Public Facilities Committee Agenda

RECEIVED
By City Clerk at 2:10 pm, Oct 11, 2018

POSTED
City Clerk

City of Newton
In City Council

Wednesday, October 17, 2018

7:00 PM
Room 204

Public Hearing assigned for October 17, 2018

#531-18 **Petition for water main extension in a private way off Farwell Street**
STEPHEN VONA, 77 Oldham Road, West Newton, petitioning for a water main extension through a proposed utility easement in a private way off Farwell Street from the existing water main in Farwell Street 150' ± northeasterly thence turning easterly and continuing a distance of 320'± thence turning northeasterly and continuing 30'± to a proposed hydrant in the private way off Farwell Street.
Petitioner to pay entire cost

Referred to Public Facilities and Finance Committees

#536-18 **Appropriate $500,000 for a wash bay at the Crafts Street Garage**
HER HONOR THE MAYOR requesting authorization to appropriate five hundred thousand dollars ($500,000) from bonded indebtedness for the purpose of funding the installation of a new wash bay at the Crafts Street Garage.

Referred to Public Facilities and Finance Committees

#537-18 **Appropriate $420,000 for2 6-wheel dump trucks**
HER HONOR THE MAYOR requesting authorization to appropriate four hundred twenty thousand dollars ($420,000) from bonded indebtedness for the purpose funding the purchase of two (2) Mack 42FR 6-wheel dump trucks for the Public Works Department.

Referred to Public Facilities and Finance Committees

#538-18 **Appropriate $89,600 for engineering services for evaluation of Bullough's Pond Dam**
HER HONOR THE MAYOR requesting authorization to appropriate eighty-nine thousand six hundred dollars ($89,600) from the Stormwater Reserve Fund for consulting engineering services to perform the Phase 2 Dam Safety Engineering Evaluation for the Bullough's Pond Dam, NID No. MA03414.

The location of this meeting is accessible and reasonable accommodations will be provided to persons with disabilities who require assistance. If you need a reasonable accommodation, please contact the city of Newton's ADA Coordinator, Jini Fairley, at least two business days in advance of the meeting: jfairley@newtonma.gov or (617) 796-1253. The city's TTY/TDD direct line is: 617-796-1089. For the Telecommunications Relay Service (TRS), please dial 711.

Referred to Public Facilities and Finance Committees

#539-18 **Transfer $100,000 for Audible Pedestrian Signal Installation at intersections in the City**
HER HONOR THE MAYOR requesting authorization to transfer the sum of one hundred thousand dollars ($100,000) from Budget Reserve for the purpose of funding Phase 1 of 3 of Audible Pedestrian Signal Installation at all remaining intersections throughout the City.

Referred to Public Facilities and Finance Committees

#540-18 **Authorize acceptance of $105,103 from the State's Transportation Infrastructure Fund**
HER HONOR THE MAYOR requesting authorization to accept, appropriate, and expend one hundred five thousand one hundred three dollars ($105,103) from the City's FY18 allocation from the Commonwealth Transportation Infrastructure Fund to be used for concept design engineering services for the complete streets design of the Wells-Nahanton Traffic Signalization and Intersection Improvement Project.

#118-18 **Request for a Public Hearing for Auburndale Square**
COUNCILORS GENTILE, KRINTZMAN AND MARKIEWICZ requesting that the Department of Public Works and Police Department Representatives hold a public hearing to obtain feedback from the public on the recently completed improvements to Auburndale Square.
Note: The Chair's intention is to vote this item no action necessary

Respectfully submitted,

Deborah Crossley, Chair

#531-18

PETITION FOR DRAIN AND SEWER

City of Newton

Date: 10-8-18

To the City Council of Newton:

The undersigned believing that the public convenience the public health require it respectfully petition that a main drain and/or common sewer be constructed in

56 FARWELL ST OWNER TURTLE LANE LLC

Insert street, way, or private lands, give names of owners

from _____

to _____

in that part of Newton called _____

RECEIVED
Newton City Clerk
2018 OCT -9 PM 12:11
David A. Olson, CMC
Newton, MA 02459

Signatures of petitioners here:	*Addresses*
	77 OLD HAM RD NEWTON
Petitioners to PAY ENTIRE Costs.	

#536-18

City of Newton, Massachusetts
Office of the Mayor

RUTHANNE FULLER
MAYOR

Telephone
(617) 796-1100
Telefax
(617) 796-1113
TDD
(617) 796-1089
E-mail
rfuller@newtonma.gov

October 9, 2018

Honorable City Council
Newton City Hall
1000 Commonwealth Avenue
Newton Centre, MA 02459

Ladies and Gentlemen:

I write to request that your Honorable Council docket for consideration a request to authorize the appropriation of $500,000 and authorize a general obligation borrowing of an equal amount for the purpose of funding the installation of a new Wash Bay at the Crafts Street Garage.

Thank you for your consideration of this matter.

Sincerely,

Ruthanne Fuller

Ruthanne Fuller
Mayor

Craft Street Wash Bay: Constructed in 1986, this building is 1,056 square feet and consists of a single wash bay, with a small room to the south which contains the support systems. The building itself is sound, but the support systems are failed and have been abandoned for many years. This facility is in poor condition, but only because the support systems within the structure have failed completely. Aside from the envelope, this building needs a complete MEP/FP overhaul.

#537-18

RUTHANNE FULLER
MAYOR

City of Newton, Massachusetts
Office of the Mayor

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TDD
(617) 796-1089
E-mail
rfuller@newtonma.gov

October 9, 2018

Honorable City Council
Newton City Hall
1000 Commonwealth Avenue
Newton Centre, MA 02459

Councilors:

I write to request that your Honorable Council docket for consideration a request to authorize the appropriation of $420,000 and authorize a general obligation borrowing of an equal amount for the purpose of funding the purchase of (2) Mack 42FR 6 Wheel Dump Trucks for the Public Works Department for Highway division operations.

Thank you for your consideration of this matter.

Sincerely,

Ruthanne Fuller

Ruthanne Fuller
Mayor

City of Newton

DEPARTMENT OF PUBLIC WORKS
OFFICE OF THE COMMISSIONER
1000 Commonwealth Avenue
Newton Centre, MA 02459-1449

Ruthanne Fuller
Mayor

To: Mayor Ruthanne Fuller
Maureen Lemieux, CFO

From: Jim McGonagle

Subject: (2) Dump Trucks for Highway Department

Date: 9/28/2018

I write to request that the Honorable Council docket for consideration a request to authorize the appropriation of $420,000 for the purchase of (2) Mack 42FR 6 Wheel Dump Trucks for the Public Works Department for Highway division operations.

Thank you for your consideration of this matter.

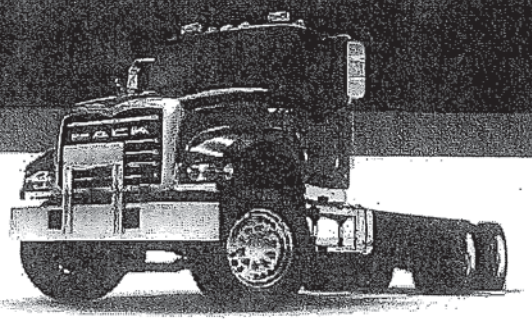
Sincerely,

Jim McGonagle
Commissioner of Public Works

Jim McGonagle
Commissioner
Telephone: (617) 796-1009 • Fax: (617) 796-1050 • jmcgonagle@newtonma.gov

Plow/Dump #537-18

MACK



PRICING SUMMARY
GRANITE 42FR

VEHICLE PRICE

BASE SELLING PRICE	$186,940.00

NEWTON CITY OF _____ DATE

MCDEVITT TRUCKS, INC. _____ DATE

McDevitt Trucks Inc.
An Employee Owned Company

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In Progress

Date 9/24/2018

Quote no.

MCDE2018000216A454
Your ref.

NEWTON CITY OF
110 CRAFTS ST OF
NEWTON 00000
MA

Technical Specification

Please find below the Technical Specification for your new Mack Truck(s).

GRANITE 42FR

APPLICATION PACKAGES

PK7 1745: CTO; RH BB, 25L DEF, LH SINGLE SLEEVED FUEL TANK, INBOARD AIR
STANDARD GROUND CLEARANCE (most applications)

CUSTOMER/VEHICLE INFO

GRANITE 42FR
2020A Pricebook
2020 MODEL YEAR
US - WARRANTY REGISTRATION LOCATION
MUNICIPAL
ALL 50 STATES, CARB ENGINE EMISSION (US17)
Made in Macungie, PA USA
ENGLISH
SNOW PLOW TRUCK
55,000 LB (25 TONNES) GROSS COMBINATION WEIGHT
BRAKE REGULATION, STOPPING DISTANCE 94M (310FT)
GRADES <6% GREATER THAN 98% OF DRIVING DISTANCE MAX GRADE 16%
AMBIENT TEMPERATURE HOT. WARMER THAN 104 F (40 C) ALLOWED UP TO 25 HOURS PER YEAR
ON-OFF HIGHWAY, STARTING GRADES<18%
CONCRETE LOADING AND / OR UNLOADING SURFACE
CONSTRUCTION SERVICE

ENGINE/TRANSMISSIONS

MP7-325M MACK 325HP @ 1400-1900 RPM (PEAK) 2100 RPM (GOV) 1260 LB-FT, US'17
3000 RDS 6-SP ALLISON GEN5 W/PROGNOSTICS, WITH PTO PROVISION
ENGINE GOVERNOR TYPE MIN-MAX

EXHAUST/EMISSIONS

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IDLE EMISSION CERTIFICATION, CARB (WITH DECAL LOCATED ON LOWER LH CORNER / DRIVER DOOR
CLEARTECH ONE BOX E.A.T.S. RH SIDE UNDER CAB US17
DPF COVER STAINLESS STEEL, POLISHED
SINGLE VERTICAL RIGHT SIDE CAB MOUNTED, LOWER VENTURI DIFFUSER, TURNED END
9' 6" FROM GROUND
SINGLE, BRIGHT FINISH HEAT SHIELD AND SCR COVER (IF EQUIPPED)
6.6 GALLON (25 L) 22" INTEGRAL TO LH FUEL TANK
EMISSION OBD, DISPLAY ONLY, USA2018

ENGINE EQUIPMENT

11" x 30" (279 mm x 762 mm) UNDER HOOD SINGLE ELEMENT DRY TYPE W/AIR INTAKE FROM BOTH SIDES OF HOOD
INSIDE/OUTSIDE AIR INTAKE W/IN-CAB CONTROL FOR SNOWPLOWS
BLACK ALUMINUM MOUNTED BEHIND GRILLE, WITHOUT WINTER FRONT COVER
MERITOR/WABCO 318 (18.7 CFM)
DELCO 12V 160A (24SI)
(3) MACK 12V 650/1950 CCA THREADED STUD TYPE
CHEVRON FULLY FORMULATED COOLANT W/ NITRATES (50/50 MIX DYED PINK) TO -34DEG
MACK COOLANT CONDITIONER
BEHR FAN AND ELECTRONIC MODULATING VISCOUS FAN DRIVE
MACK MP7 POWERLEASH
MACK W/MANUAL DRAIN VALVE (INTEGRAL W/PRIMARY FUEL FILTER)
BATTERY BOX RIGHT SIDE BEHIND SCR
MOLDED PLASTIC
SILICONE RADIATOR & HEATER HOSES, w/ 1/4 TURN BALL VALVE HTR HS W/BREEZE CONSTANT TRQUE CLAMP
12 VOLT DELCO 39MT-MXT
CORROSION RESISTANT OIL PAN
120V 1500 WATT ENGINE BLOCK HEATER
120V, 1500W BLOCK HEATER W/150W, OIL PAN HEATER WIRED TO SAME RECEPTICAL

CLUTCH/TRANS EQUIPMENT

ALLISON DASH MTD SHIFTER W/NEUTRAL TO RANGE INHIBIT (HD SERIES)
SPICER SPL170XL "EXTENDED LUBE SERIES"
TRANSYND SYNTHETIC LUBE FOR ALLISON TRANS
FURNISH FOR ALLISON TRANSMISSION W/DIRECT MOUNT COOLER
UNIVERSAL JOINT HALF-ROUND TYPE
TRANSMISSION OUTPUT TORQUE BASIC
ALUMINUM
FURNISH TC421 FOR USE W/ALLISON 3000 SERIES TRANSMISSION

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FRONT AXLE EQUIPMENT

16500# (7500 KG) MACK FXL16.5 STRAIGHT SPINDLE/UNITIZED BEARINGS
MACK MULTILEAF 16500# (7500 KG) GROUND LOAD RATING
MERITOR "S" CAM TYPE 16.5" x 6" Q+
CAST IRON
DUST SHIELDS FOR FRONT AXLE
FRONT BRAKE CHAMBER MANUFACTURER, MGM
HALDEX - AUTOMATIC
FRONT BRAKE CHAMBER 30SQ INCHES (SERVICE)
FERROUS
STANDARD
DOUBLE ACTING TYPE
SHEPPARD SD110
PETROLEUM/SYNTHETIC (50/50) OIL FRONT AXLE

