEP INSTRUCTIONS TO COMPLETE THE REQUEST FORM

1. Complete Section A with information on the vehicle to be purchased and the vehicle to be replaced (if applicable).
2. Complete Section C if the request is to request purchase an SUV, four wheel drive pickup, full size sedan or a police equipped vehicle.
3. Complete Section D if you are requesting an expansion to the size of your fleet.
4. Obtain signature of Department head or designee in Section B.
5. Please Complete Section 1 of Appendix A
6. Make an appointment with the Town Mechanics (1) to review the existing vehicle and (2) complete Appendix A prior to submission

Asset Code

Departments must use one of the following commodity codes when processing a request:

1. Sedans & Station Wagons
2. Vans, Light Duty Trucks and SUVs (GVW of 8500 or less)
3. Vans, Buses, & Trucks (GVW of over 8500 lbs)
4. Alternative Fuel Vehicles
5. Police Pursuit Vehicles



VEHICLE REQUEST FORM (Page 1)

Department/Division <u>Highway</u>	Contact Name <u>Russell Robinson</u>
ASSET CODE #	E-MAIL <u>rrobinson@acton-ma.gov</u>

SECTION A		
Expansion/Replacement	<input type="checkbox"/> Expansion <input type="checkbox"/> Transfer <input checked="" type="checkbox"/> Replacement <small>(Complete Section D for Expansion Requests)</small>	If to be transferred, identify the receiving entity?
Purchase From:	<input checked="" type="checkbox"/> State Contract <input type="checkbox"/> Surplus <input type="checkbox"/> Quote <u>Bid</u>	Purchase Option (check all that apply) <input checked="" type="checkbox"/> Purchase <input type="checkbox"/> Lease-Purchase
Vehicle Requested <input checked="" type="checkbox"/> New <input type="checkbox"/> Used (Check One)		
VEHICLE DATA	VEHICLE TO BE REPLACED	REQUESTED VEHICLE
Year	<u>1994</u>	
Make	<u>Ford</u>	
Model	<u>tempo</u>	
VIN	<u>2Fa9P36X9rb117318</u>	N/A
License Number	<u>M55035</u>	N/A
Inventory Tag Number	<u>14</u>	N/A
Current Odometer	<u>35000</u>	Estimated
Annual Miles Driven	Prior FY Actual <u>2500</u>	Estimated
Vehicle Value	Use Edmonds.com <u>\$425</u>	
Vehicle Type	<u>car</u>	<u>SM pickup</u>
Check all that apply	<input type="checkbox"/> 4WD <input type="checkbox"/> Police Equipped	<input checked="" type="checkbox"/> 4WD <input type="checkbox"/> Police Equipped
Primary Assignment	<input checked="" type="checkbox"/> Individual <input type="checkbox"/> Function <input checked="" type="checkbox"/> Pool	<input type="checkbox"/> Individual <input type="checkbox"/> Function <input type="checkbox"/> Pool
Vehicle Purpose	<input checked="" type="checkbox"/> Employee Transportation <input type="checkbox"/> Client Transportation <input type="checkbox"/> Task Specific (describe below) <input type="checkbox"/> Special Purpose (describe below)	<input checked="" type="checkbox"/> Employee Transportation <input type="checkbox"/> Client Transportation <input type="checkbox"/> Task Specific (describe below) <input type="checkbox"/> Special Purpose (describe below)
Reason for Replacement	<input checked="" type="checkbox"/> Routine (Over 100,000 miles) <input checked="" type="checkbox"/> Other (Complete Section E)	<u>SNOW and Ice Inspection</u> Actual Disposal Date/Miles
Estimated Disposal Date	<u>Spring 2010</u>	

SECTION B: SIGNATURES	
Requesting Person <u>Russell Robinson</u> Date: <u>9-24-08</u>	Department Head <u>Russell Robinson</u> Date: <u>9-24-08</u>
	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied

SECTION C: ADDITIONAL JUSTIFICATION FOR CERTAIN VEHICLE TYPES

This section must be completed if a SUV, four wheel drive vehicle, full size sedan or a police equipped vehicle is requested.

Special Requirements: Check all that apply and then describe in detail in the space provided below.

- Regularly driven off road or on unimproved roads
- Equipment/Tool Storage
- Passenger Occupancy
- Utility Features
- Pursuit Vehicle
- Other *Summer Eng. and hwy use as snow and ice inspection vehicle*

Please describe the specific need here. Include justification describing why a lower cost; more fuel-efficient vehicle is not sufficient to meet agency needs.

The Hwy Eng need a 4 wheel drive for use in snow and ice as an inspectional vehicle

SECTION D: ADDITIONAL JUSTIFICATION FOR FLEET EXPANSION

This section must be completed for expansion vehicle requests.

Reason for Expansion: Check all that apply and then describe in detail in the space provided below:

- New Statutory Requirements
- Fleet Increase Approved by Town Manager
- Program Changes
- Other *Replacement*

Describe the need to expand the fleet here.

SECTION E: REASON FOR REPLACEMENT

If "other" was selected as the reason for replacement on page one, please provide additional information below.

#14 is a '94 Ford tempo it is in fair to poor shape

By replacing the tempo with a sm. pick up truck would be useful with a sm towing capacity for sign boards light towers. 4x4 would be used in the winter for snow and ice inspection.

Section F: Projected activity (per vehicle)

	Within Acton	Outside of Acton	Tot
miles/year	<i>3000</i>	<i>0</i>	
hours/year			

Section G: Incremental cost for vehicle purchase (per vehicle)

Existing annual vehicle cost: \$	New annual vehicle cost: (purchase price times 12.33% plus cost of fuel and maintenance) \$	Incremental cost: (baseline - new) \$
-------------------------------------	---	---

Section H: Vehicle Vendor Information

Contact	Address	State
Title	City	
Company	Zip Code	
E-Mail	Phone	F A X

Section I: Existing Vehicle Information

Fuel Type:	<input type="checkbox"/> CNG	<input type="checkbox"/> Diesel	<input type="checkbox"/> LNG	<input type="checkbox"/> LPG	<input checked="" type="checkbox"/> Gasoline	<input type="checkbox"/> Other
Fuel Usage in miles per gallon:						

Section J: New Vehicle Information

Fuel Type:	<input type="checkbox"/> CNG	<input type="checkbox"/> Diesel	<input type="checkbox"/> LNG	<input type="checkbox"/> LPG	<input type="checkbox"/> Gasoline	<input type="checkbox"/> E85	<input type="checkbox"/> Oth
(if utilizing more than one fuel type, indicate which fuels and percentage operating time for each)							
Emissions per vehicle (please indicate units-g/bhp-hr, or g/gallon)							
NOx	VOC				PM2.5		
Emissions certified by:							
<input type="checkbox"/> EPA				<input type="checkbox"/> Alternate certification (specify and attach documentation)			
Vehicle use: <input type="checkbox"/> On Road <input type="checkbox"/> Off-road Type of Equipment:							
Fuel Usage <u>14</u> mpg							
(use the City rating at http://www.epa.gov/greenvehicles/index.do.isessionid=8230b13c37d76d2451b2)							

For section J see Attachment

ADDITIONAL REQUIRED INFORMATION

Purchase/Lease Information:

Anticipated Cost: _____ Lease period: _____ months/years

Chevy is looking to get

Anticipated Annual Mileage: _____

out of lease

Ford municipal will only finance

Maximum Annual Mileage (leased vehicles): _____

Cost in Excess of Allowed Annual Mileage (leased vehicles): _____

If You Require This Vehicle for Commuting, Please Detail One-Way Mileage between Employee's Home and Office, Address of Overnight Parking, And the Need for This Vehicle for Commuting Purposes

If You Will Not be Purchasing an AFV, Please Attach Documentation to Explain Why You Will Not be Able to Purchase an AFV.

MHQ state bid no AFV listed

see attachment



APPENDIX A: VEHICLE PURCHASE REQUEST FORM page 1 of 2

Section 1: Existing Vehicle Information - to be completed by Requestor

Make <i>Ford</i>	Model <i>tempo</i> <i>1994</i>	Year <i>1994</i>	Carr/ Truck # <i>14</i>	License Plate # <i>M 55035</i>
Fuel Type: <input type="checkbox"/> CNG <input type="checkbox"/> Diesel <input type="checkbox"/> LNG <input type="checkbox"/> LPG <input checked="" type="checkbox"/> Gasolina <input type="checkbox"/> Other				

Section 2: Existing Vehicle Condition - to be completed by the Town's Mechanics

GVWR <i>NA</i>	Fuel Use (mi/gal):
* ENGINE: type	4 cyl <input checked="" type="checkbox"/> 6cyl <input type="checkbox"/> 8cyl <input type="checkbox"/>
* TRANSMISSION TYPE:	Manual <input type="checkbox"/> Automatic <input checked="" type="checkbox"/>

Condition of Vehicle - to be completed by the Town's Mechanics

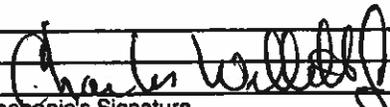
	Excellent	Good	Fair	Poor	Date last Repaired
*Engine			✓		
*Transmission			✓		
*Frame				✓	
*Differential			✓		
*Brakes (Power?)			✓		
*Steering (Power?)			✓		
*Suspension				✓	
*Clutch				✓	NA
*Body				✓	
*Radiator			✓		
*Battery			✓		
*Air Conditioner			✓		
*Heater			✓		
*Lights			✓		
*Upholstery			✓		
*Paint				✓	
*Glass				✓	
*Jack	✓				
*Radio AM/FM		✓			
*Radio -2-way		✓			
*TIRES:			✓		
R FRONT			✓		
L FRONT			✓		
R REAR			✓		
L REAR			✓		
SPARE		✓			



APPENDIX A: VEHICLE PURCHASE REQUEST FORM page 2 of 2

Mechanic's Narrative

CAR #14 is 18YRS old - HAS extensive undercarriage Rust
and Rot. All Brake lines have been replaced once All-
ready. IF CAR is to be kept longer Brake lines
and Fuel lines will have to be replaced again - CAR has a
Uni body Frame so Frame and undercarriage Repairs
can not be done - Engine has small problems -
Exhaust needs to be replaced in future as well
as brakes - To keep car in Fleet would be
cost ineffective. HAS low milage but body
and FRAME ARE Rosting Away.


Mechanic's Signature

10/2/08
Date

M-H-Q MUNICIPAL VEHICLES

Formerly A-M-I
401 Elm Street
Marlborough, MA 01752

October 28, 2008

Town of Acton
Public Works

Attn : Russ Robinson

Please find below a quote for a **New Ford Truck** per a Commonwealth of Massachusetts, Cooperative Procurement Contract.

The items offered under this program have been competitively bid and will be subsequently awarded under Massachusetts General Laws, chapter 7, section 22B and are available to the Commonwealths political subdivisions.

2009 Ford Ranger per contract spec.	\$12,095.00
Four wheel drive	5,895.00
Extended cab – 6' pickup bed	included
Cloth split bench seat	no charge
4.0 liter V/6 engine	no charge
5 speed automatic transmission	no charge
AM/FM stereo	no charge
Air conditioning	no charge
(5) P225/70R X 15 all season tires	no charge
Rhino Liner spray on bedliner	490.00
Leer Fiberglass cap – color to match	1,295.00
Whelen 4-corner hide away strobes	450.00
Total Contract Price	\$21,225.00

Available Colors :	Dark Shadow Grey metallic	Torch Red
	Vista Blue metallic	Black
	Silver metallic	Oxford White

Larry Christensen
Fleet Manager



October 29, 2008

Russ Robinson
Town of Acton

Larry Christensen
MHWQ Municipal Headquarters

Re: Ford Municipal Finance Program - Quotation for Town of Acton, MA - Bid #59268

Please review the following information. Rates and payment factors are applicable for total amounts funded from \$10,000 - \$24,999.

The quote is good until 01/31/2009. Vehicle delivery must take place and all required documentation and payments must be received by Ford Credit by the good thru date. After, 01/31/2009, rates and payments are subject to change.

A Documentation Fee of \$425 is required per transaction – not per unit, that can be paid at delivery or funded over the term (included below).

This finance proposal applies to the following options:

(1) - 2009 Ford Ranger at \$21,225.00

<u>Total Amount Funded</u>	<u>No of Pymts</u>	<u>Payment Timing</u>	<u>Rate</u>	<u>Factor</u>	<u>Payment Amount</u>
\$21,650.00	3	Annual in Advance	6.80	0.355487	\$7,696.29
\$21,650.00	4	Annual in Advance	6.95	0.275732	\$5,969.60

***To calculate Payment Amount, multiply Total Amount Funded by the Payment Factor**

The Ford Municipal lease-purchase finance plan requires no security deposit, has no prepayment penalty, no mileage penalty, nor hidden fees. The program is non-recourse to the dealer, the same as cash sale from the dealer to the municipal customer. At inception, the new equipment title/registration indicates the municipality as Registered Owner, and designates Ford Motor Credit Company, P.O. Box 1739, Dearborn, MI 48121-1739, as First Lienholder. At term end, the municipality buys the equipment \$1. The municipality, as Owner of record, is eligible for the Ford Government Price Concessions or other discounts, to reduce product cost.

Please note: Ford Credit's financing is subject to:

- 1) ***Review and approval of the Municipality's most recent audited financial statement, if requested.***
- 2) ***Mutually acceptable documentation.***

Sample forms and documentation are available upon request.

If you need additional information, please call me at 1-800-241-4199, then Press 1. Thank you for your interest in the Ford Municipal Finance Plan.

Sincerely,
Joe Vecchio
Joe Vecchio
Marketing Coordinator



2009 FORD Ranger
Printable Car Buyer's Check Sheet



Vehicle Specifications

Engine: 4 Liter, 6 cylinder
Transmission: Auto 5 speed
Fuel Type: Gasoline
Drive: 4WD
Vehicle Type: Pickup Trucks

Environmental Information

Air Pollution Score:
 10 = best



Greenhouse Gas Score:
 10 = best



SmartWay:

None in 4x4

City Fuel Economy:
 (miles per gallon)

14

Highway Fuel Economy:
 (miles per gallon)

18

Combined Fuel Economy:
 (miles per gallon)

15

Fuel Consumption:
 (gallons per 100 miles)

6.67

Estimated Annual Fuel Cost:
 (\$ dollars)

2650

Certification Sales Region:

California

Emissions Certification Standard:

LEV-II LEV

Standards
 (grams per mile)

NOx 0.07

CO 4.2

NMOG 0.09

PM 0.01

Smog-forming Pollution:
 (pounds per year)

5.29

Greenhouse Gases Emitted:
 (tons per year)

12.20

Other Information

Underhood Label ID:

9FMXT04.02EG

<u>Turbo / Supercharger:</u>	NONE
<u>Engine Descriptor:</u>	
<u>Valves per Cylinder:</u>	2
<u>Transmission Overdrive:</u>	COMPUTER CONTROLLED AUTO W/LO
<u>Number of Transmission Modes:</u>	1 DISCRETE USER-SELECTABLE TRANSMISSION MODE
<u>Variable Lock-up Point:</u>	COMPUTER CONTROLLED LOCKUP
<u>Declutching/Freewheeling:</u>	NO
<u>Passenger Volume :</u> (cubic feet)	N/A
<u>Luggage Volume :</u> (cubic feet)	N/A



Capital Improvement Program Proposal – Detail

Department Name Information Technology

Project Radio system upgrades
Fiscal Year 2010

Department Head Mark Hald

Cost \$91,000
Priority 1 of 3

1. Description

Radio system upgrades to improve coverage in all areas of town. The new system would use the Town's existing fiber optic network to improve transmission quality and reliability. Site upgrades would improve coverage.

