



The Commonwealth of Massachusetts
TOWN OF WESTBOROUGH



In accordance with the Massachusetts State Building Code 8th Edition, Section 111.2 this

CERTIFICATE OF OCCUPANCY

Certifies that the building or structure or portion thereof, as described herein, complies with the provisions of the Building Code for the following use(s) and occupancy group(s). No change shall be made in the character of occupancy or use of the building or structure without the written approval of the Building Official.

NAME OF PROJECT OR PLACE

Park Place

BUILDING/STRUCTURE ADDRESS:

7 Stagecoach Circle

BUILDING PERMIT NO.

RG-2016-00060

OWNER:

Westwood Associates

OWNER ADDRESS:

7 Stagecoach Circle

PERMIT DATE: **02/25/2016**

OCCUPANCY	OCCUPANT LOAD	DESCRIPTION OF USE OF BUILDING/STRUCTURE (OR PORTION)	
R-3		Townhouse	
SPECIAL CONDITIONS			
YES <input type="checkbox"/> / NO <input type="checkbox"/> AUTOMATIC SPRINKLER SYSTEM PROVIDED			
OFFICE OF THE BUILDING COMMISSIONER 45 WEST MAIN STREET WESTBOROUGH, MA 01581			
Date Issued: 01/11/2017		Building Official: J. Thomas Reardon	
The Building Official shall be notified within ten (10) days of any changes in the above information		TIN HTWAY, CBO Building Commissioner	

WESTBOROUGH BUILDING DEPT

Date Issued: Feb 25, 2016

Permit No.: RG-2016-00060



45 W. Main Street, 2nd floor
Westborough, MA 01581
Hours: M, W, Th 8am-5pm
Tu 8am-8pm, F 7:30am-12pm
(508) 366-3015

Location: 7 Stagecoach Circle
Westborough MA 01581

Description: completion of one of three condominium
units in a three unit building - occupancy

Owner:
EBRAHIM TAREK M HASSAN
MAHA M

Building Official:

WZ

Building Inspections and Approvals

NO.	INSPECTION	DATE	INSPECTOR
B1	Locations/Setbacks		
B2	Excavation/Soils Engineer		
B3	Footings/Fnd/Forms		
B4	As-Built Foundation Plans		
B5	Retaining Walls/Reinforce		
B6	Masonry Walls		
B7	Damp/Waterproofing		
B8	Bolts/Hold Downs/Straps		
B9	Floor Slab & Steel		
B10	Raised Floor Framing		
B11	Concealed Insulation		
B12	Floor Sheathing		
B13	Roof Sheathing		
B14	Roof Covering		
B15	Window Replacement		
B16	Masonry/Mfg. Fireplace		
B17	Frame/Bracing <i>See back</i>	6-13-16	<i>WZ</i>
B18	Insulate/Weather Strip	6-17-16	<i>WZ</i>
B19			

DO NOT COVER WALLS UNTIL FRAME, INSULATION, & ROUGH ELECTRICAL,
MECHANICAL, & PLUMBING HAVE BEEN SIGNED

B20	Interior Lath/Drywall	7.05.16	JTR
B21	Weatherproofing		
B22	T-Bar Ceiling		
B23	Rated Assemblies		
B24	Disabled Access		
B25	Demolition		
B26	Lot Drainage		
B27	(Address posted) Enter Building Final Below)		

Electrical Inspections and Approvals

NO.	INSPECTION	DATE	INSPECTOR
E1	Temporary Power		
E2	Service/Ground		
	• Location • UFER • Water Ground • Driven Road		
E3	Underground Elect		
E4	Rough Conduit		
E5	Dist Panel(s)		
E6	Rough Electrical	OK 6-6-16	<i>Joe</i>
E7	Smoke/CO Detectors		
E8	Heater Detectors		
E9	Svr Ground Fault Test		
E10	Service Panel		
E11			
E12	Electrical Final	OK-11-21-16	<i>Joe</i>

Mechanical Inspections And Approvals

NO.	INSPECTION	DATE	INSPECTOR
M1	FAU/Wall Furnace	<i>Joe</i>	11-21-16
M2	Exhaust/Combust Duct	<i>Joe</i>	11-21-16
M3	Combustion Air	<i>Joe</i>	11-21-16
M4	Rough Mechanical		
M5	AC/Compressor		
M6	Thermostat		
M7	Fire Dampers		
M8	Smoke Detectors	<i>Joe</i>	<i>Don Test</i>
M9	Commercial Hood		
M10	Boiler		
M11			
M12	Mechanical Final	<i>Joe</i>	11-21-16

Plumbing Inspections And Approvals

NO.	INSPECTION	DATE	INSPECTOR
P1	Perimeter Drainage		
P2	Water Service		
P3	Under Floor/Slab		
P4	Shower Pan		
P5	Water Lines	<i>Joe</i>	6-6-16
P6	Rough Gas Piping	<i>Joe</i>	6-6-16
P7	Rough Plumbing		
P8	Sewer (Public/Private)		
P9	Backflow Preventer		
P10	Water Heater	<i>Joe</i>	11-21-16
P11	Roof Drains		
P12	Gas (Test/Final)	<i>Joe</i>	11-21-16
P13			
P14	Plumbing Final	<i>Joe</i>	11-21-16

Verify Other Approvals

NO.	INSPECTION	DATE	INSPECTOR
V1	Special Inspection Reports		
V2	Methane System		
V3	Phased Const. Control		
V4	Structure Observation		
V5	Final Const. Control		

Agency Approvals

NO.	INSPECTION	DATE	INSPECTOR
A1	Fire Department	1.11.17	<i>COV</i>
A2	Planning Department		
A3	Conservation Commission		
A4	Health Department		
A5	Dept Public Works	11/21/2016	<i>WATER OK</i>
A6	Mass DOT		
A7	Disabled Access		
A8	MASS PDW (Env)	11/22/2016	<i>RJD</i>
A9			
B28	BUILDING FINAL	1.11.17	<i>JTR</i>

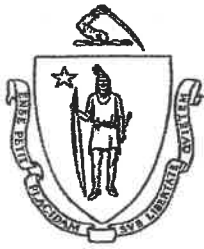
CERTIFICATE OF OCCUPANCY

POST THIS CARD AND THE APPROVED PLANS IN A CONSPICUOUS PLACE ACCESSIBLE TO THE INSPECTOR. IT SHALL BE THE DUTY OF THE APPLICANT TO CAUSE THE WORK TO REMAIN ACCESSIBLE AND EXPOSED FOR INSPECTION PURPOSES. PERMITS WILL BE VOIDED IF WORK IS NOT STARTED WITHIN 180 DAYS OR IS SUSPENDED FOR A PERIOD EXCEEDING 180 DAYS.

Bring out permit sheet rock over Joe

6-13-14 - Need rafter blocks for MB ceiling
- anchor bolts for wall + ledger

6-17-14 O.K.
✓ Z



Final Construction Control Document

To be submitted at completion of construction by a

Registered Design Professional

for work per the 8th edition of the

Massachusetts State Building Code, 780 CMR, Section 107

Project Title: Park Place Condominiums Date: 12/15/2016 Permit No. _____

Property Address: 7 Stagecoach Circle, Westborough, MA

Project: Check one or both as applicable: ☒ New construction ☐ Existing Construction

Project description: Condominium Unit Type C, Building 3, Unit 9

I Daniel M. Lewis MA Registration Number: 6046 Expiration date: 8/31/2017, am a *registered design professional*, and I have prepared or directly supervised the preparation of all design plans, computations and specifications concerning:

☒ Architectural ☐ Structural ☐ Mechanical
☐ Fire Protection ☐ Electrical ☐ Other: _____

for the above named project. I, or my designee, have performed the necessary professional services and was present at the construction site on a regular and periodic basis. To the best of my knowledge, information, and belief the work proceeded in accordance with the requirements of 780 CMR and the design documents approved as part of the building permit and that I or my designee:

1. Have reviewed, for conformance to this code and the design concept, shop drawings, samples and other submittals by the contractor in accordance with the requirements of the construction documents.
2. Have performed the duties for registered design professionals in 780 CMR Chapter 17, as applicable.
3. Have been present at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the work and to determine if the work was performed in a manner consistent with the construction documents and this code to the best of my knowledge.

Nothing in this document relieves the contractor of its responsibility regarding the provisions of 780 CMR 107.

Enter in the space to the right a "wet" or electronic signature and seal:



Phone number: 508-612-8771 Email: danlewis@charter.net

Building Official Use Only

Building Official Name: _____ Permit No.: _____ Date: _____



Final Construction Control Document

To be submitted at completion of construction by a

Registered Design Professional

for work per the 8th edition of the

Massachusetts State Building Code, 780 CMR, Section 107

Project Title: **Park Place – Building 3**

Date: **June 17, 2016**

Property Address: **7 Stagecoach Circle, Westborough, MA**

Project: Check (x) one or both as applicable: **X** New construction Existing Construction

Project description: **Three unit, 2-story, wood framed townhouse building as specified on Consulting Structural Engineer, Inc. structural drawings S-0.1 through S-4.1 dated April 23, 2013..**

I, **Brian A. Walsh, P.E.**, MA Registration Number: **46077** Expiration date: **June 30, 2018**, am a *registered design professional*, and I have prepared or directly supervised the preparation of all design plans, computations and specifications concerning:

Architectural
Fire Protection

X Structural
Electrical

Mechanical
Other: Describe

for the above named project. I, or my designee, have performed the necessary professional services and was present at the construction site on a regular and periodic basis. To the best of my knowledge, information, and belief the work proceeded in accordance with the requirements of 780 CMR and the design documents approved as part of the building permit and that I or my designee:

1. Have reviewed, for conformance to this code and the design concept, shop drawings, samples and other submittals by the contractor in accordance with the requirements of the construction documents.
2. Have performed the duties for registered design professionals in 780 CMR Chapter 17, as applicable.
3. Have been present at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the work and to determine if the work was performed in a manner consistent with the construction documents and this code.

Nothing in this document relieves the contractor of its responsibility regarding the provisions of 780 CMR 107.

Enter in the space to the right a “wet” or electronic signature and seal:



Phone number: **(978) 866-8354**

Email: **BAWalsh@cse-ma.com**

Building Official Use Only

Building Official Name:

Permit No.:

Date:

CONSTRUCTION COMPLETION NOTICE

Date: November 22, 2016

To: Building Inspector / Fire Dept. Town of Westborough

Re: Certificate of Compliance Affidavit for Park Place – 7 Stagecoach Circle – Westborough, MA

Code Official:

This letter shall serve to confirm that Seaman Engineering, Inc. has performed the final site inspection on November 22 for the FIRE PROTECTION portion of the Park Place – 7 Stagecoach Circle – Westborough, MA project and find it installed in accordance with our plans and specifications; and is in compliance with the applicable regulations and requirements of the Massachusetts State Building Code – 8th Edition.

Seaman Engineering, Inc.

Kevin R. Seaman, P.E.



Commonwealth of Massachusetts
Registered Professional Engineer
License # 38130



Date: November 22, 2016

To: Building Inspector Town of Westborough

Re: Certificate of Compliance Affidavit for Park Place – 7 Stagecoach Circle - Westborough, MA

Building Official:

This letter shall serve to confirm that Seaman Engineering Corp. has performed the final site inspections on November 22, 2016 for the **HVAC and Plumbing** portions of the Park Place – 7 Stagecoach Drive, Westborough, MA project and find them essentially installed in accordance with our plans and specifications; and to the best of our knowledge and belief are in compliance with the applicable regulations and requirements of the Massachusetts State Building Code - Eighth Edition.

Seaman Engineering Corporation



Kevin R. Seaman, P. E.
President

Commonwealth of Massachusetts
Registered Professional Mechanical Engineer
License No. 38130



Final Construction Control Document

To be submitted at completion of construction by a

Registered Design Professional

for work per the 8th edition of the

Massachusetts State Building Code, 780 CMR, Section 107

Project Title: Park Place Unit #7

Date: November 22, 2016 Permit No.

Property Address: Stage Coach Circle, Westborough, MA 01581

Project: Check (x) one or both as applicable: ☒ New construction ☐ Existing Construction

Project description: Single dwelling unit #7 of a multi-unit building

I Robert J. Figuerido MA Registration Number: 29029 Expiration date: June 30, 2018 , am a *registered design professional*, and I have prepared or directly supervised the preparation of all design plans, computations and specifications concerning:

Architectural
Fire Protection

Structural
☒ Electrical

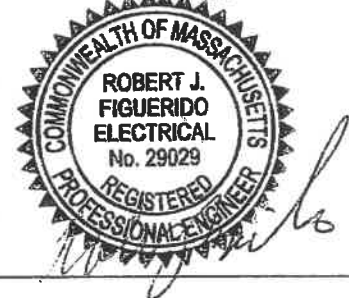
Mechanical
☒ Other: Fire Alarm

for the above named project. I, or my designee, have performed the necessary professional services and was present at the construction site on a regular and periodic basis. To the best of my knowledge, information, and belief the work proceeded in accordance with the requirements of 780 CMR and the design documents approved as part of the building permit and that I or my designee:

1. Have reviewed, for conformance to this code and the design concept, shop drawings, samples and other submittals by the contractor in accordance with the requirements of the construction documents.
2. Have performed the duties for registered design professionals in 780 CMR Chapter 17, as applicable.
3. Have been present at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the work and to determine if the work was performed in a manner consistent with the construction documents and this code.

Nothing in this document relieves the contractor of its responsibility regarding the provisions of 780 CMR 107.

Enter in the space to the right a "wet" or electronic signature and seal:



Phone number: 508.757.7793

Email: bobf@shepherdengineeringinc.com

Building Official Use Only

Building Official Name:

Permit No.:

Date:

Backflow Prevention Device Inspection and Maintenance Report Form

Owner of Property

Westwood Assoc
PO Box 250
Shrewsbury 01581

TEST Initial**Date** 11/21/2016**Contact Person**

Brian Antonioli 508 922-1467

Examined by: Scott Lenihan**Certificate #:** 32053**Cross Connection ID #:**☐ RPBP ☒ DCVA☐ Bronze ☐ Iron**Device Address**

7 Stagecoach Circle
Westborough 01581
Exact Location: Basement

Type of Gate Valve Ball**Secondary Supply or System:** Fireline**By-Pass:** NO**For Unit #:****Make:** Ames**Model #:** 2000B**Size:** 1"**Serial #:** 31339

	Check Valve 1	Check Valve 2	Diff. Pres. Relief Valve
Test Before Repairs	<input type="checkbox"/> Leaked <input type="checkbox"/> Closed Tight Pres Drop PSI: 0	<input type="checkbox"/> Leaked <input type="checkbox"/> Closed Tight	Opened Reduced Pres. PSI: 0
Describe Repairs, Parts, and Materials			
Final Test	<input type="checkbox"/> Closed Tight Pres Drop PSI: 0	<input type="checkbox"/> Closed Tight	Opened Reduced Pres. PSI 0

Test Results: PASS**Remarks:****Witnessed by:****Owner's Agent****Water Works Official****Certified Tester** Scott Lenihan**State Dept Env Quality Eng****Plumber's Name****Plumber's License #**

Certificate of Installed Insulation

Customer's name WESTWOOD ASSO Date 11/29/16
Address 7 STAGE COACH RD WESTBORO MA

With a thermal resistance of

- (1) R 38 has been installed in the main ceiling
total square feet 446 number of bags 22 thickness of insulation 10"
type of insulation CELLULOSE manufactured by GREENFIBER
- (2) R 21 has been installed in the exterior walls
total square feet 1020 number of bags 14 thickness of insulation 5.5"
type of insulation FIBERGLASS manufactured by CERTANTIDE
- (3) R 38 has been installed in the SLOPED CEILING
total square feet 1800 number of bags 90 thickness of insulation 10"
type of insulation CELLULOSE manufactured by GREENFIBER
- (4) R 38 has been installed in the GARAGE CEILING
total square feet 520 number of bags 25 thickness of insulation 10"
type of insulation CELLULOSE manufactured by GREENFIBER
- (5) R 30 has been installed in the BASEMENT CEILING
total square feet 1100 number of bags 20 thickness of insulation 9 1/2"
type of insulation FIBERGLASS manufactured by CERTANTIDE

Certified by [Signature] Date 11/30/16
General Manager

AMERICAN BUILDING SYSTEMS INC
37 SOUTHWEST CUTOFF
WORCESTER, MA 01604
508-494-4906

ACTION REPORT

Date:	December 07, 2016	Rating No.:	ABA6325
Building Name:	7 Stagecoach Circle	Rating Org.:	Advanced Building Analysis
Owner's Name:	Westwood Associates, Inc.	Phone No.:	978-270-3911
Property:	7 Stagecoach Circle	Rater's Name:	Sam Kenney
Address:	Westborough, MA 01581	Rater's No.:	0180686
Builder's Name:	Westwood Associates, Inc.		
Weather Site:	Westborough, MA	Rating Type:	Confirmed
File Name:	7 Stagecoach Circle_C.blg	Rating Date:	12/7/2016

The following table identifies and ranks energy use and cost by building component. A maximum of six components are shown. Current mechanical equipment is assumed for this analysis. To determine the impact of varying the equipment efficiency, change the equipment specified in the building file and perform the energy calculations again.