REAR AXLE EQUIPMENT

30000# (13600kg) MERITOR RS-30-185 SINGLE REDUCTION
VENDOR CARRIER
5.63 RATIO
30000# MULTILEAF W/HELPER NO ANTI-SWAY
MERITOR CAM 16.5"x7" P BRAKES
CAST IRON
HALDEX - AUTOMATIC
REAR SPRING BRAKE CHAMBERS 36/36 TYPE
DUST SHIELDS FOR REAR AXLE
FERROUS
CHICAGO RAWHIDE (SCOTSEAL)
BASIC SPINDLE NUTS, MAIN AXLE
FACTORY OPTION LUBE - REAR AXLE
MGM MODEL TR-T; TAMPER-RESISTANT BRAKE CHAMBERS
DRIVER CONTROLLED INTER WHEEL DIFFERENTIAL LOCK FRT RR AXLE, MANUAL AIR VALVE W/WARNING LIGHT.
4S/4M SYSTEM REAR WHEEL END SENSORS
BENDIX WITH TRACTION CONTROL

FRAME EQUIPMENT/FUEL TANKS

180"
57"
STEEL - 300MM X 90MM X 11.1MM -- (11.81" X 3.54" X 0.437")
BUMPER POSITION EXTENDED 20" (SNOW)
STANDARD 2 STEP CAB ACCESS
BOC AND INTERMEDIATE(S) STEEL HD BACK-TO-BACK CHANNEL

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FURNISH STANDARD STEEL CLOSING REAR CROSSMEMBER
BLACK POLYARMOUR (NO NAME TO APPEAR ON FLAP) (NOT ANTI-SPRAY TYPE)
EXTENDED-SWEPT BACK-STEEL
HOOKS
66 GALLON (250 L) 22" ALUMINUM, SLEEVED D-SHAPED
BASIC FUEL LEVEL SENDER MOUNTED ON L.H TANK
W/O RH FUEL TANK
BRAIDED HOSE
NON-LOCKABLE FUEL TANK CAP
STANDARD FINISH STEPS AND BRIGHT FINISH STRAPS

AIR/BRAKE

WABCO 1200P W/TURBO CUT OFF VALVE, W/COALESCING OIL FILTER, HEATED
MANUAL (PETCOCK) DRAIN VALVES ON ALL TANKS
STEEL
TWO (2) VALVE DUAL BRAKE SYSTEM - TRAILER SUPPLY AND TRACTOR-TRAILER PARK
INBOARD W/ TANKS UNDER BBOX (MANUAL SOLUTION)

ELECTRICAL

RH/LH LED WORK LIGHT (STEPS & GROUND) ON BOTH SIDES TRUCK
(5) TRUCKLITE LED CHROME BULLET TYPE LAMPS
DASH CTRL/PWR SUPPLY/LOCAL INST PLOW LAMPS W/LEAD FURN@ GRILL W/2W/3W WEATHER PACK CON
INCANDESCENT TAIL LAMPS
SIX (6) ASSIGNABLE BODYBUILDER DASH SWITCHES (5 ON-OFF, 1 MOMENTARY)
PARK BRAKE AND ENGINE RUNNING ACTIVATED

TRAILER CONNECTIONS

GLAD HAND COUPLINGS - NORTH AMERICAN STD
TRAILER AIR BRAKE CONNECTIONS, END OF FRAME
SINGLE 7 PINS STD SAE TYPE, END OF FRAME

PTO

TRANSMISSION PTO SWITCH AND LIGHT WITH WIRING AND PIPING FOR LOCAL INSTALLATION
BODY LINK III W/CAB PASS-THRU

SPECIALTY EQUIPMENT

WITHOUT AUXILIARY TRANSMISSION
WITHOUT AUXILIARY TRANSMISSION LOCATION

CAB INTERIOR (A THRU G)

BLEND AIR HVAC W/"ATC" TEMP REGULATION
DASH MTD, INDICATOR BODY/HOIST UP "BODYBUILDER LAMP"
(4) DOME LAMPS - DOOR AND SWITCH ACTIVATED

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5LB (ABC RATED) MOUNTED BETWEEN DRIVER SEAT BASE AND DOOR VALVE AIMED REARWARD
POLYURETHANE FLOOR MAT
EXHAUST PYROMETER GAUGE
TRANSMISSION OIL TEMP GAUGE
U.S. UNITS (PREDOMINANT)

CAB INTERIOR (H THRU R)

DEFAULT: ENGLISH, SPANISH, FRENCH
CHASSIS KEYED AT RANDOM - 2 KEYS
(2) STORAGE COMPARTMENTS AND NET RETAINERS W/CENTER MOUNTING FOR CB PROVISIONS
AM/FM PREMIUM STEREO, CD-PLAYER, MP3, WEATHERBAND, HANDSFREE INTERFACE, BLUETOOTH
RADIO ANTENNA, CAB MOUNTED BEHIND LH DOOR
POWER LEADS (5-WAY BINDING POSTS FOR CB RADIO) IN HEADER CONSOLE
SPEAKER LOCATION, IN DOORS, MIDDLE HIGH SIDE PANEL
CB RADIO MOUNTING REINFORCEMENT IN HEADER CONSOLE
REAR WINDOW (FIXED TYPE)
W/O SLEEPER BOX FURNISH KIT PARALLEL TO INSIDE SURFACE OF RIDER'S SEAT BASE
STORAGE POUCH REAR

CAB INTERIOR (S THRU Z)

DRIVER'S SEAT - STEEL GREY VINYL
MACK-AIR, HIGH BACK, 1 CHAMBER AIR LUMBAR
MACK-AIR, HIGH BACK, 1 CHAMBER AIR LUMBAR
PASSENGER'S SEAT - STEEL GREY VINYL
LAP & SHOULDER (BOTH SEATS) CAB MTD SHOULDER BELT ADJUSTMT(NOT AVAIL W/EXTED RIDER SEAT)
STANDARD PACKAGE, STEEL GRAY (Package 11A)
KEY TYPE
HEATED TINTED WINDSHIELD, TINTED SIDE AND REAR WINDOW
2 SPOKE URETHANE GRIP, GUNMETAL SPOKES, W/O SWITCHES
SUN VISOR - BOTH SIDES
POWER WINDOW LIFT WITH ELECTRIC DOOR LOCK, LH & RH
2-PIECE WINDSHIELD
2 SPEED ELECTRIC MOTOR W/INTERMITTENT FEATURE

CAB EXTERIOR

WITH INSPECTION HATCH FOR SNOWPLOW HOOD
PAINTED HOOD LATCHES
(2) MACK RECTANGULAR SINGLE TRUMPET, CHROME PLATED STEEL W/SNOW SHIELDS
SINGLE TONE

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GRILLE PAINTED GRAY
BRIGHT FINISH, LH & RH, 8" DIA. CONVEX
FLAT MIRROR - POLISHED ALUMINUM FINSH, HEATED, W/O LAMPS
8" ROUND BF FENDER MTD W/SS BRACKETS & ADJ. ARMS R.H. & L.H. (Same as 15H2001)
BRIGHT FINISH, LH & RH, 8" DIA. CONVEX
PEEP WINDOW ON RIGHT SIDE NON STG WHL POS. DEPEND
REAR CAB SUSPENSION, AIR
BF EXTERIOR CAB GRAB HANDLES, BL GRAB HANDLE RH INTERIOR WINDSHIELD POST
SILVER PAINTED W/O GRILLE SURROUND

WHEELS & TIRES

LOW ROLLING RESISTANCE, BETTER FUEL ECONOMY
12R22.5 H MICHELIN XZE
22.5x8.25 ALCOA LVL ONE ALUM DISC 10-HOLE HUB PILOTED
MACHINE CLEAN BUFFED-ALL WHEELS
TWO FRONT TIRES & WHEELS
BASIC ROLLING RESISTANCE, POOR FUEL ECONOMY
12R22.5 H MICHELIN XDN2
22.5x8.25 ALCOA LVL ONE ALUM DISC 10-HOLE HUB PILOTED (11 1/4" 286mm BOLT CIRCLE)
MACHINE CLEAN BUFFED - ALL WHEELS
FOUR REAR AXLE TIRES & WHEELS
DRIVE WHEEL STUDS LONGER LENGTH
WHEEL NUT BASIC FINISH, REAR
PROVIDE STANDARD VALVE STEMS AND CAPS

COMMUNICATION SYSTEMS

DISPLAY FEATURES, LIMITED, NO DRIVER ACCESS LEVEL 1
GUARDDOG CONNECT WITH 4G/LTE AND WLAN SYSTEM WITH DIAGNOSTIC SERVICES
REMOTE SOFTWARE UPGRADE ENABLED

ENGINE ELECTRONICS

WITHOUT ENGINE SOFTWARE SETTINGS
OIL PRESSURE, ENGINE SHUTDOWN
COOLANT TEMP, ENGINE SHUTDOWN
ENGINE PROTECTION (SHUTDOWN)
IDLE CONTROL, 650 RPM
INCREASE 10 MINUTE MAXIMUM TIME
IDLE SHUTDOWN ABS TAMPER CHECK, ENABLED
ENGINE IDLE COOLDOWN, DISABLE
ENGINE IDLE SHUTDOWN, DISABLE
IDLE SHUTDOWN TIME 10 MIN.

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30 SEC IDLE S/D WARNING TIME
38C DEG (100F), WARM UP TEMP DELAY
5 MIN. WARM UP TIME DELAY
ENGINE IDLE SHUTDOWN TIME OVERRIDDEN IF PTO ACTIVE
ENG IDLE SHUTDOWN TIME OVERRIDDEN IF TORQUE > THAN LIMIT
IDLE SHUTDOWN OVERIDE UPTO 20% ENGINE LOAD THRESHOLD
AMBIENT TEMP MIN TRESHOLD, 16 DEG C, (60 DEG F)
AMBIENT TEMP MAX TRESHOLD, 27 DEG C, (80 DEG F)
ELECTRONIC HAND THROTTLE, MAX ROAD SPEED, 16 KMH (10 MPH)
ELECTRONIC HAND THROTTLE, MAX ENGINE SPEED, 1000 RPM
ELECTRONIC HAND THROTTLE, MIN ENGINE SPEED, 700 RPM
ELECTRONIC HAND THROTTLE, SPEED RAMP RATE, 100 RPM/SEC

TRANSMISSION ELECTRONICS

ALLISON GPIO PACKAGE 223 ON/OFF HIGHWAY
ALLISON TRANSMISSION AUTO NEUTRAL SINGLE INPUT W/O SHIFT SELECTOR OVERRIDE
ALLISON PRESELECTED GEAR DURING ENGINE BRAKING - FIFTH
PRIMARY CALIBRATION SHIFT SELECT MASK 3 SPEED,1ST GEAR START
SECONDARY CALIBRATE SHIFT SELECT MASK 2 SPEED,1ST GEAR START
WITHOUT DIRECTION CHANGE ENABLE FUNCTION (DATALINK)
ECONO ROLL DISABLE mDRIVE (REQUIRED FOR ALL OTHER TRANSMISSIONS)
MACKCELLERATOR DISABLE

VEHICLE ELECTRONICS

DRIVER ID FUNCTION, DISABLED
ENGINE OVERSPEED, ALL CONDITIONS, TIME LOG IF ABOVE 2200 RPM
ENGINE OVERSPEED, FUELED, TIME LOG IF ABOVE 2100 RPM
VEHICLE OVERSPEED,ALL COND, TIME LOG IF ABOVE 75MPH (121KMH)
VEHICLE OVERSPEED, FUELED, TIME LOG IF ABOVE 70MPH (113KMH)
ENGINE IDLE DELAY TO START LOG, 2 MIN
PERIODIC TRIP LOG, DAY 1 OF THE MONTH
PRE-TRIP DIAGNOSTICS INSPECTION, BASIC
DETECTION OF SPEED SENSOR TAMPERING, ENABLE
ENG TORQUE LIMITED TO 50%, IF SPEED SENSOR TAMPER DETECTED
ENGINE HIGH IDLE SPEED IN UPPER GEARS, DISABLED
1000 MAXIMUM ENGINE SPEED AT 0 MPH
105 KM/H ROAD SPEED LIMITER(65 MPH)
101 KM/H PEDAL ROAD SPEED LIMITER (63MPH)
DISABLE POWER DIVIDER LOCK OUT (PDLO) ROAD SPEED LIMIT
MAX CRUISE, 105 KPH (65 MPH)
MIN CRUISE, 32 KPH (20 MPH)

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ENG BRK ENGAGE IN CRUISE, 3 MPH, ABOVE SET SPEED
WITH CRUISE CONTROL