2. Useful Life

3. Purpose (Please 'X' one of the Boxes and Describe, if Applicable)

Schedule Replacement

Increase Personnel Efficiency

New or Expanded Service

Replace Obsolete or Unsafe Equipment

Other (Please Explain)

(Explain Disposal of Old Equipment)

4. Justification

Poor signal quality

5. How Was this Project's Priority Determined?

North Acton Fire Station Committee

6. Estimated Cost \$91,000

Less Trade-In (If Applicable)

Net Cost

7. Are Non-Town Revenues Available to Reduce Cost?

Avalon Gift Fund / Cable Gift Fund / Homeland Security Grants

8. If this Project is Delayed, What will be the Effect on your Department?

9. Please Describe the Effect of this Project on your Operating Budget.

Personnel Budget

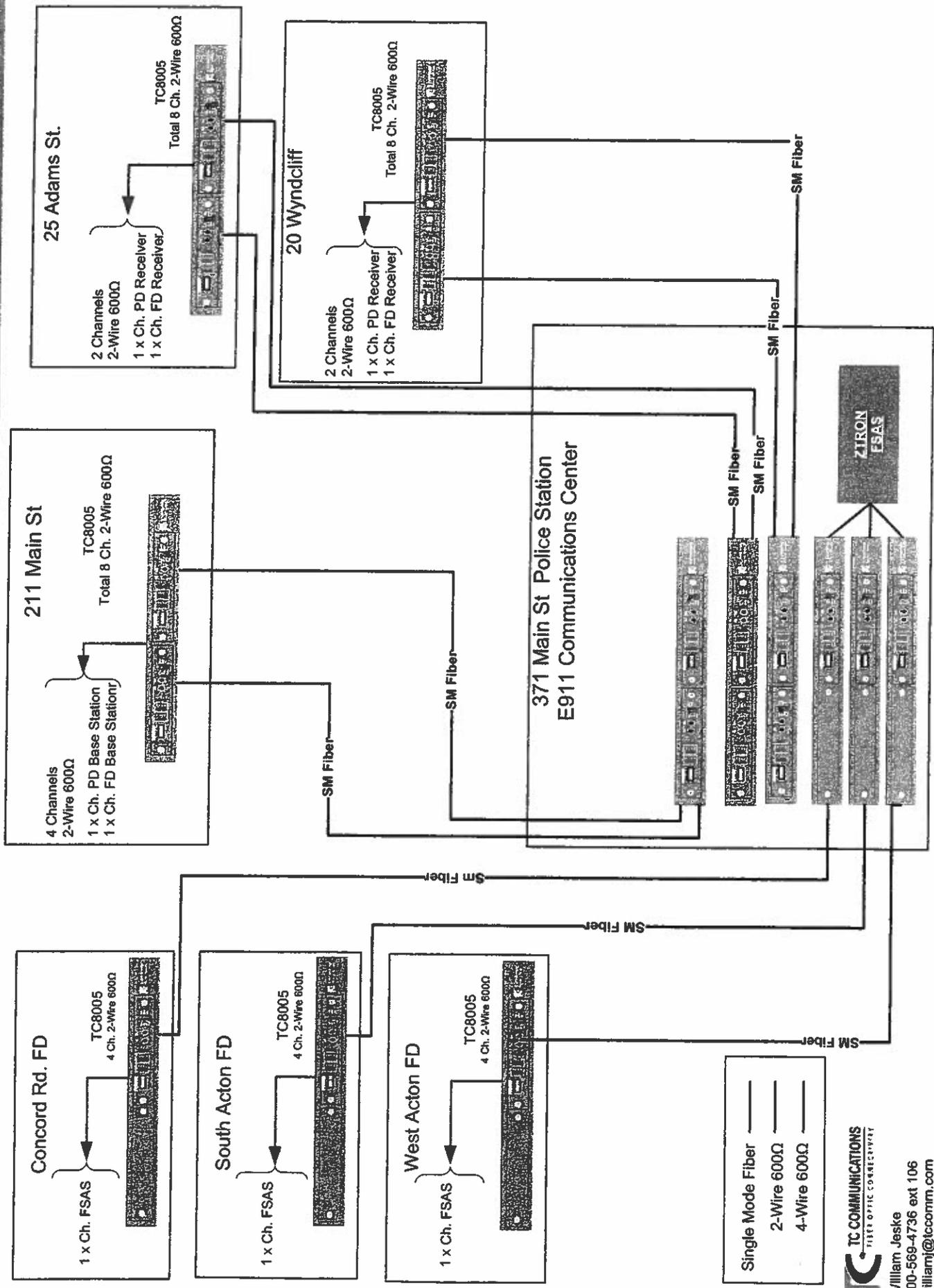
Increase
Decrease

Expense Budget

Increase
Decrease

10. Attachments, if Applicable.

All-Comm Technologies – Town of Acton Police & Fire Radio



Single Mode Fiber
 2-Wire 600Ω
 4-Wire 600Ω

Town of Acton

20 Adams Street Site

Item	Sub Qty	Nomenclature	Description	APC	DNUP Unit Price	DNUP Total Price
1	4	39905	Rohn 45 Tower Section 10'		\$292.00	\$ 1,168.00
2	1	53119	Rohn 45G Top Section	\$	385.00	\$ 385.00
3	1	73302	Rohn 45G Base Plate	\$	143.00	
4	1	67582	Rohn Pier Pin	\$	11.00	
5	1	15450	Rohn Wall Bracket 45G	\$	289.00	
6	1	66333	Rohn Anti Climb Kit	\$	534.00	
7	2	14201	Rohn Side Arm Mounts	\$	203.00	\$ 406.00
8	1	421814	Rohn Base Ground Kit	\$	34.95	
9	1	455534	Bud 7" Equipment Rack	\$	403.60	
10	1	488928	Entry Port	\$	18.10	
11	1	483923	Dual 7/8" Cable Boot for entry port	\$	20.95	
12	3	414312	Andrew 7/8" Cable Ground Kit	\$	27.55	\$ 82.65
13	1	43950	Harger Bus Ground Bar	\$	88.85	
14	1	44388	Harger Ground Bar Clamp	\$	18.15	
15	1	471683	Stainless Ground Bolts .75"	\$	4.55	
16	1	441626	Stainless Ground Bolts 1"	\$	8.65	
17	3	30040	Polyphaser Lightning Arrestor	\$	71.90	\$ 215.70
18	2	23966	Harger 19" Rack Ground Buss Bar	\$	48.91	\$ 87.82
19	2	413908	Super Flex Jumper	\$	37.60	
20	1	16967	19" Rack Mount Power Protected Strip	\$	\$61.33	
21	1	60 Man hours Labor	Tower Erection, Cable Runs, Grounding	\$	125.00	\$ 7,500.00
			Sub-Total			\$ 11,566.50

Wyndcliff Site

22	4	39905	Rohn 45 Tower Section 10'		\$292.00	\$ 1,168.00
23	1	53119	Rohn 45G Top Section	\$	385.00	\$ 385.00
24	1	73302	Rohn 45G Base Plate	\$	143.00	
25	1	67582	Rohn Pier Pin	\$	11.00	
26	1	15450	Rohn Wall Bracket 45G	\$	289.00	
27	1	66333	Rohn Anti Climb Kit	\$	534.00	
28	2	14201	Rohn Side Arm Mounts	\$	203.00	\$ 408.00
29	1	421814	Rohn Base Ground Kit	\$	34.95	
30	1	455534	Bud 7" Equipment Rack	\$	403.60	
31	1	488928	Entry Port	\$	18.10	
32	1	483923	Dual 7/8" Cable Boot for entry port	\$	20.95	
33	3	414312	Andrew 7/8" Cable Ground Kit	\$	27.55	\$ 82.65
34	1	43950	Harger Bus Ground Bar	\$	88.85	
35	1	44388	Harger Ground Bar Clamp	\$	18.15	
36	1	471683	Stainless Ground Bolts .75"	\$	4.55	
37	1	441626	Stainless Ground Bolts 1"	\$	8.65	
38	3	30040	Polyphaser Lightning Arrestor	\$	71.90	\$ 215.70
39	2	23966	Harger 19" Rack Ground Buss Bar	\$	48.91	\$ 87.82
40	2	413908	Super Flex Jumper	\$	37.60	\$ 75.20
41	1	16967	19" Rack Mount Power Protected Strip	\$	\$61.33	
42	1	60 Man Hours Labor	Tower Erection, Cable Runs, Grounding	\$	125.00	\$ 7,500.00
			Sub-Total			\$ 11,566.50

Voting Comparators

43	2	5951-800000	JPS SNV-12 Voter Chassis	\$	4,398.35	\$ 8,796.70
44	12	5951-112000	JPS SVM-2 Site Voter Module	\$	807.26	\$ 9,687.12
45	1	Labor 32 man hours	Programming, install, optimization and set-up	\$	85.00	\$ 2,720.00
			Sub-Total			\$ 21,203.82

Fiber Optic Mux Solution

46	12	TC8005R-L1-SC-04-12	TC Comm Fiber Mux Optic Board	\$	1,789.20	\$ 21,470.40
47	8	TC8005-L1-SC-5A-12	TC Comm Fiber Redundant Optics Board	\$	1,789.20	\$ 10,735.20
48	12	TCRM195-S-01	TC Comm 19" Rack Mount Card Cage	\$	247.50	\$ 2,970.00
49	1	Labor 32 Man Hours	Programming, Install, Optimizatio and set-up	\$	85.00	\$ 2,720.00
			Sub-Total			\$ 37,895.20

Satellite Receivers for FD/PPD

50	1	T5769	Motorola MTR2000 Receiver Model for FD	\$	640.00	\$ 640.00
51	1	X319	VHF 132-174 MHz. Receiver	\$	520.00	\$ 520.00
52	1	X597	Conventiona Operation	\$	1,240.00	\$ 1,240.00
53	1	X269	Spectra-TAC Operation	\$	120.00	\$ 120.00
54	1	SCV209	Programming, tuning and alignment	\$	255.00	\$ 255.00
55	1	T5769	Motorola MTR2000 Receiver Model for FD	\$	640.00	\$ 640.00
56	1	X320	UHF 403-470 MHz. Receiver	\$	720.00	\$ 720.00
57	1	X597	Conventiona Operation	\$	1,240.00	\$ 1,240.00
58	1	X269	Spectra-TAC Operation	\$	120.00	\$ 120.00
59	1	SCV209	Programming, tuning and alignment	\$	255.00	\$ 255.00
						\$ 5,750.00

211 Main Street Great Hill Site

2	483923	Andrew 7/8" Cable Ground Kit	\$	27.55	\$ 55.10
2	30040	Polyphaser Lightning Arrestor	\$	71.90	\$ 143.80
1	23966	Harger 19" Rack Ground Buss Bar	\$		\$ 48.91
1	16967	19" Rack Mount Power Protected Strip	\$		\$ 81.33
1	455534	Bud 7" Equipment Rack	\$		\$ 403.60
2	413908	Super Flex Jumper	\$	37.60	\$ 75.20
1	SVC209	Installation, grounding, set-up	\$	85.00	\$ 1,360.00
		Sub-Total			\$ 2,824.74

Total \$ 90,786.76

Capital Improvement Program Proposal – Detail

Department Name	Information Technology	Project	Unified Communications		
		Fiscal Year	2010		
Department Head	Mark Hald	Cost	\$221,450		
		Priority	2	of	3

1. Description

Convert the Town's various telephone communication systems from Centrex to a unified voice-over-IP system, utilizing our existing fiber optic network for transport. This system would also integrate voice mail with with our existing e-mail system, and would also incorporate radio.

2. Useful Life 10 to 20 years

3. Purpose (Please 'X' one of the Boxes and Describe, if Applicable)

Schedule Replacement

Increase Personnel Efficiency

New or Expanded Service

X Replace Obsolete or Unsafe Equipment
(Explain Disposal of Old Equipment)

Other (Please Explain)

4. Justification

5. How Was this Project's Priority Determined?

6. Estimated Cost \$221,450

Less Trade-In (If Applicable) Cost accounts for trade-in of existing telephone equipment
Net Cost

7. Are Non-Town Revenues Available to Reduce Cost?

Cable Gift Fund

8. If this Project is Delayed, What will be the Effect on your Department?

9. Please Describe the Effect of this Project on your Operating Budget.

Personnel Budget

Increase

Decrease

Expense Budget

Increase

Decrease

10. Attachments, if Applicable.

Date: 5/31/2007
To: Town of Acron
472 Main Street
Acron, MA 01720

Price Quotation



Quote Number: TDA-042607
Total Price: \$198,261.00

Product Number	Product Description	Unit Price	Qty	Extended Price
CORE				
UNITY CONNECTION MESSAGING LICENSES				
UNITYCN1-VM-USR	One Unity Connection VoiceMail User	\$39.00	100	\$3,900.00
CON-SAU-UCI-VMUSR	CISCO SOFTWARE ASSURANCE PLUS UPGRADES: UNITY CONNECTION MESSAGING USER	\$9.00	100	\$900.00
CISCO POWER OVER ETHERNET SWITCHES				
WS-C3560-48PS-5	Catalyst 3560 48 10/100 PoE + 4 SFP Standard Image	\$3,897.00	5	\$19,485.00
GLC-SX-80M	GE SFP, LC connector SX transceiver	\$300.00	3	\$900.00
CAB-SFP-50CM=	Catalyst 3560 SFP Interconnect Cable, 50cm	\$150.00	4	\$600.00
CISCO IP PHONES (1 RECEPTION, 1 CONFERENCE, 96 GENERAL)				
CP-7970G=	CISCO IP PHONE 7970G SPARE - POR CM5.0 ONLY	\$384.00	0	\$0.00
CP-7961G=	CISCO IP PHONE 7961G SPARE - POR CM5.0 ONLY	\$267.00	4	\$1,068.00
CP-7914=	7914 IP Phone Expansion Module	\$237.00	1	\$237.00
CP-7941G=	CISCO IP PHONE 7941G SPARE - POR CM5.0 ONLY	\$207.00	96	\$19,872.00
CP-7911G=	CISCO IP PHONE 7911G SPARE - POR CM5.0 ONLY	\$135.00	0	\$0.00
CISCO IP PHONES (DEVICE LICENSES)				
LIC-DM-DL-100=	CALLMANAGER DEVICE LICENSE 100 UNITS	\$3,000.00	4	\$12,000.00
LIC-DM-DL-10=	CALLMANAGER DEVICE LICENSE 10 UNITS	\$300.00	0	\$0.00
NETTEKS PARTNER VOICE SUPPORT OFFERING				
CON-SNTP-3560-48PS	CISCO 240724 SMARTNET: CISCO 3560 48 PORT SWITCH	\$575.10	5	\$2,875.50
UCS-UCM-1-100	UCS for UCM for One Year - 100 users	\$652.50	1	\$652.50
CISCO TRADE-IN CREDIT				
CTMP	Cisco Trade-In Credit: Fixed amount credit for the trade-in of Cisco 3550 and (5) Cisco 2950's	\$2,286.00	1	(\$2,286.00)
NETTEKS PROFESSIONAL SERVICES				
NetTeks Installation	NetTeks Installation for Cisco Unified Communications Network: Estimate based on purchasing the entire bill of materials included in this quotation. A detailed Statement of Work will be delivered with the corresponding task list once the final bill of materials is agreed upon.	\$110,000.00	1	\$110,000.00
Total				\$79,299.00

POLICE STATION (46 USERS)

UNITY CONNECTION MESSAGING (SERVER WITH 50 LICENSES)

MCS-7825-H2-UC1	MCS-7825-H2 Rack; Unity Connection 1.1; 2GB; RAID; Win2005	\$5,400.00	1	\$5,400.00
UNITYCN-K3SW30UR#	Unity Connection, 50 users, 8 ports, 1 TTS, OS	\$3,120.00	1	\$3,120.00

CISCO POWER OVER ETHERNET SWITCHES

WS-C3560-48PS-S	Catalyst 3560 48 10/100 PoE + 4 SFP Standard Image	\$3,897.00	5	\$19,485.00
GLC-SX-MM	GE SFP, LC connector SX multimode	\$300.00	2	\$600.00
CAB-SFP-50CM#	Catalyst 3560 SFP Interconnect Cable, 50cm	\$150.00	4	\$600.00
GLC-LH-SM#	GE SFP, LC connector LX/LH multimode	\$597.00	1	\$597.00

CISCO IP PHONES (2 EXPANSION PHONES & 44 GENERAL)

CP-7970G#	CISCO IP PHONE 7970G SPARE - FOR CM5.0 ONLY	\$384.00	0	\$0.00
CP-7961G#	CISCO IP PHONE 7961G SPARE - FOR CM5.0 ONLY	\$267.00	7	\$1,869.00
CP-7914#	7914 IP Phone Expansion Module	\$237.00	2	\$474.00
CP-7941G#	CISCO IP PHONE 7941G SPARE - FOR CM5.0 ONLY	\$207.00	44	\$9,108.00
CP-7911G#	CISCO IP PHONE 7911G SPARE - FOR CM5.0 ONLY	\$135.00	0	\$0.00

CISCO IP PHONES (DEVICE LICENSES)

LJC-CM-DL-100#	CALLMANAGER DEVICE LICENSE 100 UNITS	\$3,000.00	2	\$6,000.00
LJC-CM-DL-10#	CALLMANAGER DEVICE LICENSE 10 UNITS	\$300.00	0	\$0.00

NETELES PARTNER VOICE SUPPORT OFFERING

CON-SNTP-25H2UC1	CISCO 24X7X4 SMARTNET; CISCO MCS 7825 UNITY SERVER	\$1,036.80	1	\$1,036.80
CON-SNTP-356048PS	CISCO 24X7X4 SMARTNET; CISCO 3560 48 PORT SWITCH	\$575.10	5	\$2,875.50
CON-SAU-UCSW50USR	CISCO SOFTWARE ASSURANCE PLUS UPGRADES; UNITY CONNECTION MESSAGING 50 USER BUNDLE	\$702.00	1	\$702.00
UCSS-UCM-1-10	UCSS for UCM for One Year - 10 users	\$72.00	5	\$360.00

CISCO TRADE-IN CREDIT

CTMP	Cisco Trade-In Credit: Fixed amount credit for the trade-in of Cisco 3850 and (4) Cisco 2950's	\$1,850.00	1	(\$1,850.00)
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NETELES PROFESSIONAL SERVICES

Netelex Installation	Netelex Installation for Cisco Unified Communications Network Estimate based on purchasing the entire bill of materials included in this quotation. A detailed Statement of Work will be delivered with the corresponding task lists once the final bill of materials is agreed upon.	\$10,000.00	1	\$10,000.00
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Police Station Total \$59,042.30