ANNUAL ENERGY PROFILE

Energy End-Use	Component	Consumption (MMBtu/yr)		Cost (\$/yr)
HEATING	Above Grade Walls	13.4	\$	242
	Infiltration	10.4	\$	189
	Mechanical Ventilation	9.7	\$	175
	Ceilings/Roofs	8.8	\$	159
	Ducts	8.6	\$	155
	Crawl Space/Unht Bsmt	7.5	\$	136
	Other	-3.6	\$	-65
	Total	54.7	\$	990
COOLING	Internal Gains	2.7	\$	139
	Windows/Skylights	0.7	\$	39
	Ducts	0.3	\$	14
	Ceilings/Roofs	0.1	\$	4
	Other	-2.1	\$	-109
	Total	1.7	\$	87
WATER HEATING	Water Heater	15.5	\$	277
LIGHTS & APPLIANCES	Lights & Appliances	22.0	\$	1041

AIR LEAKAGE REPORT

Date:	December 07, 2016	Rating No.:	ABA6325
Building Name:	7 Stagecoach Circle	Rating Org.:	Advanced Building Analysis
Owner's Name:	Westwood Associates, Inc.	Phone No.:	978-270-3911
Property:	7 Stagecoach Circle	Rater's Name:	Sam Kenney
Address:	Westborough, MA 01581	Rater's No.:	0180686
Builder's Name:	Westwood Associates, Inc.		
Weather Site:	Westborough, MA	Rating Type:	Confirmed
File Name:	7 Stagecoach Circle_C.blg	Rating Date:	12/7/2016

Whole House Infiltration

	Blower door test	
	Heating	Cooling
Natural ACH:	0.26	0.22
ACH @ 50 Pascals:	3.55	3.55
CFM @ 25 Pascals:	845	845
CFM @ 50 Pascals:	1326	1326
Eff. Leakage Area: [sq.in]	72.8	72.8
Specific Leakage Area:	0.00024	0.00024
ELA/100 sf shell: [sq.in]	1.12	1.12

Duct Leakage

Leakage to Outside Units	Whole House
CFM @ 25 Pascals:	68
CFM25 / CFMfan:	0.0541
CFM25 / CFA:	0.0316
CFM per Std 152:	N/A
CFM per Std 152 / CFA:	N/A
CFM @ 50 Pascals:	107
Eff. Leakage Area: [sq.in]	5.86
Thermal Efficiency:	N/A
Total Duct Leakage Units	CFM25/CFA
Total Duct Leakage:	0.0521

Ventilation

Mechanical:	Exhaust Only	ASHRAE	
Sensible Recovery Eff. (%):	0.0	62.2-2010	
Total Recovery Eff. (%):	0.0		
Rate (cfm):	53	52	
Hours/Day:	24.0	24	
Fan Watts:	7.8		
Cooling Ventilation:	Natural Ventilation		

Regarding ASHRAE 62.2 Ventilation Compliance

The ASHRAE 62.2 flow rates shown above are the CONTINUOUS mechanical fresh air ventilation which will meet the 'whole-building' requirement under that version of the standard. Both values incorporate any appropriate 'infiltration credit'. Intermittent mechanical ventilation may be used if the flow rate is adjusted accordingly. For example, the runtime can be reduced to 12 hours per day using a doubled flow rate, as long as the system provides ventilation at least once every 3 hours. For more detail, refer to the appropriate standard.

BUILDING FILE REPORT

File Name: 7 Stagecoach Circle_C.blg

Date: December 07, 2016

Property/Builder:

Rating

Building Name: 7 Stagecoach Circle
 Owner's Name: Westwood Associates, Inc.
 Property Address: 7 Stagecoach Circle
 City, St, Zip: Westborough, MA 01581
 Phone No: 508-922-1467

Org. Name: Advanced Building Analysis
 Address: 2 Woodlawn St
 City, St, Zip: Amesbury, MA 01913
 Phone No: 978-270-3911
 Website: www.advancedbuildinganalysis.com

Builder's Name: Westwood Associates, Inc.
 Phone No: 508 922-1467
 Email Address: sotir@westwoodassociates.com
 Model: C- Unconditioned Basement
 Development: Stagecoach Circle
 Permit Date/Number: 02/25/2016 RG2016-00060

Rater's Name: Sam Kenney
 Rater's Email: sam@advancedbuildinganalysis.com
 Rater's ID: 0180686
 Provider ID: 1998-136
 Sample Set ID: 0000
 Rating Date: 12/7/2016
 Rating Type: Confirmed
 Reason: New Home
 Rating No.: ABA6325
 Registry ID: 903471026

General Building Information

Area of Cond. Space(sq ft): 2151
 Volume of Cond. Space: 22388
 Year Built: 2016
 Housing Type: Townhouse, end unit
 Level Type(Apartments Only): None
 Floors on or Above-Grade: 2
 Number of Bedrooms: 3
 Foundation Type: Unconditioned basement
 Enclosed Crawl Space Type: N/A
 Thermal Boundary Location: REM Default

Foundation Wall Info:

	1	2	3
Name	Full Uncond>Amb	1/2 Uncond>Amb	3' Uncond>Amb
Library Type	R0,10"	R0,10"	R0,10"
Length(ft)	26.0	8.0	10.1
Total Height(ft)	7.8	4.4	3.5
Depth Below Grade(ft)	6.8	3.4	2.5
Height Above Grade(ft)	1.0	1.0	1.0
Location	Uncond bsmt->amb/grnd	Uncond bsmt->amb/grnd	Uncond bsmt->amb/grnd
Uo Value (wall, airfilm, & soil)	0.204	0.298	0.343
Uo Value (wall assembly only)	1.205	1.205	1.205

BUILDING FILE REPORT

7 Stagecoach Circle

Page 2

Foundation Wall Info:

4

Name GarageWall
 Library Type R0,10"
 Length(ft) 39.0
 Total Height(ft) 7.8
 Depth Below Grade(ft) 6.8
 Height Above Grade(ft) 1.0
 Location Uncond bsmt->garage/grnd
 Uo Value (wall, airfilm, & soil) 0.204
 Uo Value (wall assembly only) 1.205

Foundation Wall: R0,10"

Type: Solid concrete or stone
 Thickness(in): 10.0
 Studs: None

Interior Insulation:

Continuous R-Value: 0.0
 Frame Cavity R-Value: 0.0
 Cavity Insulation Grade: 1
 Ins top: 0.0 ft from top of wall
 Ins Bottom: 0.0 ft from top of wall

Exterior Insulation:

R-Value: 0.0
 Ins top: 0.0 ft from top of wall
 Ins bottom: 0.0 ft from top of wall

Note:

Floor Info:

1

2

3

Name	Cond>Garage	Cond>UncondBasement	Cond>Amb
Library Type	R32,CE1,10-16	R30,FG1,10-16	R30,FG1,10-16
Area (sq ft)	482	1232	144
Location	Btwn cond & garage	Btwn cond & uncond bsmt	Btwn cond & ambient
Uo Value	0.033	0.036	0.036

Floor Info:

4

Name BasementStairs
 Library Type R30,FG2,X-16
 Area (sq ft) 64
 Location Btwn cond & uncond bsmt
 Uo Value 0.040

BUILDING FILE REPORT

7 Stagecoach Circle

Page 3

Floor: R32,CE1,10-16

Information From Quick Fill Screen:

Continuous Insulation R-Value	0.0
Cavity Insulation R-Value	32.4
Cavity Insulation Thickness (in.)	9.2
Cavity Insulation Grade	1.0
Joist Size (w x h, in)	1.5 x 9.3
Joist Spacing (in oc)	16.0
Framing Factor - (default)	0.1300
Floor Covering	HARDWOOD

Note:

Layers	Paths		
	Cavity	Framing	Grade
Inside Air Film	0.920	0.920	0.920
Floor covering	0.680	0.680	0.680
Subfloor	0.820	0.820	0.820
Cavity ins	32.400	0.000	0.000
Continuous ins	0.000	0.000	0.000
Framing	0.000	11.500	0.000
	0.000	0.000	0.000
Outside Air Film	0.920	0.920	0.920
Total R-Value	35.740	14.840	3.340
U-Value	0.028	0.067	0.299
Relative Area	0.870	0.130	0.000
UA	0.024	0.009	0.000

Total Component UA: 0.033

Total Component Area: 1.0

Component Uo: 0.033

BUILDING FILE REPORT

7 Stagecoach Circle

Page 4

Floor: R30,FG1,10-16

Information From Quick Fill Screen:

Continuous Insulation R-Value	0.0
Cavity Insulation R-Value	30.0
Cavity Insulation Thickness (in.)	9.3
Cavity Insulation Grade	1.0
Joist Size (w x h, in)	1.5 x 9.3
Joist Spacing (in oc)	16.0
Framing Factor - (default)	0.1300
Floor Covering	HARDWOOD

Note:

Layers	Paths		
	Cavity	Framing	Grade
Inside Air Film	0.860	0.860	0.860
Floor covering	0.680	0.680	0.680
Subfloor	0.820	0.820	0.820
Cavity ins	30.000	0.000	0.000
Continuous ins	0.000	0.000	0.000
Framing	0.000	11.625	0.000
	0.000	0.000	0.000
Outside Air Film	0.455	0.455	0.455
Total R-Value	32.815	14.440	2.815
U-Value	0.030	0.069	0.355
Relative Area	0.870	0.130	0.000
UA	0.027	0.009	0.000

Total Component UA: 0.036

Total ComponentArea: 1.0

Component Uo: 0.036

BUILDING FILE REPORT

7 Stagecoach Circle

Page 5

Floor: R30,FG2,X-16

Information From Quick Fill Screen:

Continuous Insulation R-Value	0.0
Cavity Insulation R-Value	30.0
Cavity Insulation Thickness (in.)	9.0
Cavity Insulation Grade	2.0
Joist Size (w x h, in)	1.5 x 9.3
Joist Spacing (in oc)	16.0
Framing Factor - (default)	0.1300
Floor Covering	HARDWOOD

Note: Updated Grade 2 AP 11/1/05

Layers	Paths		
	Cavity	Framing	Grade
Inside Air Film	0.920	0.920	0.920
Floor covering	0.680	0.680	0.680
Subfloor	0.820	0.820	0.820
Cavity ins	30.000	0.000	0.000
Continuous ins	0.000	0.000	0.000
Framing	0.000	11.250	0.000
	0.000	0.000	0.000
Outside Air Film	0.920	0.920	0.920
Total R-Value	33.340	14.590	3.340
U-Value	0.030	0.069	0.299
Relative Area	0.850	0.130	0.020
UA	0.025	0.009	0.006

Total Component UA: 0.040

Total ComponentArea: 1.0

Component Uo: 0.040

BUILDING FILE REPORT

7 Stagecoach Circle

Page 6

Rim and Band Joist:	1	2	3
Name	Cond>Adiabatic	Cond>Amb	Cond>Gar
Area(sq ft)	30.0	17.6	37.0
Continuous Ins	0.0	0.0	0.0
Framed Cavity Ins	21.0	21.0	21.0
Cavity Ins Thk(in)	6.5	6.5	6.5
Joist Spacing	16.0	16.0	16.0
Insulation Grade	1	1	1
Location	Cond -> another cond unit	Cond -> ambient	Cond -> garage
Uo Value	0.046	0.046	0.046

Above-Grade Wall:	1	2	3
Name	Cond>Amb	Cond>Adiabatic	Cond>Garage
Library Type	R21,FG1,6-16	R11,FG1,4-16	R21,FG1,6-16
Gross Area(sq ft)	1288.00	536.50	352.00
Exterior Color	Medium	Medium	Medium
Location	Cond -> ambient	Cond -> another cond unit	Cond -> garage
Uo Value	0.058	0.093	0.058

Above-Grade Wall:	4	5
Name	Cond>Bsmt	UnCondBsmt>Amb
Library Type	R15,FG1,4-16	R21,FG1,6-16
Gross Area(sq ft)	178.33	437.00
Exterior Color	Medium	Medium
Location	Cond -> uncond bsmt	Uncond bsmt -> ambient
Uo Value	0.079	0.058

BUILDING FILE REPORT

7 Stagecoach Circle

Page 7

Above-Grade Wall: R21,FG1,6-16

Information From Quick Fill Screen:

Standard Wood Frame

Continuous Insulation (R-Value)	0.0
Frame Cavity Insulation (R-Value)	21.0
Frame Cavity Insulation Thickness (in)	5.5
Frame Cavity Insulation Grade	1
Stud Size (w x d, in)	1.5 x 5.5
Stud Spacing (in o.c.)	16.0
Framing Factor - (default)	0.2300
Gypsum Thickness (in)	0.5

Note: Updated Grade I BH 10/24/05

Layers	Paths		
	Cavity	Framing	Grade
Inside Air Film	0.680	0.680	0.680
Gyp board	0.450	0.450	0.450
Air Gap/Frm	0.000	0.000	0.000
Cavity ins/Frm	21.000	6.875	1.030
Continuous ins	0.000	0.000	0.000
Ext Finish	0.940	0.940	0.940
	0.000	0.000	0.000
Outside Air Film	0.170	0.170	0.170
Total R-Value	23.240	9.115	3.270
U-Value	0.043	0.110	0.306
Relative Area	0.770	0.230	0.000
UA	0.033	0.025	0.000

Total Component UA: 0.058

Total Component Area: 1.0

Component Uo: 0.058

BUILDING FILE REPORT

7 Stagecoach Circle

Page 8

Above-Grade Wall: R11,FG1,4-16

Information From Quick Fill Screen:

Standard Wood Frame

Continuous Insulation (R-Value)	0.0
Frame Cavity Insulation (R-Value)	11.0
Frame Cavity Insulation Thickness (in)	3.5
Frame Cavity Insulation Grade	1
Stud Size (w x d, in)	1.5 x 3.5
Stud Spacing (in o.c.)	16.0
Framing Factor - (default)	0.2300
Gypsum Thickness (in)	0.5

Note: Updated Grade I BH 10/24/05

Layers	Paths		
	Cavity	Framing	Grade
Inside Air Film	0.680	0.680	0.680
Gyp board	0.450	0.450	0.450
Air Gap/Frm	0.000	0.000	0.000
Cavity ins/Frm	11.000	4.375	1.030
Continuous ins	0.000	0.000	0.000
Ext Finish	0.940	0.940	0.940
	0.000	0.000	0.000
Outside Air Film	0.170	0.170	0.170
Total R-Value	13.240	6.615	3.270
U-Value	0.076	0.151	0.306
Relative Area	0.770	0.230	0.000
UA	0.058	0.035	0.000