PTO ELECTRONICS

PTO 1ST, SINGLE SPEED SETTING, 1000 RPM
1ST PTO, MAX ROAD SPEED, 10 MPH (16 KPH)
PTO 1ST, SPEED RAMP RATE 100 RPM/SEC
PTO 1ST, MAX ENGINE SPEED, 2100 RPM
PTO 1ST, ROAD SPEED LIMIT, 97 KMH (60 MPH)
PTO 1ST, MINIMUM ENGINE SPEED, 600 RPM
PTO 1ST, AUTO SET SINGLE SPEED, DISABLE
PTO2 SINGLE SPEED SETTING, 1000 RPM
2ND PTO, MAX ROAD SPEED, 10 MPH (16 KPH)
PTO 2ND, SPEED RAMP RATE 100 RPM/SEC
PTO 2ND, MAX ENGINE SPEED, 2100 RPM
PTO 2ND, ROAD SPEED LIMIT, 97 KMH (60 MPH)
PTO 2ND, MINIMUM ENGINE SPEED, 600 RPM
PTO 2ND, AUTO SET SINGLE SPEED, DISABLE

PAINT

SINGLE COLOR
SOLID PAINT
MACK WHITE 08282PP; P9188
PAINT - CAB, URETHANE CLEAR COAT
SAME AS FIRST COLOR - CAB
SAME AS FIRST COLOR - HOOD
MACK BLACK (URETHANE)
PAINT BUMPER SAME COLOR AS CHASSIS RUNNING GEAR
WITHOUT OPTIONAL SPOKE WHEEL PAINT
WITHOUT OPTIONAL SPOKE WHEEL PAINT
SAME AS CHASSIS RUNNING GEAR
SAME AS CHASSIS RUNNING GEAR

BASE WARRANTY & PURCHASED COVERAGES

HEAVY DUTY WARRANTY CLASSIFICATION
HEAVY DUTY STANDARD BASE COVERAGE 12 MONTHS/100,000 MILES (161,000 KM)
MACK MP7/MP8 BASE ENGINE COVERAGE 24 MONTHS / 250,000 MILES (402,000KM)
US and CANADA EQUIPPED VEHICLE EMISSION COMPONENTS COVERAGE 60 MONTHS/100,000 MILES (161,000 KM)
ALLISON TRANSMISSIONS (Contact Allison Transmission for standard warranty and extended coverage data
STANDARD VENDOR NORMAL / HEAVY DUTY COVERAGE 36 MONTHS/350,000 (563,00 KM)

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AIR CONDITIONING STANDARD COVERAGE (Sealed System Only) 12 MONTHS UNLIMITED MILEAGE
STANDARD NORMAL / HEAVY DUTY CHASSIS TOWING 90 DAYS OR 5,000 MILES
STANDARD MACK ENGINE TOWING COVERAGE 24 MONTHS/250,000 MILES (402,000 KM)
24 MONTH - GUARDDOG CONNECT WITH MACK OTA (with ASIST and Mack OneCall))

Customer Adaptation

AIRTANK ARRANGEMENT, RELOCATED
CPC61, MANUALLY LOCATED AIR TANKS UNDER BBOX & INSIDE RAIL

Market Extras

20A Freight (28)
20A Material Surcharge US (28)

Internal Workshop

dealer prep for delivery
pac
one spare wheel and tire
allowance for GPS $200
allowance city grafics package $1000
mack engine E2 plan & EATS 60 months or 250,000 miles which ever comes first
allison 3+2 5 year total warranty
mack chassis plan 2 5 years or 250,000 miles which comes first
meritor axle carrier 5 years warranty
final clean for delivery
icc
pick up and delivery for warranty work only
body equipment per JC Madigan quote does not include option A&B

J.C. MADIGAN INC.
450 OLD UNION TURNPIKE
LANCASTER , MA.

SALES DEPT.
TEL.(978)847-2900
FAX(978)847-0068

QUOTE :CITY OF NEWTON FLEET DIVISION

TO SHAWN @ McDEVITT MACK FROM JOHN DWYER

1)11 FT (6 TO 8 CUYD) MONOSHELL DESIGN HIGH TENSILE STEEL DUMP BODY BiBEAU MODEL MS-HD WITH A MAILHOT TELESCOPIC HOIST AND 3/16" AR250 FLOOR INSTALLED ON A CITY SUPPLIED CHASSIS UNDERCOATED AND PAINTED BLACK

A) SIDE MOUNTED STAINLESS ACCESS LADDER W/ HANDLE
B) 30" STEEL CABSHIELD
C) AIRGATE W/ IN-CAB MTD. CONTROLS & (2) SAFETY LOCKS
D) AERO AUTO TARP SYSTEM W/ ALUM. ARMS & ASPHALT COVER
E) (3) BiBEAU CAM LOCK STYLE TAILGATE MTD. COAL DOORS
F) REAR MUDFLAPS W/ POLY FENDERS
G) 102dba BACKUP ALARM & IN-CAB MTD. LIFT ALARM & LIGHT
H) SIDE MOUNTED SANDER MOUNTING PLATES
I) REAR CORNER POST MTD. LED (FLASHERS, ST/TL & BU'S)
J) REAR DUMP APRON MTD. LED (FLASHERS & ST/TL)
K) (2) SIDE CORNER POST MTD. LED FLASHERS
L) CAB ROOF MOUNTED WHELEN LIBERTY LED MINI LIGHT BAR
M) 3/4" PLATE W/ 20T PINTLE, D-RINGS, GLADHANDS, & 7-PIN RV TRAILER PLUG
N) FRONT GRILL MTD. WHELEN IONAW LED FLASHERS
O) FRONT HOOD MTD. ABL LED PLOW LIGHTS ON CHROME GRAND GENERAL MOUNTS
P) STAINLESS TOOL BOXES MTD. CURB AND STREET SIDE SIZED TO FILL BACK OF CAB TO TIRE OPENINGS
Q) BUYER'S REAR BACKUP CAMERA W/ IN-CAB COLOR DISPLAY
R) (2) ECCO W2112 REAR MOUNTED LED WORKLIGHTS
S)ALL WARNING LIGHTS W/ SEPARATE SWITCHES

2) TRANSMISSION MOUNTED CENTRAL HYDRAULIC SYSTEM WITH HOTSHIFT PTO, IN-CAB MOUNTED LEVER CONTROLS TO OPERATE DUMP, 4-WAY PLOW, AND POWER BEYOND (CAPPED).
A) LOWER DUMP CONTROL HANDLE

PRICE $38250.00

1) EVEREST POWER TILT PLOW FRAME MODEL PT INSTALLED W/ 30.5" AND 21" ON CENTER PIN LOCATIONS

2) 10' 39" HIGH STEEL MOLDBOARD TRIP EDGE SNOW PLOW EVEREST MODEL R132TEL39SH WITH HYDRAULIC REVERSING MODE, CRANK DOWN LANDING LEG, CURB AND WEAR SHOES, GUIDEPOLES, AND CUTTING EDGE INSTALLED.

PRICE $16750.00

OPTION:
A) INSTALL CUSTOMER SUPPLIED SANDER W/ A NEW MOUNTING KIT, CONNECTION HOSES, AND ELECTRICAL PLUG ADD $2350.00
B) SUPPLY AND INSTALL COMPUSPREAD 550 W/ LINES PIPED TO THE REAR IN STAINLESS ADD $12650.00 (NOTE!! WORK DESCRIBED CAN ONLY BE SUPPLIED IF MHQ APPROVES THE SALE OF THE COMPUSPREAD)

NOTE!! (92" CA / PTO PROV. / PLOW LIGHT PREP./ AUX SWITCHES / FRAME EXT.)

APPROVAL_____DATE_____

PO#_____ 08/27/2018

#538-18

RUTHANNE FULLER
MAYOR

City of Newton, Massachusetts
Office of the Mayor

Telephone
(617) 796-1100
Telefax
(617) 796-1113
TDD
(617) 796-1089
E-mail
rfuller@newtonma.gov

October 9, 2018

Honorable City Council
Newton City Hall
1000 Commonwealth Avenue
Newton Centre, MA 02459

Councilors:

I write to request that your Honorable Council docket for consideration a request to authorize the appropriation of $89,600 from the Stormwater Reserve Fund for consulting engineering services to perform the Phase 2 Dam Safety Engineering Evaluation for the Bullough's Pond Dam, NID No. MA03414, Newton, MA.

Thank you for your consideration of this matter.

Sincerely,

Ruthanne Fuller

Ruthanne Fuller
Mayor

#538-18

City of Newton

DEPARTMENT OF PUBLIC WORKS

OFFICE OF THE COMMISSIONER
1000 Commonwealth Avenue
Newton Centre, MA 02459-1449

Ruthanne Fuller
Mayor

September 27, 2018

To: Mayor Ruthanne Fuller

From: James McGonagle, Commissioner

Subject: Request for Docket Item and Funding
Bullough's Pond Dam Phase 2 Dam Safety Engineering Evaluation

I respectfully request an appropriation of $89,600.00 for consulting engineering services to perform the Phase 2 Dam Safety Engineering Evaluation for the Bullough's Pond Dam, NID No. MA03414, Newton, MA.

Bullough's Pond Dam is an approximately 170-foot long earthen embankment. The top of embankment is asphalt-paved Dexter Road. The water level in Bullough's Pond is maintained via an uncontrolled 35-foot-long spillway located toward the middle of the embankment and a gated twin 24-inch diameter low-level outlet, located on the left or west side of the embankment. The upstream and downstream slopes are grassed and heavily vegetated with woody brush and trees. The Massachusetts Office of Dam Safety (OSD) database indicates that Bullough's Pond Dam is a Small size structure with a Significant Hazard Potential.

In May 2017, December 2017, and June 2018, Bullough's Pond Dam was found to be in Poor condition by ODS-retained engineers performing follow-up inspections. According to the June 2018 Follow-Up Inspection, a Phase 1 Visual Inspection Report has not been completed for the dam. Reported deficiencies in the 2018 follow-up inspection report include:

- Unwanted vegetation in areas of the dam including large trees along the downstream slops;
- Scarping along the upstream slope and bare soils prone to erosion along the downstream slope;
- Areas of displaced stones from the low-level outlet downstream headwall;
- Area of scour along the downstream channel including at the low-level outlet and along the left and right banks. If erosion of the left bank continues, it could encroach on the toe of the downstream slope;
- Mortar missing from some joints of the spillway training walls;
- Additional unspecified maintenance deficiencies and potential dam safety concerns.

Based on the reported Poor condition of the dam, ODS issued a Certificate of Non-Compliance and Dam Safety Order dated July 16, 2018. The order requires that the City:

- Conduct follow-up inspections at six-month intervals, with the first due on December 7, 2018;
- Conduct a Phase 2 Dam Inspection and Investigation, which is to begin by October 16, 2018, and be delivered to ODS by January 16, 2019; and,
- Bring the dam into compliance and complete repair work by January 16, 2020.

Telephone: 617-796-1009 • Fax: 617-796-1050 • Jmcgonagle@newtonma.gov

The requested funds will be used for the follow-up inspections, and preparation of the Phase 2 dam inspection and investigation.

Construction funds to bring the dam into compliance and to complete the repair work will be requested at a later date, once the Phase 2 dam inspection report is completed.

Please docket this item with the honorable City Council for consideration.

Sincerely,

James McGonagle
Commissioner Public Works

Telephone: 617-796-1009 • Fax: 617-796-1050 • Jmcgonagle@newtonma.gov

dcr
Massachusetts

July 16, 2018
Certified Mail No. 7017 2620 0000 7578 6800
Return Receipt Requested

City of Newton
c/o the Honorable Ruthanne Fuller
1000 Commonwealth Ave
Newton, MA 02459

Subject: **CERTIFICATE OF NON-COMPLIANCE and DAM SAFETY ORDER**

Dam Name:	Bulloughs Pond Dam
Location:	Newton
National ID No:	MA03414
Known Condition:	Poor
Hazard Potential:	Significant
Middlesex Registry of Deeds:	Book 2618, Page 2

Dear Mayor Fuller:

In accordance with 302 CMR 10.08, the Department of Conservation and Recreation (DCR), Office of Dam Safety (ODS) has determined that Bulloughs Pond Dam does not meet accepted dam safety standards and is a potential threat to public safety. Therefore, DCR hereby issues a **CERTIFICATE OF NON-COMPLIANCE and DAM SAFETY ORDER.**

ODS records indicate that the City of Newton is the Owner of the Bulloughs Pond Dam, National Inventory of Dams No. MA03414. ODS classifies the dam as a **Small Size, Significant Hazard Potential** Structure. Significant Hazard Potential Dams are dams that may cause the loss of life and property damage in the event of dam failure.

On May 2, 2017, and more recently on June 7, 2018, inspections of the Bulloughs Pond Dam were performed by engineering consultants PARE Corp., at the expense of the ODS. As a result of these inspections, the dam was determined to be **STRUCTURALLY DEFICIENT** and in **POOR** condition. The dam has been found to be in need of repair, breaching or removal to bring the dam into compliance with dam safety regulations.

The CERTIFICATE OF NON-COMPLIANCE is based on the above-referenced inspection report results which listed the observance of many deficiencies, including but not limited to:

- Unwanted vegetation in areas of the dam including large trees along the downstream slope;
- Scarping along the upstream slope and bare soils prone to erosion along the downstream slope;
- Deterioration/potential unstable headwall at the downstream end of the low-level outlet with observed scour/displaced riprap within the channel;
- Areas of scour along the downstream channel including at the low-level outlet and along the left and right banks. If erosion of the left bank continues, it could encroach on the toe of the downstream slope;
- Mortar is missing from some joints of the spillway training walls; and
- Additional maintenance deficiencies and dam safety concerns.