Product Number	Product Description	Unit Price	Qty	Extended Price
WEST ACTON FIRE STATION (6 USERS)				
CISCO VOICE GATEWAY (3 CENTREX LINES, 1 FAX MACHINE, 24 SRST LICENSES)				
CISCO2801-SRST/K9	2801 Voice Bundle w/ PVD42-8-FL-SRST-24,5P Surv,64F/256D	\$1,857.00	1	\$1,857.00
VIC2-4FXO#	Four-port Voice Interface Card - FXO (Universal)	\$480.00	1	\$480.00
VIC2-2FXS	Two-port Voice Interface Card - FXS	\$240.00	0	\$0.00
POWER OVER ETHERNET INJECTORS				
PD-6524/AC/M	24 PORT POWER OVER ETHERNET MIDSPAN INJ MANAGED/AC INPUT 802.3AF & CISCO SUPPORTED	\$1,019.15	1	\$1,019.15
CISCO IP PHONES				
CP-7970G#	CISCO IP PHONE 7970G SPARE - FOR CML5.0 ONLY	\$384.00	0	\$0.00
CP-7961G#	CISCO IP PHONE 7961G SPARE - FOR CML5.0 ONLY	\$267.00	0	\$0.00
CP-7941G#	CISCO IP PHONE 7941G SPARE - FOR CML5.0 ONLY	\$207.00	6	\$1,242.00
CP-7911G#	CISCO IP PHONE 7911G SPARE - FOR CML5.0 ONLY	\$155.00	0	\$0.00
CISCO IP PHONES (DEVICE LICENSES)				
LIC-CM-DL-100#	CALLMANAGER DEVICE LICENSE 100 UNITS	\$3,000.00	0	\$0.00
LIC-CM-DL-10#	CALLMANAGER DEVICE LICENSE 10 UNITS	\$300.00	4	\$1,200.00
UNITY CONNECTION MESSAGING LICENSES				
UNITYCN1-VM-USR	One Unity Connection Voicemail User	\$39.00	8	\$312.00
NETTEKS PARTNER VOICE SUPPORT OFFERING				
CON-SNTP-C2801SR5	CISCO 24X7X4 SMARTNET: CISCO 2801 ROUTER WITH SRST	\$518.40	1	\$518.40
CON-SAU-UCVMUSR	CISCO SOFTWARE ASSURANCE PLUS UPGRADES: UNITY CONNECTION MESSAGING USER	\$9.00	8	\$72.00
UCSS-UCM-1-10	UCSS for UCM for One Year - 10 users	\$72.00	1	\$72.00
NETTEKS PROFESSIONAL SERVICES				
Netteks Installation	NetTek Installation for Cisco Unified Communications Networks Estimate based on purchasing the entire bill of materials included in this quotation. A detailed Statement of Work will be delivered with the corresponding task lists once the final bill of materials is agreed upon.	\$2,600.00	1	\$2,600.00
WEST ACTON FIRE STATION SUBTOTAL:				\$9,986.55
SOUTH ACTON FIRE STATION (6 USERS)				
CISCO VOICE GATEWAY (1 CENTREX LINE, 1 FAX MACHINE, 24 SRST LICENSES)				
CISCO2801-SRST/K9	2801 Voice Bundle w/ PVD42-8-FL-SRST-24,5P Surv,64F/256D	\$1,857.00	1	\$1,857.00
VIC2-4FXO#	Two-port Voice Interface Card - FXO (Universal)	\$240.00	1	\$240.00
VIC2-2FXS	Two-port Voice Interface Card - FXS	\$240.00	1	\$240.00
POWER OVER ETHERNET INJECTORS				
PD-6524/AC/M	24 PORT POWER OVER ETHERNET MIDSPAN INJ MANAGED/AC INPUT 802.3AF & CISCO SUPPORTED	\$1,019.15	1	\$1,019.15
CISCO IP PHONES				
CP-7970G#	CISCO IP PHONE 7970G SPARE - FOR CML5.0 ONLY	\$384.00	0	\$0.00
CP-7961G#	CISCO IP PHONE 7961G SPARE - FOR CML5.0 ONLY	\$267.00	0	\$0.00
CP-7941G#	CISCO IP PHONE 7941G SPARE - FOR CML5.0 ONLY	\$207.00	6	\$1,242.00
CP-7911G#	CISCO IP PHONE 7911G SPARE - FOR CML5.0 ONLY	\$155.00	0	\$0.00
CISCO IP PHONES (DEVICE LICENSES)				
LIC-CM-DL-100#	CALLMANAGER DEVICE LICENSE 100 UNITS	\$3,000.00	0	\$0.00
LIC-CM-DL-10#	CALLMANAGER DEVICE LICENSE 10 UNITS	\$300.00	5	\$900.00
UNITY CONNECTION MESSAGING LICENSES				
UNITYCN1-VM-USR	One Unity Connection Voicemail User	\$39.00	6	\$234.00
NETTEKS PARTNER VOICE SUPPORT OFFERING				
CON-SNTP-C2801SR5	CISCO 24X7X4 SMARTNET: CISCO 2801 ROUTER WITH SRST	\$518.40	1	\$518.40
CON-SAU-UCVMUSR	CISCO SOFTWARE ASSURANCE PLUS UPGRADES: UNITY CONNECTION MESSAGING USER	\$9.00	6	\$54.00
UCSS-UCM-1-10	UCSS for UCM for One Year - 10 users	\$72.00	1	\$72.00
NETTEKS PROFESSIONAL SERVICES				
Netteks Installation	NetTek Installation for Cisco Unified Communications Networks Estimate based on purchasing the entire bill of materials included in this quotation. A detailed Statement of Work will be delivered with the corresponding task lists once the final bill of materials is agreed upon.	\$2,600.00	1	\$2,600.00
SOUTH ACTON FIRE STATION SUBTOTAL:				\$8,976.55

Product Number	Product Description	Unit Price	Qty	Extended Price
CENTRAL ACTON FIRE STATION (6 USERS)				
CISCO VOICE GATEWAY (1 CENTREX LINE, 1 FAX MACHINE, 34 SRST LICENSES)				
CISCO2801-SRST/K9	2801 Voice Bundle w/ PVDMA2-8-FL-SRST-24SP Serv.64F/256D	\$1,857.00	1	\$1,857.00
VIC2-2FXO#	Two-port Voice Interface Card - FXO (Universal)	\$240.00	1	\$240.00
VIC2-2FXS	Two-port Voice Interface Card - FXS	\$240.00	1	\$240.00
POWER OVER ETHERNET INJECTORS				
PD-6524/AC/M	24 PORT POWER OVER ETHERNET MIDSPAN INJ MANAGED/AC INPUT 802.3AP & CISCO SUPPORTED	\$1,019.15	1	\$1,019.15
CISCO IP PHONES				
CP-7970G#	CISCO IP PHONE 7970G SPARE - FOR CM5.0 ONLY	\$384.00	0	\$0.00
CP-7961G#	CISCO IP PHONE 7961G SPARE - FOR CM5.0 ONLY	\$267.00	0	\$0.00
CP-7941G#	CISCO IP PHONE 7941G SPARE - FOR CM5.0 ONLY	\$207.00	6	\$1,242.00
CP-7911G#	CISCO IP PHONE 7911G SPARE - FOR CM5.0 ONLY	\$135.00	0	\$0.00
CISCO IP PHONES (DEVICE LICENSES)				
LIC-CM-DL-100#	CALLMANAGER DEVICE LICENSE 100 UNITS	\$1,000.00	0	\$0.00
LIC-CM-DL-10#	CALLMANAGER DEVICE LICENSE 10 UNITS	\$300.00	3	\$900.00
UNITY CONNECTION MESSAGING LICENSES				
UNITYCN1-VM-USR	One Unity Connection Voicemail User	\$39.00	6	\$234.00
NETTEKS PARTNER VOICE SUPPORT OFFERING				
CON-SNTP-C2801SR5	CISCO 24XTX4 SMARTNET: CISCO 2801 ROUTER WITH SRST	\$518.40	1	\$518.40
CON-SAU-UC1VMUSR	CISCO SOFTWARE ASSURANCE PLUS UPGRADES: UNITY CONNECTION MESSAGING USER	\$9.00	6	\$54.00
UCSS-UCM-1-10	UCSS for UCM for One Year - 10 users	\$72.00	1	\$72.00
NETTEKS PROFESSIONAL SERVICES				
NetTelx Installation	NetTelx Installation for Cisco Unified Communications Network: Estimate based on purchasing the entire bill of materials included in this quotation. A detailed Statement of Work will be delivered with the corresponding task list once the final bill of materials is agreed upon.	\$2,600.00	1	\$2,600.00
CENTRAL ACTON FIRE STATION SUBTOTAL:				\$8,976.55
WEST ACTON CITIZENS LIBRARY (2 USERS)				
CISCO VOICE GATEWAY (2 CENTREX LINES, 1 FAX MACHINE, 34 SRST LICENSES)				
CISCO2801-SRST/K9	2801 Voice Bundle w/ PVDMA2-8-FL-SRST-24SP Serv.64F/256D	\$1,857.00	1	\$1,857.00
VIC2-2FXO#	Two-port Voice Interface Card - FXO (Universal)	\$240.00	1	\$240.00
VIC2-2FXS	Two-port Voice Interface Card - FXS	\$240.00	1	\$240.00
CISCO POWER CUBES AND CORDS				
CP-PWR-CUBE-3	IP Phone power transformer for the 7900 phone series	\$27.00	2	\$54.00
CP-PWR-CORD-NA#	7900 Series Transformer Power Cord, North America	\$6.00	2	\$12.00
CISCO IP PHONES				
CP-7970G#	CISCO IP PHONE 7970G SPARE - FOR CM5.0 ONLY	\$384.00	0	\$0.00
CP-7961G#	CISCO IP PHONE 7961G SPARE - FOR CM5.0 ONLY	\$267.00	0	\$0.00
CP-7941G#	CISCO IP PHONE 7941G SPARE - FOR CM5.0 ONLY	\$207.00	2	\$414.00
CP-7911G#	CISCO IP PHONE 7911G SPARE - FOR CM5.0 ONLY	\$135.00	0	\$0.00
CISCO IP PHONES (DEVICE LICENSES)				
LIC-CM-DL-100#	CALLMANAGER DEVICE LICENSE 100 UNITS	\$1,000.00	0	\$0.00
LIC-CM-DL-10#	CALLMANAGER DEVICE LICENSE 10 UNITS	\$300.00	1	\$300.00
UNITY CONNECTION MESSAGING LICENSES				
UNITYCN1-VM-USR	One Unity Connection Voicemail User	\$39.00	2	\$78.00
NETTEKS PARTNER VOICE SUPPORT OFFERING				
CON-SNTP-C2801SR5	CISCO 24XTX4 SMARTNET: CISCO 2801 ROUTER WITH SRST	\$518.40	1	\$518.40
CON-SAU-UC1VMUSR	CISCO SOFTWARE ASSURANCE PLUS UPGRADES: UNITY CONNECTION MESSAGING USER	\$9.00	2	\$18.00
UCSS-UCM-1-10	UCSS for UCM for One Year - 10 users	\$72.00	1	\$72.00
NETTEKS PROFESSIONAL SERVICES				
NetTelx Installation	NetTelx Installation for Cisco Unified Communications Network: Estimate based on purchasing the entire bill of materials included in this quotation. A detailed Statement of Work will be delivered with the corresponding task list once the final bill of materials is agreed upon.	\$1,600.00	1	\$1,600.00
WEST ACTON CITIZENS LIBRARY SUBTOTAL:				\$5,403.40

Product Number	Product Description	Unit Price	Qty	Extended Price
SENIOR CENTER (9 USERS)				
CISCO VOICE GATEWAY (3 CENTREX LINES, 1 FAX MACHINE, 24 SRST LICENSES)				
CISCO2801-SRST/K9	2801 Voice Bundle w/ PVDNA2-8-FL-SRST-24,5P Serv,64F/256D	\$1,857.00	1	\$1,857.00
VIC3-2FXO=	Two-port Voice Interface Card - FXO (Universal)	\$240.00	1	\$240.00
VIC3-2FXS	Two-port Voice Interface Card - FXS	\$240.00	1	\$240.00
POWER OVER ETHERNET INJECTORS				
PD-4524/AC/M	24 PORT POWER OVER ETHERNET MIDSPAN INJ MANAGEDAC INPUT 802.3AF & CISCO SUPPORTED	\$1,019.15	1	\$1,019.15
CISCO IP PHONES				
CP-7970G=	CISCO IP PHONE 7970G SPARE - FOR CMS.0 ONLY	\$384.00	0	\$0.00
CP-7961G=	CISCO IP PHONE 7961G SPARE - FOR CMS.0 ONLY	\$267.00	0	\$0.00
CP-7941G=	CISCO IP PHONE 7941G SPARE - FOR CMS.0 ONLY	\$207.00	9	\$1,863.00
CP-7911G=	CISCO IP PHONE 7911G SPARE - FOR CMS.0 ONLY	\$135.00	0	\$0.00
CISCO IP PHONES (DEVICE LICENSES)				
LIC-CM-DL-10=	CALLMANAGER DEVICE LICENSE 10 UNITS	\$300.00	4	\$1,200.00
UNITY CONNECTION MESSAGING LICENSES				
UNITYCN1-VM-USR	One Unity Connection Voicemail User	\$39.00	9	\$351.00
NETTEKS PARTNER VOICE SUPPORT OFFERING				
CON-SNTP-C2801SRS	CISCO 24X24 SMARTNET: CISCO 2801 ROUTER WITH SRST	\$518.40	1	\$518.40
CON-SAU-UCMVMUSR	CISCO SOFTWARE ASSURANCE PLUS UPGRADES: UNITY CONNECTION MESSAGING USER	\$9.00	9	\$81.00
UCSS-UCM-1-10	UCSS for UCM for One Year - 10 users	\$72.00	1	\$72.00
<u>NETTEKS PROFESSIONAL SERVICES</u>				
Neteks Installation	NetEks Installation for Cisco Unified Communications Network: Estimate based on purchasing the entire bill of materials included in this quotation. A detailed Statement of Work will be delivered with the corresponding task lists once the final bill of materials is agreed upon.	\$3,000.00	1	\$3,000.00
SENIOR CENTER SUBTOTAL:				\$8,441.55
HIGHWAY (9 USERS)				
CISCO VOICE GATEWAY (3 CENTREX LINES, 1 FAX MACHINE, 24 SRST LICENSES)				
CISCO2801-SRST/K9	2801 Voice Bundle w/ PVDNA2-8-FL-SRST-24,5P Serv,64F/256D	\$1,857.00	1	\$1,857.00
VIC4-4FXO=	Four-port Voice Interface Card - FXO (Universal)	\$480.00	1	\$480.00
VIC3-2FXS	Two-port Voice Interface Card - FXS	\$240.00	1	\$240.00
POWER OVER ETHERNET INJECTORS				
PD-4524/AC/M	24 PORT POWER OVER ETHERNET MIDSPAN INJ MANAGEDAC INPUT 802.3AF & CISCO SUPPORTED	\$1,019.15	1	\$1,019.15
CISCO IP PHONES				
CP-7970G=	CISCO IP PHONE 7970G SPARE - FOR CMS.0 ONLY	\$384.00	0	\$0.00
CP-7961G=	CISCO IP PHONE 7961G SPARE - FOR CMS.0 ONLY	\$267.00	0	\$0.00
CP-7941G=	CISCO IP PHONE 7941G SPARE - FOR CMS.0 ONLY	\$207.00	9	\$1,863.00
CP-7911G=	CISCO IP PHONE 7911G SPARE - FOR CMS.0 ONLY	\$135.00	0	\$0.00
CISCO IP PHONES (DEVICE LICENSES)				
LIC-CM-DL-10=	CALLMANAGER DEVICE LICENSE 10 UNITS	\$300.00	4	\$1,200.00
UNITY CONNECTION MESSAGING LICENSES				
UNITYCN1-VM-USR	One Unity Connection Voicemail User	\$39.00	9	\$351.00
NETTEKS PARTNER VOICE SUPPORT OFFERING				
CON-SNTP-C2801SRS	CISCO 24X24 SMARTNET: CISCO 2801 ROUTER WITH SRST	\$518.40	1	\$518.40
CON-SAU-UCMVMUSR	CISCO SOFTWARE ASSURANCE PLUS UPGRADES: UNITY CONNECTION MESSAGING USER	\$9.00	9	\$81.00
UCSS-UCM-1-10	UCSS for UCM for One Year - 10 users	\$72.00	1	\$72.00
<u>NETTEKS PROFESSIONAL SERVICES</u>				
Neteks Installation	NetEks Installation for Cisco Unified Communications Network: Estimate based on purchasing the entire bill of materials included in this quotation. A detailed Statement of Work will be delivered with the corresponding task lists once the final bill of materials is agreed upon.	\$3,000.00	1	\$3,000.00
HIGHWAY SUBTOTAL:				\$8,681.55