Total Component UA: 0.093

Total Component Area: 1.0

Component Uo: 0.093

BUILDING FILE REPORT

7 Stagecoach Circle

Page 9

Above-Grade Wall: R15,FG1,4-16

Information From Quick Fill Screen:

Standard Wood Frame

Continuous Insulation (R-Value)	0.0
Frame Cavity Insulation (R-Value)	15.0
Frame Cavity Insulation Thickness (in)	3.5
Frame Cavity Insulation Grade	1
Stud Size (w x d, in)	1.5 x 3.5
Stud Spacing (in o.c.)	16.0
Framing Factor - (default)	0.2300
Gypsum Thickness (in)	0.5

Note: Updated Grade I BH 10/24/05

Layers	Paths		
	Cavity	Framing	Grade
Inside Air Film	0.680	0.680	0.680
Gyp board	0.450	0.450	0.450
Air Gap/Frm	0.000	0.000	0.000
Cavity ins/Frm	15.000	4.375	1.030
Continuous ins	0.000	0.000	0.000
Ext Finish	0.940	0.940	0.940
	0.000	0.000	0.000
Outside Air Film	0.170	0.170	0.170
Total R-Value	17.240	6.615	3.270
U-Value	0.058	0.151	0.306
Relative Area	0.770	0.230	0.000
UA	0.045	0.035	0.000

Total Component UA: 0.079

Total Component Area: 1.0

Component Uo: 0.079

BUILDING FILE REPORT

7 Stagecoach Circle

Page 10

Window Information:	1	2	3
Name	Front DH Shaded	Front Shaded	Right DH
Library Type	U:0.29, SHGC:0.26	U:0.29, SHGC:0.26	U:0.29, SHGC:0.26
U-Value	0.290	0.290	0.290
SHGC	0.260	0.260	0.260
Area(sq ft)	27.00	5.30	26.60
Orientation	Southeast	Southeast	Northeast
Overhang Depth	0.0	7.0	0.0
Overhang To Top	0.0	2.0	0.0
Overhang To Bottom	0.0	6.6	0.0
Interior Winter Shading	0.85	0.85	0.85
Interior Summer Shading	0.70	0.70	0.70
Adjacent Winter Shading	None	None	None
Adjacent Summer Shading	None	None	None
Wall Assignment	AGWall 1	AGWall 1	AGWall 1

Window Information:	4	5	6
Name	Right Glazed Door	Back DH	Basement DH
Library Type	U:0.30, SHGC:0.25	U:0.29, SHGC:0.26	U:0.29, SHGC:0.26
U-Value	0.300	0.290	0.290
SHGC	0.250	0.260	0.260
Area(sq ft)	10.42	97.60	20.32
Orientation	Northeast	Northwest	Northwest
Overhang Depth	0.0	0.0	0.0
Overhang To Top	0.0	0.0	0.0
Overhang To Bottom	0.0	0.0	0.0
Interior Winter Shading	0.85	0.85	0.85
Interior Summer Shading	0.70	0.70	0.70
Adjacent Winter Shading	None	None	None
Adjacent Summer Shading	None	None	None
Wall Assignment	AGWall 1	AGWall 1	AGWall 5

BUILDING FILE REPORT

7 Stagecoach Circle

Page 11

Window Information:

7

Name Basement Slider
Library Type U:0.30, SHGC:0.25
U-Value 0.300
SHGC 0.250
Area(sq ft) 42.00
Orientation Northwest
Overhang Depth 0.0
Overhang To Top 0.0
Overhang To Bottom 0.0
Interior Winter Shading 0.85
Interior Summer Shading 0.70
Adjacent Winter Shading None
Adjacent Summer Shading None
Wall Assignment AGWall 5

Window: U:0.29, SHGC:0.26

U-Value: 0.290
Solar Heat Gain Coefficient: 0.260
Note:

Window: U:0.30, SHGC:0.25

U-Value: 0.300
Solar Heat Gain Coefficient: 0.250
Note:

Door Information:

1

2

3

Name	FrontDoor	GarageDoors	Basement Door
Opaque Area(sq ft)	22.0	20.0	20.0
Library Type	Steel-urth w/brk	Steel-urth w/brk	Steel-urth w/brk
Wall Assignment	AGWall 1	AGWall 3	AGWall 4
Uo Value	0.187	0.187	0.187

Door: Steel-urth w/brk

R-Value of Opaque Area: 4.4
Storm Door: No
Note:

BUILDING FILE REPORT

7 Stagecoach Circle

Page 12

Roof Information:	1	2	3
Name	Vaulted>Amb	Flat>Attic Main	Flat>Attic Sunroom
Library Type	R32,CE,10-16,C	R52,CE14",10-16	R52,CE14",10-16
Ceiling Area(sq ft)	1115.00	843.00	168.00
Roof Area(sq ft)	1226.00	1162.00	210.00
Color	Medium	Medium	Medium
Radiant Barrier	No	No	No
Type(Attic)	Vaulted	Attic	Attic
Uo Value	0.034	0.020	0.020
Clay or Cement Tiles:	No	No	No
Sub Roof Ventilation:	No	No	No

BUILDING FILE REPORT

7 Stagecoach Circle

Page 13

Ceiling: R32,CE,10-16,C

Information From Quick Fill Screen:

Continuous Insulation (R-Value)	0.0
Cavity Insulation (R-Value)	32.5
Cavity Insulation Thickness (in)	9.3
Cavity Insulation Grade	1
Gypsum Thickness (in)	0.500
Bottom Chord/Rafter Size(w x h, in)	1.5 x 9.3
Bottom Chord/Rafter Spacing (in o.c.)	16.0
Framing Factor - (default)	0.1412
Ceiling Type	Vaulted

Note: quick-fill by MP 12/18/05

Layers	Paths		
	Framing	Cavity	Grade
Inside Air Film	0.610	0.610	0.610
Gyp board	0.450	0.450	0.450
Cavity Ins/Frm	11.625	32.500	0.000
Continuous ins	0.000	0.000	0.000
Plywood	0.930	0.930	0.930
Shingles	0.400	0.400	0.400
	0.000	0.000	0.000
Outside Air Film	0.170	0.170	0.170
Total R-Value	14.185	35.060	2.560
U-Value	0.070	0.029	0.391
Relative Area	0.141	0.859	0.000
UA	0.010	0.024	0.000

Total Component UA: 0.034

Total Component Area: 1.0

Component Uo: 0.034

BUILDING FILE REPORT

7 Stagecoach Circle

Page 14

Ceiling: R52,CE14",10-16

Information From Quick Fill Screen:

Continuous Insulation (R-Value)	20.1
Cavity Insulation (R-Value)	32.4
Cavity Insulation Thickness (in)	9.3
Cavity Insulation Grade	1
Gypsum Thickness (in)	0.500
Bottom Chord/Rafter Size(w x h, in)	1.5 x 9.3
Bottom Chord/Rafter Spacing (in o.c.)	16.0
Framing Factor - (default)	0.1412
Ceiling Type	Attic

Note: MAB-ABA 4-9-08

Layers	Paths		
	Framing	Cavity	Grade
Inside Air Film	0.858	0.858	0.858
Gyp board	0.450	0.450	0.450
Cavity Ins/Frm	11.625	32.400	0.000
Continuous ins	20.100	20.100	20.100
	0.000	0.000	0.000
	0.000	0.000	0.000
	0.000	0.000	0.000
Outside Air Film	0.858	0.858	0.858
Total R-Value	33.891	54.666	22.266
U-Value	0.030	0.018	0.045
Relative Area	0.141	0.859	0.000
UA	0.004	0.016	0.000

Total Component UA: 0.020

Total ComponentArea: 1.0

Component Uo: 0.020

BUILDING FILE REPORT

7 Stagecoach Circle

Page 15

Skylight Information:

1

Name	Skylight
Library Type	VeluxFS
U-Value	0.450
SHGC	0.260
Area(sq ft)	7.9
Winter Shading	None
Summer Shading	None
Orientation	South
Pitch[?/12]	11
Ceiling Assignment	Roof 1

Window: VeluxFS

U-Value:	0.450
Solar Heat Gain Coefficient:	0.260
Note:	

Mechanical Equipment: General

Number of Mechanical Systems:	3
Heating SetPoint(F):	68.00
Heating Setback Thermostat:	Present
Cooling SetPoint(F):	78.00
Cooling Setup Thermostat:	Present

Heat: WFSR060B042A

SystemType:	Fuel-fired air distribution
Fuel Type:	Natural gas
Rated Output Capacity (kBtuh):	58.0
Seasonal Equipment Efficiency:	95.5 AFUE
Auxiliary Electric:	636 Eae
Note:	International Comfort Products AHR#5039442 ****NO ECM****
Location:	Uncond bsmnt/enclosed crawl
Performance Adjustment:	100
Percent Load Served:	100
Number Of Units:	1

BUILDING FILE REPORT

7 Stagecoach Circle

Page 16

Cooling Equipment: AHRI 8586293

System Type:	Air conditioner
Fuel Type:	Electric
Rated Output Capacity (kBtu/h):	27.4
Seasonal Equipment Efficiency:	13.0 SEER
Sensible Heat Fraction (SHF):	0.70
Note:	AHRI 8586293 GRANDAIRE WCA3304GKN2/WLNC304BA EER 10.5
Location:	Uncond bsmnt/enclosed crawl
Performance Adjustment:	100
Percent Load Served:	100
Number Of Units:	1

Water Heating Equipment: Rinnai, R75Li

Water Heater Type:	Instant water heater
Fuel Type:	Natural gas
Energy Factor:	0.82
Recovery Efficiency:	0.00
Water Tank Size (gallons):	0
Extra Tank Insulation (R-Value):	0.0
Note:	Model#-REU-VC2528FFUD(A)-US AHRI#-5339228
Location:	Uncond bsmnt/enclosed crawl
Percent Load Served:	100
Performance Adjustment:	100
Number Of Units:	1

Duct System Information:

Name	Whole House
Heating System	WFSR060B042A
Cooling System	AHRI 8586293
Supply Area(sq ft)	435.6
Return Area(sq ft)	403.3
Conditioned Floor Area(sq ft)	2151.0
# of Registers	5
Duct Leakage	
Qualitative Assessment - Not Applicable	
Duct Leakage to Outside:	68.00 CFM @ 25 Pascals
Supply Duct Leakage - Not Applicable	
Return Duct Leakage - Not Applicable	
Total Duct Leakage:	112.00 CFM @ 25 Pascals
Duct Tightness Test:	Postconstruction Test

BUILDING FILE REPORT

7 Stagecoach Circle

Page 17

Duct Information:	1	2	3
Type	Supply	Return	Supply
PercentArea	30.0	30.0	40.0
R-Value	6.0	6.0	6.0
Location	Unconditioned basement	Unconditioned basement	Conditioned space

Duct Information:	4	5	6
Type	Return	Supply	Return
PercentArea	40.0	30.0	30.0
R-Value	6.0	8.0	8.0
Location	Conditioned space	Attic, exposed	Attic, exposed

Infiltration and Mechanical Ventilation

Whole House Infiltration

Measurement Type:	Blower door test
Heating Season Infiltration Value:	1326 CFM @ 50 Pascals
Cooling Season Infiltration Value:	1326 CFM @ 50 Pascals
Shelter Class	4
Code Verification:	Tested

Mechanical Ventilation for IAQ

Type:	Exhaust Only
Rate(cfm):	53
Sensible Recovery Efficiency(%):	0.00
Total Recovery Efficiency(%):	0.00
Hours per Day:	24.00
Fan Power (watts):	7.80

Ventilation Strategy for Cooling

Cooling Season Ventilation:	Natural Ventilation
-----------------------------	---------------------

Lights and Appliances

Simplified Audit	
Refrigerator KWh:	645
Refrigerator Location:	Conditioned
Dishwasher EF:	0.00
Dishwasher kWh/yr:	270
Dishwasher Capacity:	12
Dishwasher kWh/Year:	270
Range/Oven Fuel Type:	Natural gas
Induction Range:	No
Convection Oven:	Yes

BUILDING FILE REPORT

7 Stagecoach Circle

Page 18

Lights and Appliances

Clothes Dryer Fuel Type:	Electric
Clothes Dryer Location:	Conditioned
Clothes Dryer Moisture Sensing:	No
Clothes Dryer Energy Factor:	3.01
Clothes Dryer Gas Energy Factor:	2.67
Clothes Washer Location:	Conditioned
Clothes Washer LER:	704.0
Clothes Washer MEF:	0.817
Clothes Washer Capacity:	2.874
Clothes Washer Electricity Rate:	0.08
Clothes Washer Gas Rate:	0.58
Clothes Washer Annual Gas Cost:	23.00
Percent CFLs:	94.7
Percent Fluorescent:	0.0
Percent Exterior Lights:	100.0
Percent Garage Lights:	60.0
Ceiling Fan CFM / Watt:	0.00

BUILDING FILE REPORT

7 Stagecoach Circle

Page 19

Mandatory Requirements

IECC Requirements

Verified IECC 04:	false
Verified IECC 06:	false
Verified IECC 09:	true
Verified IECC 12:	false
Verified IECC 15:	false
Verified NY-ECCC 2010:	false

ENERGY STAR Version 3 Checklists

Thermal Enclosure Checklist:	false
HVAC System Quality Installation Contractor Checklist:	false
HVAC System Quality Installation Rater Checklist:	false
Water Management System Builder Checklist:	false

ENERGY STAR Version 3 Appliances

Has Refrigerators:	false
Number Of Refrigerators:	0
Has Ceiling Fans:	false
Number Of Ceiling Fans:	0
Has Exhaust Fans:	false
Number Of Exhaust Fans:	0
Has Dishwashers:	false
Number Of Dishwashers:	0

ENERGY STAR Version 3 Basements

Basement Wall Area 50% Below Grade:	false
Basement Floor Area:	0
2009 IECC Prescriptive Requirements for ENERGY STAR v3.0	false
Slab Insulation Exemption:	false

Indoor airPlus Verification Checklist:	false
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Notes

WARNINGS:

- The total gross wall area (AGWalls + Fnd Walls) adjacent to unconditioned or ambient appears to be small in relation to the Conditioned Floor Area. Please verify that the wall areas are correct!

BUILDING FILE REPORT

7 Stagecoach Circle

Page 20

All wall areas verified. Foundation Walls adjacent to unconditioned basement of adjacent unit not included.

BUILDER'S AFFIDAVIT

Property/Builder:

Owner's Name: Westwood Associates, Inc.
Property Address: 7 Stagecoach Circle
City, St, Zip: Westborough, MA 01581
Phone No.: 508-922-1467

Builder's Name: Westwood Associates, Inc.
Model: C- Unconditioned Basement
Development: Stagecoach Circle
Phone No.: 508 922-1467

Rating Date: 11/30/2016
Rating No.: ABA6325

IMPORTANT NOTICE TO BUILDER

Builder affirms in this affidavit that all components listed in the Building File Report are accurate and incorporated into this New Home. Builder agrees to permit home energy rating system (HERS) Provider and/or Rater, to randomly verify components solely for the benefit of the HERS Provider's and/or Rater's interest. The HERS Provider and Rater do not create or imply any duty or obligations to Builder or any subsequent owner. Builder is responsible for making any inspections to protect Builder's interest. There is no GUARANTEE or WARRANTY, expressed or implied, from the HERS Provider or Rater as to this New Home.

Builder's Signature:  Date: 12 / 1 / 16
Westwood Associates, Inc.