These foregoing deficiencies compromise the structural integrity of the dam and present a potential threat to public safety. ODS has determined that the dam needs to be repaired, breached or removed in order to bring the dam into compliance with dam safety regulations.

G.L. c. 253, Sections 44-48 and 302 CMR 10.00 set forth the jurisdiction for ODS and its authority to take action and order actions to be taken. For your information a copy of the Dam Safety Regulations, 302 CMR 10.00 Dam Safety, can be found on the ODS website.

DAM SAFETY ORDER:

In accordance with the authority of G.L. c. 253, Section 47, 302 CMR 10.07 and 10.08 you are hereby **ORDERED** to comply with the following:

1) **Conduct Follow-up Inspections:** You shall complete follow-up visual inspections at six (6)-month intervals, conducted by a registered professional civil engineer qualified to conduct dam inspections, at your cost, until adequate repairs are made or the dam is adequately breached. You shall submit the first Follow-up Inspection to ODS no later than **December 7, 2018.**

   Follow-up inspections are to be summary in format and shall provide a written description, including photographs, of any changes in condition. Your engineer is to use the attached ODS Poor Condition Dam Follow-up Inspection Form to report follow-up inspection findings. The form is also available electronically on the ODS web site. Your engineer shall include a cover letter on engineering firm letterhead that briefly summarizes the current follow-up inspection and findings.

You shall submit one (1) hard copy printed double-sided and one (1) electronic pdf copy of all completed follow-up visual inspection reports to ODS within thirty (30) days of the date of follow-up inspection field work.

2) **Conduct Phase II Inspection and Investigations.** You shall hire at your cost, a qualified registered professional engineer with dam engineering experience (engineer) to conduct a Phase II Inspection and Investigation of the dam to evaluate the structural integrity and spillway hydraulic adequacy of your dam and to develop/implement a plan to bring the dam into compliance with dam safety regulations by adequately repairing, breaching or removing the dam (see attached Phase II Investigation Outline).

   a. You shall commence the Phase II Inspection and Investigation no later than **October 16, 2018**. The Phase II Inspection and Investigation is to conform to the attached Phase II Investigation Outline. You are to, in a letter to ODS, no later than **October 2, 2018,** identify your selected engineer and inform ODS of the start date of the Phase II work.

   b. The Phase II Inspection and Investigation is to be completed, signed and stamped by your engineer and copies of the Phase II final report are to be delivered to ODS no later than **January 16, 2019**.

      You shall include a cover letter with the submitted Phase II report which describes your selected alternative to bring the dam into compliance with dam safety regulations. The owner shall submit a statement of your intent to implement inspection report recommendations to address structural and operational deficiencies to ODS upon submission of the required Phase II Inspection and Investigation completed by your engineer.

3) **Bring the dam into compliance and complete all repair, breach or removal work no later than January 16, 2020.** With your Phase II submittal, you must also provide a proposed timeline to design, permit and construct the selected alternative to repair, breach or remove the dam. The selected alternative must be completed, and the dam brought into compliance with Dam Safety regulations, by January 16, 2020.

4) **Additional Requirements:**
   a. You shall furnish copies of all required submittals listed above via certified mail.

   b. In order to maintain compliance with the Commonwealth's Wetlands Protection Laws you may have to seek requisite approval from your local Conservation Commission in accordance with G.L. c. 131, §40. You are obligated to contact and maintain communication with the Newton Conservation Commission and any other local, state or federal permitting agency the ensure compliance with the Wetlands Protection Act and any other regulatory requirements.

c. You must inform the following parties about the condition of the dam and your developing plans to bring the dam into compliance with dam safety regulations: all abutters of the impoundment upstream; property owners within one-half mile downstream of the Bulloughs Pond Dam; Northeast District, Division of Fisheries & Wildlife, 85 Fitchburg Rd, Ayer, MA 01432; Regional Director, Department of Environmental Protection, Northeast Region, 205B Lowell St, Wilmington, MA 01887; Conservation Commission, 1000 Commonwealth Ave, Newton, MA 02459; Emergency Management Director, 1164 Centre St, Newton, MA 02459.

Please be advised that in accordance with G.L. c. 253, § 47, "any person who fails to comply with the provisions of this chapter or of any order, regulation or requirement of the department relative to dam safety, shall be fined an amount not to exceed $5,000 for each offense, to be fixed by the court." Furthermore, each violation shall be regarded as a separate and distinct offense and, in case of a continuing violation, each day's continuance thereof shall be deemed to be a separate and distinct offense.

Nothing in this order releases the owner from the requirements of any prior Dam Safety Order issued for this dam.

In accordance with 302 CMR 10.08, this CERTIFICATE OF NON-COMPLIANCE and DAM SAFETY ORDER will be recorded by the DCR at the Registry of Deeds in the county where the dam lies. Issuance of a Certificate of Compliance following adequate repair or breaching of the dam will be required to discharge the CERTIFICATE OF NON-COMPLIANCE and DAM SAFETY ORDER.

Please direct any technical questions, correspondence, or submittals to Emily Caruso, Department of Conservation and Recreation, Office of Dam Safety, 180 Beaman Street, West Boylston, MA 01583 or Emily.Caruso@state.ma.us. Other questions regarding process and administration of Dam Safety regulations should be directed to Bill Salomaa, Director of Office of Dam Safety, at William.Salomaa@state.ma.us. Additional dam safety information can be found at the DCR-ODS website: http://www.mass.gov/eea/agencies/dcr/conservation/dam-safety/.

Thank you for your cooperation.

Sincerely,

Leo Roy
Commissioner, DCR

Enclosure: June 2018 Follow-Up Inspection

CC: Senator Cynthia Stone Creem
Representative Kay Khan
Newton Emergency Management Director
Newton Conservation Commission
Barbara Newman, U.S. Army Corps
Northeast Region, DEP
Deirdre Buckley, MEPA
Northeast District, DFW
Rob Lowell, DCR
William Salomaa, DCR
Ariana Johnson, Esq., DCR
Nick Wildman, DER

Department of Conservation and Recreation
Office of Dam Safety
Phase II Inspection and Investigation Outline

I.	Review of existing information.....
II.	Updated Detailed Phase I surface inspection in compliance with Office of Dam Safety Phase I Inspection format.....
III.	Subsurface Investigations – borings, sampling, analysis.....
IV.	Topographic Survey, wetlands flagging/delineation, of sufficient detail to support not only the Phase II effort, but sufficient for the future implementation of design phase.....
V.	Stability and seepage analyses – Seismic and static stability evaluation of dam (upstream and downstream slopes, internal materials), seepage potential, internal erosion potential, piping potential.....
VI.	Hydrologic/Hydraulic Analysis and spillway inadequacy resolution.....
VII.	Alternatives analysis and presentation of conceptual designs and associated estimated design, permitting and construction costs to bring the dam structure into compliance with Chapter 253 Section 44-48 and 302 CMR 10.00 Dam Safety Regulations by either executing selected repair plan or breach plan.....
VIII.	Final Report Presented to the Office of Dam Safety.....

Commonwealth of Massachusetts
Department of Conservation and Recreation
Office of Dam Safety Poor Condition Dam Follow-up Inspection Form

(Complete this inspection form and provide a cover letter on consulting firm letterhead that briefly summarizes the current follow-up inspection and findings. The cover letter shall be signed and stamped by the Registered Professional Engineer in charge of the inspection)

Dam Name:
Dam Owner:
Nat. ID Number:
Hazard Potential:
Location of Dam (town):
Coordinate location (lat, long):
Date of Inspection:
Weather:

Consultant Inspector(s): firm name and name of Registered Professional Engineer in charge of inspection.

Others in Attendance at Field Inspection: include list of names, affiliation and phone numbers.

Attachments: Updated site sketch with photo locations, Updated photos, and copy of locus map from Phase I report and other applicable attachments.

I. **Previous Inspection date/Overall Condition:**
- Date of most recent formal Phase I Inspection Report:
- List the overall condition reported in most recent Phase I Inspection Report:

II. **Previous Inspection Deficiencies:**
- List identified deficiencies in the most recent Phase I Inspection Report:

III. **Overall Condition of Dam at the Time of the Current Follow-up Inspection:**
a. State the current condition
b. Have conditions changed since the previous inspection? Yes or no.

IV. **Comparison of Current Conditions to Condition Listed in Previous Phase I Inspection Report:**
a. Have any of the deficiencies listed in the previous Phase I Inspection Report worsened?
b. If yes, list the changes.
c. Are there any additional deficiencies that have been identified in the current inspection?

d. If yes, list the deficiencies and describe.

V. Dam Safety Orders:
- List dam safety orders that have been issued to the dam owner pertaining to this dam.

VI. Maintenance:
1. Indicate if there exists an operation and maintenance plan for the dam.
2. Indicate if it appears the dam is being maintained.

VII. Recommendations:

VIII. Other Comments or Observations:

IX. Updated Site Sketch with Photo Locations:

X. Updated Photos:

XI. Copy of Locus Map from Phase I Report:

XII. Other applicable attachment:

LAW DEPARTMENT

CITY OF NEWTON, MASSACHUSETTS
CITY HALL
1000 COMMONWEALTH AVENUE
NEWTON CENTRE, MA 02459
TELEPHONE (617) 796-1240
FACSIMILE (617) 796-1254

ACTING CITY SOLICITOR
OUIDA C.M. YOUNG

DEPUTY CITY SOLICITORS
ANGELA BUCHANAN SMAGULA
JEFFREY A. HONIG

ASSISTANT CITY SOLICITORS
MARIE M. LAWLOR
MAURA E. O'KEEFE
ALAN D. MANDL
JILL M. MURRAY
JONAH M. TEMPLE
JACLYN R. ZAWADA
JENNIFER C. PUCCI

CERTIFIED MAIL NO. 7009 0820 0000 1611 4407
RETURN RECEIPT REQUESTED

September 11, 2018

Commissioner of DCR
Department of Conservation and Recreation
Office of Dam Safety – Registration
180 Beaman Street
West Boylston, MA 01583

Re: Bulloughs Pond Dam

Dear Commissioner:

In accordance with MGL Chapter 253 Sections 44-50 and 302 CMR 10.05, enclosed for filing with the DCR please find a recorded copy of the Certificate of Registration for the Bulloughs Pond Dam in Newton. The Certificate was recorded this day in the Middlesex South Registry of Deeds at Book 71602, Page 530.

Thank you.

Very truly yours,

Marie M Lawlor

Marie M. Lawlor
Assistant City Solicitor

Cc: James McGonagle, Commissioner, DPW
Lou Taverna, City Engineer

dcr
Massachusetts

2018 00140291
Bk: 71602 Pg: 630 Doc: CERT
Page: 1 of 2 09/11/2018 02:40 PM

Commonwealth of Massachusetts
Department of Conservation and Recreation
Office of Dam Safety
DAM REGISTRATION CERTIFICATE
Issued in Accordance with MGL Chapter 253
Sections 44-50 and 302 CMR 10.05

CERTIFICATE NUMBER MA03414 – R1

As required by MGL Chapter 253, and for the purpose of creating a public record of the subject dam, the Office of Dam Safety hereby issues this Dam Registration Certificate, to be recorded by the dam owner at the Registry of Deeds in the county where the dam lies.

Section I: Dam Information

Dam Name	Bulloughs Pond Dam
Name of Impoundment	Bulloughs Pond
Location (City/Town)	Newton
Structural Height	9 ft
Hazard Potential Rating	Significant
National Dam ID No.	MA03414
Latitude	Lat.: 42.3418
Longitude	Long.: -71.2052

Section II: Registry of Deeds Information for the Property on which the Dam Lies

Property/Dam Owner(s)	City of Newton
Registry Location (County Name)	Middlesex South
Registry of Deeds Book No.	2618
Registry of Deeds Page No.	2

Section III: Town/City Assessor's Office Information for the Property on which the Dam Lies

Property/Dam Owner Name	City of Newton
Mailing Address	1000 Commonwealth Avenue
Town/Zip	Newton, MA 02459
Map No	
Section Block Lot No	24-37-10 and 24-38-10

COMMONWEALTH OF MASSACHUSETTS · EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS

Department of Conservation and Recreation
251 Causeway Street, Suite 600
Boston MA 02114-2119
617-626-1250 617-626-1351 Fax
www.mass.gov/dcr

Charles D. Baker, Governor
Karyn E. Polito, Lt. Governor
Matthew A. Beaton, Secretary, Executive Office of Energy & Environmental Affairs
Leo Roy, Commissioner, Department of Conservation & Recreation

CERTIFICATE NUMBER MA03414 – R1

Section IV: Transfer of Ownership Notification Requirement

In accordance with M.G.L. c. 253, the dam owner shall notify the Commissioner by registered or certified mail, of the proposed transfer of legal title of such dam 30 days prior to any such transfer. Upon receipt of such notice, a new Certificate of Registration will be issued. Such Certificate shall contain any outstanding obligations of the registered owner under M.G.L. c. 253, §§ 44 through 50.