Product Number	Product Description	Unit Price	Qty	Extended Price
EMERGENCY MANAGEMENT (2 USERS)				
CISCO VOICE GATEWAY (1 CENTREX LINE & 24 SRST LICENSES)				
CISCO2801-SRST/K9	2801 Voice Bundle w/ PVDML-4,FL-SRST-24SP Serv.64F/256D	\$1,857.00	1	\$1,857.00
VIC2-2FXO=	Two-port Voice Interface Card - FXO (Universal)	\$240.00	1	\$240.00
POWER OVER ETHERNET INJECTORS				
PD-4524/AC/M	24 PORT POWER OVER ETHERNET MIDSPAN INJ MANAGED/AC INPUT 802.3AF & CISCO SUPPORTED	\$1,019.15	0	\$0.00
CP-PWR-CUBE-S	IP Phone power transformer for the 7900 phone series	\$27.00	2	\$54.00
CP-PWR-CORD-NA=	7900 Series Transformer Power Cord, North America	\$6.00	2	\$12.00
CISCO IP PHONES				
CP-7970G=	CISCO IP PHONE 7970G SPARE - FOR CM5.0 ONLY	\$384.00	0	\$0.00
CP-7961G=	CISCO IP PHONE 7961G SPARE - FOR CM5.0 ONLY	\$267.00	0	\$0.00
CP-7941G=	CISCO IP PHONE 7941G SPARE - FOR CM5.0 ONLY	\$207.00	2	\$414.00
CP-7911G=	CISCO IP PHONE 7911G SPARE - FOR CM5.0 ONLY	\$155.00	0	\$0.00
CISCO IP PHONES (DEVICE LICENSES)				
LIC-CA-DL-100*	CALLMANAGER DEVICE LICENSE 100 UNITS	\$3,000.00	0	\$0.00
LIC-CA-DL-10*	CALLMANAGER DEVICE LICENSE 10 UNITS	\$300.00	1	\$300.00
UNITY CONNECTION MESSAGING LICENSES				
UNITYCN1-VM-USR	One Unity Connection Voicemail User	\$39.00	2	\$78.00
NETTEKS PARTNER VOICE SUPPORT OFFERING				
CON-SNTP-C2801SR5	CISCO 24X7X4 SMARTNET: CISCO 2801 ROUTER WITH SRST	\$518.40	1	\$518.40
CON-SAU-UC1VMUSR	CISCO SOFTWARE ASSURANCE PLUS UPGRADES: UNITY CONNECTION MESSAGING USER	\$9.00	2	\$18.00
UCSS-UCM-1-10	UCSS for UCM for One Year - 10 users	\$72.00	1	\$72.00
NETTEKS PROFESSIONAL SERVICE				
Neteks Installation	NetTeks Installation for Cisco Unified Communications Network Estimate based on purchasing the entire bill of materials included in this quotation. A detailed Statement of Work will be delivered with the corresponding task lists once the final bill of materials is agreed upon.	\$1,600.00	1	\$1,600.00
EMERGENCY MANAGEMENT SUBTOTAL:				\$5,163.40
WASTEWATER TREATMENT PLANT (3 USERS)				
CISCO VOICE GATEWAY (3 CENTREX LINE, 2 FAX LINES, 24 SRST LICENSES)				
CISCO2801-SRST/K9	2801 Voice Bundle w/ PVDML-4,FL-SRST-24SP Serv.64F/256D	\$1,857.00	1	\$1,857.00
VIC2-4FXO=	Four-port Voice Interface Card - FXO (Universal)	\$480.00	1	\$480.00
VIC2-2FXS	Two-port Voice Interface Card - FXS	\$240.00	1	\$240.00
POWER OVER ETHERNET INJECTORS				
PD-4524/AC/M	24 PORT POWER OVER ETHERNET MIDSPAN INJ MANAGED/AC INPUT 802.3AF & CISCO SUPPORTED	\$1,019.15	1	\$1,019.15
CISCO IP PHONES				
CP-7970G=	CISCO IP PHONE 7970G SPARE - FOR CM5.0 ONLY	\$384.00	0	\$0.00
CP-7961G=	CISCO IP PHONE 7961G SPARE - FOR CM5.0 ONLY	\$267.00	0	\$0.00
CP-7941G=	CISCO IP PHONE 7941G SPARE - FOR CM5.0 ONLY	\$207.00	5	\$431.00
CP-7911G=	CISCO IP PHONE 7911G SPARE - FOR CM5.0 ONLY	\$155.00	0	\$0.00
CISCO IP PHONES (DEVICE LICENSES)				
LIC-CA-DL-10*	CALLMANAGER DEVICE LICENSE 10 UNITS	\$300.00	2	\$600.00
UNITY CONNECTION MESSAGING LICENSES				
UNITYCN1-VM-USR	One Unity Connection Voicemail User	\$39.00	3	\$117.00
NETTEKS PARTNER VOICE SUPPORT OFFERING				
CON-SNTP-C2801SR5	CISCO 24X7X4 SMARTNET: CISCO 2801 ROUTER WITH SRST	\$518.40	1	\$518.40
CON-SAU-UC1VMUSR	CISCO SOFTWARE ASSURANCE PLUS UPGRADES: UNITY CONNECTION MESSAGING USER	\$9.00	3	\$27.00
UCSS-UCM-1-10	UCSS for UCM for One Year - 10 users	\$72.00	1	\$72.00
NETTEKS PROFESSIONAL SERVICE				
Neteks Installation	NetTeks Installation for Cisco Unified Communications Network Estimate based on purchasing the entire bill of materials included in this quotation. A detailed Statement of Work will be delivered with the corresponding task lists once the final bill of materials is agreed upon.	\$1,600.00	1	\$1,600.00
WASTEWATER MANAGEMENT SUBTOTAL:				\$7,151.55

Product Number	Product Description	Unit Price	Qty	Extended Price
NARA PARK (2 PHONES)				
POWER OVER ETHERNET INJECTORS				
PD-4524/AC/M	24 PORT POWER OVER ETHERNET MIDSPAN INJ MANAGED/AC INPUT 802.3AF & CISCO SUPPORTED	\$1,019.11	0	\$0.00
CP-PWR-CLBE-3	IP Phone power transformer for the 7900 phone series	\$27.00	2	\$54.00
CP-PWR-CORD-NA	7900 Series Transformer Power Cord, North America	\$6.00	1	\$12.00
CISCO IP PHONES				
CP-7970G	CISCO IP PHONE 7970G SPARE - FOR CM5.0 ONLY	\$384.00	0	\$0.00
CP-7961G	CISCO IP PHONE 7961G SPARE - FOR CM5.0 ONLY	\$267.00	0	\$0.00
CP-7941G	CISCO IP PHONE 7941G SPARE - FOR CM5.0 ONLY	\$207.00	2	\$414.00
CP-7911G	CISCO IP PHONE 7911G SPARE - FOR CM5.0 ONLY	\$135.00	0	\$0.00
CISCO IP PHONES (DEVICE LICENSES)				
LIC-CM-DL-100	CALLMANAGER DEVICE LICENSE 100 UNITS	\$3,000.00	0	\$0.00
LIC-CM-DL-10	CALLMANAGER DEVICE LICENSE 10 UNITS	\$300.00	1	\$300.00
UNITY CONNECTION MESSAGING LICENSES				
UNITYCM-VM-USR	One Unity Connection Voicemail User	\$39.00	2	\$78.00
NETTELS PARTNER VOICE SUPPORT OFFERING				
CON-SAU-UCMUSER	CISCO SOFTWARE ASSURANCE PLUS UPGRADES: UNITY CONNECTION MESSAGING USER	\$9.00	2	\$18.00
UCSS-UCM-1-10	UCSS for UCM for One Year - 10 users	\$72.00	1	\$72.00
NETTELS PROFESSIONAL SERVICES				
Netels Installation	NetTels Installation for Cisco Unified Communications Networks: Estimate based on purchasing the entire bill of materials included in this quotation. A detailed Statement of Work will be delivered with the corresponding task list once the final bill of materials is agreed upon.	\$1,200.00	1	\$1,200.00
NARA PARK SUBTOTAL:				\$2,148.00
CISCO LEARNING CREDIT				
Cisco Training	Cisco Learning Credit: \$3000 worth of voice training from a Cisco Learning Solutions Partner (CLSP) or their sponsored organizations. This is intended for System Administrator/ IT Personnel	(\$3,000.00)	1	(\$3,000.00)
Payment Terms:	Net 30			
Invoice Date:	Included			
Quote Valid Until:	6/30/2007			

Notes:

Signed:

Larry O'Toole

This price quotation does not constitute an offer by NetTels to sell products, but it instead is an invitation to issue a purchase order to NetTels until the Quotation Valid date specified on this Price Quotation. Such a purchase order will be subject to NetTels's standard procedures, terms, and conditions for the acceptance of purchase orders. This order may be subject to sales tax, VAT, duty and freight charges even if not noted on this quote. Hardware purchases totaling more than \$50,000 will require an initial deposit (50%) to place the order.

NetTels Technology Consultants, Inc. - Confidential and Proprietary

NetTeks
Technology Consultants, Inc.



NetTeks Technology Consultants, inc
2 Oliver Street, 10th Floor
Boston, MA 02109

Ph: 617-896-6329
Fax: 617-896-6379

Date: 2/21/2008
To: Town of Acton
472 Main Street
Acton, MA 01720
Mark Hald

Quote Number: SN-020907
Total Price: \$23,250.00

Product Number	Product Description	Unit Price	Qty	Extended Price
Acton, MA				
NetTeks	Consulting support - Radio Integration	\$23,250.00	1	\$23,250.00

Payment Terms: NET 30
Installation: INCLUDED
Quote Valid Until: 3/22/2008

Signed:

Notes:

Larry O'Toole

This price quotation does not constitute an offer by NetTeks to sell products, but is instead an invitation to issue a purchase order to NetTeks until the Quotation Valid date specified on this Price Quotation. Such a purchase order will be subject to NetTek's standard procedures, terms, and conditions for the acceptance of purchase orders. This order may be subject to sales tax, VAT, duty and freight charges even if not noted on this quote.

NetTeks Technology Consultants, Inc. - Confidential and Proprietary

1 Executive Summary

NetTeks Technology Consultants, Inc (NetTeks) looks forward to developing our partnership with Town of Acton by assisting with the implementation of a Cisco Unified Communications platform in the Acton, MA Town Hall with remote office setups throughout the Town. NetTeks utilizes a proven service delivery value model to define each client's expectations up-front. The enclosed SOW enables us to mutually review, agree upon, and document all the business objectives and technology deliverables before work begins. We take this approach to give you the assurance that your needs will be met accurately and consistently.

2 Project Abstract

2.1 Project Summary

The scope of this project is to provide Town of Acton with system engineering resources and project management services for the implementation of a Cisco Unified Communications platform in the Acton, MA Core/Town Hall and remote locations for radio integration. This SOW includes efforts required to provide consulting and implementation services for the leased line project for up to 12 point-to-point full-duplex audio circuits between E&M ports across the network.

2.2 Project Deliverables

- Acton, MA
 - On-site configuration support for the core and remote routers
 - On-scene support at remote site locations to verify E/M port configurations and optimization of audio quality
 - Documentation of E/M port configurations

2.3 Staffing

- 1 Senior Systems Consultant(s)
- Appropriate Engineer(s) as determined by the project schedule
- Town of Acton Project Contact

2.4 Schedule

Scheduling is based on availability of the appropriate resources at the time of commitment, as well as availability of associated product.

On-site and On-scene support to occur during week of 10 September 2007 or other mutually agreeable period by both parties, within the validity of this proposal.

Price is inclusive of 5 days support by Cisco Unified Communication engineer and 2 days of documentation of project and configurations, delivered within 2 weeks after on-site support.

Capital Improvement Program Proposal – Detail

Department Name	Information Technology	Project	Faulkner Room Audio-Video	
		Fiscal Year	2010	
Department Head	Mark Hald	Cost	\$25,000	
		Priority	3	of 3

1. Description

Upgrade the audio and video components used in the Faulkner Room (204) of Town Hall. This equipment is used to record and broadcast meetings of the Selectmen, Finance Committee, etc.

2. Useful Life 5 to 10 years

3. Purpose (Please 'X' one of the Boxes and Describe, if Applicable)

Schedule Replacement

Increase Personnel Efficiency

New or Expanded Service

X *Replace Obsolete or Unsafe Equipment
(Explain Disposal of Old Equipment)*

Other (Please Explain)

4. Justification

Several complaints about transmission quality have come from viewers of the public access channels.

5. How Was this Project's Priority Determined?

6. Estimated Cost \$25,000
Less Trade-In (If Applicable)
Net Cost

7. Are Non-Town Revenues Available to Reduce Cost?
 Cable Gift Fund

8. If this Project is Delayed, What will be the Effect on your Department?

9. Please Describe the Effect of this Project on your Operating Budget.

Personnel Budget
 Increase
 Decrease

Expense Budget
 Increase
 Decrease

10. Attachments, if Applicable.

New England Home Theater, LLC

**23 Stevens Street
Littleton, MA 01460
Ph: 978.952.8555
Fax: 978.952.8455**

DATE	QUOTE NO.
01/22/08	012208SB

BILL TO	SHIP TO
INFORMATION TECHNOLOGY TOWN OF ACTON 472 MAIN STREET ACTON, MA 01720	ACTON TOWN HALL 472 MAIN STREET ACTON, MA 01720

P.O. NO.	TERMS	REP	SHIP DATE	SHIP VIA	PROJECT
TBD	TBD	SB	TBD	INSTALLATION	TOWN HALL
DESCRIPTION				QTY	AMOUNT
<u>TOWN HALL VIDEO CAMERA SYSTEM UPGRADE:</u>					
SONY BRC-300 3-CCD COLOR ROBOTIC VIDEO CAMERA (EACH)				2	\$8,495.00
SONY BRBK-301 ANALOG / RGB COMPONENT CARD (EACH)				2	\$745.00
SONY BRCH / WMPP WALL BRACKET IN BLACK (EACH)				2	\$595.00
SONY RM-BR300 REMOTE CONTROL UNIT FOR SONY PZT CAMERAS (EACH)				1	\$1,495.00
VISCA8P-8P-150 CABLE VISCA 8PIN 150FT (EACH)				2	\$475.00
NEW ENGLAND HOME THEATER CUSTOM INSTALLATION SERVICES (INSTALL / REPLACE TOWN HALL PZT CAMERA SYSTEM & CONTROL)					\$995.00
NOTES/INFO:					
CUSTOMER IS TAX EXEMPT					
SEE MANUFACTURER FOR ADDITIONAL WARRANTY INFORMATION					

SUB TOTAL:	\$12,800.00
TAX:	\$0.00
TOTAL:	\$12,800.00
PAID:	\$0.00
TOTAL DUE:	QUOTE

New England's Premier Custom Installer of High-End Audio Systems, Home Theater Design & Installation, Whole House Audio & Video!

Money back guarantee good 30 days past date above on all speakers. Restocking fee will be applied on video & electronics. Money back only good on products returned in original container complete with all packing and supplies. If you have any questions about your order, or require further information, please contact us via email at info@newenglandhometheater.net or call us at 978.952.8555



41 Terrill Park Drive • Concord, NH 03301
 Phone: 603-224-2300 • Fax: 603-224-2308

Town of Acton
 Information Technology
 472 Main Street, Acton, MA 01720

Date: 12/12/2007

Qty.	Mfrgr / Model #	Description	Cost:	Ext. Cost
1	Leightonix NEXUS	Video Control System	\$ 6,150.00	\$ 6,099.00
1	Leightonix LGX-HD500-GT	500GB storage for Nexus	\$ 435.00	\$ 435.00
1	Leightonix LGX-HDRK-GT	Rackmount for LGX-HD500-GT	\$ 106.00	\$ 106.00
1	APC 1250BN	UPS 500VA 300W BACKUP SYSTEM	\$ 179.00	\$ 179.00
2	Tascam DV-D01U	TASCAM DVD PLAYER	\$ 436.00	\$ 872.00
2	Leightonix LGX DVPLY	DVPLY CONTROL CABLE	\$ 46.00	\$ 92.00
1	JVC BR-DV3000U	Mini DV / DV deck	\$ 1,469.00	\$ 1,469.00
1	Leightonix PRSY9P	INTERFACE, PRO-BUS (for BR-DV3000U above)	\$ 97.00	\$ 97.00
1	Middle Atlantic RSH4S2S	RACKMOUNT KIT FOR BR-DV3000U	\$ 99.00	\$ 99.00
1	Sylvania RSDWT1304RB	MONITOR/RECEIVER, 13" COLOR TV	\$ 89.00	\$ 89.00
2	JVC TM-A101GU	MONITOR, 10" COLOR CRT (w/ Speakers)	\$ 359.00	\$ 718.00
1	FEC RK101G	CUSTOM DUAL RACK MOUNT (for A101GU above)	\$ 165.00	\$ 165.00
1	Middle Atlantic ERK-4020LRD	RACK CABINET W/O REAR DOOR	\$ 336.00	\$ 336.00
2	Middle Atlantic U2	2RU rackshelves	\$ 29.00	\$ 58.00
1	Middle Atlantic PD-915R	RACK-MOUNT AC OUTLET STRIP - 8 OUTLET	\$ 65.00	\$ 65.00
1	Middle Atlantic ERK-VT	VENTED TOP	\$ 23.00	\$ 23.00
1	Middle Atlantic CBS-ERK-20	SKIRTED WHEELBASE, 20"D, ERK - Includes Casters	\$ 94.00	\$ 94.00
3		TRAINING HOURS--At Vendor Location	\$ -	NO CHARGE

Quotes good for 30 days
 shipping not included
 Submit Kevin Long

List price: COST: \$ 10,996.00

Lerner | Ladds + Bartels, Inc.