HERS Index: 59

Rating Reason: Confirmed

Rater's Signature: 

Date: 11 / 30 / 2016

2009 IECC Certificate

7 Stagecoach Circle, Westborough, MA 01581

Building Envelope Insulation

Ceiling: R-32.5
Above Grade Walls: R-21.0
Foundation Walls: R-0.0
Exposed Floor: R-30.0
Slab: None
Infiltration: Htg: 1326 Clg: 1326 CFM50
Duct: R-6.0
Duct Leakage to Outside: 68.00 CFM @ 25 Pascals

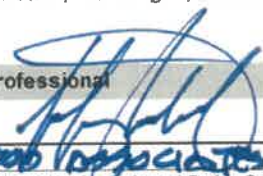
Window Data	U-Factor	SHGC
Window:	0.290	0.260

Mechanical Equipment

HEAT: Fuel-fired air distribution, Natural gas, 95.5 AFUE.
COOL: Air conditioner, Electric, 13.0 SEER.
DHW: Instant water heater, Natural gas, 0.82 EF, 0.0 Gal.

Builder or Design Professional

Signature


WESTBROOK ASSOCIATES, INC.

REM/Rate - Residential Energy Analysis and Rating Software v14.6.1

Home Energy Rating Certificate

7 Stagecoach Circle
Westborough, MA 01581



**5 Stars Plus
Confirmed**

Uniform Energy Rating System

1 Star 500-401	1 Star Plus 400-301	2 Stars 300-251	2 Stars Plus 250-201	3 Stars 200-151	3 Stars Plus 150-101	4 Stars 100-91	4 Stars Plus 90-86	5 Stars 85-71	5 Stars Plus 70 or Less
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HERS Index: **57**

General Information

Conditioned Area: 2151 sq. ft. House Type: Townhouse, end unit
Conditioned Volume: 22388 cubic ft. Foundation: Unconditioned basement
Bedrooms: 3

Mechanical Systems Features

Heating: Fuel-fired air distribution, Natural gas, 95.5 AFUE.
Cooling: Air conditioner, Electric, 13.0 SEER.
Water Heating: Instant water heater, Natural gas, 0.82 EF, 0.0 Gal.
Duct Leakage to Outside: 68.00 CFM25.
Ventilation System: Exhaust Only: 53 cfm, 7.8 watts.
Programmable Thermostat: Heating: Yes Cooling: Yes

Building Shell Features

Ceiling Flat: R-52.5 Slab: None
Sealed Attic: NA Exposed Floor: R-30.0
Vaulted Ceiling: R-32.5 Window Type: U-Value: 0.290, SHGC: 0.260
Above Grade Walls: R-21.0 Infiltration Rate: Htg: 1326 Clg: 1326 CFM50
Foundation Walls: R-0.0 Method: Blower door test

Lights and Appliance Features

Percent Interior Lighting: 94.70 Range/Oven Fuel: Natural gas
Percent Exterior Lighting: 100.00 Clothes Dryer Fuel: Electric
Refrigerator (kWh/yr): 645.00 Clothes Dryer EF: 3.01
Dishwasher (kWh/yr): 270.00 Ceiling Fan (cfm/Watt): 0.00

The Home Energy Rating Standard Disclosure for this home is available from the rating provider.

REMI/Rate - Residential Energy Analysis and Rating Software v14.5.1

This information does not constitute any warranty of energy cost or savings.
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Registry ID: 903471026
Rating Number: ABA6325
Certified Energy Rater: Sam Kenney
Rating Date: 12/7/2016
Rating Ordered For: Westwood Associates, Inc.

Estimated Annual Energy Cost

Use	Confirmed MMBtu	Cost	Percent
Heating	54.7	\$990	39%
Cooling	1.7	\$87	3%
Hot Water	16.9	\$301	12%
Lights/Appliances	22.0	\$1041	41%
Photovoltaics	-0.0	\$-0	-0%
Service Charges		\$131	5%
Total	95.3	\$2550	100%

**This home meets or exceeds the minimum
criteria for all of the following:**

- 2009 IECC Duct Leakage Mandatory Requirement*
- 2009 IECC Mandatory Infiltration < 7ACH50*
- MA Stretch Code HERS Rating Performance requirement*

* Compliance with criteria for this program is
determined by the rater.

Advanced Building Analysis LLC.

201 Woodlawn Ave.
Amesbury, Ma 01913
978-270-3911

Sam Kenney
Certified Energy Rater

RESNET HOME ENERGY RATING Standard Disclosure

For home located at: 7 Stagecoach Circle

City: Westborough

State: MA

1. ☒ The Rater or the Rater's employer is receiving a fee for providing the rating on this home.
2. ☐ In addition to the rating, the Rater or Rater's employer has also provided the following consulting services for this home:

- ☐ A. Mechanical system design
- ☐ B. Moisture control or indoor air quality consulting
- ☐ C. Performance testing and/or commissioning other than required for the rating itself
- ☐ D. Training for sales or construction personnel
- ☐ E. Other (specify below)

3. ☐ The Rater or Rater's employer is:

- ☐ A. The seller of this home or their agent
- ☐ B. The mortgagor for some portion of the financed payments on this home
- ☐ C. An employee, contractor or consultant of the electric and/or natural gas utility serving this home

4. ☐ The Rater or Rater's employer is a supplier or installer of products, which may include:

	Installed in this home by:		OR	Is in the business of:	
HVAC systems	<input type="checkbox"/> Rater	<input type="checkbox"/> Employer		<input type="checkbox"/> Rater	<input type="checkbox"/> Employer
Thermal insulation systems	<input type="checkbox"/> Rater	<input type="checkbox"/> Employer		<input type="checkbox"/> Rater	<input type="checkbox"/> Employer
Air sealing of envelope or duct systems	<input type="checkbox"/> Rater	<input type="checkbox"/> Employer		<input type="checkbox"/> Rater	<input type="checkbox"/> Employer
Windows or window shading systems	<input type="checkbox"/> Rater	<input type="checkbox"/> Employer		<input type="checkbox"/> Rater	<input type="checkbox"/> Employer
Energy efficient appliances	<input type="checkbox"/> Rater	<input type="checkbox"/> Employer		<input type="checkbox"/> Rater	<input type="checkbox"/> Employer
Construction (builder, developer, construction contractor, etc.)	<input type="checkbox"/> Rater	<input type="checkbox"/> Employer		<input type="checkbox"/> Rater	<input type="checkbox"/> Employer
Other (specify below):	<input type="checkbox"/> Rater	<input type="checkbox"/> Employer		<input type="checkbox"/> Rater	<input type="checkbox"/> Employer

I attest that the above information is true and correct to the best of my knowledge. As a Rater or Rating Provider I abide by the rating quality control provisions of the Mortgage Industry National Home Energy Rating Standard as set forth by the Residential Energy Services Network (RESNET). The national rating quality control provisions of the rating standard are contained in Chapter One 4.C.8. of the standard and are posted at http://resnet.us/standards/RESNET_Mortgage_Industry_National_Home_Energy_Rating_Standard_Disclosure_for_this_home_is_available_from_the_rating_provider. The Home Energy Rating Standard Disclosure for this home is available from the rating provider. To report any complaints regarding this Rater's services, please visit http://www.energyratersma.com/Feedback_New.html

Sam Kenney

Rater's Printed Name

Rater's Signature



0180686

Certification #

December 07, 2016

Date



TOWN OF WESTBOROUGH

FIRE - RESCUE - EMERGENCY MEDICAL SERVICES

Walter N. Perron, Chief
Captains:

Calvin A. Lawrence
Joseph R. Lawrence
Robert W. Rand
Brian K. Roberts

42 Milk Street
Westborough, Massachusetts 01581-1208
Telephone (508) 366-3040
Fax (508) 366-0079
Emergency - 911



Date: May 16, 2013

Tenant: Park Place, Stagecoach Circle

Location: 1, 2 3, 4 5, 6, **7**, 9, 8, 10, 11, 12 Stagecoach Circle Contact/s: Sotir Papalilo
Phone: **508 922 1467** Fax:

Job Function: X General contractor/Developer

Final Occupancy Documentation Requirements (FODRS)

Please acknowledge that other items may be required during the course of the documentation review and/or final occupancy. The Westborough Building Department will also require documentation that may include original engineer's letters and documents. Please refer to the Westborough Building Department for their specific requirements for documentation that may be different from ours.

Please provide a point of contact that will gather all the documentation and contact us to have it reviewed. This typically does not become a scheduling problem with notice of one or two days. Once the documentation is accepted then you can schedule an appointment to have a final occupancy inspection.

Please feel free to call if you have any questions and/or comments throughout the inspection process.




items are required




1. Sprinkler System Installation/Alteration Permit (with all fees paid) obtained from the Westborough Fire Department prior to commencement of work.





3. Fire Alarm System Installation/Alteration Permit (with all fees paid) obtained from the Westborough Fire Department prior to commencement of work.


5.  Engineer's affidavit indicating that the complete sprinkler system has been installed per all applicable codes (NFPA 13), rules, laws, regulations, plans, manufacturer's specifications including but not limited to 780 CMR, 527 CMR, and MGL 148. This shall document testing and inspection of appropriate sprinkler supervisory and alarm devices to the fire alarm panel and subsequent appropriate transmittal to the central station company and or master box as applicable. You shall notify the Fire Department at 508-366-3040 immediately prior to testing/inspection. Such affidavit shall state a test/inspection was completed per the above and the system was left in a fully operational and compliant condition as of - ___date. An original engineer's stamp, signature, and date will be required. Date of last visit required.


6.  Engineer's affidavit indicating that the complete fire alarm system has been installed per all applicable codes (NFPA 72), rules, laws, regulations, plans, manufacturer's installation instructions including but not limited to 780 CMR, 527 CMR, and MGL 148. This shall document a test to the central station alarm company and or master box as applicable and subsequent transmittal to the Westborough Fire Department. You shall notify the Fire Department at 508-366-3040 immediately prior to testing. Such affidavit shall state a test/inspection was completed per the above and the system was left in a fully operational and compliant condition as of ___date. An original engineer's stamp, signature, and date will be required. Date of last visit required.

7.  Above ground test certificate including 200lb test documentation per NFPA 13 with original signatures for the sprinkler system.


8.  Underground test certificate including 200lb test documentation per NFPA 13 with original signatures by the sprinkler contractor for the sprinkler system.

9.  Sprinkler contractor's affidavit indicating that all the water supply lines starting off the main line have been completely flushed and all the gates and valves to the fire protection system are fully opened and compliant with any applicable rules, laws, codes, plans, regulations. It shall also state the system has been inspected, tested, and left in an operational and compliant condition as of ___date. This shall require an original signature and/or seal. Date of last visit required.


11.  Letter of assurance from the fire alarm system installing contractor with original signature to indicate that the fire alarm work (state what was done), has been installed per all applicable codes (NFPA 72), rules, laws, regulations, plans, manufacturer's installation instructions including but not limited to 780 CMR, 527 CMR, and MGL 148. This shall document a test to the central station alarm company and or master box as applicable and subsequent transmittal to the Westborough Fire Department. You shall notify the Fire Department at 508-366-3040 immediately prior to testing. Such affidavit shall state a test/inspection was completed per the above and the system was left in a fully operational and compliant condition as of ___date. An original signature, and date will be required.


12.  Letter of assurance from the sprinkler system installing contractor with original signature to indicate that the sprinkler work done (state what was done), has been installed per applicable codes (NFPA 13), rules, laws, regulations, plans, manufacturer's specifications including but not limited to 780 CMR, 527 CMR, and MGL 148. This shall document testing and inspection of appropriate sprinkler supervisory and alarm devices to the fire alarm panel and subsequent appropriate transmittal to the central station company and or master box as applicable. You shall notify the Fire Department at 508-366-3040 immediately prior to testing/inspection. Such affidavit shall state a test/inspection was completed per the above and the system was left in a fully operational and compliant condition as of -__date. An original signature and date will be required.

16.  Architects final affidavit for construction. This may be a copy. Date of last visit required.

19.  Letter from building owner stating the "AS BUILT" plans for the sprinkler, fire alarm, generator systems have been received.

20.  NFPA 72 Record of Completion for fire alarm system. (work that was done).

51.  Letter of Assurance from the residential units smoke detection installing contractor indicating that the smokes have been installed per all applicable rules, laws, regulations, and manufacturer's instructions to include but not limited to 527 CMR, MGL 148, and NFPA 72 and that they have been completely tested, found to be in working order, and left in operational and compliant condition as of ____ (date). Original Signature and date required.

52.  Letter of Assurance from the Carbon Monoxide residential unit detector installing contractor stating that the Carbon Monoxide detectors located at (address) has been installed per all applicable rules, codes, regulations, laws, manufacturer's instructions to include but not limited to: 527 CMR 31, MGL 26F1/2, and 780 CMR. The detectors have been inspected and tested, found to be in an operational and compliant condition as of ____ (date). Original signature and date required.

53.  Copy of the Sprinkler Contractor's license.

NOTES:

****ANY DEVIATION FROM PLANS SHALL BE SPECIFICALLY NOTED ON THE ENGINEER'S AFFIDAVITS and CONTRACTOR'S ASSURANCE LETTERS.****

****Any deficiencies found during the final occupancy inspection may require new documentation from the contractor and engineer indicating the date the item was corrected and now is in a fully compliant condition.****

FIRE DEPARTMENT USE ONLY BELOW THIS LINE

FODRS SUBMITTED AS ONE PACKAGE BY POINT PERSON ☐ YES ☐ NO

FD REVIEWER NAME _____ DATE REVIEWED _____

RESUBMISSION REVIEW DATES: _____, _____, _____ initials

FODRS COMPLETED DATE:

OUTSTANDING ITEMS REQUIRING SUBMISSION and or CORRECTION COMMUNICATED TO POINT PERSON? ☐ YES ☐ NO TO WHOM WAS THIS COMMUNICATED? _____ PERSON SENDING (FD) _____

Dates outstanding items communicated _____.



TOWN OF WESTBOROUGH

FIRE - RESCUE - EMERGENCY MEDICAL SERVICES

42 Milk Street
Westborough, Massachusetts
01581-1208
Telephone (508) 366-3040
Fax (508) 366-0079

PERMIT APPLICATION

One application per system
(check one)

☐ Fire Alarm System ☒ Sprinkler System ☐ Fixed Suppression System

Date: 3/12/13 PERMIT # 2013-15 New: XX Addition: Alteration:

Tenant name: Park Place Address: 7, 9, 11 Stagecoach Circle
(specific location at address, floor, suite, etc.)

Company name: Dynamic Fire Protection, Inc. License # 822

Address: PO Box 172 Berlin MA 01503 Phone: 978-838-9441 Fax: 978-838-0398

Installer name: Alan Roseberry License # 823

Address: PO Box 172 Berlin MA 01503 Phone: 978-838-9441 Fax: 978-838-0398

Description of exact work to be done:

Installation of a residential fire sprinkler system per NFPA 13D

Writing permit issued? Y N Required: Attach a copy of applicable contractor/installer license.

Contractor/Installer original signature: [Signature] Date: 3/12/13
(Must be of licensed person)

Fee: \$20.00 Received by CRA Fire Prevention Office Use Only
(Check # 33880 (check only made payable to the Town of Westborough))

Plans reviewed and issues addressed? ☒ N

Cut sheets for equipment to be installed received? ☒ N

Final Occupancy Documentation Requirements issued? ☒ N

Conditions of permit: Conform to all provisions of MGL c. 144, 527 CMR, 780 CMR, all applicable codes, & standards. to include but not limited to NFPA 13

Signature of issuing authority: [Signature] Date: 5-29-13
Verbal 5-29-13

ORIGINAL KEPT AS APPLICATION. COPY SIGNED BY ISSUING AUTHORITY IS PERMIT.

Application for Permit to Perform Electrical Work

All work to be performed in accordance with the Massachusetts Electrical Code (MEC), 527 CMR 12.00

To the Inspector of Wires:

City or Town of: Westborough, MADate: May 31, 2016

By this application the undersigned gives notice of his or her intention to perform the electrical work described below.