The Department of Conservation and Recreation

By: _____
William C. Salomaa, Director
Office of Dam Safety

Date Issued: August 6, 2018

Suffolk, *ss.* Commonwealth of Massachusetts

On this 6th day of August, 2018, before me, the undersigned notary public, personally appeared William C. Salomaa, proved to me through satisfactory evidence of identification, which was personally known to me, to be the person whose name is signed on the preceding document, and acknowledged to me that he signed it voluntarily, in his capacity as Director of the Office of Dam Safety with the Department of Conservation and Recreation, for its stated purpose.

_____
Ariana L. Johnson
Notary Public
My Commission Expires
July 22, 2022

ARIANA L. JOHNSON
Notary Public
COMMONWEALTH OF MASSACHUSETTS
My Commission Expires
July 22, 2022

Engineers | Scientists | Planners

PARECORP.COM

PARE CORPORATION

June 8, 2018

Mr. Paul Marinelli
Department of Conservation and Recreation
Office of Dam Safety
251 Causeway Street
Boston, MA 02114

Re: **June 2018 Follow-Up Inspection**
MA03414 Bulloughs Pond Dam
Newton, Massachusetts
(Pare Project No.:09124.56/152)

Dear Mr. Marinelli:

As requested by the MADCR Office of Dam Safety (MADCR), Pare Corporation (Pare) completed a follow-up inspection of conditions at the Bulloughs Pond Dam located in Newton, Massachusetts on June 7, 2018. The Bulloughs Pond Dam is currently classified as a significant hazard potential intermediate sized dam and is currently considered to be in Poor[1] condition, consistent with that reported within the past follow up inspections completed in May 2017 and December 2017. The dam has been found to have the following deficiencies:

1. Unwanted vegetation in areas of the dam including large trees along the downstream slope;
2. Scarping along the upstream slope and bare soils prone to erosion along the downstream slope
3. Areas of displaced stones from the low-level outlet downstream headwall;
4. Areas of scour along the downstream channel including at the low-level outlet and along the left and right banks. If erosion of the left bank continues, it could encroach on the toe of the downstream slope;
5. Mortar missing from some joints of the spillway training walls
6. Additional maintenance deficiencies and potential dam safety concerns.

Bulloughs Pond Dam, as shown on Figure 3: Site Sketch, consists of an approximate 170-foot long earthen embankment dam with a 35-foot long concrete weir spillway and a low-level outlet consisting of gated twin 24-inch diameter conduits. At the time of the inspection, the level of the impoundment was near normal pool levels with approximately half an inch of flow over the spillway weir. During the current inspection, there was no apparent indication of significant additional deterioration beyond that previously observed.

It is critical to note that the condition of the dam is evolutionary in nature and depends on numerous and constantly changing internal and external conditions. It would be incorrect to assume that the present condition of the dam will continue to represent the condition of the dam at some point in the future.

[1] The recommended condition of the dam is based upon the limited scope of the follow-up inspection. In the absence of more detailed inspections and/or evaluations, conservative assumptions regarding uncertainties were made to arrive at the noted condition of the dam. A more detailed review of conditions may suggest a different condition rating

We trust that the attached Follow-up Inspection Form meets the current requirements for the Bulloughs Pond Dam. Should you have any questions please feel free to contact me at 508.543.1755 or via email at aorsi@parecorp.com.

Sincerely,

PARE CORPORATION

COMMONWEALTH OF MASSACHUSETTS
ALLEN R. ORSI
CIVIL
No. 48924
REGISTERED PROFESSIONAL ENGINEER

Allen R. Orsi, P.E.
Vice President

Attachment: Office of Dam Safety Follow-up Dam Inspection Form w/ attachments

Commonwealth of Massachusetts
Department of Conservation and Recreation
Office of Dam Safety Follow-up Dam Inspection Form

Dam Name: Bulloughs Pond Dam
Dam Owner: Unknown

Nat. ID Number: MA03414
Hazard Potential: Significant (Class II)
Location of Dam (town): Newton
Coordinate location (lat,long): 42.34185°N / 71.20524°W
Date of Inspection: June 7, 2018
Weather: 75°F, Cloudy

Consultant Inspector(s): Pare Corporation, Allen R. Orsi, P.E.

Others in Attendance at Field Inspection: None

Attachments: Figure 1: Locus Plan
Figure 2: Aerial Plan
Figure 3: Site Sketch
Photographs
Inspection Limitations

I. Previous Inspection date/Overall Condition:

- May 2, 2017 Follow Up Inspection, Pare Corporation / Poor condition
- December 20, 2017 Follow Up Inspection, Pare Corporation / Poor condition

II. Previous Inspection Deficiencies:

From the previous Follow Up Inspections by Pare Corporation:

- Unwanted vegetation in areas of the dam including large trees along the downstream slope;
- Scarping along the upstream slope and bare soils prone to erosion along the downstream slope;
- Deterioration / potential unstable headwall at the downstream end of the low-level outlet with observed scour / displaced riprap within the channel;
- Areas of scour along the downstream channel including at the low-level outlet and along the left and right banks. If erosion of the left bank continues, it could encroach on the toe of the downstream slope;
- Mortar missing from some joints of the spillway training walls; and
- Additional maintenance deficiencies and dam safety concerns.

III. Overall Condition of Dam at the Time of the Current Follow-up Inspection:

a. **State the current condition:** *Poor (Based on a limited scope of inspection/evaluation)*
b. **Have conditions changed since the previous inspection?** *No.*

IV. Comparison of Current Conditions to Condition Listed in Previous Phase I Inspection Report:

a. **Have any of the deficiencies listed in the previous Phase I Inspection Report worsened?** *No Phase I*
b. **If yes, list the changes.** Not Applicable
c. **Are there any additional deficiencies that have been identified in the current inspection?** *No*
d. **If yes, list the deficiencies and describe.** Not Applicable

V. Dam Safety Orders:

- None Available

VI. Maintenance:

1. **Indicate if there exists an operation and maintenance plan for the dam.** No formal operational or maintenance plan is known to exist.
2. **Indicate if it appears the dam is being maintained.** As indicated by Newton DPW staff present onsite during the May 2017 inspection (unrelated to the inspection), the Town regularly utilizes the low level outlet to control the pond level during storm events and as part of seasonal drawdowns. It also appears that regular maintenance is performed along the crest of the dam.

VII. Recommendations:

In general, the condition of the dam appears similar to that observed during the May 2017 Follow Up Inspection. As such, the recommendations listed therein remain valid as listed below with revisions highlighted in italics:

Studies and Analyses

1. Determine dam ownership.
2. Complete a detailed visual inspection of the dam and appurtenances (Phase I).
3. Underwater inspection of components of spillway and lower level outlet that were not accessible during this and past follow up inspections.
4. Complete survey to verify the height of the dam and to support additional evaluations.
5. Complete additional evaluations to determine/verify the appropriate hazard potential classification.
6. Complete a stability analysis for the embankment section.
7. Complete a detailed Hydraulic/Hydrologic (H&H) analysis.
8. Evaluate erosion along the downstream channel to determine the need (if any) to stabilize areas of erosion.
9. Prepare a formalized Operations and Maintenance Manual.
10. Prepare an Emergency Action Plan.

Yearly & Recurrent Maintenance Recommendations

1. Perform regular monitoring and inspection of the dam and appurtenant structures.
2. Complete/continue regular maintenance activities.

Repair Recommendations

1. Clear the dam of unwanted vegetation. Grub systems and establish adequate surface protection;

2. Install adequate surface protection including riprap along the upstream slope and grass along the downstream slope.
3. Repair the low-level outlet downstream headwall.
4. Provide adequate scour protection along the banks of the downstream channel.
5. Repoint the joints of the spillway training walls.

Remedial Measures

1. Undertake additional repairs as identified to be required through the completion of the recommended inspections and studies.

VIII. Other Comments or Observations:

During the current follow up inspection the following was noted:

- The impoundment appeared to be near normal operating levels.
- Minor debris is present along the spillway crest.
- The upstream slope is densely overgrown with a variety of plants, weeds, and other vegetation. Access for inspection was limited.
- Iron oxide stained seepage / groundwater flow continues along the base of the downstream end of the boulder wall that lines the right side of the downstream channel. The flow was approximated at 10 GPM (consistent with past follow up inspections).
- Mortar is missing from some joints of the training walls of the spillway.
- Low flow, typical of previous inspection, was observed dripping from both of the low level outlet pipes.

IX. Updated Site Sketch with Photo Locations: Attached

X. Updated Photos: Attached

XI. Copy of Locus Map from Phase I Report: Attached

XII. Other applicable attachment: Figure 2: Aerial Plan, Inspection Limitations

USGS TOPOGRAPHIC MAP FROM OFFICE OF GEOGRAPHIC AND ENVIRONMENTAL INFORMATION (MASSGIS), COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS

PARE CORPORATION

BULLOUGHS POND DAM

MA03414

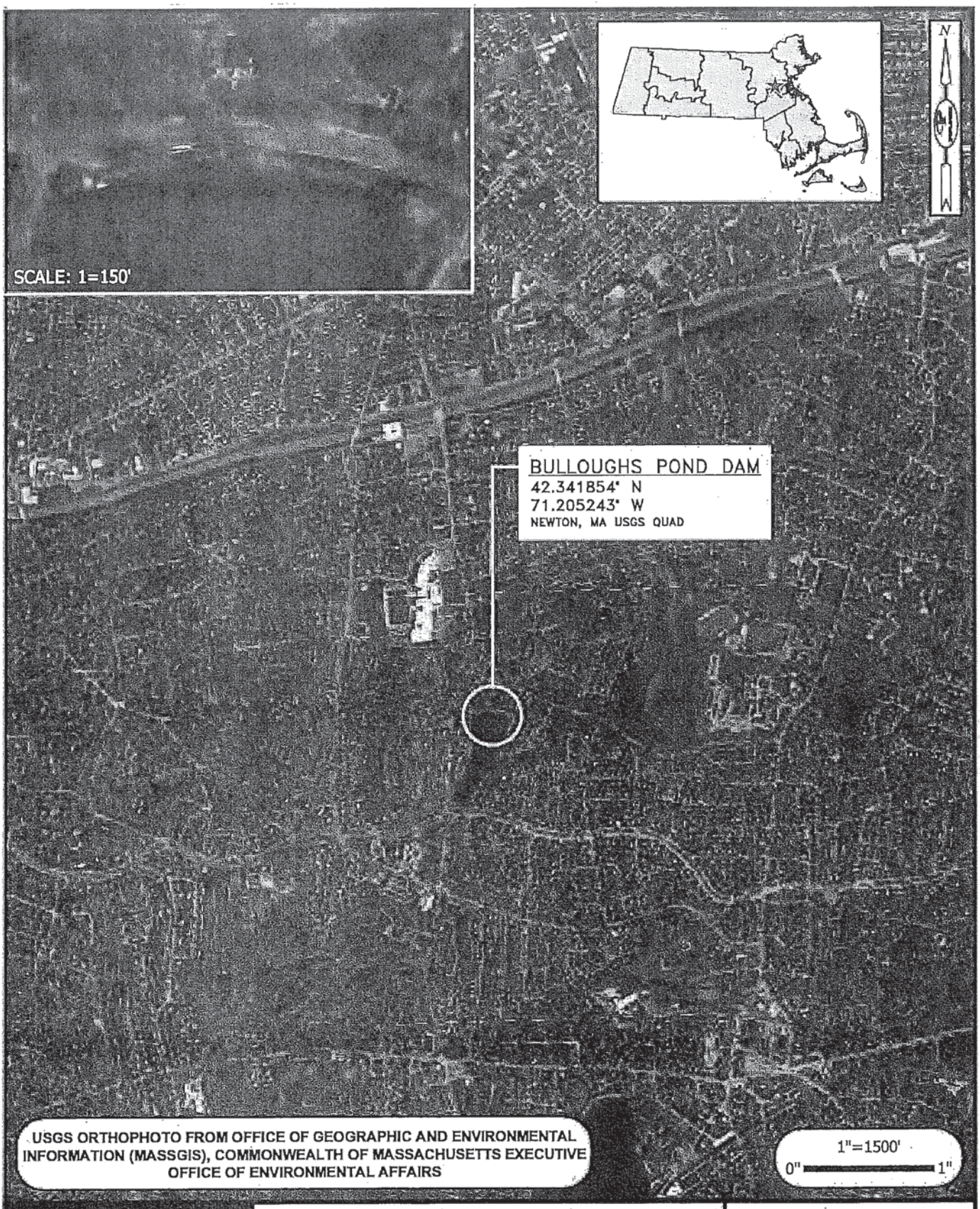
NEWTON, MASSACHUSETTS

OWNER: UNKNOWN

LOCUS PLAN

DECEMBER 2017 FIGURE 1

#538-18



PARE CORPORATION

BULLOUGHS POND DAM

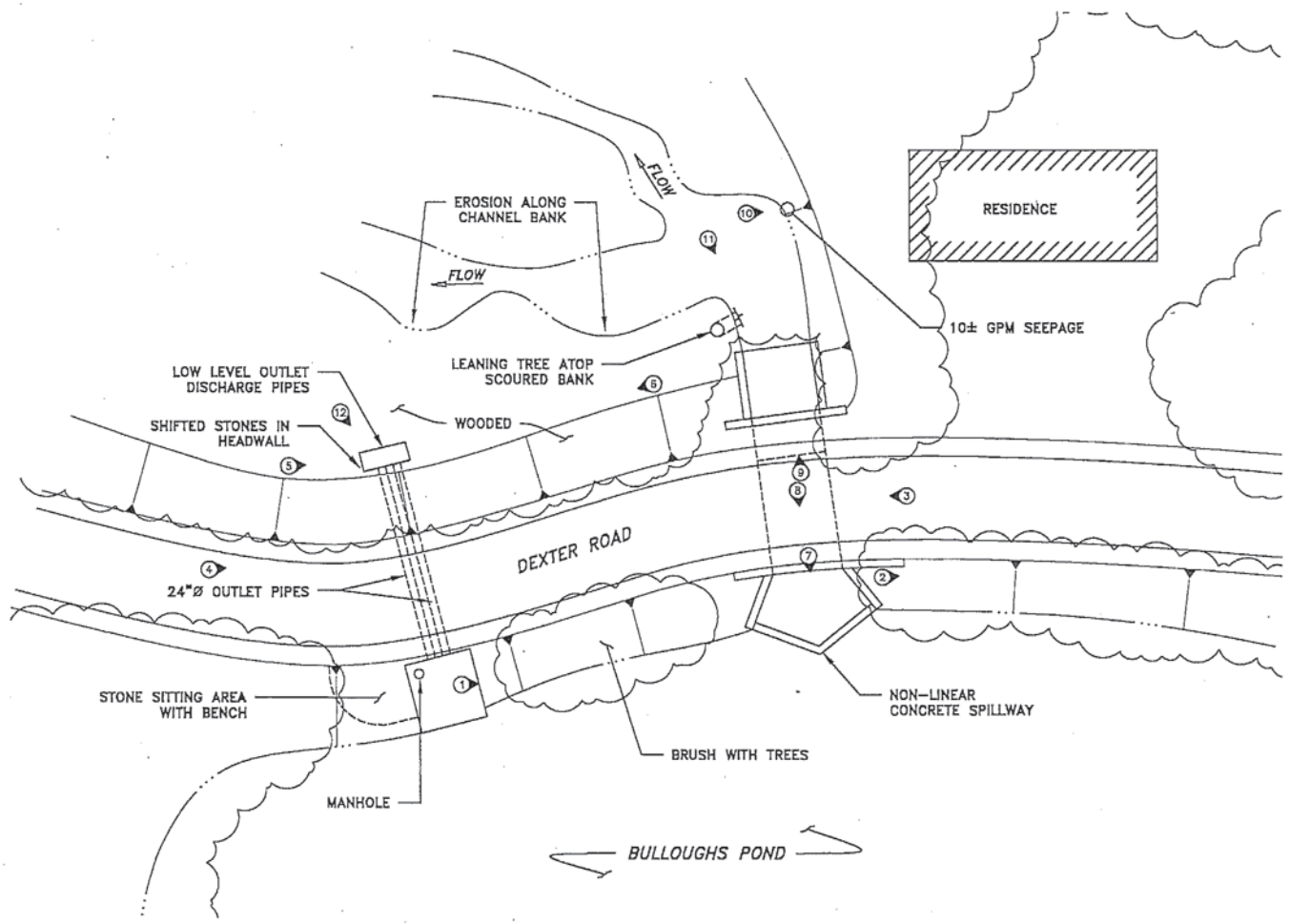
MA03414

NEWTON, MASSACHUSETTS

OWNER: UNKNOWN

AERIAL PLAN

DECEMBER 2017 FIGURE 2



SITE SKETCH

SCALE: 1"=30'±

NOTES AND LEGEND

1. PLAN DEVELOPED FROM NOTES TAKEN DURING THE INSPECTION AND AVAILABLE AERIAL IMAGERY FROM MASSGIS. INFORMATION IS PROVIDED FOR REFERENCE PURPOSES ONLY.

④ DENOTES APPROXIMATE LOCATION AND DIRECTION OF PHOTOGRAPH.

PARE CORPORATION
ENGINEERS · SCIENTISTS · PLANNERS
10 LINCOLN ROAD, SUITE 210
FOXBORO, MA 02035
508-543-1700

SCALE ADJUSTMENT GUIDE
0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING.

BULLOUGHS POND DAM
MA03414
NEWTON, MASSACHUSETTS
OWNER: UNKNOWN

REVISIONS:

PROJECT NO.:	09124.56/152
DATE:	JUNE 2018
SCALE:	AS NOTED
DESIGNED BY:	ARD
CHECKED BY:	MED
DRAWN BY:	LMC
APPROVED BY:	ARD

SITE SKETCH

FIGURE NO.: 3

#538-18

Y:\JOBS\09 Jobs\09124.56 ODS-FY18#4-Abandoned Dam Insps-MA\Task 152 Bulloughs Pond Dam June 2018 PCDF\FIG 3 SITE SKETCH.dwg

Photo No. 1: Upstream slope right of the low level outlet.

Photo No. 2: Upstream slope right of the spillway.

Photo No. 3: Crest from near the right abutment looking left.

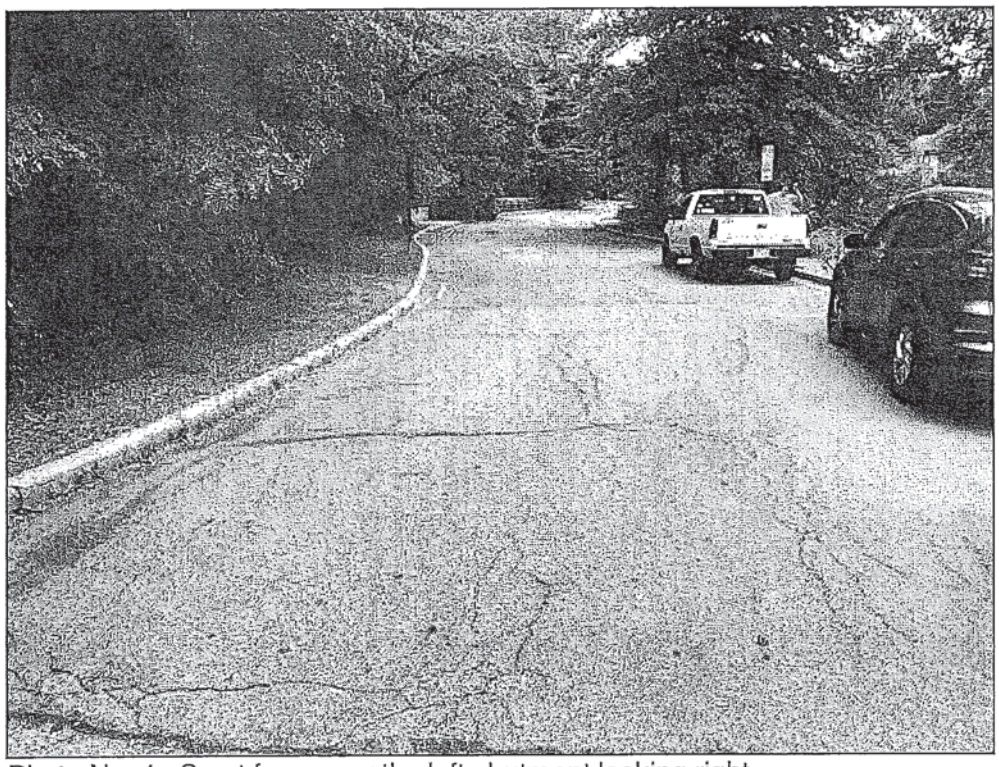


Photo No. 4: Crest from near the left abutment looking right.

Photo No. 5: Downstream slope from near the left abutment.

Photo No. 6: Downstream slope from left of the spillway looking left.

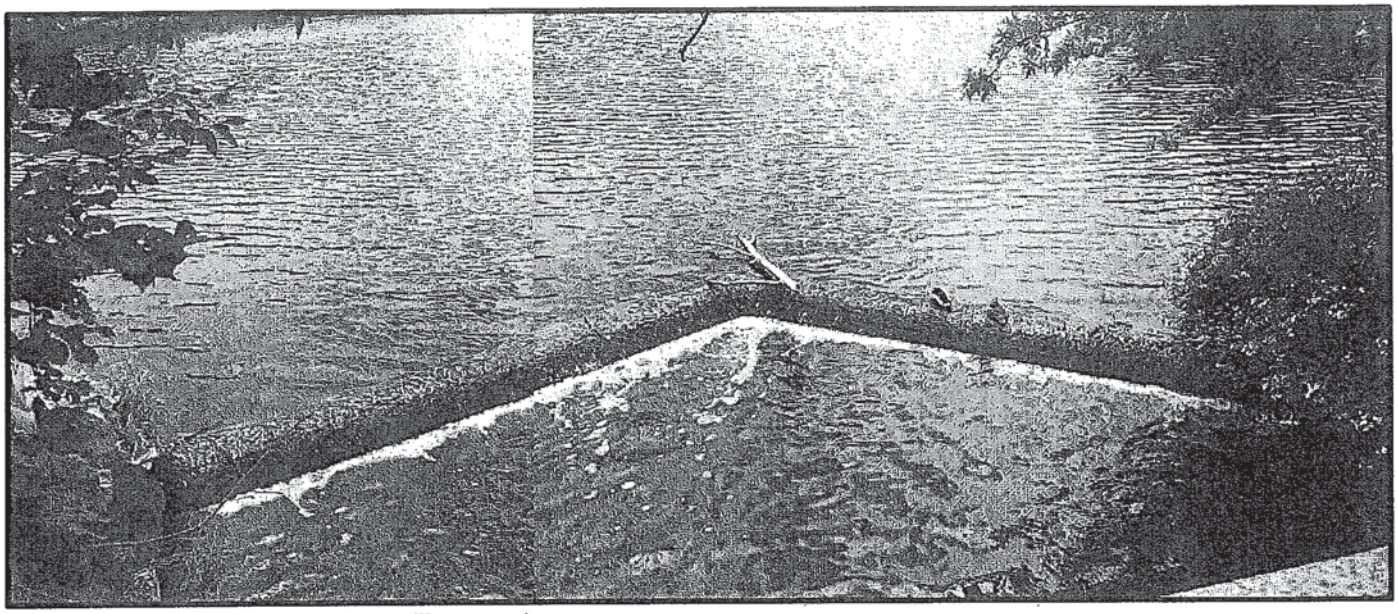


Photo No. 7: Overview of the spillway weir.

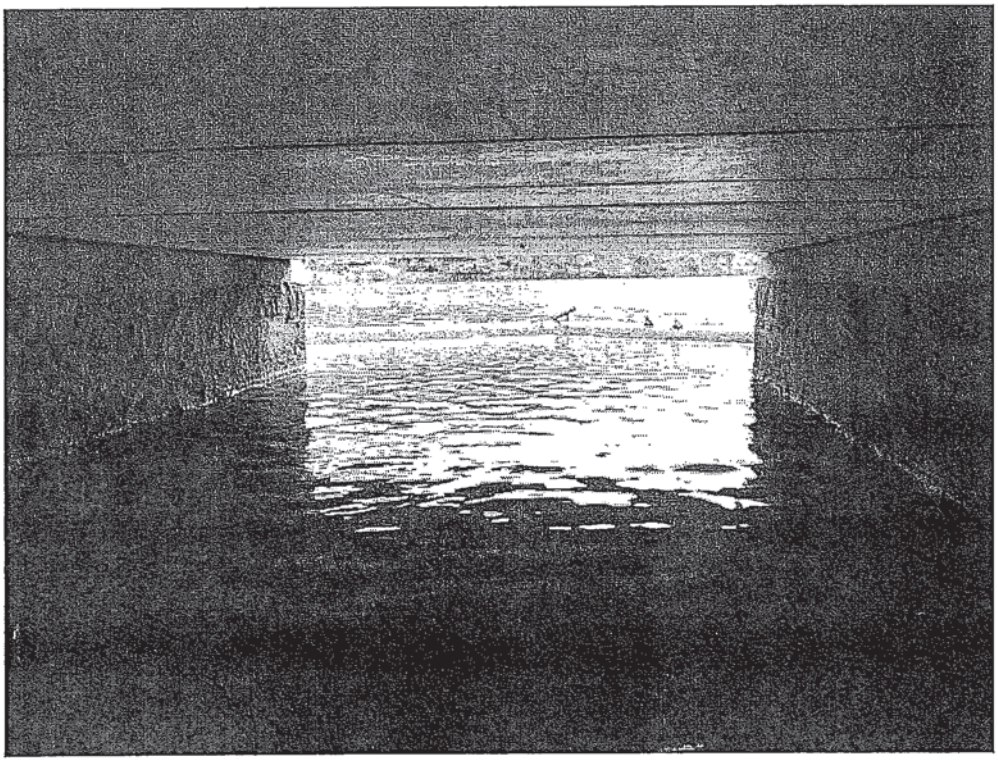


Photo No. 8: Spillway from downstream.

Photo No. 9: Downstream channel at the spillway.

Photo No. 10: Iron oxide stained flow from the downstream bank along the right side of the downstream channel.

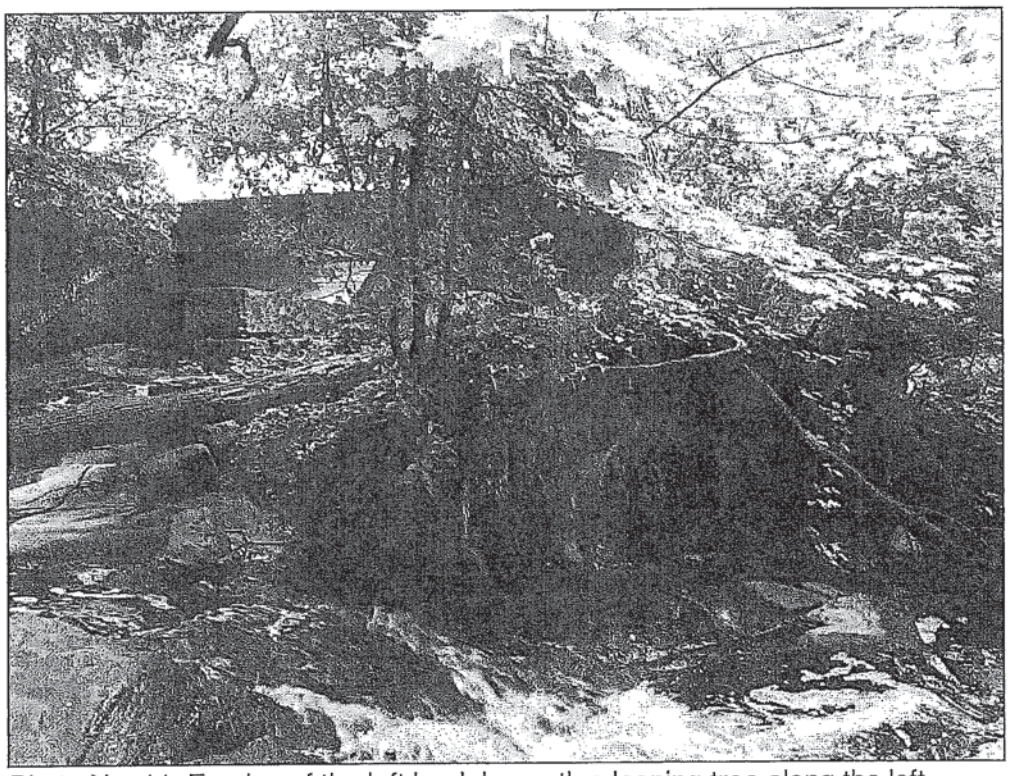


Photo No. 11: Erosion of the left bank beneath a leaning tree along the left side of the downstream channel.

Photo No. 12: Low level outlet discharge headwall and standing water in the downstream channel.

VISUAL DAM INSPECTION LIMITATIONS

Visual Inspection

1. The assessment of the general condition of the dam is based upon available data and visual inspections. Detailed investigations and analyses involving topographic mapping, subsurface investigations, testing and detailed computational evaluations are beyond the scope of this report.

2. In reviewing this report, it should be realized that the reported condition of the dam is based on observations of field conditions at the time of inspection, along with data available to the inspection team.

3. In cases where an impoundment is lowered or drained prior to inspection, such action, while improving the stability and safety of the dam, removes the normal load on the structure and may obscure certain conditions, which might otherwise be detectable if inspected under the normal operating environment of the structure.

4. It is critical to note that the condition of the dam depends on numerous and constantly changing internal and external conditions, and is evolutionary in nature. It would be incorrect to assume that the present condition of the dam will continue to represent the condition of the dam at some point in the future. Only through continued care and inspection can there be any chance that unsafe conditions be detected.

Use of Report

1. The applicability of other environmental permits (ie., NOI, PGP, Water Quality Certificate, etc.) needs to be determined prior to undertaking maintenance activities that may occur within resource areas under the jurisdiction of MADEP, the local conservation commission or other regulatory agency.

2. This report has been prepared for the exclusive use of the Massachusetts Department of Conservation and Recreation for specific application to the Bulloughs Pond Dam in accordance with generally accepted engineering practices. No other warranty, expressed or implied, is made.

3. This report has been prepared for this project by Pare. This report is for preliminary evaluation purposes only and is not necessarily sufficient to support design or repairs or recommendations or to prepare an accurate bid.

#539-18

RUTHANNE FULLER
MAYOR

City of Newton, Massachusetts
Office of the Mayor

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(617) 796-1100
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TDD
(617) 796-1089
E-mail
rfuller@newtonma.gov

October 9, 2018

Honorable City Council
Newton City Hall
1000 Commonwealth Avenue
Newton Centre, MA 02459

Councilors:

I write to request that your Honorable Council docket for consideration a request to authorize the transfer of $100,000 from FY19 Budget Reserve for the purpose of funding Phase 1 of 3 of Audible Pedestrian Signal Installation at all remaining intersections throughout the City.

Thank you for your consideration of this matter.

Sincerely,

Ruthanne Fuller

Ruthanne Fuller
Mayor

City of Newton

DEPARTMENT OF PUBLIC WORKS
OFFICE OF THE COMMISSIONER
1000 Commonwealth Avenue
Newton Centre, MA 02459-1449

Ruthanne Fuller
Mayor

10/9/18

There are approximately 100 signalized intersections in the City, and approximately 50 locations have either partial or no buttons. A typical 4-legged intersection requires 8 APS buttons, and at roughly $750 per button that's $6,000 per signalized intersection, or approximately $300,000 for full APS at the remaining locations.

Since this is going to be the first year of a 3-year APS upgrade program, we are requesting $100,000 for APS Upgrades to be performed in FY19.

Please reach out if you have any questions

Jason Sobel
Transportation Director - Operations

Jim McGonagle
Commissioner
Telephone: (617) 796-1009 • Fax: (617) 796-1050 • jmcgonagle@newtonma.gov

#540-18

City of Newton, Massachusetts
Office of the Mayor

RUTHANNE FULLER
MAYOR

Telephone
(617) 796-1100
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(617) 796-1113
TDD
(617) 796-1089
E-mail
rfuller@newtonma.gov

October 9, 2018

Honorable City Council
Newton City Hall
1000 Commonwealth Avenue
Newton Centre, MA 02459

Councilors:

I write to request that your Honorable Council docket for consideration a request to authorize the acceptance, appropriation and expenditure of $105,103 the City's total FY18 allocation from the Commonwealth Transportation Infrastructure Fund. As a result of state legislation that was enacted in August 2016, the City has received its first allocation from the regulation of transportation network services (Uber, etc).

Each transportation network service must report the number of rides from the prior year that originated within each city or town and pay a per-ride assessment of 20 cents into the fund. Half of the amount in the fund is paid to cities and towns based on the number of rides from the previous year that originated in that city or town.

The funds must be used "to address the impact of transportation network services on municipal roads, bridges and other transportation infrastructure or any other public purpose substantially related to the operation of transportation network services in the city or town including, but not limited to, the complete streets program established in [G.L. c. 90I, § 1] and other programs that support alternative modes of transportation." St. 2016, c. 187, § 8(c)(i).

Specifically, the Public Works Department is requesting to use these funds for concept design engineering services, consisting of traffic evaluation, alternatives analysis, and concept design engineering development, for the complete streets design of the Wells-Nahanton Traffic Signalization and Intersection Improvement Project.

Thank you for your consideration of this matter.

Sincerely,

Ruthanne Fuller

Ruthanne Fuller
Mayor

City of Newton

DEPARTMENT OF PUBLIC WORKS
OFFICE OF THE COMMISSIONER
1000 Commonwealth Avenue
Newton Centre, MA 02459-1449

Ruthanne Fuller
Mayor

To: Mayor Ruthanne Fuller
Maureen Lemieux, CFO

From: Jim McGonagle

Subject: Wells Nahanton

Date: 9/28/2018

I request a total of $105,000 (includes 10% contingency) in funds for concept design engineering services, consisting of traffic evaluation, alternatives analysis, and concept design engineering development, for the Wells-Nahanton Traffic Signalization and Intersection Improvement Project. The project will upgrade traffic signal equipment, install ADA compliant ramps, and improve multimodal transportation safety and operations. The concept design is scheduled to be completed by winter 2018.

The design engineering consultant, Environmental Partners Group, will conduct site visits, conduct traffic engineering studies, provide site survey for base mapping, review base plans, provide conceptual alternatives and conduct meetings. Concept design does not include final engineering design and bid document preparation, bid and construction phase services, nor engineering services during construction. These services will be submitted at a later date once the concept design is selected and the project scope is better defined.

Environmental Partners Group was selected by Public Works as the engineering consultant for this project based on their previous design experience in this area, including engineering design services for the Dedham Street-Nahanton Street-Brookline Street-Carlson Avenue traffic signalization and intersection improvements project. Environmental Partners Group has conducted some needed preliminary baseline data for this project, which allowed City staff to better understand the potential options that could be considered and evaluated for roadway and intersection improvements at this location. Furthermore, Environmental Partners Group has extensive experience in the City, and is familiar with our project development and approval process. Environmental Partners Group designed the traffic signal improvements for the Washington Street-Harvard Street intersection, and is currently our engineering design consultant for Walnut Street in Newtonville.

Jim McGonagle
Commissioner of Public Works

Jim McGonagle
Commissioner
Telephone: (617) 796-1009 • Fax: (617) 796-1050 • jmcgonagle@newtonma.gov

Environmental Partners GROUP
A partnership for engineering solutions.

April 27, 2018

Mr. James McGonagle, Commissioner
Department of Public Works
City of Newton
1000 Commonwealth Avenue
Newton, MA 02459

Attn: Ms. Nicole Freedman, Director of Transportation

Re: Nahanton Street Improvements at Wells Avenue and Winchester Street Intersections

Dear Mr. McGonagle:

Environmental Partners Group, Inc. (Environmental Partners) is pleased to submit the following Scope of Services and fee to the City of Newton for professional engineering services associated with the design of circulation and safety improvements at the Nahanton Street at Wells Avenue and Winchester Street (JCC Early Learning Center Driveway) intersection and the Nahanton Street at Winchester Street intersection. Work will begin with evaluating existing safety and operations, identifying alternatives for improvements, preparing a Technical Memorandum summarizing findings and public outreach. The project will then advance into the Preliminary Design and Final Design phases and bid document preparation.

In order to meet these objectives we propose the following Scope of Services:

SCOPE OF SERVICES

Environmental Partners will provide professional engineering services necessary for the preparation of plans, specifications and cost estimates for safety and operational improvements at the Nahanton Street at Wells Avenue and Winchester Street (JCC Early Learning Center Driveway) intersection and the Nahanton Street at Winchester Street intersection. The design will be based on the design standards, engineering criteria and directives of the Massachusetts Department of Transportation (MassDOT) and the City where applicable and feasible. The Scope of Services shall be apportioned as follows:

- Phase 1 – Traffic Evaluation and Concept Development
- Phase 2 – Engineering Design and Bid Document Preparation
- Phase 3 – Bid and Construction Phase Services

A. Phase 1 – Traffic Evaluation and Concept Development

1. *General*

   a. Phase 1 will involve performing evaluations necessary to identify deficiencies at the Nahanton Street at Wells Avenue and Winchester Street (JCC Early Learning Center Driveway) intersection and to identify alternatives for improvements to safety and operations. Given the proximity and traffic signal coordination with the Nahanton Street at Winchester Street intersection, Environmental Partners will collect and analyze traffic and accident data at both intersections as well improvements at both locations.

   b. A topographic survey and base plan preparation will be performed of the subject project intersection in order to determine the feasibility and the impacts of alternatives under consideration during the Conceptual Design phase.

   c. The findings will be presented to City officials and the public for insight and feedback. Ultimately one preferred alternative will be selected by the City for advancement into the Engineered Design phase. The project is anticipated to proceed through a City review process; a review by MassDOT is not anticipated.

2. *Traffic Engineering*

   a. Environmental Partners will request available pertinent information relative to the proposed project from the City. This will include existing plans, traffic information, crash data or other documents for review and evaluation. A visual review of the project area will be conducted to identify deficiencies.

   b. Environmental Partners will perform Turning Movement Counts (TMC) at the both intersections during typical weekday morning peak hours (7:00 a.m. to 9:00 a.m.) and evening peak hours (4:00 p.m. to 6:00 p.m.). Information collected will include vehicle classification, pedestrian volumes and bicycle volumes in 15 minute intervals. It is anticipated that the peak traffic periods will be captured within the identified hours of the TMC's and that additional TMC's will not be required. The traffic data will be summarized in turning movement diagrams for the morning and evening peak hours.

      With discussions of a left turn lane onto Winchester Street and potential development along Winchester Street adjacent to the JCC Early Learning Center, a TMC will be performed at both intersections from 11:00am to 1:00pm on a typical Saturday.

c. Automatic Traffic Recorder (ATR) counts are anticipated to be collected for a typical weekday at the following five (5) locations to determine fluctuations in daily traffic volumes, vehicle classification, and 85th percentile vehicle speeds:

- Nahanton Street west of Wells Avenue
- Nahanton Street east of Winchester Street
- Wells Avenue south of Nahanton Street
- Winchester Street (JCC Early Learning Center Driveway) north of Nahanton Street
- Winchester Street north of Nahanton Street

d. Traffic operations and queues will also be observed at the above two (2) intersections during the identified peak periods to gain an understanding of circulation, driver behavior, delays and queues. Given the critical role that traffic congestion and traffic fluctuations play at the location and their impact to traffic modeling, this Scope of Services assumes two brief observation periods of the intersections during both weekday morning and afternoon peak periods.

e. Recorded crash data provided by the City and/or made available by MassDOT relative to the subject two intersections will be reviewed and summarized for the five most recent years available. The rate of crashes at each location will be calculated for comparison with state and local district averages. Trends in crash type will be reviewed for consideration of improvements. The data analysis will be used to determine safety issues that may be addressed through engineering and design. The analysis shall be performed using the latest available crash data furnished by the City.

f. The traffic data will be summarized and projected to reflect anticipated future growth to a design year of 2027 based on available data. Operations will be analyzed at each of the two intersections under both current and future traffic volumes using Synchro software. The analysis of critical weekday peak hour traffic volumes will be used to determine what, if any, changes to geometry or traffic control could be made to improve operations under existing and future conditions. (Evaluation of Saturday traffic volumes will be performed only to verify adequate turning lane length onto Winchester Street is provided in the concepts.)

g. Environmental Partners will also review any available evaluations or reports provided by the City regarding changes in traffic circulation caused by the potential future connection between Wells Avenue and Carlson Avenue. For purposes of this project, it is anticipated that modeling the surrounding roadway network to calculate changes in circulation caused by this potential future connection is not included in this Scope of Services.

h. The above analyses, results and recommendations will be summarized in a Technical Memorandum. Further, conceptual improvements (as described under the Conceptual Design section below) will be identified, analyzed and summarized.

3. *Topographic Survey and Base Plan*

a. A topographic survey will be performed to generate a base plan suitable to design the proposed features identified herein. The following survey limits are anticipated:
   - Nahanton Street: 2,000 feet total (starting 100 feet west of the eastern Nahanton Street bridge abutment, extending to 100 feet east of the Winchester Street intersection)
   - Wells Avenue: south of Nahanton Street for a distance of 1,500 feet (200 feet south of Wells Avenue connection) and 100 feet of the side Wells Avenue approach for a total distance of 1,600 feet
   - Winchester Street (JCC Early Learning Center Driveway): north of Nahanton Street for a distance of 250 feet
   - Winchester Street: north of Nahanton Street for a distance of 100 feet

b. The base plan will be prepared in AutoCAD format and will include all pertinent physical features from back of sidewalk to back of sidewalk. The survey will include a detailed and accurate grading model, compatible with Civil 3D which will be reviewed by Environmental Partners. Elevations will be provided at the centerline, along roadway edge lines, and back of sidewalks. Survey limit will be extended to 30 feet beyond the edge of road.

c. All visible existing utilities within the right of way will be shown. Utility information provided by the responsible utility owner will be included on the base plans including pipe sizes and outlet pipes.

d. It is understood that all information that the City has available relative to the project (i.e., existing plans, GIS mapping data, traffic data information, accident data, local traffic ordinance and bylaws, etc.) will be provided to Environmental Partners at no cost so that we may properly review the work. Police details will be provided by the City as required.

e. Right of Way information will be researched and compiled from the Assessors' office, Department of Public Works, MassDOT and Registry of Deeds to obtain available information relative to roadway layout lines, property lines and baseline information. All horizontal and vertical control will be connected to the Massachusetts Grid System by GPS. Property sidelines will be shown in approximate locations based on available information; owner deed reference, book and page

number will be labeled.

4. *Conceptual Design*

   a. An alternatives analysis will be performed to identify potential improvements at the Nahanton Street at Wells Avenue and Winchester Street (JCC Early Learning Center Driveway) intersection and at the Nahanton Street at Winchester Street intersection.
   b. It is our understanding through discussions with the City that bicycle travel along Nahanton Street is significant. Environmental Partners will include an evaluation of pedestrian and bicycle movements within the project limits to document existing volumes and travel patterns for comparison with treatments outside project limits in order to recommend improvements in safety and connectivity.

   c. In identifying alternatives for improvement at the intersections, considerations may include increasing capacity from the Wells Avenue approach with potential widening in various areas of the intersection, expanding pedestrian connections between intersections, and improved bicycle accommodations. Considerations will also be made for widening the Nahanton Street corridor to improve operations and bicycle accommodations within project limits. Environmental Partners will evaluate the impacts each alternative will have on the surrounding right of way, wetlands and environment. Constraints caused by topography and conceptual proposed grading transitions will be evaluated.

   d. Up to six (6) alternatives will be conceptually presented to the City for consideration. Each alternative will be evaluated for pro's and con's for presentation at the first public meeting.

   e. Following the first public meeting, the alternatives remaining under consideration will be refined based on feedback from the public and the City for presentation at the second public meeting.

   f. The preferred alternative identified by the City will be refined based on input provided for advancement into Preliminary Design phase.

5. *Meetings*

   a. Bi-weekly conference calls will take place to discuss updates on project status and to gain further project insight.

   b. Up to four (4) project coordination meetings are anticipated with representatives of the City, City officials and boards during Phase 1.

c. This Scope of Services assumes that Environmental Partners will prepare for and attend two (2) public meetings to present the evaluations and alternatives, solicit input and gain consensus on the preferred alternative. PowerPoint presentations are anticipated for the public meetings.

B. Phase 2 – Engineering Design and Bid Document Preparation

1. General

a. Environmental Partners will address review comments provided by representatives of the City as well as identified during team and/or public meetings and will advance the Conceptual Design to the Engineered Design Phase (Preliminary Design and Final Design). Bid documents will be prepared adequate for bidding purposes including plans, specifications and construction estimates. This project is anticipated to proceed through a City review process; a review by MassDOT is not anticipated.

2. Preliminary Design

a. Environmental Partners will prepare the standard preliminary (50%) design of the preferred alternative based on sound engineered design and standards, ADA regulations and recommendations from the City regarding specific project criteria. The Preliminary Design will include a preliminary layout of the project intersection(s), traffic signal system, bicycle accommodations and ADA compliant provisions. The Preliminary Design phase submission will include plans showing the proposed improvements, typical roadway cross sections, critical cross sections, lane configurations, pavement markings, traffic signal layout and a preliminary construction cost estimate.

b. Preliminary Design plans will include a Cover Sheet, Legend Sheet, Key Plan, Preliminary Traffic Plans, General Construction Plans and Critical Cross Sections. The Preliminary Traffic Plans will include lane configurations, pavement markings and general traffic signal layout. The General Construction Plans will show areas of roadway rehabilitation, narrowing and/or widening including areas of milling and resurfacing. In addition, the plans will include general horizontal alignment.

c. A preliminary construction cost estimate will be prepared in MassDOT format and based on prevailing prices established by MassDOT and recently awarded projects completed by Environmental Partners.

3. *Final Design*

   a. Final Design plans will include additional plans from the Preliminary Design Phase such as Details, Final Traffic Plans, General Construction Plans, Curb Tie Plans, Profiles and Critical Cross Sections. Final Traffic Plans will include more detailed information from the Preliminary Traffic Plans including but not limited to signs and traffic signal charts. The General Construction Plans will be advanced from the preliminary level to show more detailed information such as affected driveways and obstructions as well as to identify any land acquisitions necessary to accommodate the proposed improvements.

4. *Environmental Permitting*

   a. Roadway and sidewalk construction is anticipated to take place within the 100 foot wetland buffer zone and 100 foot and 200 foot riverfront buffer zone however construction impacts to adjacent wetland and river areas are not anticipated.

   b. Based on MassGIS NHESP mapping, this Scope of Services assumes that this project is not adjacent to endangered species habitats or vernal pools.

   c. The above evaluations will be summarized and included with the Notice of Intent (NOI) for filing to the Conservation Commission. This Scope of Services assumes environmental permitting applications for this project will be limited to the submission of an NOI. The preparation of a Stormwater Memorandum will be included.

5. *Bid Document Preparation*

   a. Environmental Partners will prepare supplementary specifications to the Massachusetts Department of Transportation "Standard Specifications for Highways and Bridges" (latest edition) in the form of Special Provisions which will incorporate relevant sections of the City's standard specifications where applicable. This work includes the preparation of the bid tabulation and technical specification sections of the contract bid documents. Standard bidding requirements, general conditions, agreement or other information associated with procurement requirements and procedures will be provided by the City.

   b. Environmental Partners will provide a final construction cost estimate. The final construction cost estimate will include the quantity, unit price and estimated cost of all pay items. The estimate will be based on prevailing prices established by

MassDOT and recently advertised and awarded projects completed by the City and Environmental Partners. A bid tab will be prepared and included in the Measurement and Payment section of the bid document providing the quantity for each bid item.

c. It is anticipated that the mast arm foundation designs will be based on MassDOT standard details. Soil material type will be assumed for purposes of preparing the bid document. Prior to construction, borings will be performed by the awarded Contractor to verify soil materials. Changes between assumed soil conditions and boring soil results will be addressed using the standard pay item "Footing Cost Adjustment".

d. The bid package will be submitted to the City for review and comment upon completion. A response to comments will be provided and changes implemented as necessary into the submission of bid documents including plans, specifications, and estimates (PS&E).

6. *Meetings*

a. Bi-weekly conference calls will take place to discuss updates on project status and to discuss design details.

b. Up to six (6) project coordination meetings are anticipated with representatives of the City, City officials and boards during Phase 2.

c. This Scope of Services assumes that Environmental Partners will prepare for and attend one (1) public meeting to present the engineered design and solicit input regarding the detailed design. A PowerPoint presentation is anticipated for the public meeting.

C. Phase 3 - Bid and Construction Phase Services

1. *General*

a. This Scope of Services assumes that the City will administer the construction of this project.

2. *Bid Phase Services*

a. Environmental Partners will assist the City in advertising for and obtaining bids for construction, materials, equipment and services; and, where applicable, maintain a

record of prospective bidders to whom Bidding Documents have been issued, and attend pre-bid conferences for the contract. Environmental Partners will issue Addenda as appropriate to clarify, correct or change the Bidding Documents.

b. Environmental Partners will consult with the City as to the acceptability of subcontractors, suppliers and other persons and entities proposed by the Contractor for those portions of the work as to which such acceptability is required by the Bidding Documents.

c. Environmental Partners will attend the bid opening, prepare bid tabulation sheets and assist the City in evaluating bids or proposals and in assembling and awarding contracts for construction, materials, equipment and services.

3. *Construction Phase Services*

a. Environmental Partners will provide construction administration services including attendance to preconstruction conferences, review and approval of shop drawings, review of payment requisitions, consultation and office services, site visits, inspections, meetings, final inspection or other related work, as requested by the City in connection with this project. All services provided by Environmental Partners will be as directed by the City.

FEE

A. The Scope of Services **Phase 1 – Traffic Evaluation and Concept Development** is estimated at the lump sum fee of $94,500.00 based on the following Fee Schedule.

Fee Schedule

Phase 1 – Traffic Evaluation and Concept Development

Labor	
1. Traffic Engineering	$ 19,500
2. Base Plan Review/Site Visits	$ 3,700
3. Conceptual Alternatives/Const. Est.	$ 18,200
4. Meetings/Coordination/Presentation Materials	$ 19,100
	$ 60,500
Expenses	
1. Survey	$ 30,600
2. Traffic Counts	$ 2,200
3. Wetland Flagging	$ 900
4. Misc. Expenses	$ 300
	$ 34,000
Phase 1 Total	***$ 94,500***

The scope and fee for the follow-on services identified as **Phase 2 – Engineering Design and Bid Document Preparation** and **Phase 3 – Bid and Construction Phase Services** will be established and negotiated with the City once the design parameters have been established, following completion of Phase 1.

SCHEDULE

Environmental Partners is prepared to commence on the above service immediately upon receipt of an executed Notice to Proceed. Environmental Partners will use its best efforts to perform all services as expeditiously as is consistent with professional skill and care and the orderly progress of the work. The schedule will primarily be dictated by the City's schedule for public meetings. Preparation for the first public meeting including data collection, traffic evaluations, topographic survey, base plan preparation and initial conceptual alternatives is anticipated to be completed within 3 months of an executed Notice to Proceed depending on weather conditions and the City's schedule.

We appreciate this opportunity to be of service to the City of Newton. If you have any questions regarding this proposal or require additional information, please do not hesitate to contact us.

Sincerely,

ENVIRONMENTAL PARTNERS GROUP, INC.

Paul F. Gabriel, P.E. LSP
President

James D. Fitzgerald, P.E., LEED AP
Director of Transportation