236 Hope Street
 Providence, Rhode Island 02906
 401 421-7715
 fax 421-7718
 LLBarchitects.com

Steven L. Lerner, AIA
 Christian J. Ladds, AIA
 Kathleen A. Bartels, AIA
 R. Drayton Fair, AIA

**West Acton Windsor Building
 Preliminary Project Budget Summary
 Scheme #1
 November 3, 2008**

- General Exterior Restoration / Repair
- Ground Floor Accessibility and Renovation
- Minimal Second Floor Restoration / Repair

Total Project Budget **\$306,000.00**

Probable Construction Costs		\$256,900.00
• General Demolition		\$10,000.00
• Basement Structural Repair		\$8,000.00
• New entry ramp, vestibule, door		\$65,000.00
• New HP unisex toilet		\$25,000.00
• Scrape and Paint exterior		\$10,000.00
• Restore windows & add wood storms		\$25,000.00
• New roof		\$13,000.00
• Reconstruct front facade		\$15,000.00
• Central AC		\$17,000.00
• Interior Paint		\$7,000.00
• Plaster Repairs		\$5,000.00
• Sand & restore wood floors		\$7,000.00
• Electric upgrade		\$15,000.00
• Restore ceiling on ground floor		\$12,000.00
• New First Floor Kitchenette		\$5,000.00
Subtotal		\$239,000.00
Construction Contingency (7.5%)		\$18,000.00

Fees & Expenses **\$49,000.00**

Fees		
• Basic Architect / Engineering Fees		\$36,000.00
Expenses		
• Reimbursable Expenses Allowance (Print, Phone, Fax, etc.)		\$2,500.00
• Additional Presentation Materials Allowance		-0-
• Survey Allowance		\$2,500.00
• Document Printing		\$3,000.00
• Testing @ Construction Allowance		\$1,500.00
• Hazardous Material Survey/Documentation		\$1,500.00
• Hazardous Material Removal		-0-
• Clerk of the Works Allowance		-0-
Subtotal		\$47,000.00
Project Expenses Contingency (5%)		\$2,000.00





TRACTOR 102
JO-950
(ROADSIDE SERVICE HOC)

VEHICLE REQUEST FORM INSTRUCTIONS & INFORMATION

The Town of Acton is voluntarily complying with The Federal Energy Policy Act of 1992, which requires governmental fleets to meet the following standard -- 75% of new Light-Duty Vehicles (LDVs) acquisitions to be Alternative Fueled Vehicles (AFV). LDVs are defined as 8500 GVWR or less. Off-road, non-administrative emergency vehicles, and vehicles acquired solely for research or testing purposes are exempt from this standard. All new vehicles must be an EPA certified "Smart Way" or "Smart Way Elite" vehicle. Acton's minimum miles per gallon standard for all new LDV purchases are as follows:

New NHTSA Calculation:

	<u>Gasoline</u>	<u>E-85</u>
• Sedans/station wagons	21mpg City	N/A
• Full size Pick-ups & SUVs 2WD	15 mpg city	11 mpg city
• Full size Pick-ups & SUVs 4WD	14 mpg city	9 mpg city

To determine which vehicles meet the "Smart Way" certifications and mpg standard use the ratings at :

<http://www.epa.gov/greenvehicles/Index.do;jsessionid=82306299f6a3352b137f>

STEP-BY-STEP INSTRUCTIONS TO COMPLETE THE REQUEST FORM

1. Complete Section A with information on the vehicle to be purchased and the vehicle to be replaced (if applicable).
2. Complete Section C if the request is to request purchase an SUV, four wheel drive pickup, full size sedan or a police equipped vehicle.
3. Complete Section D if you are requesting an expansion to the size of your fleet.
4. Obtain signature of Department head or designee in Section B.
5. Please Complete Section 1 of Appendix A
6. Make an appointment with the Town Mechanics (1) to review the existing vehicle and (2) complete Appendix A prior to submission

Asset Code

Departments must use one of the following commodity codes when processing a request:

1. Sedans & Station Wagons
2. Vans, Light Duty Trucks and SUVs (GVW of 8500 or less)
3. Vans, Buses, & Trucks (GVW of over 8500 lbs)
4. Alternative Fuel Vehicles
5. Police Pursuit Vehicles



VEHICLE REQUEST FORM (Page 1)

Department/Division <u>MUN. PROP.</u>	Contact Name
ASSET CODE # <u>102</u>	E-MAIL

SECTION A

Expansion/Replacement	<input type="checkbox"/> Expansion <input type="checkbox"/> Transfer <input checked="" type="checkbox"/> Replacement <small>(Complete Section D for Expansion Requests)</small>	If to be transferred, identify the receiving entity?
Purchase From:	<input checked="" type="checkbox"/> State Contract <input type="checkbox"/> Surplus <input type="checkbox"/> Quote <u>Bid</u>	Purchase Option (check all that apply) <input checked="" type="checkbox"/> Purchase <input type="checkbox"/> Lease-Purchase
Vehicle Requested <input checked="" type="checkbox"/> New <input type="checkbox"/> Used (Check One)		

VEHICLE DATA	VEHICLE TO BE REPLACED	REQUESTED VEHICLE
Year	<u>1980</u>	
Make	<u>John Deere</u>	
Model	<u>950</u>	
VIN	<u>13645</u>	N/A
License Number	<u>M24242</u>	N/A
Inventory Tag Number	<u>102</u>	N/A
Current Odometer	<u>None</u>	Estimated
Annual Miles Driven	Prior FY Actual <u>NA</u>	Estimated
Vehicle Value	Use Edmonds.com <u>NA</u>	
Vehicle Type	<u>tractor</u>	
Check all that apply	<input type="checkbox"/> 4WD <input type="checkbox"/> Police Equipped	<input type="checkbox"/> 4WD <input type="checkbox"/> Police Equipped
Primary Assignment	<input type="checkbox"/> Individual <input type="checkbox"/> Function <input checked="" type="checkbox"/> Pool	<input type="checkbox"/> Individual <input type="checkbox"/> Function <input type="checkbox"/> Pool
Vehicle Purpose	<input type="checkbox"/> Employee Transportation <input type="checkbox"/> Client Transportation <input type="checkbox"/> Task Specific (describe below) <input type="checkbox"/> Special Purpose (describe below)	<input type="checkbox"/> Employee Transportation <input type="checkbox"/> Client Transportation <input type="checkbox"/> Task Specific (describe below) <input type="checkbox"/> Special Purpose (describe below)
Reason for Replacement	<input type="checkbox"/> Routine (Over 120,000 miles) <input checked="" type="checkbox"/> Other (Complete Section E)	Actual Disposal Date/Miles
Estimated Disposal Date	<u>Summer Fy 10</u>	

SECTION B: SIGNATURES

Requesting Person	Department Head <u>Russell W. [Signature]</u> <input checked="" type="checkbox"/> Approved
Date: _____	Date: <u>10/29/08</u> <input type="checkbox"/> Denied

SECTION C: ADDITIONAL JUSTIFICATION FOR CERTAIN VEHICLE TYPES

This section must be completed if a SUV, four wheel drive vehicle, full size sedan or a police equipped vehicle is requested.

Special Requirements: Check all that apply and then describe in detail in the space provided below.

- Regularly driven off road or on unimproved roads
- Equipment/Tool Storage
- Passenger Occupancy
- Utility Features
- Pursuit Vehicle
- Other

Please describe the specific need here. Include justification describing why a lower cost; more fuel-efficient vehicle is not sufficient to meet agency needs.

SECTION D: ADDITIONAL JUSTIFICATION FOR FLEET EXPANSION

This section must be completed for expansion vehicle requests.

Reason for Expansion: Check all that apply and then describe in detail in the space provided below:

- New Statutory Requirements
- Fleet Increase Approved by Town Manager
- Program Changes
- Other

Describe the need to expand the fleet here.

SECTION E: REASON FOR REPLACEMENT

If "Other" was selected as the reason for replacement on page one, please provide additional information below.

28 year old tractor
See mechanics notes

Section F: Projected activity (per vehicle)

	Within Acton	Outside of Acton	Total
miles/year			
hours/year			

Revision Date: May 19, 2008

Section G: Incremental cost for vehicle purchase (per vehicle)

Existing annual vehicle cost: \$	New annual vehicle cost: (purchase price times 12.33% plus cost of fuel and maintenance) \$	Incremental cost: (baseline - new) \$	
-------------------------------------	---	---	--

Section H: Vehicle Vendor Information

Contact		Address	
Title		City	State
Company		Zip Code	
E-Mail		Phone	F A X

Section I: Existing Vehicle Information

Fuel Type:	<input type="checkbox"/> CNG	<input checked="" type="checkbox"/> Diesel	<input type="checkbox"/> LNG	<input type="checkbox"/> LPG	<input type="checkbox"/> Gasoline	<input type="checkbox"/> Other
Fuel Usage in miles per gallon:						

Section J: New Vehicle Information

Fuel Type:	<input type="checkbox"/> CNG	<input type="checkbox"/> Diesel	<input type="checkbox"/> LNG	<input type="checkbox"/> LPG	<input type="checkbox"/> Gasoline	<input type="checkbox"/> E85	<input type="checkbox"/> Other
(if utilizing more than one fuel type, indicate which fuels and percentage operating time for each)							
Emissions per vehicle (please indicate units-g/bhp-hr, or g/gallon)							
NOx	VOC			PM2.5			
Emissions certified by:							
<input type="checkbox"/> EPA <input type="checkbox"/> Alternate certification (specify and attach documentation)							
Vehicle use: <input type="checkbox"/> On Road <input type="checkbox"/> Off-road Type of Equipment:							
Fuel Usage _____mpg							
(use the City rating at http://www.epa.gov/greenvehicles/index.do?sessionId=8230b13c37d76d2451b2)							

ADDITIONAL REQUIRED INFORMATION

Purchase/Lease Information:

Anticipated Cost: _____ Lease period: _____ months/years

Anticipated Annual Mileage: _____

Maximum Annual Mileage (leased vehicles): _____

Cost in Excess of Allowed Annual Mileage (leased vehicles): _____

If You Require This Vehicle for Commuting, Please Detail One-Way Mileage between Employee's Home and Office, Address of Overnight Parking, And the Need for This Vehicle for Commuting Purposes

If You Will Not be Purchasing an AFV, Please Attach Documentation to Explain Why You Will Not be Able to Purchase an AFV.

use 820



APPENDIX A: VEHICLE PURCHASE REQUEST FORM page 1 of 2

Section 1: Existing Vehicle Information - to be completed by Requestor

Make <i>John Deere</i>	Model <i>950</i>	Year <i>1980</i>	Car/ Truck # <i>102</i>	License Plate # <i>M24242</i>
Fuel Type: <input type="checkbox"/> CNG <input checked="" type="checkbox"/> Diesel <input type="checkbox"/> LNG <input type="checkbox"/> LPG <input type="checkbox"/> Gasoline <input type="checkbox"/> Other				

Section 2: Existing Vehicle Condition - to be completed by the Town's Mechanics

GVWR <i>N/A</i>	Fuel Use (mi/gal):
*ENGINE: type <input checked="" type="checkbox"/> 4 cyl <input type="checkbox"/> 6cyl <input type="checkbox"/> 8cyl	
*TRANSMISSION TYPE: <input checked="" type="checkbox"/> Manual <input type="checkbox"/> Automatic	

Condition of Vehicle - to be completed by the Town's Mechanics

	<u>Excellent</u>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>Date last Repaired</u>
*Engine				✓	
*Transmission		✓	✓		
*Frame		✓			
*Differential				✓	
*Brakes (Power?)				✓	
*Steering (Power?)			✓		
*Suspension					<i>NA</i>
* Clutch				✓	
*Body			✓		
*Radiator			✓		
*Battery		✓			
*Air Conditioner		<i>NONE</i>			<i>NA</i>
*Heater		<i>NONE</i>			<i>NA</i>
*Lights		✓			
*Upholstery				✓	
*Paint				✓	
*Glass					<i>NA</i>
*Jack					<i>NA</i>
*Radio AM/FM					<i>NA</i>
*Radio -2-way					<i>NA</i>
*TIRES:			✓	✓	
R FRONT			✓	✓	
L FRONT			✓	✓	
R REAR			✓	✓	
L REAR			✓	✓	
SPARE			✓	<i>NONE</i>	<i>NA</i>



APPENDIX A: VEHICLE PURCHASE REQUEST FORM page 2 of 2

Mechanic's Narrative

Due to the age of this tractor, parts have become extremely hard to obtain and most parts have become unavailable. The hydraulic system is very weak and need to be rebuilt. The transmission also needs to be rebuilt. The clutch needs to be replaced.

The difficulty with obtaining parts combined with the age and necessary work to be done on this piece of equipment make it not worth keeping. I recommend that it be replaced.

Charles Welllett
Mechanic's Signature

10/28/08
Date

Capital Improvement Program Proposal – Detail

Department Name	Municipal Properties	Project	Replace truck 109		
Department Head	Dean Charter	Fiscal Year	2010		
		Cost	\$45,000		
		Priority	4	of	10

1. Description

Replace existing truck 109 (1999 Ford F-350) with a similar unit

2. Useful Life 8 years

3. Purpose (Please 'X' one of the Boxes and Describe, if Applicable)

Schedule Replacement

Increase Personnel Efficiency

New or Expanded Service

*Replace Obsolete or Unsafe Equipment
(Explain Disposal of Old Equipment)*

Other (Please Explain)

4. Justification

Existing truck is in daily use for all Municipal Properties groundskeeping, street tree maintenance, and snow plowing duties. Unit is no longer reliable

5. How Was this Project's Priority Determined?

This is one of only two trucks used by the grounds crew. It is an essential piece of equipment. Truck now has over 70,000 miles, and numerous repair issues

6. Estimated Cost **\$45,000**
Less Trade-In (if Applicable) **Negligible trade in value**
Net Cost

7. Are Non-Town Revenues Available to Reduce Cost?

NO

8. If this Project is Delayed, What will be the Effect on your Department?

Grounds crew will become non-functional

9. Please Describe the Effect of this Project on your Operating Budget.

Personnel Budget no impact

Increase
Decrease

Expense Budget no impact

Increase
Decrease

10. Attachments, if Applicable.

Vehicle Request Form



TRUCK 109 71780
F-350
(BIFA) TRUCK

VEHICLE REQUEST FORM INSTRUCTIONS & INFORMATION

The Town of Acton is voluntarily complying with The Federal Energy Policy Act of 1992, which requires governmental fleets to meet the following standard -- 75% of new Light-Duty Vehicles (LDVs) acquisitions to be Alternative Fueled Vehicles (AFV). LDVs are defined as 8500 GVWR or less. Off-road, non-administrative emergency vehicles, and vehicles acquired solely for research or testing purposes are exempt from this standard. All new vehicles must be an EPA certified "Smart Way" or "Smart Way Elite" vehicle. Acton's minimum miles per gallon standard for all new LDV purchases are as follows:

New NHTSA Calculation:

	<u>Gasoline</u>	<u>E-85</u>
• Sedans/station wagons	21mpg City	N/A
• Full size Pick-ups & SUVs 2WD	15 mpg city	11 mpg city
• Full size Pick-ups & SUVs 4WD	14 mpg city	9 mpg city

To determine which vehicles meet the "Smart Way" certifications and mpg standard use the ratings at :

<http://www.epa.gov/greenvehicles/Index.do;jsessionid=82306299f6a3352b137f>

STEP-BY-STEP INSTRUCTIONS TO COMPLETE THE REQUEST FORM

1. Complete Section A with information on the vehicle to be purchased and the vehicle to be replaced (if applicable).
2. Complete Section C if the request is to request purchase an SUV, four wheel drive pickup, full size sedan or a police equipped vehicle.
3. Complete Section D if you are requesting an expansion to the size of your fleet.
4. Obtain signature of Department head or designee in Section B.
5. Please Complete Section 1 of Appendix A
6. Make an appointment with the Town Mechanics (1) to review the existing vehicle and (2) complete Appendix A prior to submission

Asset Code

Departments must use one of the following commodity codes when processing a request:

1. Sedans & Station Wagons
2. Vans, Light Duty Trucks and SUVs (GVW of 8500 or less)
3. Vans, Buses, & Trucks (GVW of over 8500 lbs)
4. Alternative Fuel Vehicles
5. Police Pursuit Vehicles



VEHICLE REQUEST FORM (Page 1)

Department/Division MUN. PROP.	Contact Name
ASSET CODE #	E-MAIL

SECTION A		
Expansion/Replacement	<input type="checkbox"/> Expansion <input type="checkbox"/> Transfer <input checked="" type="checkbox"/> Replacement <small>(Complete Section D for Expansion Requests)</small>	If to be transferred, identify the receiving entity?
Purchase From:	<input checked="" type="checkbox"/> State Contract <input type="checkbox"/> Surplus <input type="checkbox"/> Quote	Purchase Option (check all that apply) <input checked="" type="checkbox"/> Purchase <input type="checkbox"/> Lease-Purchase
Vehicle Requested <input checked="" type="checkbox"/> New <input type="checkbox"/> Used (Check One)		

VEHICLE DATA	VEHICLE TO BE REPLACED	REQUESTED VEHICLE
Year	1999	2009
Make	Ford	Ford
Model	F350	F350
VIN	1FDWF3751KEC67075	N/A
License Number	M60724	N/A
Inventory Tag Number	109	N/A
Current Odometer	71796	Estimated 0
Annual Miles Driven	Prior FY Actual 7179.6	Estimated 0
Vehicle Value KBB	Use Edmunds Edmunds.com \$5100	
Vehicle Type	Flat Bed	
Check all that apply	<input checked="" type="checkbox"/> 4WD <input type="checkbox"/> Police Equipped	<input checked="" type="checkbox"/> 4WD <input type="checkbox"/> Police Equipped
Primary Assignment	<input type="checkbox"/> Individual <input type="checkbox"/> Function <input checked="" type="checkbox"/> Pool	<input type="checkbox"/> Individual <input type="checkbox"/> Function <input checked="" type="checkbox"/> Pool
Vehicle Purpose	<input checked="" type="checkbox"/> Employee Transportation <input type="checkbox"/> Client Transportation <input type="checkbox"/> Task Specific (describe below) <input type="checkbox"/> Special Purpose (describe below) <i>Equip. transportation</i>	<input checked="" type="checkbox"/> Employee Transportation <input type="checkbox"/> Client Transportation <input type="checkbox"/> Task Specific (describe below) <input type="checkbox"/> Special Purpose (describe below) <i>Equip. transportation</i>
Reason for Replacement	<input type="checkbox"/> Routine (Over 120,000 miles) <input type="checkbox"/> Other (Complete Section E)	Actual Disposal Date/Miles
Estimated Disposal Date	Summer FY 10	

SECTION B: SIGNATURES	
Requesting Person	Department Head <i>Russell W. Robinson</i> <input checked="" type="checkbox"/> Approved
Date: _____	Date: _____ <input type="checkbox"/> Denied

SECTION C: ADDITIONAL JUSTIFICATION FOR CERTAIN VEHICLE TYPES

This section must be completed if a SUV, four wheel drive vehicle, full size sedan or a police equipped vehicle is requested.
Special Requirements: Check all that apply and then describe in detail in the space provided below.

- Regularly driven off road or on unimproved roads
- Equipment/Tool Storage
- Passenger Occupancy
- Utility Features
- Pursuit Vehicle
- Other

Please describe the specific need here. Include justification describing why a lower cost; more fuel-efficient vehicle is not sufficient to meet agency needs.

this truck is used to plow snow, haul muni proo equipment.
pull wood chipper equip trailers.