Application Number: 16-00922Date Applied: May 31, 2016Permit Number: E-2016-00297Street Number: 7 Street Name: Stagecoach Circle Parcel ID:Owner or Tenant: Westwood Associates Telephone No:Owner's Address: PO Box 250 Owner City/State/Zip: SHREWSBURY MA 01545Is this permit in conjunction with a building permit? ☒ Yes ☐ No Is this new construction? ☐ Yes ☐ NoBuilding Use Group: ☐ Commercial ☒ Residential ☐ Educational Utility Auth No.:Existing Service: 0 Amps 0 / 0 Volts ☐ Overhead ☐ Underground No. of Meters 0New Service: 200 Amps 120 / 240 Volts ☐ Overhead ☐ Underground No. of Meters 1Number of Feeders and Ampacity: 4/0 200 ampLocation and Nature of Proposed Electrical Work: wire new house complete

Completion of the following table may be waived by the Inspector of Wires.

No. of Recessed Luminaries: <u>10</u>	No. of Ceil.-Susp.(Paddle) Fans: <u>2</u>	No. of Transformers: <u>0</u>	Total KVA: <u>0</u>
No. of Luminary Outlets: <u>20</u>	No. of Hot Tubs: <u>0</u>	No. of Generators: <u>0</u>	Total KVA: <u>0</u>
No. of Luminaries: <u>20</u>	Swimming Pool: <input type="checkbox"/> Above Ground <input type="checkbox"/> In-Ground	No. of Emergency Lighting Battery Units: <u>0</u>	
No. of Receptacle Outlets: <u>45</u>	No. of Oil Burners: <u>0</u>	FIRE ALARMS	No. of Zones: <u>1</u>
No. of Switches: <u>25</u>	No. of Gas Burners: <u>1</u>	No. of Detection and Initiating Devices: <u>7</u>	
No. of Ranges: <u>0</u>	No. of Air Cond.: <u>1</u>	No. of Alerting Devices: <u>7</u>	
No. of Waste Disposers: <u>1</u>	No. of Total Tons: <u>1</u>	No. of Self-Contained Detection/Alerting Devices: <u>0</u>	
	Heat Pump Number: <u>0</u> Tons: <u>0</u> KW: <u>0</u>	<input checked="" type="checkbox"/> Local <input type="checkbox"/> Municipal Connection	
	Totals:		
No. of Dishwashers: <u>1</u>	Space/Area Heating: <u>0</u> KW: <u>0</u>	Other:	
No. of Dryers: <u>1</u>	Heating Appliances: <u>0</u> KW: <u>0</u>	Security Systems*: <u>0</u>	
No. of Water Htrs: <u>0</u> KW: <u>0</u>	No. of Signs: <u>0</u>	No. Devices or Equivalent:	
No. of Hydromassage Bathtubs: <u>0</u>	No. of Ballasts: <u>0</u>	Data Wiring: <u>2</u>	
	Total HP: <u>0</u>	No. Devices or Equivalent:	
		Telecommunications Wiring: <u>2</u>	
		No. Devices or Equivalent:	

Other:

Attach additional detail if desired, or as required by the Inspector of Wires.

Estimated Value of Electrical Work: \$ 500.00 (When required by municipal policy)

Work to Start: ... Inspections to be required in accordance with MEC Rule 10, and upon completion.

INSURANCE COVERAGE: Unless waived by the owner, no permit for the performance of electrical work may be issued unless the licensee provides proof of liability insurance including "completed operation" coverage or its substantial equivalent. The undersigned certifies that such coverage is in force, and has exhibited proof of same to the permit issuing office.**CHECK ONE:** ☒ Liability Insurance Policy ☐ Bond ☐ Other Type Indemnity (Specify:)**I certify, under the pains and penalties of perjury, that the information on this application is true and complete.****FIRM NAME:** Chris Christoforou **FIRM LIC. NO:** E 33902**LICENSEE NAME:** Chris Christoforou **LICENSEE LIC. NO:** E 33902**Signature:** **Business Telephone:** (508) 414-8685**Address:** 267 Chandler Street Worcester, MA **Alternate Telephone:**

*Security System Contractor License required for this work; if applicable, enter the license number here:

OWNER'S INSURANCE WAIVER: I am aware that the licensee does not have liability insurance coverage normally required by law. By my signature below, I hereby waive this requirement. I am the (check one)☐ Owner ☐ Owner's Agent

Signature: Telephone:

CONSTRUCTION COMPLETION NOTICE

Date: **November 22, 2016**

To: Building Inspector / Fire Dept. **Town of Westborough**

Re: Certificate of Compliance Affidavit for **Park Place – 7 Stagecoach Circle – Westborough, MA**

Code Official:

This letter shall serve to confirm that Seaman Engineering, Inc. has performed the final site inspection on November 22 for the **FIRE PROTECTION** portion of the **Park Place – 7 Stagecoach Circle – Westborough, MA** project and find it installed in accordance with our plans and specifications; and is in compliance with the applicable regulations and requirements of the Massachusetts State Building Code – 8th Edition.

Seaman Engineering, Inc.

Kevin R. Seaman, P.E.



Commonwealth of Massachusetts
Registered Professional Engineer
License # 38130



Date: November 22, 2016

To: Building Inspector Town of Westborough, MA

Re: Certificate of Compliance Affidavit for Park Place – 7 Stagecoach Circle,
Westborough, MA

Building Official:

This letter shall serve to confirm that Seaman Engineering Corporation has performed the necessary site inspections for the **Fire Suppression** portions of the Park Place project at 7 Stagecoach Circle in Westborough, MA and find them essentially installed in accordance with our plans and specifications; and to the best of our knowledge and belief are in compliance with the applicable regulations and requirements of the Massachusetts State Building Code 780 CMR - Eighth Edition, 527 CMR and MGL 148.

Applicable supervisory and related sprinkler alarm testing and inspection associated with the interface of the suppression system to the fire alarm system has been completed and is ready for final inspection by the Westborough Fire Department.

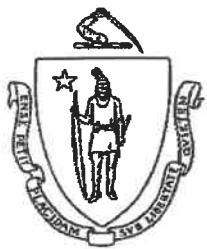
Our punchlist inspection was completed and performed on Tuesday November 22, 2016 with no comments.

Seaman Engineering Corporation

Kevin R. Seaman, P. E.
President



Commonwealth of Massachusetts
Registered Professional Mechanical
License No. 38130



Final Construction Control Document

To be submitted at completion of construction by a

Registered Design Professional

for work per the 8th edition of the

Massachusetts State Building Code, 780 CMR, Section 107

Project Title: Park Place Unit #7

Date: November 22, 2016 Permit No.

Property Address: Stage Coach Circle, Westborough, MA 01581

Project: Check (x) one or both as applicable: ☒ New construction ☐ Existing Construction

Project description: Single dwelling unit #7 of a multi-unit building

I Robert J. Figuerido MA Registration Number: 29029 Expiration date: June 30, 2018, am a *registered design professional*, and I have prepared or directly supervised the preparation of all design plans, computations and specifications concerning:

Architectural
Fire Protection

Structural
☒ Electrical

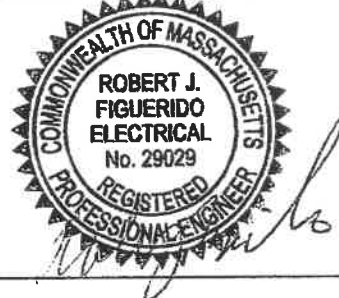
Mechanical
☒ Other: Fire Alarm

for the above named project. I, or my designee, have performed the necessary professional services and was present at the construction site on a regular and periodic basis. To the best of my knowledge, information, and belief the work proceeded in accordance with the requirements of 780 CMR and the design documents approved as part of the building permit and that I or my designee:

1. Have reviewed, for conformance to this code and the design concept, shop drawings, samples and other submittals by the contractor in accordance with the requirements of the construction documents.
2. Have performed the duties for registered design professionals in 780 CMR Chapter 17, as applicable.
3. Have been present at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the work and to determine if the work was performed in a manner consistent with the construction documents and this code.

Nothing in this document relieves the contractor of its responsibility regarding the provisions of 780 CMR 107.

Enter in the space to the right a "wet" or electronic signature and seal:



Phone number: 508.757.7793

Email: bobf@shepherdengineeringinc.com

Building Official Use Only

Building Official Name:

Permit No.:

Date:

SHEPHERD ENGINEERING, INC.

1308 GRAFTON STREET \$ WORCESTER, MA 01604 \$ (508) 757 7793 \$ FAX: (508) 753 2309

November 22, 2016

INSPECTION AFFIDAVIT - ELECTRICAL

Mr. Christopher Knight, Fire Prevention
Westborough Fire Department
Town of Westborough
34 West Street
Westborough, MA 01581


Re: Park Place – Stage Coach Circle
Park Street
Westborough, MA

In accordance with the Massachusetts State Building Code, I, Robert J. Figuerido, being a Registered Professional Engineer, reviewed the electrical and fire alarm installation at the above referenced facility pertaining to the rough and finished electrical and fire alarm wiring and hereby certify that to the best of our knowledge, the electrical and fire alarm systems for the above named project pertaining to **Unit #7** complies with the Contract Documents and meet the applicable provisions of the 8th Edition of the Massachusetts State Building Code 780 CMR, Section 107.6.2.2 and acceptable engineering practices, applicable laws, and ordinances for the proposed use for occupancy.

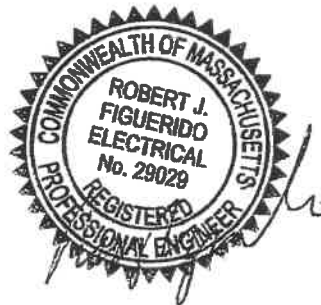
Date of Inspections:

June 6, 2016 Rough Inspection

November 22, 2016 Final Inspection



Signature and Seal
Expiration Date: June 30, 2018



Contractor's Material and Test Certificate for Aboveground Piping

PROCEDURE

Upon completion of work, inspection and tests shall be made by the contractor's representative and witnessed by the property owner or their authorized agent. All defects shall be corrected and system left in service before contractor's personnel finally leave the job.

A certificate shall be filled out and signed by both representatives. Copies shall be prepared for approving authorities, owners, and contractor. It is understood the owner's representative's signature in no way prejudices any claim against contractor for faulty material, poor workmanship, or failure to comply with approving authority's requirements or local ordinances.

Property name Park Place						Date 11/28/16		
Property address 7 Stagecoach Circle - Westborough MA								
Plans	Accepted by approving authorities (names) Westborough Fire Dept.							
	Address Westborough MA							
	Installation conforms to accepted plans					<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	Equipment used is approved If no, explain deviations					<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Instructions	Has person in charge of fire equipment been instructed as to location of control valves and care and maintenance of this new equipment? If no, explain					<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	Have copies of the following been left on the premises?					<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	1. System components instructions					<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	2. Care and maintenance instructions					<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Location of system	Supplies buildings Basement							
Sprinklers	Make	Model	Year of manufacture	Orifice size	Quantity	Temperature rating		
	Reliable - RES SSP	F1RES	2015	1/2"		155		
	Reliable - RES HSW	F1RES	2015	1/2"		155		
Pipe and fittings	Type of pipe CPVC							
	Type of fittings CPVC							
Alarm valve or flow indicator	Alarm device			Maximum time to operate through test connection				
	Type	Make	Model	Minutes	Seconds			
	Flow	System Sensor	VSR	0	30 +/-			
N/A	Dry valve			Q. O. D.				
	Make	Model	Serial no.	Make	Model	Serial no.		
	Time to trip through test connection ^{a,b}		Water pressure	Air pressure	Trip point air pressure	Time water reached test outlet ^{a,b}		Alarm operated properly
			psi	psi	psi			
	Minutes	Seconds				Minutes	Seconds	Yes No
	Without Q.O.D.							
	With Q.O.D.							
	If no, explain							

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NFPA 13 (p. 1 of 3)

^a Measured from time inspector's test connection is opened

^b NFPA 13 only requires the 60-second limitation in specific sections

FIGURE 24.1 Contractor's Material and Test Certificate for Aboveground Piping.



N/A	Operation <input type="checkbox"/> Pneumatic <input type="checkbox"/> Electric <input type="checkbox"/> Hydraulics							
	Piping supervised <input type="checkbox"/> Yes <input type="checkbox"/> No				Detecting media supervised <input type="checkbox"/> Yes <input type="checkbox"/> No			
	Does valve operate from the manual trip, remote, or both control stations? <input type="checkbox"/> Yes <input type="checkbox"/> No							
	Is there an accessible facility in each circuit for testing? <input type="checkbox"/> Yes <input type="checkbox"/> No				If no, explain			
	Make	Model	Does each circuit operate supervision loss alarm?		Does each circuit operate valve release?		Maximum time to operate release	
Yes			No	Yes	No	Minutes	Seconds	
N/A	Location and floor	Make and model	Setting	Static pressure		Residual pressure (flowing)		Flow rate
				Inlet (psi)	Outlet (psi)	Inlet (psi)	Outlet (psi)	Flow (gpm)
Test description	<p>Hydrostatic: Hydrostatic tests shall be made at not less than 200 psi (13.6 bar) for 2 hours or 50 psi (3.4 bar) above static pressure in excess of 150 psi (10.2 bar) for 2 hours. Differential dry-pipe valve clappers shall be left open during the test to prevent damage. All aboveground piping leakage shall be stopped.</p> <p>Pneumatic: Establish 40 psi (2.7 bar) air pressure and measure drop, which shall not exceed 1½ psi (0.1 bar) in 24 hours. Test pressure tanks at normal water level and air pressure and measure air pressure drop, which shall not exceed 1½ psi (0.1 bar) in 24 hours.</p>							
Tests	All piping hydrostatically tested at <u>100</u> psi (<u> </u> bar) for <u>1</u> hours						If no, state reason	
	Dry piping pneumatically tested <input type="checkbox"/> Yes <input type="checkbox"/> No							
	Equipment operates properly <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							
	Do you certify as the sprinkler contractor that additives and corrosive chemicals, sodium silicate or derivatives of sodium silicate, brine, or other corrosive chemicals were not used for testing systems or stopping leaks? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							
	Drain test	Reading of gauge located near water supply test connection: <u> </u> psi (<u> </u> bar)				Residual pressure with valve in test connection open wide: <u> </u> psi (<u> </u> bar)		
	Underground mains and lead-in connections to system risers flushed before connection made to sprinkler piping							
	Verified by copy of the Contractor's Material and Test Certificate for Underground Piping. <input type="checkbox"/> Yes <input type="checkbox"/> No						Other Explain	
	Flushed by installer of underground sprinkler piping <input type="checkbox"/> Yes <input type="checkbox"/> No						By Others	
	If powder-driven fasteners are used in concrete, has representative sample testing been satisfactorily completed? <input type="checkbox"/> Yes <input type="checkbox"/> No						If no, explain	
Blank testing gaskets	Number used		Locations <u>N/A</u>				Number removed	
Welding	Welding piping <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							
	If yes . . .							
	Do you certify as the sprinkler contractor that welding procedures used complied with the minimum requirements of AWS B2.1, ASME Section IX <i>Welding and Brazing Qualifications</i> , or other applicable qualification standard as required by the AHJ? <input type="checkbox"/> Yes <input type="checkbox"/> No							
	Do you certify that all welding was performed by welders or welding operators qualified in accordance with the minimum requirements of AWS B2.1, ASME Section IX <i>Welding and Brazing Qualifications</i> , or other applicable qualification standard as required by the AHJ? <input type="checkbox"/> Yes <input type="checkbox"/> No							
	Do you certify that the welding was conducted in compliance with a documented quality control procedure to ensure that (1) all discs are retrieved; (2) that openings in piping are smooth, that slag and other welding residue are removed; (3) the internal diameters of piping are not penetrated; (4) completed welds are free from cracks, incomplete fusion, surface porosity greater than 1/16 in. diameter, undercut deeper than the lesser of 25% of the wall thickness or 1/32 in.; and (5) completed circumferential butt weld reinforcement does not exceed 3/32 in.? <input type="checkbox"/> Yes <input type="checkbox"/> No							

FIGURE 24.1 *Continued*

Cutouts (discs)	Do you certify that you have a control feature to ensure that all cutouts (discs) are retrieved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Hydraulic data nameplate	Nameplate provided <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If no, explain
Remarks	Date left in service with all control valves open 11/25/16	
Signatures	Name of sprinkler contractor Dynamic Fire Protection Inc.	
	Tests witnessed by	
	The property owner or their authorized agent (signed)	Title Date
	For sprinkler contractor (signed) Alan Roseberry	Title President Date 11/28/16
Additional explanations and notes		
<p>Sprinkler system has been hydrostatically tested to normal operating pressure per NFPA 13D Section 4.3.</p> <p>A 200 psi hydrostatic test is not required</p>		
© 2006 National Fire Protection Association		NFPA 13 (p. 3 of 3)

FIGURE 24.1 *Continued*



EHWA EXCAVATING, INC.