SECTION D: ADDITIONAL JUSTIFICATION FOR FLEET EXPANSION

This section must be completed for expansion vehicle requests.

Reason for Expansion: Check all that apply and then describe in detail in the space provided below:

- New Statutory Requirements
- Fleet Increase Approved by Town Manager
- Program Changes
- Other

Describe the need to expand the fleet here.

SECTION E: REASON FOR REPLACEMENT

"Other" was selected as the reason for replacement on page one, please provide additional information below.

10 year old truck has severe rust has been
on fire under hood transmission is tired Engine
uses oil

Section F: Projected activity (per vehicle)

	Within Acton	Outside of Acton	Total
miles/year	7200		
hours/year			

Revision Date: May 19, 2008

Section G: Incremental cost for vehicle purchase (per vehicle)

Existing annual vehicle cost: \$	New annual vehicle cost: (purchase price times 12.33% plus cost of fuel and maintenance) \$	Incremental cost: (baseline - new) \$	
-------------------------------------	---	---	--

Section H: Vehicle Vendor Information

Contact		Address	
Title		City	State
Company		Zip Code	
E-Mail		Phone	F A X

Section I: Existing Vehicle Information

Fuel Type:	<input type="checkbox"/> CNG	<input type="checkbox"/> Diesel	<input type="checkbox"/> LNG	<input type="checkbox"/> LPG	<input checked="" type="checkbox"/> Gasoline	<input type="checkbox"/> Other
Fuel Usage in miles per gallon:						

Section J: New Vehicle Information

Fuel Type:	<input type="checkbox"/> CNG	<input type="checkbox"/> Diesel	<input type="checkbox"/> LNG	<input type="checkbox"/> LPG	<input checked="" type="checkbox"/> Gasoline	<input type="checkbox"/> E85	<input type="checkbox"/> Other
(if utilizing more than one fuel type, indicate which fuels and percentage operating time for each)							
Emissions per vehicle (please indicate units-g/bhp-hr, or g/gallon)							
NOx		VOC		PM2.5			
Emissions certified by:							
<input type="checkbox"/> EPA <input type="checkbox"/> Alternate certification (specify and attach documentation)							
Vehicle use: <input type="checkbox"/> On Road <input type="checkbox"/> Off-road Type of Equipment:							
Fuel Usage _____mpg							
(use the City rating at http://www.epa.gov/greenvehicles/index.do?sessionId=8230b13c37d76d2451b2)							

See attachment

ADDITIONAL REQUIRED INFORMATION

Purchase/Lease Information:

Anticipated Cost: _____ Lease period: _____ months/years

Anticipated Annual Mileage: _____

see attachment

Maximum Annual Mileage (leased vehicles): _____

Cost in Excess of Allowed Annual Mileage (leased vehicles): _____

If You Require This Vehicle for Commuting, Please Detail One-Way Mileage between Employee's Home and Office, Address of Overnight Parking, And the Need for This Vehicle for Commuting Purposes

If You Will Not be Purchasing an AFV, Please Attach Documentation to Explain Why You Will Not be Able to Purchase an AFV.

Over 8500 GVW



APPENDIX A: VEHICLE PURCHASE REQUEST FORM page 1 of 2

Section 1: Existing Vehicle Information - to be completed by Requestor

Make <i>Ford</i>	Model <i>DUMP F-350</i>	Year <i>1999</i>	Car/ Truck # <i>109</i>	License Plate # <i>M60724</i>
Fuel Type: <input type="checkbox"/> CNG <input type="checkbox"/> Diesel <input type="checkbox"/> LNG <input type="checkbox"/> LPG <input checked="" type="checkbox"/> Gasoline <input type="checkbox"/> Other				

Section 2: Existing Vehicle Condition - to be completed by the Town's Mechanics

GVWR	<i>11200</i>	Fuel Use (mi/gal):
* ENGINE: type	4 cyl	6cyl
		8cyl <input checked="" type="checkbox"/>
* TRANSMISSION TYPE:	Manual	Automatic <input checked="" type="checkbox"/>

Condition of Vehicle - to be completed by the Town's Mechanics

	Excellent	Good	Fair	Poor	Date last Repaired
*Engine				<input checked="" type="checkbox"/>	
*Transmission				<input checked="" type="checkbox"/>	<i>41650 miles Rebuilt</i>
*Frame				<input checked="" type="checkbox"/>	
*Differential			<input checked="" type="checkbox"/>		
*Brakes (Power?)			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
*Steering (Power?)			<input checked="" type="checkbox"/>		
*Suspension			<input checked="" type="checkbox"/>		
*Clutch			<i>NA</i>		<i>NA</i>
*Body					
*Radiator				<input checked="" type="checkbox"/>	
*Battery			<input checked="" type="checkbox"/>		
*Air Conditioner		<input checked="" type="checkbox"/>			
*Heater		<input checked="" type="checkbox"/>			
*Lights		<input checked="" type="checkbox"/>			
*Upholstery			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
*Paint			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
*Glass			<input checked="" type="checkbox"/>		
*Jack		<input checked="" type="checkbox"/>			
*Radio AM/FM		<input checked="" type="checkbox"/>			
*Radio -2-way		<input checked="" type="checkbox"/>			
*TIRES:					
R FRONT			<input checked="" type="checkbox"/>		
L FRONT			<input checked="" type="checkbox"/>		
R REAR			<input checked="" type="checkbox"/>		
L REAR			<input checked="" type="checkbox"/>		
SPARE			<input checked="" type="checkbox"/>		



APPENDIX A: VEHICLE PURCHASE REQUEST FORM page 2 of 2

Mechanic's Narrative

Truck #109 has transmission problems. It was rebuilt in March 2005 and it will probably have to be rebuilt again. The engine has had problems with State emission tests and will need major work in order to pass the next inspection. In addition, the frame is rotted and the brakes need a major overhaul.

This truck is used for snow plowing and is heavily worked. Its condition makes it unreliable during the winter.

In my opinion, the expenses outweigh keeping the vehicle.

Charles Willott
Mechanic's Signature

10/28/08
Date

M-H-Q MUNICIPAL VEHICLES

Formerly A-M-I
**401 Elm Street
Marlborough, MA 01752**

October 30, 2008

Town of Acton
Highway Department

Attn : Russ Robinson

Please find below a quote for a **New Ford Truck** per a Commonwealth of Massachusetts, Cooperative Procurement Contract. The items offered under this program have been competitively bid and will be subsequently awarded under Massachusetts General Laws, Chapter 7, Section 22B and are available to Political Subdivisions.

2009 Ford F-350 chassis per contract spec. #09-19	\$19,095.00
Four wheel drive	4,795.00
All terrain tires	195.00
Cab steps	325.00
6.8 liter V/10 gasoline engine	no charge
5 year or 60,000 mile power train warranty	no charge
141" wheel base – 60" cab to axle	no charge
Automatic transmission	no charge
17,950 lb. GVW	no charge
Color : cab (GG) Forest Green – body black	no charge
Vinyl bench seat	no charge
Air conditioning	no charge
AM/FM stereo	no charge
9 ½' platform stake body	4,495.00
Steel front bulkhead	585.00
Combination pintle/ball hitch	450.00
Whelen DOT 102E (3) LED light system	1,295.00
9' Fisher Minute Mount snow plow	5,195.00
9' Fisher cutting edge	included
9' Fisher snow foil	349.00
Total Contract Price	\$36,779.00

Larry Christensen
Fleet Manager



Ford Motor Credit Company

The American Road
P.O. Box 1739
Dearborn, Michigan 48121-1739

October 31, 2008

Russell Robinson
Town of Acton

Larry Christensen
MHQ Municipal Headquarters

Re: Ford Municipal Finance Program - Quotation for **Town of Acton, MA - Bid #59302**

Please review the following information. Rates and payment factors are applicable for total amounts funded from \$25,000 - \$74,999.

The quote is good until 01/31/2009. Vehicle delivery must take place and all required documentation and payments must be received by Ford Credit by the good thru date. After, 01/31/2009, rates and payments are subject to change.

A Documentation Fee of \$425 is required per transaction – not per unit, that can be paid at delivery or funded over the term (included below).

This finance proposal applies to the following options:

(1) - 2009 Ford F350 at \$36,779.00

<u>Total Amount Funded</u>	<u>No of Pymts</u>	<u>Payment Timing</u>	<u>Rate</u>	<u>Factor</u>	<u>Payment Amount</u>
\$37,204.00	3	Annual in Advance	6.80	0.355487	\$13,225.54
\$37,204.00	4	Annual in Advance	6.95	0.275732	\$10,258.33

***To calculate Payment Amount, multiply Total Amount Funded by the Payment Factor**

The Ford Municipal lease-purchase finance plan requires no security deposit, has no prepayment penalty, no mileage penalty, nor hidden fees. The program is non-recourse to the dealer, the same as cash sale from the dealer to the municipal customer. At inception, the new equipment title/registration indicates the municipality as Registered Owner, and designates Ford Motor Credit Company, P.O. Box 1739, Dearborn, MI 48121-1739, as First Lienholder. At term end, the municipality buys the equipment \$1. The municipality, as Owner of record, is eligible for the Ford Government Price Concessions or other discounts, to reduce product cost.

Please note: Ford Credit's financing is subject to:

- 1) ***Review and approval of the Municipality's most recent audited financial statement, if requested.***
- 2) ***Mutually acceptable documentation.***

Sample forms and documentation are available upon request.

If you need additional information, please call me at 1-800-241-4199, then Press 1. Thank you for your interest in the Ford Municipal Finance Plan.

Sincerely,
Joe Vecchio
Joe Vecchio
Marketing Coordinator

HERTZ EQUIPMENT TRUCKS FOR RENT 2008-2009

IC #	Size	Typical Makes/Models	WEEKLY	MONTHLY
PICK UPS				
659 -01	ALL	F150 SUPERCAB 4WD GAS	\$580	\$1,655
659 -02	ALL	F250 CREWCAB 4WD GAS	\$690	\$1,975
658 -01	ALL	F350 CREWCAB 4WD DSL	\$750	\$2,115
Box Dump - Diesel				
656-07	3 yd	Ford F350-450 DSL REG CAB	\$495	\$1,805
656-09	5-6 yd	Ford F750 DSL REG CAB	\$815	\$2,555
656-09	5-6 yd	Ford F750 DSL CREW CAB	\$990	\$2,680
656-014	12-14 YD	INT 9000 DSL REG CAB	\$1,870	\$5,365

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METROWEST MECHANICAL

METROWEST MECHANICAL CO., INC. / 2 EASTERN RD. ACTON, MA 01720

Mr. Dean Charter
Director of Municipal Properties
Town Hall
Acton, MA 01720

Re: Fire Department Heating Plant Upgrades

Dear Dean,

We have prepared the budget outlined below as a guideline for upgrading the South and West Acton Fire station heating systems which are fairly typical in size and scope.

Item		Allowance
Abatement	\$	9,000.00
Demolition	\$	11,000.00
Central Plant Upgrade Includes:	\$	56,000.00
Boilers		
Pumps		
Hydronic Specialties		
Boiler Room Piping		
Breeching or Venting		
Labor for Central plant installation		
Insulation of Central Plant Piping		
General Conditions		
Heating Distribution Includes:	\$	57,000.00
Unit Heaters		
Fan Coil Units		
Radiation		
Piping		
Insulation of Distribution System	\$	16,000.00
Power Wiring	\$	19,000.00
Control System Complete	\$	28,000.00
		<hr/>
Base Cost	\$	196,000.00
Design and CM	\$	30,000.00
		<hr/>
Current Budget	\$	226,000.00
One Year Escalation Cost @ 8%	\$	18,080.00
		<hr/>
Budget	\$	244,080.00

Thank you for the opportunity to be of service.

METROWEST MECHANICAL

Paul Clapp

Paul D. Clapp
President

Capital Improvement Program Proposal – Detail

Department Name	Municipal Properties	Project	DPW internal renovations design	
		Fiscal Year	2010	
Department Head	Dean Charter	Cost	\$33,000	
		Priority	7	of 10

1. Description

Preliminary design and cost budgeting for internal renovations to the Public Works Facility, including locker rooms, restrooms, storage areas, office areas, and workshops

2. Useful Life 20 years

3. Purpose (Please 'X' one of the Boxes and Describe, if Applicable)

- | | | |
|--------------------------------|----------|---|
| Schedule Replacement | # | Increase Personnel Efficiency |
| New or Expanded Service | # | Replace Obsolete or Unsafe Equipment |
| Other (Please Explain) | | (Explain Disposal of Old Equipment) |

4. Justification

Existing building was built in late 1960s. Crew size and duties have changed considerably. Locker room needs to be expanded, and facilities for female workers added. Plumbing, electrical, and mechanical systems are all beyond expected service life and need to be replaced.

5. How Was this Project's Priority Determined?

Condition of existing systems and inadequacy of facilities

6. Estimated Cost **\$33,000 (design only) construction cost TBD**
Less Trade-In (If Applicable)
Net Cost

7. Are Non-Town Revenues Available to Reduce Cost?
 NO

8. If this Project is Delayed, What will be the Effect on your Department?

Eventual piecemeal (high) replacement cost, possible civil rights lawsuit due to unequal facilities for female employees.

9. Please Describe the Effect of this Project on your Operating Budget.

<u>Personnel Budget no impact</u>	<u>Expense Budget no impact</u>
Increase	Increase
Decrease	Decrease

10. Attachments, if Applicable.

August 15, 2008

Acton Town Hall
472 Main Street
Acton, MA 01720
ATTN: Dean Charter

~PROPOSAL~

Project: Town Hall Window Restoration and Storm Windows

A visit was made to the town hall to inspect the windows on Monday, July 21, 2008 with Dean Charter. This proposal reflects conditions found during that time. There are six different sized windows and several arrangements. The sash are in fair to good condition considering their age, and exhibit failed paint and putty. Some sash will require wood joint and/or muntin repair or replacement. All but two openings are of a double hung configuration with a rope and pulley balance system. The existing hardware is not original to the window. All sash will benefit from a full restoration.

Restoration Process:

- Number, remove and transport sash, pulleys and stops to Heartwood's shop
- Remove all hardware, glass and paint finishes from sash and stops to bare wood
- Repair and/or replace damaged wood components (some sash will require splicing or replacement of entire members)
- Sand and prep surfaces and clean glass
- Supply new mahogany parting beads
- Apply oil conditioner to all wood surfaces
- Reinstall glass with oil based putty. This proposal reflects flat glass replacement of broken panes unless otherwise specified.
- Apply one coat of oil based Fine Paints of Europe undercoat primer
- Apply two coats of oil based Fine Paints of Europe finish paint
- Transport and install sash, parting beads, stops, hardware, weather stripping and new rope
- This proposal reflects work to be done on the sash and stops only. Sill, trim and jamb to be scraped and painted by others.

Window Descriptions:

12	40" x 96"	6 over 6	Double hung
14	40" x 76"	6 over 6	Double hung
1	40" x 108"	6 over 6	Double hung
2	28" x 108"	4 over 4	2 sash, no balance system
1	40" x 80"	4 over 6 over 6	Double hung w/ round top transom
2	22" x 60"	4 over 4	Round top double hung

Pricing:

12	6 over 6	Double hung/each	\$ 2,070	\$ 24,840
14	6 over 6	Double hung/each	1,920	26,880
1	6 over 6	Double hung		2,270
2	4 over 4	Double fixed/each	1,470	2,940
1	4/6/6	Round top		1,940
2	4 over 4	Round top	1,190	<u>2,380</u>
			TOTAL	\$ 61,250

Cost of newly manufactured mouth blown glass is \$20 per square foot plus shipping. Above pricing includes flat glass replacement.

Storm Windows:

Purchase and install SpencerWorks All-Season Storm windows. Storm windows include two glass panels and one screen panel. Rectangle configurations will be hung using traditional hanging hardware to allow for removal and reinstallation. Round top panels to be hung with side application hardware. One coat of factory applied Fine Paints of Europe primer and finish paint is included. Price includes one week rental of boom list for installation.

32	All-season storms, installed	TOTAL	\$ 30,699
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Capital Improvement Program Proposal – Detail

Department Name	Municipal Properties	Project	Office Space Needs Study	
		Fiscal Year	2010	
Department Head	Dean Charter	Cost	\$50,000	
		Priority	9	of 10

1. Description

Perform Office Space Needs Study of available work spaces, including Town Hall, 468 Main Street, 17 Woodbury Lane, Morrison Farm, and Windsor Building. The study would identify the possibilities for realignment of Town Hall offices, and examine the feasibility and cost of moving some operations into existing vacant or lightly used buildings.

2. Useful Life 20 years

3. Purpose (Please 'X' one of the Boxes and Describe, if Applicable)

<p><input type="checkbox"/> Schedule Replacement</p> <p><input type="checkbox"/> New or Expanded Service</p> <p><input type="checkbox"/> Other (Please Explain)</p>	<p><input type="checkbox"/> Increase Personnel Efficiency</p> <p><input type="checkbox"/> Replace Obsolete or Unsafe Equipment (Explain Disposal of Old Equipment)</p>
--	--

4. Justification

The last time this kind of a study was done was in 1984, in preparation for the expansion of Town Hall. There have been numerous organizational changes and staff added since that time (HR, Recreation, IT, Sewer, etc.) This would be a comprehensive look at office arrangement and reuse of lightly used or vacant buildings for office purposes.

5. How Was this Project's Priority Determined?

6. Estimated Cost **\$50,000**
Less Trade-In (If Applicable)
Net Cost

7. Are Non-Town Revenues Available to Reduce Cost?
 NO

8. If this Project is Delayed, What will be the Effect on your Department?

Delay will have little impact on Municipal Properties, but we will continue to maintain vacant buildings and have overcrowded, inefficient offices in Town Hall.