P.O. BOX 1051
LITTLETON, MA. 01460-0651
Telephone: 978-486-8078 Fax: 978-486-8525

CONTRACTORS COMPLETION STATEMENT

Westborough Fire Department
42 Milk Street
Westborough, Ma. 01581


Re: Fire prevention at: Park Place, 7 . Stagecoach Circle, Westborough, Ma. 01581

January 12, 2015

Dear Sir/Madam,

On 10/18/2013, Ehwa Excavating, Inc., installed one inch fire protection service line, which was checked under static pressure of 120 lbs. +/- . Also checked, was a one inch corp. stop and a one inch line. All were dry. Bob Duff, of the Westborough DPW, inspected the above prior to backfill.

Sincerely,


Glenn P. Ehwa, Pres.
Ehwa Excavating, Inc.



DYNAMIC FIRE PROTECTION, INC.

P.O. Box 172
BERLIN, MA 01503
(978) 838-9441
(978) 838-0398 FAX

Contractors Completion Statement

DATE: **Nov. 28, 2016**

TO: **Westborough Fire Department**

ATTN: **Fire Prevention**

RE: **Park Place
7 Stagecoach Circle
Westborough, MA**

This letter shall serve to confirm that:

The sprinkler system at the above referenced location has been installed per NFPA 13D and applicable rules, laws, regulations, plans, manufacturer's specifications including but not limited to 780 CMR 8th Edition, 527 CMR, and MGL 148. The appropriate sprinkler supervisory and alarm devices have been tested and are working properly.

The water supply lines have all been flushed and all gates and valves to the fire protection system are open and compliant with any applicable rules, laws, codes, plans and regulations.

The system was left in a fully operational and compliant condition as of **Nov. 25, 2016**.

Sincerely,

Alan Roseberry
Dynamic Fire Protection, Inc.

**Chris Christoforou Electrician
267 Chandler Street
Worcester, MA 01602**

Letter of Assurance

I, Chris Christoforou, electrical contractor, hereby certify that I have installed the fire alarm system at 7 Stagecoach Circle, Westborough, MA, which includes Firex smoke detectors, 120 volt carbon monoxide/smoke detectors and heat detectors with battery backup all interconnected consistent with all applicable codes (NFPA 72) rules, laws, manufacturer's installation instructions including but not limited to 780 CMR, 527 CMR and MGL 148. The detectors have been inspected and tested and found to be in an operational and compliant condition as of December 7, 2016.

A handwritten signature in blue ink, appearing to read "Ch. Christof", is written over a horizontal line.

Chris Christoforou,
Electrician

Date: December 7, 2016

Series MT and MT Strobe Multitone Electronic Appliances



SERIES MT STROBE



MT4-115-WH



SERIES MT-12/24

Description:

The Wheelock Series MT and MT Strobe Multitone electronic appliances offer a choice of eight (8) nationally and internationally recognized alerting sounds: Horn, Bell, March Time Horn, Code-3 Tone, Code-3 Horn, Slow Whoop, Siren or Hi/Lo Tone. The Code-3 Horn and tone patterns are engineered to comply with NFPA/ANSI Temporal Pattern specifications without requiring additional equipment. With MT and MT Strobe appliances, one alarm appliance meets most of your signaling needs. The MT strobes can be synchronized using the Wheelock DSM Sync Modules, Wheelock Power Supplies or other manufacturers panel incorporating the Wheelock Patented Sync Protocol.

The MT Strobes are designed for ADA applications while meeting or exceeding the latest requirements of NFPA 72, ANSI 117.1, UFC and UL Standard 1971 as well as meeting ADA requirements concerning photosensitive epilepsy.

Each MT and MT Strobe appliance has two installer selective sound output levels: STANDARD dBA and HIGH dBA. Non-strobe versions provide selectable voltage capability in one unit, 12VDC or 24VDC. Strobe versions are specific for either 12VDC or 24VDC and all models may be used with filtered or unfiltered (full-wave-rectified) input voltages. Separate input terminals are available, shunt wires are provided to enable both tone and strobe to operate simultaneously from a single input.

The Series MT Multitone Strobe appliances are UL Listed for indoor wall mount applications under Standard 1971 for Signaling Devices for the Hearing Impaired and under Standard 464 for Audible Signaling Appliances.


Features:

- Approvals include: UL Standard 1971, UL Standard 464, California State Fire Marshal (CSFM), New York City (MEA), Factory Mutual (FM) and Chicago (BFP) See approvals by model in Specifications and Ordering Information
- Designed to meet or exceed ADA/NFPA/UFC/ANSI Standards and Accessibility Guidelines
- Complies with OSHA 29, Part 1910.165
- Series MT appliances have IN and OUT wiring terminations that accept two #12 to #18 American Wire Gauge (AWG) wires at each terminal. Inputs are polarized for compatibility with standard reverse polarity type supervision
- One alarm appliance with (8) eight selective signals to provide superior sound penetration for various ambient and wall conditions with two field selectable sound output levels
- Code-3 Horn and Tone meet ANSI/NFPA temporal pattern for standard emergency evacuation signaling
- Audible and strobe can operate from a single NAC circuit or from separate NAC circuits with any of the (8) eight audible sounds
- MT Strobe models are available with Wheelock patented MCW Multi-Candela strobes with field selectable candela settings at 15/30/75/110cd or with single candela 1575cd strobes. Synchronize using the Wheelock Sync Modules or panels with built-in Wheelock Patented Sync Protocol
- Selectable input voltage on non-strobe versions. Strobe versions are factory set for either 12 or 24VDC, with wide-Listed voltage range, filtered (DC) and FWR
- No additional trimplate required for flush mounting

For Weatherproof MTWP See Data Sheet S9004



7135-0785:118 (MT4)
7125-0785:155 (MT)
7125-0758:156 (MTWP)

NOTE: All CAUTIONS and WARNINGS are identified by the symbol . All warnings are printed in bold capital letters .
▲ WARNING: PLEASE READ THESE SPECIFICATIONS AND INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. FAILURE TO COMPLY WITH ANY OF THESE INSTRUCTIONS, CAUTIONS AND WARNINGS COULD RESULT IN IMPROPER APPLICATION, INSTALLATION AND/OR OPERATION OF THESE PRODUCTS IN AN EMERGENCY SITUATION, WHICH COULD RESULT IN PROPERTY DAMAGE, AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.

General Notes:

- Strobes are designed to flash at 1 flash per second minimum over their "Regulated Voltage Range" (16-33v for 24VDC units and 8-17.5v for 12VDC units). Regulated Voltage Range is the newest terminology used by UL to identify the listed voltage range.
- All candela ratings represent minimum effective Multitone Strobe intensity based on UL Standard 1971.
- MT Strobe models are UL Standard 1971 Listed for indoor use with a temperature range of 32°F to 120°F (0°C to 49°C) and maximum humidity of 93% ±2%. The MT-12/24, MTWP and MT4 models are listed for outdoor use at -31°F to 150°F (-35°C to 66°C) and maximum humidity of 95% (See Data Sheet S9004 or Installation Instruction Sheet P84150 for more detail on MTWP).
- MTWP and MT4 strobes are listed under UL 1638.
- MT Audible is UL Standard 464 Listed.

Alarm Tones

tone	Alarm Tones Pattern Description
HORN	BROADBAND HORN (Continuous)
BELL	1560 Hz MODULATED (0.07 sec. ON/Repeat)
MARCH TIME HORN	HORN (0.25 sec. ON/0.25 sec. OFF/Repeat)
CODE-3 HORN	HORN (ANSI S3.41 Temporal Pattern)
CODE-3 TONE	500 Hz (ANSI S3.41 Temporal Pattern)
SLOW WHOOP	500-1200 Hz SWEEP (4.0 sec. ON/0.5 sec. OFF/Repeat)
SIREN	600-1200 Hz SWEEP (1.0 sec. ON/Repeat)
HI/LO	1000/800 Hz (0.25 sec. ON/Alternate)

Table 1: dBA and Current Ratings for Multitone Audible Portion

	RMS Current (amps)										dBA @ 10ft (UL Reverberant)					
	24 VDC				12 VDC				120 VAC		24 VDC		12 VDC		120 VAC	
	HI Output		STD Output		HI Output		STD Output		HI Output	STD Output	HI Output	STD Output	HI Output	STD Output	HI Output	STD Output
	@ 24 VDC	UL max*	@ 24 VDC	UL max*	@ 24 VDC	UL max*	@ 24 VDC	UL max*	UL max*	UL max*	HI Output	STD Output	HI Output	STD Output	HI Output	STD Output
Horn	0.074	0.108	0.033	0.044	0.145	0.176	0.023	0.034	0.050	0.042	92	87	90	77	85	82
Bell	0.040	0.053	0.018	0.024	0.077	0.095	0.014	0.020	0.041	0.039	86	80	85	69	82	75
March Time Horn	0.067	0.104	0.033	0.038	0.109	0.142	0.023	0.034	0.050	0.040	89	84	89	74	85	79
Code-3 Horn	0.069	0.091	0.026	0.035	0.100	0.142	0.023	0.034	0.050	0.042	88	83	88	73	82	75
Code-3 Tone	0.061	0.075	0.026	0.035	0.088	0.105	0.015	0.021	0.042	0.040	85	80	84	70	79	75
Slow Whoop	0.069	0.098	0.028	0.037	0.100	0.142	0.025	0.035	0.050	0.042	90	89	89	75	85	82
Siren	0.080	0.104	0.027	0.036	0.122	0.152	0.021	0.030	0.045	0.041	89	84	89	75	85	82
HI/LO	0.044	0.057	0.020	0.026	0.089	0.114	0.018	0.026	0.042	0.039	86	81	86	71	82	79

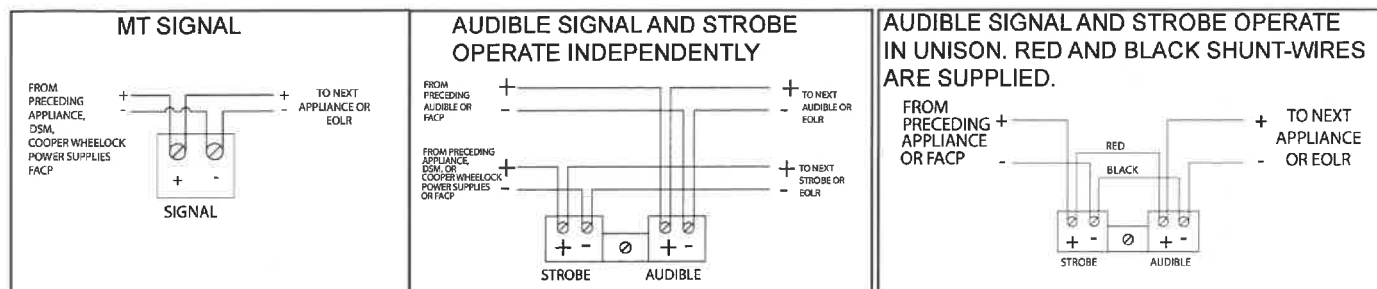
Table 2: Strobe Current Ratings

Model	RMS Current (amps)						
	MT-121575	MT-241575	MTWP-2475	MT-24MCW			
Candela	1575cd	1575cd	180cd	15cd	30cd	75cd	110cd
@ 24VDC	0.152	0.060	0.094	0.041	0.063	0.109	0.140
UL max*	0.255	0.090	0.138	0.060	0.092	0.165	0.220

Note: If the strobe and audible operate on the same circuit, add the strobe current from Table 2 to the audible current from Table 1.

* RMS current ratings are per UL average RMS method. UL max current rating is the maximum RMS current within the listed voltage range (16-33v for 24v units). For strobes the UL max current is usually at the minimum listed voltage (16v for 24v units). For audibles the max current is usually at the maximum listed voltage (33v for 24v units). For unfiltered FWR ratings, see installation instructions.

Wiring Diagrams (for all models)



Specifications and Ordering Information

Model Number	Order Code	Input Voltage	Rated Candela	Mounting Options***	Agency Approvals				
					UL	MEA	CSFM	FM	BFP
MT-12/24-R	5023	12/24	-	D,E,F,L,M,O,P,R	X	X	X	X	X
MT-12/24-W	5024	12/24	-	D,E,F,L,M,O,P,R	X	X	X	X	X
MT-241575W-FR*	8422	24	15 (75 on AXIS)	D,E,F,L,M,O,P,R	X	X	X	X	-
MT-24MCW-FR	3301	24	15/30/75/110	D,E,F,L,M,O,P,R	X	-	X	-	-
MT-24MCW-FW	3303	24	15/30/75/110	D,E,F,L,M,O,P,R	X	-	X	-	-
MT-24MCW-AR***	3304	24	15/30/75/110	D,E,F,L,M,O,P,R	X	-	X	-	-
MT-121575W-FR*	8421	12	15 (75 on AXIS)	D,E,F,L,M,O,P,R	X	X	X	X	-
MT-121575W-NW	9747	12	15 (75 on AXIS)	D,E,F,L,M,O,P,R	X	X	X	X	-
MTWP-2475W-FR**	8420	24	180 @ 77°F (25°C)	M	X	X	X	X	-
MTWP-2475W-NW**	9744	24	180 @ 77°F (25°C)	M	X	X	X	X	-
MT4-115-R	6223	120 VAC	-	D,E,J,K,N,O,R	X	X	X	-	X
MT4-115-S	6142	120 VAC	-	D,E,J,K,N,O,R	X	X	X	-	X
MT4-115-WH-VFR##	6224	120 VAC	15	D,E,J,K,N,O,R	X	X	X	-	X
MT4-12/24-R	5308	12/24	-	D,E,J,K,N,O,R	X	X	X	X	-
MT4-12/24-S	7997	12/24	-	D,E,J,K,N,O,R	X	X	X	X	-

NOTE:

**MTWP-2475W is Weatherproof and rated for 180 cd @ 77°F (25°C). See Data Sheet S9004 or Installation Instruction P84150.

***For additional information on mounting please refer to Data Sheet S7000.

1575 strobes are UL Listed for 15cd with 75cd on AXIS.

Series WH Strobe is listed for UL Standard 1638 only. See Instruction Sheet P83160.

*** "A" Stands for Agent Lettering.

WARNING: CONTACT WHEELLOCK FOR THE CURRENT "INSTALLATION INSTRUCTIONS" P82467 MT-12/24, P84155 MT w/Strobe P84150 MTWP WEATHERPROOF "GENERAL INFORMATION" SHEET (P82380) ON THESE PRODUCTS. THESE DOCUMENTS DO UNDERGO PERIODIC CHANGES. IT IS IMPORTANT THAT YOU HAVE CURRENT INFORMATION ON THESE PRODUCTS. THESE MATERIALS CONTAIN IMPORTANT INFORMATION THAT SHOULD BE READ PRIOR TO SPECIFYING OR INSTALLING THESE PRODUCTS, INCLUDING:

- TOTAL CURRENT REQUIRED BY ALL APPLIANCES CONNECTED TO SYSTEM SECONDARY POWER SOURCES.
- FUSE RATINGS ON NOTIFICATION APPLIANCE CIRCUITS TO HANDLE PEAK CURRENTS FROM ALL APPLIANCES ON THOSE CIRCUITS.
- COMPOSITE FLASH RATE FROM MULTIPLE STROBES WITHIN A PERSON'S FIELD OF VIEW.
- THE VOLTAGE APPLIED TO THESE PRODUCTS MUST BE WITHIN THEIR RATED INPUT VOLTAGE RANGE.
- INSTALLATION IN OFFICE AREAS AND OTHER SPECIFICATION AND INSTALLATION ISSUES.
- USE STROBES ONLY ON CIRCUITS WITH CONTINUOUSLY APPLIED OPERATING VOLTAGE. DO NOT USE STROBE ON CODED OR INTERRUPTED CIRCUITS IN WHICH THE APPLIED VOLTAGE IS CYCLED ON AND OFF AS THE STROBE MAY NOT FLASH.
- FAILURE TO COMPLY WITH THE INSTALLATION INSTRUCTIONS OR GENERAL INFORMATION SHEETS COULD RESULT IN IMPROPER INSTALLATION, APPLICATION, AND/OR OPERATION OF THESE PRODUCTS IN AN EMERGENCY SITUATION, WHICH COULD RESULT IN PROPERTY DAMAGE AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.
- CONDUCTOR SIZE (AWG), LENGTH AND AMPACITY SHOULD BE TAKEN INTO CONSIDERATION PRIOR TO DESIGN AND INSTALLATION OF THESE PRODUCTS, PARTICULARLY IN RETROFIT INSTALLATIONS.

Wheelock products must be used within their published specifications and must be PROPERLY specified, applied, installed, operated, maintained and operationally tested in accordance with their installation instructions at the time of installation and at least twice a year or more often and in accordance with local, state and federal codes, regulations and laws. Specification, application, installation, operation, maintenance and testing must be performed by qualified personnel for proper operation in accordance with all of the latest National Fire Protection Association (NFPA), Underwriters' Laboratories (UL), National Electrical Code (NEC), Occupational Safety and Health Administration (OSHA), local, state, county, province, district, federal and other applicable building and fire standards, guidelines, regulations, laws and codes including, but not limited to, all appendices and amendments and the requirements of the local authority having jurisdiction (AHJ).

Architects and Engineers Specifications

The notification appliance shall be a Wheelock Series MT audible/visual appliance or equivalent. Notification appliance shall be electronic and use solid state components. Electromechanical alternatives are not approved. Each electronic appliance shall provide eight (8) field selectable alarm tones. The tones shall consist of: HORN, BELL, MARCH TIME HORN, CODE-3 HORN, CODE-3 TONE, SLOW WHOOP, SIREN and HI/LO. Tone selection shall be by durable dip switch assembly and not clips or jumpers. The Multitone Audible appliance shall be UL Listed under Standard 464 for Audible Signal Appliances. The audible and the strobe shall be able to operate from a single NAC circuit while producing any of these tones. The appliance shall provide two output sound levels: STANDARD and HIGH dBA. The HIGH dBA setting shall provide a minimum 5 dBA increase in sound output at nominal voltage. The HIGH anechoic dBA measurement at 10 feet at the alarm HORN SETTING shall be 99 dBA minimum. Operating voltages shall be either 12 VDC or 24 VDC using filtered power or unfiltered power supply (full-wave-rectified). All models shall have provisions for standard reverse polarity type supervision and IN/OUT field wiring using terminals that accept #12 to #18 AWG wiring.

Combination audible/visual appliances shall incorporate a Xenon flashtube enclosed in a rugged Lexan® lens or equivalent with solid state circuitry. Strobe shall produce a flash rate of one (1) flash per second minimum over the voltage range. The MT strobe intensity shall be rated per UL and Listed under Standard 1971 for Signaling Devices for the Hearing Impaired for 1575cd multi-candela with field selectable 15/30/75/110 candela settings. The 1575 candela strobe shall be specified when 15 candela or with 75 candela intensity on-axis is required. Strobe Models shall incorporate circuitry for synchronized strobe flash and shall be designed for compatibility with Wheelock DSM Sync Modules, Wheelock Power Supplies or other manufacturers panels with built-in Wheelock Patented Sync Protocol. The strobes shall not drift out of synchronization at any time during operation. If the module fails to operate (i.e., contacts remain closed), the strobes shall revert to a non-synchronized default flash rate. Strobe activation shall be via independent input or from the same input circuit as the audible.

The combination audible/visual appliances shall be installed indoors and may be surface or flush mounted. They shall mount to standard electrical hardware requiring no additional trimplate or adapter. The aesthetic appearance shall not have any mounting holes or screw heads visible when the installation is completed. The appliance shall be finished in a textured red color.

The Series MT-12/24, MTWP and MT4 appliances may be installed indoor or outdoor with the proper back box.

NOTE: Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Wheelock Inc. standard terms and conditions.



WE ENCOURAGE AND SUPPORT NICET CERTIFICATION
3 YEAR WARRANTY

S2000 MT 06/11

NJ Location
273 Branchport Ave.
Long Branch, NJ 07740
P: 800-631-2148
F: 732-222-8707
www.coopernotification.com

Cooper Notification is



 **COOPER**Notification



DYNAMIC FIRE PROTECTION, INC.

P.O. BOX 172
BERLIN, MA 01503
(978) 838-9441
(978) 838-0398 FAX

Contractors Completion Statement

DATE: **Nov. 28, 2016**

TO: **Westborough Fire Department**

ATTN: **Fire Prevention**

RE: **Park Place
7 Stagecoach Circle
Westborough, MA**

This letter shall serve to confirm that:

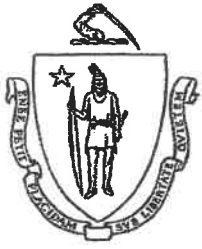
The sprinkler system at the above referenced location has been installed per NFPA 13D and applicable rules, laws, regulations, plans, manufacturer's specifications including but not limited to 780 CMR 8th Edition, 527 CMR, and MGL 148. The appropriate sprinkler supervisory and alarm devices have been tested and are working properly.

The water supply lines have all been flushed and all gates and valves to the fire protection system are open and compliant with any applicable rules, laws, codes, plans and regulations.

The system was left in a fully operational and compliant condition as of **Nov. 25, 2016**.

Sincerely,

Alan Roseberry
Dynamic Fire Protection, Inc.



Final Construction Control Document

To be submitted at completion of construction by a

Registered Design Professional

for work per the 8th edition of the

Massachusetts State Building Code, 780 CMR, Section 107

Project Title: Park Place Condominiums Date: 12/15/2016 Permit No. _____

Property Address: 7 Stagecoach Circle, Westborough, MA

Project: Check one or both as applicable: ☒ New construction ☐ Existing Construction

Project description: Condominium Unit Type C, Building 3, Unit 9

I Daniel M. Lewis MA Registration Number: 6046 Expiration date: 8/31/2017, am a
registered design professional, and I have prepared or directly supervised the preparation of all design plans,
computations and specifications concerning:

☒ Architectural ☐ Structural ☐ Mechanical
☐ Fire Protection ☐ Electrical ☐ Other: _____

for the above named project. I, or my designee, have performed the necessary professional services and was present at the construction site on a regular and periodic basis. To the best of my knowledge, information, and belief the work proceeded in accordance with the requirements of 780 CMR and the design documents approved as part of the building permit and that I or my designee:

1. Have reviewed, for conformance to this code and the design concept, shop drawings, samples and other submittals by the contractor in accordance with the requirements of the construction documents.
2. Have performed the duties for registered design professionals in 780 CMR Chapter 17, as applicable.
3. Have been present at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the work and to determine if the work was performed in a manner consistent with the construction documents and this code to the best of my knowledge.

Nothing in this document relieves the contractor of its responsibility regarding the provisions of 780 CMR 107.

Enter in the space to the right a "wet" or electronic signature and seal:



Phone number: 508-612-8771 Email: danlewis@charter.net

Building Official Use Only

Building Official Name: _____ Permit No.: _____ Date: _____

Westwood Associates, Inc.

January 5, 2015


Chris Knight
FF/Insp.
Westborough Fire Dept.
Westborough, Massachusetts 01581

Re: 7 Stagecoach Circle

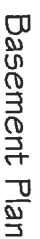
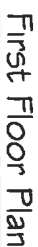
Dear Chris:

I am writing to confirm that the as-build plans for the fire alarm and sprinkler systems in connection with the above captioned property have been received.

Sincerely,



Sotir Papalilo



14 ½* RESIDENTIAL HSW
 K 4.9 WHITE 155°

22 ½* RESIDENTIAL 59P
 K 4.2 WHITE 155°

1 QUICK RESPONSE D
 K 5.6 WHITE 155°

AS-BUILT

**Chris Christoforou Electrician
267 Chandler Street
Worcester, MA 01602**

Letter of Assurance

I, Chris Christoforou, electrical contractor, hereby certify that I have installed Firex smoke detectors (120 volt detectors with battery backup) at 7 Stagecoach Circle, Westborough, MA, all interconnected consistent with all applicable rules, laws, manufacturer's installation instructions including but not limited to 527 CMR and MGL 148, and NFPA 72. The smoke detectors have been inspected and tested and found to be in an operational and compliant condition as of December 7, 2016.



**Chris Christoforou,
Electrician**

Date: December 7, 2016

**Chris Christoforou Electrician
267 Chandler Street
Worcester, MA 01602**

Letter of Assurance

I, Chris Christoforou, electrical contractor, hereby certify that I have installed Firex carbon monoxide/smoke detectors (120 volt detectors with battery backup) at 7 Stagecoach Circle, Westborough, MA, all interconnected consistent with all applicable rules, laws, manufacturer's installation instructions including but not limited to 527 CMR 31, and MGL 26F1/2, and 80 CMR. The Firex carbon monoxide/smoke detectors have been inspected and tested and found to be in an operational and compliant condition as of December 7, 2016.



**Chris Christoforou,
Electrician**

Date: December 7, 2016



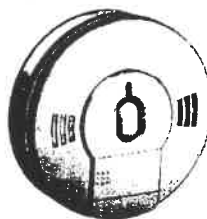
SIGNALING



User's Guide for Model KN-COPE-I

Combination Photoelectric Smoke and Carbon Monoxide Alarm

- 120 VAC (Interconnectable)
- 2-LED Display
- 9V Battery Backup
- Front Load Battery
- Peak Level Memory
- Hush ®
- Voice Message System
- Low Battery Hush®



For questions concerning your Smoke and Carbon Monoxide Alarm, please call our Consumer Hotline at 1-800-880-6788.

For your convenience, write down the following information. If you call our consumer hotline, these are the first questions you will be asked:

Alarm Model Number (located on back of the alarm):	
Date of Manufacture (located on back of the alarm):	
Date of Purchase:	
Where Purchased:	

ATTENTION: Please take a few minutes to thoroughly read this user's guide which should be saved for future reference and passed on to any subsequent owner.

Manual P/N 820-1669 Rev. A

2528-7201-01

For model: P12040

Smoke Alarm User's Guide

**AC Wire-in Single and/or Multiple Station (up to 24 Devices)
Photoelectric Smoke Alarm with 9 Volt Battery Back Up and
"HUSH" Control to temporarily silence nuisance alarms.**

Thank you for purchasing this smoke alarm. It is an important part of your family's home safety plan. You can trust this product to provide the highest quality safety protection. We know you expect nothing less when the lives of your family are at stake. Kidde alarms and accessories **CAN ONLY BE** interconnected with other Kidde alarms and accessories as well as specified brands and models of interconnect compatible alarms. Connection of Kidde products to a non-specified manufacturer's interconnect system, or connection with non-specified equipment from another manufacturer into an existing Kidde system could result in nuisance alarming, failure to alarm, or damage to one or all of the devices in the interconnect system. Refer to the User's Guide supplied with each Kidde product for interconnect compatible models, brands, and devices. Refer to the wiring instructions in section 3 for NFPA initiating device limits.

For your convenience, write down the following information. If you call our Consumer Hotline, these are the first questions you will be asked.

Smoke Alarm Model Number (located on back of alarm):	
Date Code (located on back of alarm). National Fire Protection Association (NFPA) and the manufacturer recommends replacing this alarm ten years from the date code:	
Date of Purchase:	
Where Purchased:	



21008164-EN Rev A
1375-7213-00

Commonwealth of Massachusetts
Department of Public Safety

Sprinkler Contractor

License: SC-000822

ALAN S ROSEBERRY
307 BALL HILL RD
Princeton MA 01541



Thomas W. Kelly
Commissioner

Expiration:
05/30/2017

FIRE ALARM AND EMERGENCY COMMUNICATION SYSTEM RECORD OF COMPLETION

To be completed by the system installation contractor at the time of system acceptance and approval.
It shall be permitted to modify this form as needed to provide a more complete and/or clear record.

Insert N/A in all unused lines.

Attach additional sheets, data, or calculations as necessary to provide a complete record.

1. PROPERTY INFORMATION

Name of property: PARK PLACE
Address: STAGECOAST CIRCLE #7
Description of property: TOWN HOUSE
Occupancy type: RESIDENTIAL
Name of property representative: SOTIR PAPAIOU, PRESIDENT
Address: P.O. Box 250, SHREVEPORT, MA. 01545
Phone: 508.922.1467 Fax: E-mail: sotir@westwoodassociates.com
Authority having jurisdiction over this property: WESTWOOD ASSOCIATES, INC.
Phone: Fax: E-mail:

2. INSTALLATION, SERVICE, AND TESTING CONTRACTOR INFORMATION

Installation contractor for this equipment: CHRIS CHRISTOFOROU, ELECTRICIAN
Address: 267 CHANDLER ST. WORCESTER, MA. 01602
License or certification number: E33902
Phone: 508.414.8685 Fax: E-mail:
Service organization for this equipment: CHRIS CHRISTOFOROU, ELECTRICIAN
Address: 267 CHANDLER ST. WORCESTER, MA. 01602
License or certification number: E33902
Phone: 508.414.8685 Fax: E-mail:
A contract for test and inspection in accordance with NFPA standards is in effect as of:
Contracted testing company:
Address:
Phone: Fax: E-mail:
Contract expires: Contract number: Frequency of routine inspections:

3. DESCRIPTION OF SYSTEM OR SERVICE

- ☒ Fire alarm system (nonvoice)
☐ Fire alarm with in-building fire emergency voice alarm communication system (EVACS)
☐ Mass notification system (MNS)
☐ Combination system, with the following components:
☐ Fire alarm ☐ EVACS ☐ MNS ☐ Two-way, in-building, emergency communication system
☐ Other (specify):

NFPA 72, Fig. 10.18.2.1.1 (p. 1 of 2)

3. DESCRIPTION OF SYSTEM OR SERVICE (continued)

NFPA 72 edition:

2010

Additional description of system(s):

3.1 Control Unit

Manufacturer:

Model number:

3.2 Mass Notification System

☒ This system does not incorporate an MNS

3.2.1 System Type:

☐ In-building MNS—combination

☐ In-building MNS—stand-alone

☐ Wide-area MNS

☐ Distributed recipient MNS

☐ Other (specify):

3.2.2 System Features:

☐ Combination fire alarm/MNS

☐ MNS autonomous control unit

☐ Wide-area MNS to regional national alerting interface

☐ Local operating console (LOC)

☐ Direct recipient MNS (DRMNS)

☐ Wide-area MNS to DRMNS interface

☐ Wide-area MNS to high-power speaker array (HPSA) interface

☐ In-building MNS to wide-area MNS interface

☐ Other (specify):

3.3 System Documentation

☐ An owner's manual, a copy of the manufacturer's instructions, a written sequence of operation, and a copy of the numbered record drawings are stored on site. Location:

3.4 System Software

☐ This system does not have alterable site-specific software.