9. Please Describe the Effect of this Project on your Operating Budget.

<u>Personnel Budget</u>	<u>Expense Budget</u>
Increase #	Increase #
Decrease	Decrease

10. Attachments, if Applicable.

Capital Improvement Program Proposal – Detail

Department Name	Municipal Properties	Project	Town Hall internal improvements	
		Fiscal Year	2010	
Department Head	Dean Charter	Cost	\$50,000	
		Priority	10	of
				10

1. Description

Create employee shower room on second floor of Town Hall

2. Useful Life 40 years

3. Purpose (Please 'X' one of the Boxes and Describe, if Applicable)

<p>Schedule Replacement</p> <p># New or Expanded Service</p> <p>Other (Please Explain)</p>	<p>Increase Personnel Efficiency</p> <p>Replace Obsolete or Unsafe Equipment (Explain Disposal of Old Equipment)</p>
---	--

4. Justification

Many employees would like to exercise during lunch breaks, and this would facilitate that activity. Fit and health employees are more productive and have lower long term health care costs

5. How Was this Project's Priority Determined?

Desire to improve the health and fitness of Town employees

6. Estimated Cost **\$50,000 (estimate)**

Less Trade-In (If Applicable)

Net Cost

7. Are Non-Town Revenues Available to Reduce Cost?

NO

8. If this Project is Delayed, What will be the Effect on your Department?

No impact on Municipal Properties, as most of those employees would not use the shower room.

9. Please Describe the Effect of this Project on your Operating Budget.

Personnel Budget

Increase #
Decrease

Expense Budget

Increase #
Decrease

10. Attachments, if Applicable.

Capital Improvement Program Proposal – Detail

Department Name	Natural Resources	Project	Recreation Parking Lots	
		Fiscal Year	2010, 2011	
Department Head	Tom Tidman	Cost		
		Priority	1	of 5

1. Description

- A) NARA – construct 75-car (gravel) parking lot attached to the existing NARA parking lot off Quarry Road in 2010.
- B) Design & construct a 75-car (gravel) parking lot at the School Street fields in 2011.
- C) Design & construct a 75-car (paved) parking lot at the Morrison Farm in 2011.

2. Useful Life

3. Purpose (Please 'X' one of the Boxes and Describe, if Applicable)

- | | |
|--|--|
| <input type="checkbox"/> <i>Schedule Replacement</i> | <input type="checkbox"/> <i>Increase Personnel Efficiency</i> |
| <input checked="" type="checkbox"/> New or Expanded Service | <input type="checkbox"/> <i>Replace Obsolete or Unsafe Equipment</i> |
| <input type="checkbox"/> <i>Other (Please Explain)</i> | <input type="checkbox"/> <i>(Explain Disposal of Old Equipment)</i> |

4. Justification

- A) NARA – existing demand for additional parking.
- B) Field development at School Street will require additional (off street parking)
- C) Recreation development at the Morrison Farm will require on-site parking.

5. How Was this Project's Priority Determined?

- A) NARA – experience and public demand, safety concerns.
- B) School Street – no existing off-street parking.
- C) Morrison Farm – long term plan for property development (Morrison Farm Recommendation Reuse Report 2007)

6. Estimated Cost

Less Trade-In (If Applicable) \$200,000
Net Cost

7. Are Non-Town Revenues Available to Reduce Cost?

8. If this Project is Delayed, What will be the Effect on your Department?

Continued issues at NARA Park.

9. Please Describe the Effect of this Project on your Operating Budget.

<u>Personnel Budget</u>	<u>Expense Budget</u>
Increase	Increase <input checked="" type="checkbox"/>
Decrease	Decrease

10. Attachments, if Applicable.

Capital Improvement Program Proposal – Detail

Department Name	Natural Resources/Recreation	Project Fiscal Year	New Recreation Personnel 2010		
Department Head	Tom Tidman	Cost	TBD		
		Priority	2	of	5

1. Description

Create a new full-time position in the Recreation Department as an assistant to the Director. This is a benefited position with job duties to include: Liaison to A/B youth sports leagues, responsible for field scheduling, direct interface with league directors regarding field improvements, as part of the 'greening of Acton' initiative. New hire will have a working knowledge of organic field maintenance techniques; will spend some of his or her time working with the Natural Resources crew implementing improved organic turf management methods. This person will work directly with Recreation office staff assisting with facility and event scheduling.

2. Useful Life

3. Purpose (Please 'X' one of the Boxes and Describe, if Applicable)

- | | |
|--|--|
| <input type="checkbox"/> Schedule Replacement | <input checked="" type="checkbox"/> Increase Personnel Efficiency |
| <input checked="" type="checkbox"/> New or Expanded Service | <input type="checkbox"/> Replace Obsolete or Unsafe Equipment (Explain Disposal of Old Equipment) |
| <input type="checkbox"/> Other (Please Explain) | |

4. Justification

As the Recreation Department assumes greater responsibility for the organic treatment of our athletic fields (the greening of Acton initiative), more trained man-power will be required. Acton/Boxborough youth athletics has greater than 3500 participants during each of their seasons, these athletes are participating on 9 municipal turf fields in Acton with a total area of over 40 acres. NARA Picnic and beach facilities have experienced expanded use over the past year and the introduction of the permanent Picnic Pavilion will increase the administrative demands of overseeing NARA's scheduling.

5. How Was this Project's Priority Determined?

Demand for improvements to our existing turf fields and administrative workload. We've stretched our existing Recreation staff of two people to the breaking point!

6. Estimated Cost

Less Trade-In (If Applicable)
Net Cost

7. Are Non-Town Revenues Available to Reduce Cost?

8. If this Project is Delayed, What will be the Effect on your Department?

Continued complaints from leagues, delay in initiating the 'greening of Acton' directive.

9. Please Describe the Effect of this Project on your Operating Budget.

<u>Personnel Budget</u>	<u>Expense Budget</u>
Increase <input checked="" type="checkbox"/>	Increase <input checked="" type="checkbox"/>
Decrease	Decrease
No Change	No Change

10. Attachments, if Applicable.

Capital Improvement Program Proposal – Detail

Department Name Natural Resources/Recreation

Project "Goward Field"
Fiscal Year FY10

Department Head Tom Tidman

Cost \$200,000.00
Priority 3 of 5

1. Description

The Goward Field Playground structure is outdated and becoming unsafe. The maintenance of this playground has been continual and complaints steady on the condition of the equipment. This has been traditionally a very heavily used playground (located behind the Memorial Library), however, some residents report that they have been going out of town to use other facilities because of the playground's condition.

2. Useful Life 15-20 Years

3. Purpose (Please 'X' one of the Boxes and Describe, if Applicable)

Schedule Replacement

Increase Personnel Efficiency

New or Expanded Service

X *Replace Obsolete or Unsafe Equipment
(Explain Disposal of Old Equipment)*

Other (Please Explain)

Disposal of old playground will be dismantled and discarded or recycled if possible.

4. Justification

Wood surface is splintering and is probably pressure treated on stand alone structures. A safe playground geared toward pre-school aged children is needed. Handicapped accessibility will be addressed.

5. How Was this Project's Priority Determined?

Safety and citizens concerns.
Increased maintenance cost
Parts replacement difficulty and becoming unavailable

6. Estimated Cost \$200,000.00

Less Trade-In (If Applicable)

Net Cost \$200,000.00

7. Are Non-Town Revenues Available to Reduce Cost?

Resident monetary support will be solicited for the project through the Acton Family Network (AFN), a community organization for young families. A grant request to Boundless Playgrounds was recently turned down, but other grant opportunities continue to be explored.

8. If this Project is Delayed, What will be the Effect on your Department?

More citizen concerns and increase potential injury to children.

9. Please Describe the Effect of this Project on your Operating Budget.

<u>Personnel Budget</u>	<u>Expense Budget</u>
Increase	Increase
Decrease	Decrease
X No Change	X No Change

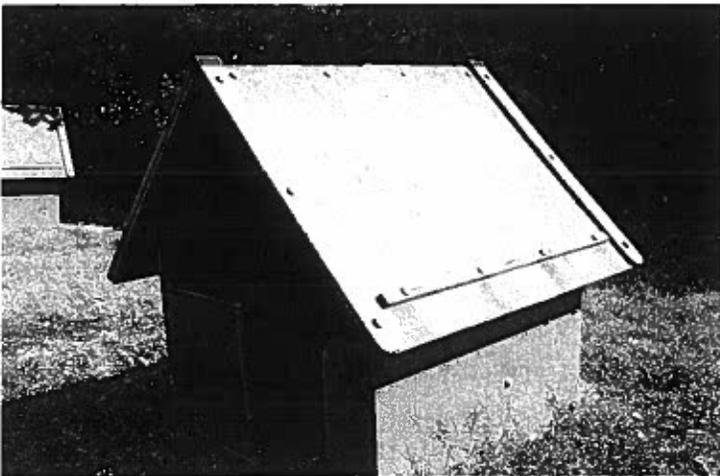
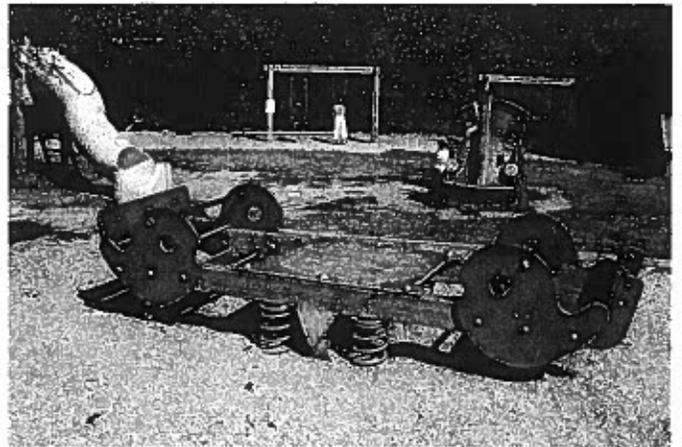
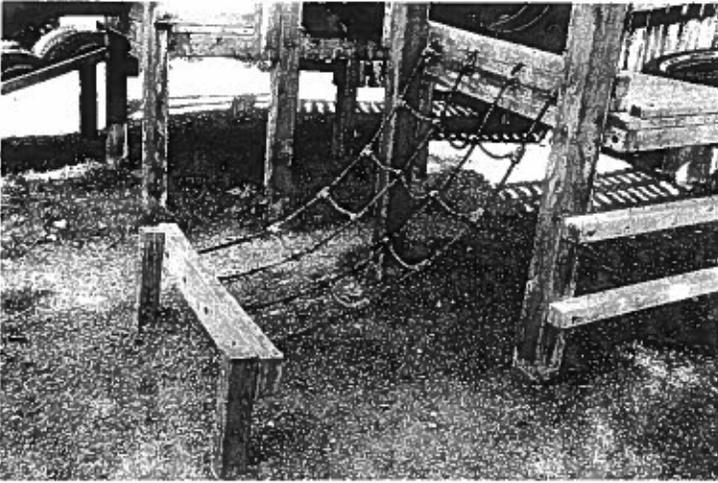
10. Attachments, if Applicable.

Playground Photos and Boundless Playground grant application attached.

Goward Playground (1 of 2)



Goward Playground (2 of 2)



The Town of Acton Recreation Commission and Recreation Department are pleased to have this opportunity to present our plans for a Boundless Playground installation in Acton, Massachusetts.

The playground site we have chosen is in the heart of Acton, surrounded by many of our most historic buildings. It is also adjacent to our town hall, as well as our main library, which has roughly 230,000 visitors passing through the doors each year. The location makes it geographically accessible to all of the members of our community but the existing structure, besides being run down and in dire need of replacement, lacks full physical accessibility. So, as we began planning for new equipment, we knew this was an opportunity to fill a crucial need: to provide a place where all children could play, without limitation.

The Town of Acton has a strong history of community involvement and we plan to draw and build on our existing network extensively as we work to complete this playground. The Recreation Department and Recreation Commission have an established relationship with the Acton Family Network, an organization founded in 1995, consisting of more than 200 Acton families. Our partnership with this group allows us to reach a large number of Acton families for input as well as for fundraising efforts. We have similar connections with the town's local neighborhood groups, providing even further assurance that Acton's citizens are informed and excited about the project, that they have the opportunity to provide input into the planning stages, and that they are able to contribute financially to the effort. For the purposes of this project, these relationships will be further formalized through surveys and ongoing communication with organization leaders. Along with more traditional fundraising efforts, our project activities will involve the organizations already mentioned, along with community groups and local schools, to include Acton residents of all ages. For example:

- Solicitation of youth volunteers from Acton's very active program for preteens and teenagers, Danny's Place Youth Center, which works to promote the positive development of the community youth;
- An "Acton Playground" t-shirt design contest for high school students, with the winning design printed on shirts to be sold, with the profits to go to the playground fund;
- Ongoing communication with Acton schools at all levels to encourage teachers to incorporate the ideas of community building and the value of full accessibility into lesson plans, with the goal of giving local children true ownership of their new playground;
- Solicitation of volunteers from Acton's Garden Club to assist with landscaping.
- Solicitation of in-kind and cash donations from local businesses, including items that can be used directly for the playground, as well as others that can be included in fundraising auctions and/or sales;
- Communication with Acton residents via the playground's most important "neighbor," Acton Memorial Library.
- Regular updates and fundraising efforts with the Acton area community through information tables at summer concerts, a project website, and newspaper articles.

We recognize that this playground is about much more than Acton's children and that our community in this case extends well beyond town limits. Currently, nearby children who need wheelchair accessibility to fully enjoy a playground must travel an hour or more to do so, and this is simply not acceptable. It is our intention to make our new playground a welcoming place to children of all ages and all abilities from every surrounding community, and with Acton's central location in Boston's Metrowest area and proximity to both I-95/Route 128 and Route 495 (Boston's major arteries), this could literally mean tens of thousands of children will benefit. To that end, we have initiated partnerships and ongoing communication with family organizations, early intervention programs, and special education parent advisory committees serving more than 20 adjacent and nearby towns, all to ensure that the voices of as many families as possible are heard loud and clear as we move forward with our plans. (We would be pleased to provide you with a complete list of our partners).

This project will be overseen by Acton's Recreation Department, together with our Recreation Commission. Acton's Recreation Director, Catherine Fochtman, has extensive experience in leading successful playground development efforts. She is awaiting approval of a Community Preservation Act grant for creating a new accessible playground in the West Acton community subdivision of Indian Village. Her commitment to playground development includes successful completion of a recent Certified Playground Safety Inspector course. Her dedication to addressing community needs through project management includes leadership roles in the Acton Garden Club – past president and Friends of the Acton Arboretum – current president. She initiated and successfully completed the donation of a landscape project in 2004 by the Acton Garden Club to plant foundation shrubs at the Main Street entrance of the Acton Memorial Library. She is currently engaged in supporting the effort to construct a formal garden and seating area at the rear entrance of the Acton Memorial Library in memory of prominent Acton citizen, Charlotte Sagoff. At the Acton Arboretum, she has contributed to the creation of a CPA grant funded Universal Trail, a handicapped accessible trail for the physically and visually impaired. She will lead the spring installation of an accessible fragrance garden, the destination of the Universal Trail. Recreation Commissioner Karen Jarsky will also play a lead role in the project. She holds a PhD in Education and has extensive experience leading community projects that bring together diverse constituents toward common goals. Moreover, her background in research will help us ensure that our efforts to gather input from community members will be systematic and thorough, and her experience in the classroom will be instrumental as we involve Acton's schools in planning and fundraising efforts.

The planning committee will also include individuals from the broader Acton and Metrowest communities: The Commission on Disabilities chairman Jean Nigro has pledged support. Former chairman Lisa Franklin has collaborated with the Recreation Department in conducting site visits of Acton's playgrounds to assess handicapped accessibility deficiencies. Mr. Martin Martini, the president of the Acton Area Early Intervention program, Minuteman ARC, has pledged support at both the organizational and personal level, providing us a direct link to many of the families our playground will serve. Acton-Boxborough Special Education Parent Advisory Council president Nancy Sherburne has been a tireless advocate for the parents of children with special needs, and she has pledged the valuable support of her organization, representing the families with accessibility needs in our community. Finally, countless citizens have expressed interest in developing this playground site, and many have indicated they wish to be involved in the planning. The planning committee will include diverse parent voices, with special attention given

to ensuring that parents of children who will benefit most from the accessibility of the playground are included. (Here, again, we will draw on the partnerships we have already established.)

In sum, our **library playground** will be a community undertaking in the broadest and truest sense of the word. When construction is complete, we anticipate an incredible celebration, with citizens from Acton and every nearby town rejoicing in the fact that all of our children will be able to play the way they deserve to. And, as importantly, we anticipate the pride that comes from knowing we will have accomplished it together.



Project Acton Memorial Library

1. Time in discussion or development:		6-12
2. Begun organizing a planning committee:		yes
2a. Committee/Organization name:	Recreation Commission Playground Subcommittee	
2b. Does it have a 501(c)(3) status or are you affiliated with an organization that does:	yes	
3. Secured a playground site:		yes
a. Address	486 Main Street Acton MA , 01720	
b. Site type:	Main Library grounds	
c. Open to public	yes	
Comments:		
d. Site/Playground location name:	Goward Field	
e. Site owner:	Town of Acton	
f. Is this playground project to be part of a master plan for the site:	yes	
Comments:	1990 Town of Acton Master Plan and the Town of Acton Open Space and Recreation Plan 2002- 2007	
g. Playground square footage:	15,000-25,000	
h. Existing play equipment on this site:	yes	
4. Total amount raised to date:		0
Amount from public funding:		0
5. Equipment manufacturer:		no
b. At this time, have you received any preliminary Boundless Playgrounds Certified Model layouts for your playground:		no
6. Construction month:		4
Construction year:		2009
7. Community description:		suburban
8. Willing to involve corporate sponsors:		yes
Specific need or request:		

- 9.** Receive playground equipment catalogs/information from our Playground Industry Partners? yes
- 10.** Share your project information with our Partners: yes
- 11.** In considering the update to the Town of Acton Open Space and Recreation Plan for 2008-2012, the Recreation Commission has named as a top priority, "Playgrounds made safe, up-to-date and accessible."
- Playground project inspiration:
- 12.** Enlisted the assistance of business or community organizations yes
- We have made connections with organizations representing 24 communities in total. Acton-Boxborough Parent Advisory Council (Acton, Boxborough); Town of Acton Commission on Disabilities (Acton); Acton Family Network (Acton); Forest Glen Association (Acton-West Acton); Indian Village Subdivision (Acton-West Acton); Acton-Boxborough Regional High School (Acton, Boxborough); Acton Memorial Library (Acton); Nashoba Special Education Parents Advisory Council of the Nashoba Regional School District (Stow, Lancaster, Bolton); Kids Play (Bedford); Carlisle Parents Connection (Carlisle); Harvard Family Association (Harvard); Maynard Family Association (Maynard); Stow Area Parents Network (Stow area); Minuteman ARC Early Intervention (Acton, Bedford, Boxborough, Carlisle, Concord, Lincoln, Littleton, Maynard and Stow); Thom Anne Sullivan Center EIP (Billerica, Chelmsford, Dracut, Dunstable, Lowell, Tewksbury, Tyngsboro and Westford); Thom Marlboro Area EI Program (Hudson, Marlborough, Northborough, Southborough and Westborough). We are awaiting support confirmation from 20 other organizations that represent Metrowest regional Early Intervention programs, regional Family Networks and neighborhood and school organizations.
- 13.** Projected total budget for playground: 200000
- 14.** Portion allocated for playground equipment, safety surfacing, and installation of equipment and surfacing: 170000
- 15.** Required bid process: yes
- 16.** Estimated number of children who would be served by your playground: 7000
- 17.** Estimated median income of your community: Over_50,000

Key
a supporters:

18. Estimated total population of your community

10,001–25,000

19. Comments

The Town of Acton Recreation Commission and Recreation Department are completing the approval process this week at Acton's Town Meeting for a \$75,000 Community Preservation Act grant to construct a new handicapped accessible 65' x 65' playground at Elm Street Field in Acton. Our Acton Family Network and Indian Village Subdivision liason has pledged to raise \$10,000 in supporting funds for this more modest playground. Our successful experience in garnering support for this West Acton playground installation positions us ideally for our next endeavor - the creation of a new handicapped accessible playground in the heart of Acton, the Acton Memorial Library. We are ready to start the planning process for the Acton Memorial Library design and funding now that we are concluding the necessary funding and will soon begin the final deign, site preparation and installation process for our Elm Street project. We have made contact with GameTime representative Travis Armes regarding our intention to pursue this grant.

Print this Page

**MetroWest Area Grant
Application and Selection Process
Due Diligence Questions
ACTON**

- 1) Please describe the access and transportation accessibility of the site, i.e. how will people with disabilities gain access to the site and move about the site? Describe available parking and the route of travel to and from the playground site, i.e. the number of handicapped parking spaces, the distance from parking lot, pathway material, slope, etc.

The playground is adjacent to the Acton Memorial Library's parking lot. Consideration will be given to converting three parking spaces nearest to the playground to handicapped parking spaces, two for cars, one as a transition area between the handicapped spaces. There are currently two handicapped spaces with a transition space located closer to the front entry of the library. Pathway material includes a concrete walkway along the parking lot perimeter, connecting the playground to the entrance to the library. Within the current playground, asphalt paving leads to the playground structures.

- 2) The MetroWest Grant states that "sites should have reasonable public access": What are the hours your playground can be open to the public? Is it near any forms of Mass Transit? If your site cannot be completely open to the public, then briefly describe who will be allowed access and when.

The playground is open for public access from dawn until dusk. Children accessing the library are often taken to the playground during library hours, which are currently Monday-Thursday: 9am-9pm; Friday: 9am-5pm; Saturday: 9am-12pm; Sunday: Closed. Library hours may be adjusted during the summer. Acton has a train stop in South Acton on the Fitchburg line. A community bus shuttle which would likely travel north and south on Route 27/Main Street (which connects the MBTA station and the library) is under serious consideration for funding by the Town in the near future.

- 3) What site prep will be necessary and do you know the approximate costs involved? What is the approximate square footage of your site?

Reshaping of the surfaces needs further study to determine the cost. While the current playground has some handicapped accessible features, such as a wooden ramp to the central structure, the site will require regrading to meet accessibility guidelines, particularly for pathways around and through the playground. The existing playground is occupying a space roughly 5,650 square feet in size. The Goward field area is recorded as 1.69 acres in size. We are clarifying the actual square footage allocated to the playground with the Town Engineering Dept.

- 4) Our hope is that this grant will provide you with a substantial portion of your Equipment, Surfacing, and Installation budget: Can you tell us what resources you plan on using to obtain the balance of your total budget needed for other aspects of the playground (See Exhibit 2, items 1-4 in RFP).

We anticipate minimizing our costs by having the sitework performed and materials supplied in-house by Town departments. The site analysis and technical drawings will be created by the Town of Acton Engineering Department. Site work and base material installation for walkways and safety surfacing will be conducted by the Town of Acton Highway Department. Materials will be supplied by the Town via a CPA grant, with the exception of poured rubberized surfaces or loose fill playground surfacing materials, to be provided by the playground manufacturer. Additional amenities will be obtained by donation from community supporters. It is anticipated that local businesses will step forward with donations, as they have for recent Acton projects such as the T.J. O'Grady Skate Park. In the past, Lazaro Paving Corp. donated paving, the Acton Water District donated water fountains, local contractor Bentley Builders donated and constructed a gazebo with a concrete pad, Kennedy Nursery donated trees and shrubs.

- 5) We received your estimated budget and ESI figures – Can you provide additional details as to how you arrived at these figures?

The estimated total budget is \$200,000. \$125,000 covers equipment, surfacing and installation. \$60,000 will be obtained by CPA funding for site preparation materials and contractual services needed for landscaping (retaining walls, ramps, etc.). \$15,000 will be raised in cash and in-kind donations for playground amenities.

- 6) The grant asks that you complete your playground project by June 2009. Please provide us with a preliminary timeline of your project milestones - Ground Breaking, Equipment Order, and Grand Opening.

Work Plan: Estimate 60 days planning, 30 day installation	Estimated Date
Phase I – Playground Vendor Selection	
<i>Recreation Dept</i> Write Bid document, Advertise, Select vendor(s)	July 2007
Phase II – Ground Breaking	
<i>Natural Resources Dept</i> Demolition , 2 man crew x 8 hrs Existing Playground structures removed and discarded, most not salvageable	September 2008
<i>Engineering Dept</i> Onsite Engineering , measurements, 2 men x 4 hrs Topography plan generated in house, 1 man x 4 hrs	September 2008
Playground Vendor Equipment Order Design Playground Utilizing base information, design playground to site specs	October 2008
<i>Highway Dept</i> Playground Excavation 4 man crew x 8 hrs, bobcat Unsuitable material loaded in dump truck, Hauled to Highway dept facility	October 2008
Playground Fill and Compact 4 man crew x 4 hrs, bobcat Bring in suitable base material, gravel, compact all material	October 2008

4 man crew x 4hrs Pour walkway, shape and level	
Phase III - Playground Installation	
<i>Natural Resources</i> , 2 man crew x 4 hrs Receive and inventory shipped equipment	November 2008
<i>Natural Resources</i> , 2 man crew x 8 hrs Pour concrete footings for playground structures	November 2008
<i>Playground Vendor/Community group</i> Installation of playground structures	November 2008
<i>Natural Resources</i> , 2 man crew x 8 hrs Playground surface , level and finish material	November 2008
<i>Natural Resources</i> , 2 man crew x 8 hrs Loaming and seeding grounds	April 2009
Grand Opening	May 2009

- 7) You provided us with a great list of organizations that are supporting your project – are there any in particular that you can tell us about that are offering you financial assistance, or in kind services that will help you with your goal?

We are very excited about our list of community partners because they represent a diverse range of voices. Their contributions to-date and for the short term are focused on planning, because that is our current stage in the process. In particular, our partnerships with Minuteman Arc and the Commission on Disabilities will ensure that our planning is sensitive to and responsive to the needs of all of the children our playground is intended to serve.

Another important collaborator will be our local youth center, Danny's Place. Because of the center's commitment to the area's young people – particularly with respect to community service and civic-mindedness – this playground project is a wonderful chance for them to be involved with a true community improvement from start to finish. At the same time, the Center and the young people who utilize it offer a valuable "guerilla marketing" opportunity, as our community's young people help us spread the word about the project.

As we move forward with our fundraising efforts, we plan to draw upon all of our partners' established connections to secure additional funds and in-kind services. Because they represent a geographical area larger than Acton, we anticipate a greater likelihood of securing in-kind donations in the way of both labor and materials. Acton area businesses have a long history of being supportive of recreational facilities – and in particular, playgrounds – and we have every reason to believe that support will carry through strongly to this project.

- 8) Please explain how you plan on getting your community involved in this process. For instance, will you have a Community Build, or Professional installation (either is acceptable)? Will you have the community involved in Fundraising, Design Exercises, Public Relations, etc...

Our most basic principle with respect to community involvement is "word of mouth." More precisely, we are operating under the assumption that communication is paramount, because we are certain that the more people who know about the project, the more excitement there will be, and, in turn, the more support (financial and otherwise) we will gain. This is one of the primary reasons behind our extensive partnership list, and it is also the reason for our commitment to ongoing public relations about the project. Sharing our goals and plans through

newspaper articles, website updates, information tables at public events, etc., will allow us to engage more individuals and groups in the process. Part of that process, of course, is our fundraising efforts, and the more visible the project remains, the easier it will be to secure donations of funds and in-kind services from businesses in the Acton area.

Because we are still somewhat early in the process, we have the opportunity to involve community members in numerous ways. First and foremost, we will involve Acton-area families as well as local experts in education, physical therapy, occupational therapy, and special needs children in planning the playground to ensure that the widest possible range of needs are met by the equipment and facility. Even community members without any personal expertise or interest in the accessibility of the playground have a stake in the project: As part of the property in the physical and symbolic heart of Acton, this playground will be a centerpiece of the community, a source of pride and joy.

We recognize that the benefits of this playground extend well beyond the finished product, and that they also include the very process of making it happen. There is already a strong sense of community and civic pride in Acton and the surrounding area, and bringing our citizens together to make this playground happen will allow us to tap into this resource and strengthen it even further. Through our work with local schools, for example, students from elementary school through high school will have the opportunity to learn about the value of access and community building. Adults in the Acton area – whether as individuals or as part of one of our partner organizations – will have the opportunity to participate in whatever capacity is most comfortable to them, from planning, public relations or fundraising, to installing the final landscaping. (While we have planned for a professional installation, we intend to rely heavily on community volunteers for non-structural work like landscaping and clean-up.)

- 9) Who will be responsible for the maintenance of the playground once it is complete?
The Town Of Acton Natural Resources Department will handle maintenance. The Recreation Department reports to the Natural Resources Director.

- 10) What plan would you put in place to assure that that the Community at large and the children best served by this playground will know of its opening?

Because ongoing communication is so central to our plans, it is our hope that by the time the playground is ready for children, everyone in the surrounding area will already be fully aware of it. That said, we recognize that it is still important to get the word out. In addition to press releases to local area newspapers, we will take advantage of community events for word-of-mouth advertising, as well as signs and banners throughout town (a common and effective advertising tactic in the area). Also, this is where our partnerships with area organizations (family organizations, early intervention offices, special education groups) will be especially helpful, as we will ask our partners to share the news with their members and clients through their regular newsletters, email bulletins, and scheduled events.

The fact that, through our partnerships, the playground will be so familiar to so many family organizations, early intervention programs, and other community groups means that communication will be ongoing, well beyond our “grand opening.” As new families move to the area, they will learn of the playground quickly and through local sources. Too often, important resources remain hidden because not enough people know about them. Our extensive partnership list ensures that in this case, that simply will not happen. The playground will be highly visible, well into the future.

- 11) Please give some thought to how you might recognize the Donor. Plaque, etc...

With previous playground projects, we have had success with selling engraved bricks that were then used to line the pathways to the facility. This allows smaller-scale donors to feel tangible ownership of the playground. We will also provide donors the opportunity to sponsor specific aspects of the playground, such as benches and landscaping, and we will then provide small plaques on or near these items to acknowledge the gifts. Finally, a larger plaque will list donors whose contributions (cash or in-kind) exceed a certain level.

Also, in keeping with our goal of involving the community in as many ways as possible and recognizing that not everyone who wants to help can donate money, we intend to connect with the Acton Boxborough Regional High School Art Department to sponsor a t-shirt design contest. The winning student’s design can be used on a t-shirt to be awarded to volunteers. (For example, the shirt might say “I helped build Acton’s Boundless Playground!”) This has the added advantage of continuing to spread news and excitement about the project.

- 12) Please email us some photos of your site to: tterzo@boundlessplaygrounds.org - Be sure to show access points and general condition. OPTIONAL: If you have a Site Survey please send us a copy.



July 2, 2008

Ms. Catherine Fochtman
Catherine Fochtman
472 Main Street
Acton, MA 01720

Re: Metro-West Boundless Playgrounds Grant

Dear Ms. Fochtman,

We received many wonderful applications from around the Metro-West area of Boston for the Boundless Playgrounds grant. The review panel has completed the very difficult task of evaluating all the submissions based on the guidelines and criteria outlined in the request for proposals.

We regret to inform you that your playground project has not been selected for funding at this time. However, now that we are aware of your project, we will maintain your information for presentation to other funders. We will certainly keep you apprised should a new opportunity arise. Also, we ask that you keep us informed of your progress and let us know if we can ever be of any assistance.

Thank you for your interest. We wish you luck as you work to bring a Boundless™ playground to your community.

Sincerely,

Deborah Midford
Sr. Director Programs & Services

Capital Improvement Program Proposal – Detail

Department Name	Natural Resources	Project	Cemetery Improvements Roadway Resurfacing	
		Fiscal Year	2010	
Department Head	Tom Tidman	Cost	\$50,000 for each year FY'10, FY'11	
		Priority	4	of 5

1. Description

Many of the existing road surfaces in our two major cemeteries are in need of resurfacing. We have estimated that the cost to resurface breaks down as follows:

*Estimate: \$40 per linear foot to mill a 12-foot wide drive, re-grade and pave with 4" thick asphalt. 1,200 foot driveway at 12' wide costs = \$50,000

2. Useful Life: 20 years

3. Purpose (Please 'X' one of the Boxes and Describe, if Applicable)

Schedule Replacement

New or Expanded Service

Other (Please Explain)

Increase Personnel Efficiency

Replace Obsolete or Unsafe Equipment

(Explain Disposal of Old Equipment)

FY'10: 1,200 linear feet of resurfacing at Mt. Hope Cemetery

FY'11: 1,200 linear feet of resurfacing at Woodlawn Cemetery

4. Justification

Just like any public paved road in Acton, routine maintenance and resurfacing is necessary. Cemetery road resurfacing has not been done for more than 30 years.

5. How Was this Project's Priority Determined?

This maintenance is long overdue.

6. Estimated Cost

FY'10 \$50,000 FY'11 \$50,000

Less Trade-In (If Applicable)

Net Cost

7. Are Non-Town Revenues Available to Reduce Cost?

Chapter 90 Funds cannot be used for the resurfacing of cemetery roads. Trust funds are limited to lot improvements.

8. If this Project is Delayed, What will be the Effect on your Department?

Continued deterioration, more frequent complaints.

9. Please Describe the Effect of this Project on your Operating Budget.

Personnel Budget

Increase

Decrease

Expense Budget

Increase

Decrease

10. Attachments, if Applicable.

*Estimated per linear foot resurfacing costs were generated by the Acton Engineering Department.

Capital Improvement Program Proposal – Detail

Department Name	Natural Resources	Project	Quarry Road – Extend Electric Service		
		Fiscal Year	2010		
Department Head	Tom Tidman	Cost	25K		
		Priority	5	of	5

1. Description:

Extend overhead electric service on Quarry Road by approximately 400', terminating at the ballfield parking lot entrance. Install street light at parking lot / Quarry Road intersection.

2. Useful Life: 25 years

3. Purpose (Please 'X' one of the Boxes and Describe, if Applicable)

- | | |
|--|---|
| <input type="checkbox"/> Schedule Replacement | <input type="checkbox"/> Increase Personnel Efficiency |
| <input checked="" type="checkbox"/> New or Expanded Service | <input type="checkbox"/> Replace Obsolete or Unsafe Equipment |
| <input type="checkbox"/> Other (Please Explain) | <input type="checkbox"/> (Explain Disposal of Old Equipment) |

4. Justification

Quarry Road is heavily used during the spring, summer and fall for events at NARA Park. Lighting at the parking lot entrance would be an important safety improvement, for residents, event goers and sports teams.

5. How Was this Project's Priority Determined?

Discussions with Natural Resources staff, A.P.D. and park users.

6. Estimated Cost

Less Trade-In (If Applicable)
Net Cost 25K

7. Are Non-Town Revenues Available to Reduce Cost?

NO

8. If this Project is Delayed, What will be the Effect on your Department?

No effect.

9. Please Describe the Effect of this Project on your Operating Budget.

<u>Personnel Budget</u>	<u>Expense Budget</u>
Increase	Increase
Decrease	Decrease

10. Attachments, if Applicable.