Operating system (executive) software revision level:

Site-specific software revision date:

Revision completed by:

☐ A copy of the site-specific software is stored on site. Location:

3.5 Off-Premises Signal Transmission

☒ This system does not have off-premises transmission.

Name of organization receiving alarm signals with phone numbers:

Alarm:

Phone:

Supervisory:

Phone:

Trouble:

Phone:

Entity to which alarms are retransmitted:

Phone:

Method of retransmission:

If Chapter 26, specify the means of transmission from the protected premises to the supervising station:

If Chapter 27, specify the type of auxiliary alarm system: ☐ Local energy ☐ Shunt ☐ Wired ☐ Wireless

4. CIRCUITS AND PATHWAYS

4.1 Signaling Line Pathways

N/A.

4.1.1 Pathways Class Designations and Survivability

Pathways class:

Survivability level:

Quantity:

(See NFPA 72, Sections 12.3 and 12.4)

4.1.2 Pathways Utilizing Two or More Media

Quantity:

Description:

4.1.3 Device Power Pathways

- ☐ No separate power pathways from the signaling line pathway
- ☐ Power pathways are separate but of the same pathway classification as the signaling line pathway
- ☐ Power pathways are separate and different classification from the signaling line pathway

4.1.4 Isolation Modules

Quantity:

4.2 Alarm Initiating Device Pathways

4.2.1 Pathways Class Designations and Survivability

Pathways class:

Survivability level:

Quantity:

(See NFPA 72, Sections 12.3 and 12.4)

4.2.2 Pathways Utilizing Two or More Media

Quantity:

Description:

4.2.3 Device Power Pathways

- ☐ No separate power pathways from the initiating device pathway
- ☐ Power pathways are separate but of the same pathway classification as the initiating device pathway
- ☐ Power pathways are separate and different classification from the initiating device pathway

4.3 Non-Voice Audible System Pathways

4.3.1 Pathways Class Designations and Survivability

Pathways class:

Survivability level:

Quantity:

(See NFPA 72, Sections 12.3 and 12.4)

4.3.2 Pathways Utilizing Two or More Media

Quantity:

Description:

4.3.3 Appliance Power Pathways

- ☐ No separate power pathways from the notification appliance pathway
- ☐ Power pathways are separate but of the same pathway classification as the notification appliance pathway
- ☐ Power pathways are separate and different classification from the notification appliance pathway

5. ALARM INITIATING DEVICES

5.1 Manual Initiating Devices

5.1.1 Manual Fire Alarm Boxes

☒ This system does not have manual fire alarm boxes.

Type and number of devices: Addressable:

Conventional:

Coded:

Transmitter:

Other (specify):

5.1.2 Other Alarm Boxes

☒ This system does not have other alarm boxes.

Description:

Type and number of devices: Addressable:

Conventional:

Coded:

Transmitter:

Other (specify):

5.2 Automatic Initiating Devices

5.2.1 Smoke Detectors

☐ This system does not have smoke detectors.

Type and number of devices: Addressable:

Conventional: 8

Other (specify):

Type of coverage: ☒ Complete area ☐ Partial area ☐ Nonrequired partial area

Other (specify):

Type of smoke detector sensing technology: ☐ Ionization ☒ Photoelectric ☐ Multicriteria ☐ Aspirating ☐ Beam

Other (specify):

5.2.2 Duct Smoke Detectors

☒ This system does not have alarm-causing duct smoke detectors.

Type and number of devices: Addressable:

Conventional:

Other (specify):

Type of coverage:

Type of smoke detector sensing technology: ☐ Ionization ☐ Photoelectric ☐ Aspirating ☐ Beam

5.2.3 Radiant Energy (Flame) Detectors

☒ This system does not have radiant energy detectors.

Type and number of devices: Addressable:

Conventional:

Other (specify):

Type of coverage:

5.2.4 Gas Detectors

☒ This system does not have gas detectors.

Type of detector(s):

Number of devices: Addressable:

Conventional:

Type of coverage:

5.2.5 Heat Detectors

☐ This system does not have heat detectors.

Type and number of devices: Addressable:

Conventional: 2

Type of coverage: ☒ Complete area ☐ Partial area ☐ Nonrequired partial area ☐ Linear ☐ Spot

Type of heat detector sensing technology: ☒ Fixed temperature ☐ Rate-of-rise ☐ Rate compensated

5. ALARM INITIATING DEVICES *(continued)*

5.2.6 Addressable Monitoring Modules

Number of devices:

☒ This system does not have monitoring modules.

5.2.7 Waterflow Alarm Devices

Type and number of devices: Addressable:

☐ This system does not have waterflow alarm devices.

Conventional: **2** Coded: Transmitter:

5.2.8 Alarm Verification

Number of devices subject to alarm verification:

☐ This system does not incorporate alarm verification.

Alarm verification set for _____ seconds

5.2.9 Presignal

Number of devices subject to presignal:

☒ This system does not incorporate pre-signal.

Describe presignal functions:

5.2.10 Positive Alarm Sequence (PAS)

Describe PAS:

☒ This system does not incorporate PAS.

5.2.11 Other Initiating Devices

Describe:

☒ This system does not have other initiating devices.

6. SUPERVISORY SIGNAL-INITIATING DEVICES

6.1 Sprinkler System Supervisory Devices

Type and number of devices: Addressable:

☒ This system does not have sprinkler supervisory devices.

Conventional: Coded: Transmitter:

Other (specify):

6.2 Fire Pump Description and Supervisory Devices

Type fire pump: ☐ Electric pump ☐ Engine

☒ This system does not have a fire pump.

Type and number of devices: Addressable:

Conventional: Coded: Transmitter:

Other (specify):

6.2.1 Fire Pump Functions Supervised

☐ Power ☐ Running ☐ Phase reversal ☐ Selector switch not in auto ☐ Engine or control panel trouble ☐ Low fuel

Other (specify):

6.3 Duct Smoke Detectors (DSDs)

Type and number of devices: Addressable:

☒ This system does not have DSDs causing supervisory signals.

Conventional:

Other (specify):

Type of coverage:

Type of smoke detector sensing technology: ☐ Ionization ☐ Photoelectric ☐ Aspirating ☐ Beam

6.4 Other Supervisory Devices

Describe:

☒ This system does not have other supervisory devices.

7. MONITORED SYSTEMS

7.1 Engine-Driven Generator

☒ This system does not have a generator.

7.1.1 Generator Functions Supervised

- ☐ Engine or control panel trouble ☐ Generator running ☐ Selector switch not in auto ☐ Low fuel
☐ Other (specify):

7.2 Special Hazard Suppression Systems

☒ This system does not monitor special hazard systems.

Description of special hazard system(s):

7.3 Other Monitoring Systems

☒ This system does not monitor other systems.

Description of special hazard system(s):

8. ANNUNCIATORS

☒ This system does not have annunciators.

8.1 Location and Description of Annunciators

Location 1:

Location 2:

Location 3:

9. ALARM NOTIFICATION APPLIANCES

9.1 In-Building Fire Emergency Voice Alarm Communication System

☒ This system does not have an EVACS.

Number of single voice alarm channels:

Number of multiple voice alarm channels:

Number of speakers:

Number of speaker circuits:

Location of amplification and sound-processing equipment:

Location of paging microphone stations:

Location 1:

Location 2:

Location 3:

9.2 Nonvoice Notification Appliances

☒ This system does not have nonvoice notification appliances.

Horns: With visible:

Bells: With visible:

Chimes: With visible:

Visible only: Other (describe):

9.3 Notification Appliance Power Extender Panels

☒ This system does not have power extender panels.

Quantity:

Locations:

10. MASS NOTIFICATION CONTROLS, APPLIANCES, AND CIRCUITS

☒ This system does not have an MNS.

10.1 MNS Local Operating Consoles

Location 1:

Location 2:

Location 3:

10.2 High-Power Speaker Arrays

Number of HPSA speaker initiation zones:

Location 1:

Location 2:

Location 3:

10.3 Mass Notification Devices

Combination fire alarm/MNS visible appliances:

MNS-only visible appliances:

Textual signs:

Other (describe):

Supervision class:

10.3.1 Special Hazard Notification

☒ This system does not have special suppression predischARGE notification.

☒ MNS systems DO NOT override notification appliances required to provide special suppression predischARGE notification.

11. TWO-WAY EMERGENCY COMMUNICATION SYSTEMS

11.1 Telephone System

☒ This system does not have a two-way telephone system.

Number of telephone jacks installed:

Number of warden stations installed:

Number of telephone handsets stored on site:

Type of telephone system installed: ☐ Electrically powered ☐ Sound powered

11.2 Two-Way Radio Communications Enhancement System

☒ This system does not have a two-way radio communications enhancement system.

Percentage of area covered by two-way radio service: Critical areas: % General building areas: %

Amplification component locations:

Inbound signal strength: dBm Outbound signal strength: dBm

Donor antenna isolation is: dB above the signal booster gain

Radio frequencies covered:

Radio system monitor panel location:

11. TWO-WAY EMERGENCY COMMUNICATION SYSTEMS (continued)

11.3 Area of Refuge (Area of Rescue Assistance) Emergency Communications Systems

☒ This system does not have an area of refuge (area of rescue assistance) emergency communications system.

Number of stations:

Location of central control point:

Days and hours when central control point is attended:

Location of alternate control point:

Days and hours when alternate control point is attended:

11.4 Elevator Emergency Communications Systems

☒ This system does not have an elevator emergency communications system.

Number of elevators with stations:

Location of central control point:

Days and hours when central control point is attended:

Location of alternate control point:

Days and hours when alternate control point is attended:

11.5 Other Two-Way Communication Systems

Describe:

12. CONTROL FUNCTIONS

This system activates the following control functions:

☐ Hold-open door releasing devices ☐ Smoke management ☐ HVAC shutdown ☐ F/S dampers

☐ Door unlocking ☐ Elevator recall ☐ Fuel source shutdown ☐ Extinguishing agent release

☐ Elevator shunt trip ☐ Mass notification system override of fire alarm notification appliances

Other (specify):

12.1 Addressable Control Modules

☒ This system does not have control modules.

Number of devices:

Other (specify):

13. SYSTEM POWER

13.1 Control Unit

N/A

13.1.1 Primary Power

Input voltage of control panel:

Control panel amps:

Overcurrent protection: Type:

Amps:

Location (of primary supply panel board):

Disconnecting means location:

13.1.2 Engine-Driven Generator

☐ This system does not have a generator.

Location of generator:

Location of fuel storage:

Type of fuel:

13. SYSTEM POWER (continued)

13.1.3 Uninterruptible Power System

☒ This system does not have a UPS.

Equipment powered by a UPS system:

Location of UPS system:

Calculated capacity of UPS batteries to drive the system components connected to it:

In standby mode (hours):

In alarm mode (minutes):

13.1.4 Batteries

Location:

Type:

Nominal voltage:

Amp/hour rating:

Calculated capacity of batteries to drive the system:

In standby mode (hours):

In alarm mode (minutes):

☐ Batteries are marked with date of manufacture

☐ Battery calculations are attached

13.2 In-Building Fire Emergency Voice Alarm Communication System or Mass Notification System

☒ This system does not have an EVACS or MNS system.

13.2.1 Primary Power

Input voltage of EVACS or MNS panel:

EVACS or MNS panel amps:

Overcurrent protection: Type:

Amps:

Location (of primary supply panel board):

Disconnecting means location:

13.2.2 Engine-Driven Generator

☒ This system does not have a generator.

Location of generator:

Location of fuel storage:

Type of fuel:

13.2.3 Uninterruptible Power System

☒ This system does not have a UPS.

Equipment powered by a UPS system:

Location of UPS system:

Calculated capacity of UPS batteries to drive the system components connected to it:

In standby mode (hours):

In alarm mode (minutes):

13.2.4 Batteries

Location:

Type:

Nominal voltage:

Amp/hour rating:

Calculated capacity of batteries to drive the system:

In standby mode (hours):

In alarm mode (minutes):

☐ Batteries are marked with date of manufacture

☐ Battery calculations are attached

13. SYSTEM POWER (continued)

13.3 Notification Appliance Power Extender Panels

☒ This system does not have power extender panels.

13.3.1 Primary Power

Input voltage of power extender panel(s):

Power extender panel amps:

Overcurrent protection: Type:

Amps:

Location (of primary supply panel board):

Disconnecting means location:

13.3.2 Engine-Driven Generator

☒ This system does not have a generator.

Location of generator:

Location of fuel storage:

Type of fuel:

13.3.3 Uninterruptible Power System

☒ This system does not have a UPS.

Equipment powered by a UPS system:

Location of UPS system:

Calculated capacity of UPS batteries to drive the system components connected to it:

In standby mode (hours):

In alarm mode (minutes):

13.3.4 Batteries

Location:

Type:

Nominal voltage:

Amp/hour rating:

Calculated capacity of batteries to drive the system:

In standby mode (hours):

In alarm mode (minutes):

☐ Batteries are marked with date of manufacture

☐ Battery calculations are attached

14. RECORD OF SYSTEM INSTALLATION

Fill out after all installation is complete and wiring has been checked for opens, shorts, ground faults, and improper branching, but before conducting operational acceptance tests.

This is a: ☒ New system ☐ Modification to an existing system Permit number:

The system has been installed in accordance with the following requirements: (Note any or all that apply.)

☒ NFPA 72, Edition: 2010

☒ NFPA 70, National Electrical Code, Article 760, Edition:

☒ Manufacturer's published instructions

Other (specify):

System deviations from referenced NFPA standards:

Signed:

Printed name: CHRIS CHRISTOPOROU

Date:

Organization:

Title:

Phone:

CHRIS CHRISTOPOROU

ELECTRICIAN

508.44.8685

15. RECORD OF SYSTEM OPERATIONAL ACCEPTANCE TEST

☒ New system

All operational features and functions of this system were tested by, or in the presence of, the signer shown below, on the date shown below, and were found to be operating properly in accordance with the requirements for the following:

☐ Modifications to an existing system

All newly modified operational features and functions of the system were tested by, or in the presence of, the signer shown below, on the date shown below, and were found to be operating properly in accordance with the requirements of the following:

☒ NFPA 72, Edition: 2010

☒ NFPA 70, National Electrical Code, Article 760, Edition:

☒ Manufacturer's published instructions

Other (specify):

☐ Individual device testing documentation [Inspection and Testing Form (Figure 14.6.2.4) is attached]

Signed:



Printed name: CHRIS CHRISTOFOROU

Date:

Organization: CHRIS CHRISTOFOROU

Title: ELECTRICIAN

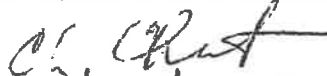
Phone: 508.414.8685

16. CERTIFICATIONS AND APPROVALS

16.1 System Installation Contractor:

This system, as specified herein, has been installed and tested according to all NFPA standards cited herein.

Signed:



Printed name: CHRIS CHRISTOFOROU

Date:

Organization: CHRIS CHRISTOFOROU

Title: ELECTRICIAN

Phone: 508.414.8685

16.2 System Service Contractor:

The undersigned has a service contract for this system in effect as of the date shown below.

Signed:

Printed name:

Date:

Organization:

Title:

Phone:

16.3 Supervising Station:

This system, as specified herein, will be monitored according to all NFPA standards cited herein.

Signed:

Printed name:

Date:

Organization:

Title:

Phone:

16. CERTIFICATIONS AND APPROVALS (continued)

16.4 Property or Owner Representative:

I accept this system as having been installed and tested to its specifications and all NFPA standards cited herein.

Signed:  Printed name: Alex Chisarov Date: .
Organization: Alex Chisarov Title: Phone: 508.414.8685

16.5 Authority Having Jurisdiction:

I have witnessed a satisfactory acceptance test of this system and find it to be installed and operating properly in accordance with its approved plans and specifications, with its approved sequence of operations, and with all NFPA standards cited herein.

Signed: Printed name: Date:
Organization: Title: Phone: