Space Needs Assessment for the Bridgewater Fire Department Bridgewater, MA



September 2020



ARCHITECTS, LLC

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Space Needs Assessment for the

Bridgewater Fire Department Bridgewater, MA

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GENERAL INFORMATION

Date: September 2020

Department: Bridgewater Fire Department

Address: 22 School Street

Bridgewater, MA 02324

Primary Contacts: Thomas D. Levy, Fire Chief

(508) 697-0900

Michael MacDermott,

Deputy Fire Chief

Total Building Area: Fire Headquarters:

22 School Street

Total: 8,267 s.f. gross

East Side Station:

Station 2

774 Plymouth St.

Total: 7,280 s.f. gross

Community Area: 28.2 square miles total

(27.5 square miles of land)

(448 acres of water)

Note: Fire Service area includes Bridgewater State University and Old Colony Correctional Facility (medium

and minimum security facility focused on mental health)

GROWTH ESTIMATES

	Year	2000	2010	2020	2030	2040
	<u>-</u>	census	census	census	projected	projected
Bridgewater, MA		25,352	26,709	27,800	28,333	28,689

source: UMass, Donahue Institute, United States Census Bureau

CALLS FOR SERVICE PROJECTIONS

Fire Department

Year	2003	2010	2019	2030	2040
Fire Statistics:	actual	actual	actual		
Calls for Service	3,328	4,041	4,711	6,000	7,500
Fire Alarm Responses	n/a	280	336	400	450
Fire Investigations	n/a	640	681	730	750
Medical Transport	n/a	1,953	2,547	3,250	4,500
FD Services Rendered	n/a	619	587	1,020	1,100
Other*	n/a	549	560	600	700
Bridgewater State College reporting as % of total		6.9% (278)	6.2% (291)	7.0% (420)	8.0% (600)
MCI Bridgewater reporting as % of total		5.9% (238)	5.8% (272)	6.5% (390)	7.0% (525)

[&]quot;Other" includes accidental, cancelled, extinguished, or patient refusals.

STAFF PROJECTIONS

Fire Personnel:

Yea	r 2020	2030	2040
	actual	est.	est.
Fire Headquarters			
Fire Chief	1	1	1
Deputy Chief	1	1	4
Captain (EMS / Training)	1	1	1
Captain / Lieutenant	4	4	0
Career Fire Fighters	24	24	32
Training Capt / EMS / Code Enforcement	0	0	0
Administrative	2	3	4
SUBTOTAL	33	34	42
Station 2 – Prattown (East)			
Deputy Chief	0	0	0
Captain / Lieutenant	4	4	0
Career Fire Fighters	16	16	16
Training Capt / EMS / Code Enforcement	0	1	1
SUBTOTAL	20	21	21
Station 3 – Scotland (West)			
Assistant Chief	0	0	1
Deputy Chief	0	0	0
Captain / Lieutenant	0	4	4
Career Fire Fighters	0	16	16
Training Capt / EMS / Code Enforcement	0	1	1
SUBTOTAL	0	21	22
Total Positions	53	76	85

VEHICLE PROJECTIONS

Fire Apparatus and Vehicles:

	estimated	estimated	estimated
ire Headquarters:			
Tower Truck / Aerial	1	1	1
Engine / Pumper Trucks	1	1	1
Ambulances	1	2	2
Pickup Truck	1	1	1
Utility Trailer	1	1	1
Shift Commander (SUV)	1	1	1
EMS Officer (SUV)	1	1	1
Antique Fire Apparatus (1840 Hand Pump)	1	1	1
SUBTOTAL	8	9	9
tation 2 – Prattown (East)			
Engine / Pumper Trucks	1	1	1
Ambulances	1	2	2
Pickup Truck / SUV	1	1	1
Utility Trailer	2	2	2
SUBTOTAL	5	6	6
tation 3 – Scotland (West)			
Tower Truck / Aerial	0	0	1
Engine / Pumper Trucks	1	1	1
Ambulance	1	1	1
Pickup Truck / SUV	1	1	1
Utility Trailer	1	1	1
Boat Trailer (22' w/trailer)	1	1	1
SUBTOTAL	5	5	6

Proposed Square Footage

SPACE NEEDS ASSESSMENT

BRIDGEWATER FIRE HEADQUARTERS

1.	Pub	lic	(Net)
	a.	Vestibule	120
		Identifiable main entrance location for Public access	
		2. Air-lock vestibule	
		3. Walk off mat	
		4. Intercom / Phone within Vestibule, autodial to FD Dispatch	
	b.	Public Lobby	400
		1. Access to Fire Prevention Offices / Clerical	
		2. Exterior access to Training Classroom	
		3. Video monitoring of space	
		4. Computer workstation for one (1), public access for permitting	
		5. 1840 Hand Pump integrated as focal point within Lobby	
		6. House telephone	
		7. Public seating for 2-4	
		8. Display case	
		9. Pamphlet rack	
		10. Tackboard / Poster case	
		11. Water cooler	
		12. Adjacent to Fire Prevention, Training Classroom, Public Toilets	
	c.	Public Toilet Rooms Two (2) @ 180	360
		1. Handicap accessible	
		2. Male and Female toilet rooms, multiple fixture required, minimum	
		3. Sized for Training Room capacity	
		4. Adjacent to Training Classroom	
		4. Adjacent to Training Classroom	

2. Training Classroom / E.O.C. / Community Meeting Room

a.	Locat	<u>ion</u>	
	1. 2.	Adjacent to Public Lobby, Toilets, Exterior Entry Utilize for Department Training, Meetings, Social Events, Emergency Operations Center, Warming Shelter, Community gatherings.	
b.	Train	ing Classroom 1	,200
	1.	Seating for one-hundred (100) at chairs only	
	2.	Flat floor, hard floor surface	
	3.	Folding partition to separate space into two (2) meeting spaces	
	4.	Projection screen / Smartboard	
	5.	Independent sound system	
	6.	Lighting on dimmers, varied lighting levels	
	7.	Movable tables and chairs	
	8.	TV monitor(s) with A/V connections	
	9.	Coat storage	
	10.	Radio communications remote console position	
	11.	Portable podium	
	12.	Coffee counter with sink, microwave, under counter refrigerator	
c.	<u>Furni</u>	ture Storage	200
	1.	Storage of moveble table and chairs	
	1. 2.	Storage of movable table and chairs Adjacent to Training Classroom	
	۷.	Adjacent to Training Classroom	
d.	Audio	Visual Storage	80
	1.	Storage of sound system amplifier head and againment	
	1. 2.	Storage of sound system amplifier head end equipment Rack mounted equipment	
		Then mounted equipment	
Train	ning S	upplies Storage	
a.	Train	ing Supplies Storage	80
	1.	Storage of training material, manuals, training aids, etc.	
	2.	Storage of audio-visual equipment head end equipment, rack mounted	
	3.	Adjacent to Training Classroom	
Supp	olies St	torage	
	a 1	·	100
a.	Suppl	ies Storage	100
	1.	Storage of food items, kitchen supplies, sound equipment, emergency management supplies, cots, ham radio equipment, etc.	

2.

3.

4.

Adjacent to Training Classroom

<i>5</i> .	Medical Exam Room							
	a.	Medical Exam Room	75					
		1. Personal exam space for use by professional staff						
		2. Sink / countertop / storage cabinet / PPE storage						
		3. Adjacent to Training Classroom						
<i>6</i> .	Em	Emergency Management Director's Office						
	a.	Emergency Management Director's Office	125					
		1. Workstation for one (1)						
		2. Visitor's chairs for two (2)						
		3. File storage						
		4. Bookshelving / manuals storage						
		5. Adjacent to Training Classroom						
<i>7</i> .	Fire	e Prevention Office						
	a.	Fire Prevention Office	320					
		1. Workstations for two (2) Inspectors						
		2. Visitor's chairs, one (1) per workstation						
		3. Bookshelving / manuals storage / reference materials / codes						
		4. File Storage, active and archive storage						
		5. Flat files for plan storage						
		6. Adjacent to Clerical Workstation, Interview Room						
	b.	Clerical Workstation	200					
		1. Workstations for one (1)						
		2. Waiting chairs for two (2)						
		3. Transaction window to Public Lobby, sliding type						
		4. File Storage, active and archive storage						
		5. Bookshelving						
		6. Adjacent to Public Lobby, Fire Prevention Office, Interview Room						
	c.	Interview Room	125					
		1. Workstation for one (1)						
		2. Visitor's chairs for two (2)						
		3. Audio and video recording capabilities, mute option						
		4. Acoustic separation from adjacent spaces						
		5. Adjacent to Clerical Workstation, Public Lobby						

8. Administrative Offices

a.	Fire C	Chief	250
	1.	Workstation for one (1)	
	2.	Credenza	
	3.	Conference table with seating for four (4)	
	3. 4.	File storage	
	- . 5.	Bookshelving / manuals storage	
	6.	Adjacent to Executive Assistant, Assistant Chief, Conference Room	
b.	Assist	tant Chief	225
	1		
	1.	Workstation for one (1)	
	2.	Credenza	
	3.	Conference table with seating for four (4)	
	4.	File storage	
	5.	Bookshelving / manuals storage	
	6.	Adjacent to Executive Assistant, Fire Chief, Conference Room	
c.	Shift ?	Deputy Office	150
	1.	Workstation for one (1)	
	2.	Visitor's chairs for two (2)	
	3.	File storage	
	4.	Bookshelving / manuals storage	
	5.	Adjacent to Executive Assistant, Conference Room	
d.	Traini	ing / EMS Office	150
	1.	Workstation for one (1)	
	2.	Visitor's chairs for two (2)	
	3.	File storage	
	3. 4.	Bookshelving / manuals storage	
	4. 5.		
	3.	Adjacent to Administrative Assistant, Conference Room	
e.	Execu	utive Assistant	280
	1.	Workstation for one (1)	
	2.	Waiting chairs for two (2)	
	3.	File storage for active and archive filing needs	
	4.	Bookshelving	
	5.	Adjacent to Workroom, Administrative Offices, Conference Room	

f.	Conf	Perence Room	280
	1.	Conference seating for 10-12, minimum	
	2.	Markerboard	
	3.	Wall mounted monitor(s)	
	3. 4.	Adjacent to Administrative Offices, Executive Assistant	
Œ	Worl	kroom	180
g.	<u> </u>	KIOOIII	100
	1.	High speed copier / scanner	
	2.	Paper shredder	
	3.	Sink / countertop area	
	4.	Fax machine	
	5.	Microwave	
	6.	Undercounter refrigerator	
	7.	File storage	
	8.	Office supplies storage / paper storage / mailing equipment	
	9.	Adjacent to Executive Assistant, Administrative Offices	
	7.	rajucon to Executive rissistant, raininistrative offices	
h.	<u>Toile</u>	et / Shower / Lockers	125
	1	TD 11 4 1 1 1 1 C 1 1	
	1.	Toilet, sink, shower for single occupancy use	
	2.	Handicap adaptable	
	3.	Locker storage for four (4)	
Wa	tch Roo	om / Dispatch	
a.	Wato	ch Room / Dispatch	350
	1.	Console position for one (1) to include base radios, dispatch equiplocal radio frequencies for PD / DPW / Mutual Aid	oment,
	2.	Computer workstations for two (2)	
	3.	Access control at points of entry	
	4.	Overhead door controls for Apparatus Bays	
	5.	Lighting on dimming controls / uplighting	
	6.	Bookshelving / Manuals storage	
	7.	Tackboard / markerboard	
	8.	Monitoring of building CCTV network	
	9.	Conduits to antenna mount locations	
	10.	Tone generator	
	10.	Recharge racks for portable radios / battery recharging	
	11. 12.	Fax machine	
	12.	Multi-purpose copier / scanner	
	13. 14.	Adjacent to Firefighter's Functions, Apparatus Bays	
	14.	CANDONADO DO CIDATENDA A CIDADADONA CADROLLANA DAVA	

	b.	Toilet Rooms (Unisex)	60
		1. Handicap accessible	
		2. Toilet / sink / urinal	
		3. Exhaust ventilation	
		4. Telephone / Data jacks	
		5. Adjacent to Watch Room / Dispatch	
10.	Equ	sipment Storage Room	
	a.	Equipment Storage Room	150
		 Storage of bullet proof vests, tactical gear, office supplies Adjacent to Watch Room / Dispatch, Roll Call 	
11.	Roll	l Call	
	a.	Roll Call	300
		1. Training table seating for twelve (12)	
		2. Supervisor's workstation for one (1)	
		3. Markerboard	
		4. Bookshelving / manual storage	
		5. Wall mounted monitor(s)	
		6. Adjacent to Equipment Storage Room, Watch Room / Dispatch, Firefighter's Functions	
12.	Tou	r Commander	
	a.	Tour Commander	125
		1. Workstation for one (1)	
		2. Visitor's chairs for two (2)	
		3. File storage	
		4. Bookshelving / manuals storage	
		5. Adjacent to Firefighter's Functions	

13. Firefighter's Functions

 Comfortable furniture, "living room" setting Cable TV access, wall mounted monitor Total seating for eight (8) Kitchen facilities with range, ventilation hood, double refrigerators, freezer unit, hand wash sink, preparation sink, disposal Coffee maker Grease trap Emergency gas shut off valve Ice Machine, 400# capacity, minimum Trash / recycling containers 	
 Cable TV access, wall mounted monitor Total seating for eight (8) Kitchen facilities with range, ventilation hood, double refrigerators, freezer unit, hand wash sink, preparation sink, disposal Coffee maker Grease trap Emergency gas shut off valve Ice Machine, 400# capacity, minimum 	
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 Kitchen facilities with range, ventilation hood, double refrigerators, freezer unit, hand wash sink, preparation sink, disposal Coffee maker Grease trap Emergency gas shut off valve Ice Machine, 400# capacity, minimum 	
freezer unit, hand wash sink, preparation sink, disposal 5. Coffee maker 6. Grease trap 7. Emergency gas shut off valve 8. Ice Machine, 400# capacity, minimum	
 Coffee maker Grease trap Emergency gas shut off valve Ice Machine, 400# capacity, minimum 	
 6. Grease trap 7. Emergency gas shut off valve 8. Ice Machine, 400# capacity, minimum 	
7. Emergency gas shut off valve8. Ice Machine, 400# capacity, minimum	
8. Ice Machine, 400# capacity, minimum	
7. Trush / Tee yelling containers	
10. Markerboard	
11. Dining table to seat twelve to fifteen (12-15)	
12. Work counter with bar stool seating for six (6)	
13. Locate adjacent to Turn-out Gear, Apparatus Bays, Exterior Entry	
b. Study Room (future Lt's Office)	125
1. Area for quiet study / research	
2. Workstations for two (2)	
3. Adjacent to Tour Commander	
Bunk Rooms / Restrooms / Lockers	
a. Officer's Bunk Room One (1) @ 150	150
<u> </u>	
1. Individual sleeping room (capacity of 1 / room)	
2. Twin size mattresses with nightstands	
3. Desks / chair	
5. Desks / Chan	
4. Direct and indirect lighting	
4. Direct and indirect lighting	
4. Direct and indirect lighting5. Four (4) cubbie compartments, lockable	
 4. Direct and indirect lighting 5. Four (4) cubbie compartments, lockable 6. Hard surface flooring 	700
 4. Direct and indirect lighting 5. Four (4) cubbie compartments, lockable 6. Hard surface flooring 7. Adjacent to Restrooms, Lockers b. Firefighter's / EMS Bunk Rooms Seven (7) @ 100 	700
 4. Direct and indirect lighting 5. Four (4) cubbie compartments, lockable 6. Hard surface flooring 7. Adjacent to Restrooms, Lockers b. Firefighter's / EMS Bunk Rooms Seven (7) @ 100 1. Individual sleeping rooms (capacity of 1 / room) 	_700
 4. Direct and indirect lighting 5. Four (4) cubbie compartments, lockable 6. Hard surface flooring 7. Adjacent to Restrooms, Lockers b. Firefighter's / EMS Bunk Rooms Seven (7) @ 100 1. Individual sleeping rooms (capacity of 1 / room) 2. Twin size mattresses with nightstands 	<u>700</u>
 4. Direct and indirect lighting 5. Four (4) cubbie compartments, lockable 6. Hard surface flooring 7. Adjacent to Restrooms, Lockers b. Firefighter's / EMS Bunk Rooms Seven (7) @ 100 1. Individual sleeping rooms (capacity of 1 / room) 2. Twin size mattresses with nightstands 3. Desks / chairs within individual sleeping rooms 	<u>700</u>
 4. Direct and indirect lighting 5. Four (4) cubbie compartments, lockable 6. Hard surface flooring 7. Adjacent to Restrooms, Lockers b. Firefighter's / EMS Bunk Rooms Seven (7) @ 100 1. Individual sleeping rooms (capacity of 1 / room) 2. Twin size mattresses with nightstands 3. Desks / chairs within individual sleeping rooms 4. Direct and indirect lighting 	700
 4. Direct and indirect lighting 5. Four (4) cubbie compartments, lockable 6. Hard surface flooring 7. Adjacent to Restrooms, Lockers b. Firefighter's / EMS Bunk Rooms Seven (7) @ 100 1. Individual sleeping rooms (capacity of 1 / room) 2. Twin size mattresses with nightstands 3. Desks / chairs within individual sleeping rooms 	<u>700</u>

c.	Rest	rooms / Showers	Four (4) @ 120	480
	1.	Individual restrooms / sh	owers / changing rooms	
	2.	Each restroom to contain	toilet, urinal, sink, shower unit	
	3.	Robe hooks		
	4.	Wall mirror		
	5.	Convenience outlets		
d.	Prop	perty Lockers		500
	1.	Thirty-two, minimum, fu	ll size lockers for firefighter's perso	onal use.
	2.		72" with storage drawer, power rec	
	3.	Adjacent to Bunk Rooms	s, Restrooms	
Phy	sical T	Training Room		
a.	Phys	sical Training Room		400
	1.	Ceiling clearance for we	ghtlifting / free weights	
	2.	Drinking fountain with b	ottle filler	
	3.	Mirrored wall surfaces		
	4.	Sports flooring surface		
	5.	Electrical outlets for state	onary fitness equipment	
	6.	Wall mounted monitor(s)	

Adjacent to Firefighter's Functions, Property Lockers, Restrooms

7.

16. Apparatus Bays

1.	Three (3) double-deep bays required, (18' wide x 80' long per double deep apparatus bays preferred) 14' wide x 14' high apparatus bay doors at each bay	
1.	deep apparatus bays preferred) 14' wide x 14' high apparatus bay doors at each bay	
	14' wide x 14' high apparatus bay doors at each bay	
2.		
3.	120 V. @ each bay	
4.	Exhaust system for apparatus (complete capture and exhaust)	
5.	Trench style floor drains centrally located at each bay with oil and grease	,
	entrapment system	
6.	Radio speakers / intercom system / paging/alert tone	
7.	Compressed air overhead with shut down disconnects at each apparatus	
8.	Overhead tank water fill at select apparatus	
9.	Multiple hose bibb connections (inside and outside bays)	
10.	Pressure washer hookups located in multiple locations with soap solution	l
	pickup tube.	
11.	Auto door openers with remotes on all bay doors (both ends)	
12.	Markerboard / apparatus status and daily check clipboard area	
13.	Radio charging station	
14.	Networked printer location	
15.	Radiant heating throughout floor slabs	
Turn-c	out Gear Locker Area 50	<u>)0</u>
1.	Lockers for gear storage, 24" x 24" x 72", open style	
2.	Total number: Thirty-two (32) minimum	
3.	Floor drains	
4.	Ventilated	
5.	Seamless flooring with radiant heating	
6.	Radio recharge station and supplies storage	
7.	Adjacent to Apparatus Bays	
Casca	de Room 15	<u>50</u>
1.	Cascade fill system for air packs	

- Air pack storage racks and fill station 2.
- Workbench area 3.
- Storage of all oxygen bottle inventory 4.
- 5. Adjacent to Apparatus Bays

b.

c.

d.	Deco	entamination / Washer and Dryer Room	280
	1.	Direct entrance from exterior of Apparatus Bays	
	2.	Industrial sized washer/extractor and dryer for gear	
	3.	Decontamination deluge shower enclosure (for full gear)	
	3. 4.	Commercial washer / dryer for towels / department use	
	4 . 5.	Directly vent dryers to exterior	
	<i>5</i> . 6.	Larger slop sink to pre-wash gear	
	7.	Drying racks (coats/pants and boots)	
	8.	Eye wash station	
	9.	Floor drains with capture system for runoff	
	10.	Cleaning of soiled equipment according to NFPA 1581 standards	
	11.	Wall dispenser for cleaning soaps and degreasers	
	12.	Adjacent to Apparatus Bays and Exterior Entry	
		ragueone to rappulation zary	
e.	Gene	ral Storage	575
	1		
	1.	Emergency lighting / electric generators	
	2.	Portable pumps	
	3.	Speedy dry	
	4.	Air compressor tools and supplies	
	5.	Foam storage	
	6.	Haz-mat equipment	
	7.	Cleaning supplies	
	8.	Protective clothing	
	9.	Portable extinguishers	
	10.	Emergency lighting	
	11.	Adjacent to Apparatus Bays	
f.	Gear	Supply Storage	100
	1.	Protective clothing storage shelving	
	2.	Storage of helmets, boots, department issued equipment	
	2.	Storage of hemicis, boots, department issued equipment	
g.	<u>Hose</u>	Storage	180
	1.	Double door entry	
	2.	Portable hose rack storage	
	3.	Floor drain	
	4.	Adjacent to Apparatus Bays	

h.	Maintenance Room	150
	1. Workbench with vise	
	2. Workstation for one (1)	
	3. File storage for maintenance paperwork	
	4. Welding machine	
	5. Drill press / parts washer	
	6. Equipment / tools storage racks	
	7. Adjacent to Parts Storage, Apparatus Bays	
i.	Parts Storage	120
	1. Wire mesh enclosure	
	2. Industrial shelving units for spare parts, inventory, gear	
	3. Access controlled	
	4. Adjacent to Maintenance Room, Apparatus Bays	
j.	Medical Supply Storage	150
	1. Access controlled point of entry	
	2. Adjustable shelving for medical supply inventory	
	3. Refrigerator	
	4. Adjacent to Apparatus Bays / Ambulance Bay	
k.	Toilet Rooms (Unisex)	60
	1. Handicap accessible	
	2. Toilet / sink / urinal	
	3. Exhaust ventilation	
	4. Adjacent to Apparatus Bays	
Cus	stodial Services	
a.	Custodial Closets Two (2) @ 60	120
	1. One per floor (minimum)	
	2. Floor sink	
	3. Janitorial supplies / cart storage	
	4. Equipment storage	

18. Mechanical

a.	Boller Room		600
	 Two boilers, Circulation points Hot water head Floor drains Chimney bread 	ater	
b.	HVAC Equipment		w/in Boiler Room / Roof
	4. Zoned system5. Radiant floor6. Host compute	cy filters with DDC controls	
c.	Emergency Generato	or	Exterior pad mounted
	1. See Exterior (Considerations	
d.	Electrical Switchgean	r Room	180
	 Main Distribu Electrical sub 	ution Panel (MDP) opanels	
e.	Emergency Electrica	l Room	100
	 Electrical sub Automatic tra 	ppanels for life safety power req ansfer switch	uirements
f.	Fire Suppression		80
	2. Municipal wa	ed facility per NFPA 13 standar	•

19. Computer Data Rooms

a.	Con	nputer Data Room	200
	1.	Workstation for one (1)	
	•	3.6 1 . 1.1 .	

- Manual storage shelving 2.
- Wall mounted and rack mounted data equipment 3.
- Server location and head end location for data, telephone, access control, 4. CCTV, radio equipment, antennas
- 5. Patch panels for data / telephone wiring
- UPS system for all rack mounted equipment, E.O.C. functions, Watch 6. Room
- 7. Conduit pathways to Watch Room, E.O.C., antenna mounts

20. Circulation

Corridors w/in net to gross calculation a.

48" clear width (min.) 1.

b. Stairs w/in net to gross calculation

- 1. 48" clear width (min.)
- 2. Incorporate exterior openings for training exercises, confined space training, training use
- Hard, washable surfaces 3.
- 4 Floor drain
- Elevator w/in net to gross calculation c.
 - Incorporate if public access / civilian employees are present on upper 1. floors
 - 2. Code minimum requirements for stretcher access
 - 3. Adjacent to public access, if required

21. Equipment Storage Bays

1,500 a. Equipment Storage Bays

- 1. Indoor storage bays, three (3), for fire vehicles, trailers, bulk supplies
- Heated and ventilated, radiant floor slab heating 2.
- Overhead door access with motor operators 3.
- Equipment charging locations 4.
- Adjacent to Firefighter's Functions, Apparatus Bays 5.

Proposed Square Footage

BRIDGEWATER FIRE STATIONS #2 & #3

Pub	dia		(Net)
1 и 0 а.		ibule	120
а.	<u>v Cst</u>	iouic	120
	1.	Identifiable main entrance location for Public access	
	2.	Air-lock vestibule	
	3.	Walk off mat	
	4.	Intercom / Phone within Vestibule, autodial to FD Dispatch	
b.	<u>Publ</u>	ic Lobby	250
	1.	Access to Watch Room, Training Classroom	
	2.	Video monitoring of space	
	3.	House telephone	
	4.	Public seating for 2-4	
	5.	Display case	
	6.	Pamphlet rack	
	7.	Tackboard / Poster case	
	8.	Water cooler	
	9.	Adjacent to Training Classroom, Public Toilet	
c.	<u>Publ</u>	ic Toilet Room One (1) @ 60	60
	1.	Handicap accessible	
	2.	Unixex toilet rooms, single fixture	
	3.	For public use when visiting facility	
	4.	Adjacent to Public Lobby, Training Classroom	

Training Classroom / Community Meeting Room *2*.

a.	Loca	ation_	
	1. 2.	Adjacent to Public Lobby, Toilet, Exterior Entry Utilize for Department Training, Meetings, Social Events, Commungatherings.	nity
b.	<u>Trai</u>	ning Classroom	450
	1.	Seating for fifteen (15) at training tables and chairs	
	2.	Flat floor, hard floor surface	
	3.	Projection screen / Smartboard	
	4.	Independent sound system	
	5.	Lighting on dimmers, varied lighting levels	
	6.	Movable tables and chairs	
	7.	TV monitor(s) with A/V connections	
	8.	Coat storage	
	9.	Portable podium	
	10.	Coffee counter with sink, microwave, under counter refrigerator	
c.	<u>Furn</u>	niture Storage	100
	1		
	1.	Storage of movable table and chairs	
	2.	Adjacent to Training Classroom	
d.	Aud	io Visual / Training Supplies Storage	80
	1.	Storage of sound system amplifier head end equipment	
	2.	Storage of training supplies and equipment	
	3.	Rack mounted equipment	
Sup	plies S	Storage	
a.	-	plies Storage	100
	1.	Storage of emergency management supplies, cots	
	2.	Adjacent to Training Classroom	
Med	lical E	Exam Room	
a.	<u>Med</u>	lical Exam Room	<u>75</u>
	1	Dansonal ayam anaga fan yaa by anafassi anal staff	
	1.	Personal exam space for use by professional staff	
	2. 3	Sink / countertop / storage cabinet / PPE storage Adjacent to Public Lobby Training Classroom	
	٦.	ACDACED TO PHOTIC LODGY TEAUTIOUT TASSIOON	

3.

Watch Room / Copy Room / Workroom **5.**

a.

a.	Wate	ch Room / Dispatch	350
	1.	Console position for one (1) to include base radios, dispatch equipment	nt.
		local radio frequencies for PD / DPW / Mutual Aid	,
	2.	Computer workstations for two (2)	
	3.	Access control at points of entry	
	4.	Overhead door controls for Apparatus Bays	
	5.	Lighting on dimming controls / uplighting	
	6.	Bookshelving / Manuals storage	
	7.	Tackboard / markerboard	
	8.	Monitoring of building CCTV network	
	9.	Conduits to antenna mount locations	
	10.	Tone generator	
	11.	Recharge racks for portable radios / battery recharging	
	12.	High speed copier, scanner, networked to workstations	
	13.	Fax machine	
	14.	Paper shredder	
	15.	Adjacent to Firefighter's Functions, Apparatus Bays	
b.	Supp	plies Storage	80
	1.	Office supplies storage	
	2.	Bulk paper storage	
	3.	Adjacent to Watch Room / Copy Room / Workroom	
Sup	perviso	r's Office	
a.	Supe	ervisor's Office (Lieutenant)	125
и.	Бирс	of visor is office (Electronam)	123
	1.	Workstation for one (1)	
	2.	Visitor's chairs for two (2)	
	3.	File storage	
	4.	Bookshelving / manuals storage	
	5.	Adjacent to Watch Room, Firefighter's Functions	

7. Firefighter's Functions

	Day .	Room / Kitchen / Dining	700
	1.	Comfortable furniture, "living room" setting	
	2.	Cable TV access, wall mounted monitor	
	3.	Total seating for six (6)	
	4.	Kitchen facilities with range, ventilation hood, double refrigerators,	
		freezer unit, hand wash sink, preparation sink, disposal	
	5.	Coffee maker	
	6.	Grease trap	
	7.	Emergency gas shut off valve	
	8.	Ice Machine, 400# capacity, minimum	
	9.	Trash / recycling containers	
	10.	Markerboard	
	11.	Dining table to seat six (6)	
	12.	Work counter with bar stool seating for four (4)	
	13.	Locate adjacent to Turn-out Gear, Apparatus Bays, Exterior Entry	
b.	Study	y Room (future Office)	125
	1.	Area for quiet study / research	
	2.	Workstations for two (2)	
	3.	Adjacent to Supervisor's Office	
Bur	nk Roo	ms / Restrooms / Lockers	
a.	Offic	eer's Bunk Room One (1) @ 150	150
a.	Offic	eer's Bunk Room One (1) @ 150	150
a.	Offic	Double occupancy sleeping room (capacity of 2 / room)	150
a.			150
a.	1.	Double occupancy sleeping room (capacity of 2 / room)	150
a.	1. 2.	Double occupancy sleeping room (capacity of 2 / room) Twin size mattresses with nightstands Desks / chair	150
a.	1. 2. 3.	Double occupancy sleeping room (capacity of 2 / room) Twin size mattresses with nightstands	150
a.	1. 2. 3. 4. 5.	Double occupancy sleeping room (capacity of 2 / room) Twin size mattresses with nightstands Desks / chair Direct and indirect lighting Eight (8) cubbie compartments, lockable	150
a.	1. 2. 3. 4.	Double occupancy sleeping room (capacity of 2 / room) Twin size mattresses with nightstands Desks / chair Direct and indirect lighting	150
	1. 2. 3. 4. 5. 6. 7.	Double occupancy sleeping room (capacity of 2 / room) Twin size mattresses with nightstands Desks / chair Direct and indirect lighting Eight (8) cubbie compartments, lockable Hard surface flooring	150 500
	1. 2. 3. 4. 5. 6. 7.	Double occupancy sleeping room (capacity of 2 / room) Twin size mattresses with nightstands Desks / chair Direct and indirect lighting Eight (8) cubbie compartments, lockable Hard surface flooring Adjacent to Restrooms, Lockers ighter's / EMS Bunk Rooms Five (5) @ 100	
	1. 2. 3. 4. 5. 6. 7. Firef	Double occupancy sleeping room (capacity of 2 / room) Twin size mattresses with nightstands Desks / chair Direct and indirect lighting Eight (8) cubbic compartments, lockable Hard surface flooring Adjacent to Restrooms, Lockers ighter's / EMS Bunk Rooms Five (5) @ 100 Individual sleeping rooms (capacity of 1 / room)	
	1. 2. 3. 4. 5. 6. 7. Firef: 1. 2.	Double occupancy sleeping room (capacity of 2 / room) Twin size mattresses with nightstands Desks / chair Direct and indirect lighting Eight (8) cubbie compartments, lockable Hard surface flooring Adjacent to Restrooms, Lockers ighter's / EMS Bunk Rooms Five (5) @ 100 Individual sleeping rooms (capacity of 1 / room) Twin size mattresses with nightstands	
	1. 2. 3. 4. 5. 6. 7. Firef 1. 2. 3.	Double occupancy sleeping room (capacity of 2 / room) Twin size mattresses with nightstands Desks / chair Direct and indirect lighting Eight (8) cubbie compartments, lockable Hard surface flooring Adjacent to Restrooms, Lockers ighter's / EMS Bunk Rooms Five (5) @ 100 Individual sleeping rooms (capacity of 1 / room) Twin size mattresses with nightstands Desks / chairs within individual sleeping rooms	
	1. 2. 3. 4. 5. 6. 7. Firef 1. 2. 3. 4.	Double occupancy sleeping room (capacity of 2 / room) Twin size mattresses with nightstands Desks / chair Direct and indirect lighting Eight (8) cubbie compartments, lockable Hard surface flooring Adjacent to Restrooms, Lockers ighter's / EMS Bunk Rooms Five (5) @ 100 Individual sleeping rooms (capacity of 1 / room) Twin size mattresses with nightstands Desks / chairs within individual sleeping rooms Direct and indirect lighting	
	1. 2. 3. 4. 5. 6. 7. Firef. 1. 2. 3. 4. 5.	Double occupancy sleeping room (capacity of 2 / room) Twin size mattresses with nightstands Desks / chair Direct and indirect lighting Eight (8) cubbie compartments, lockable Hard surface flooring Adjacent to Restrooms, Lockers ighter's / EMS Bunk Rooms Five (5) @ 100 Individual sleeping rooms (capacity of 1 / room) Twin size mattresses with nightstands Desks / chairs within individual sleeping rooms Direct and indirect lighting Four (4) cubbie compartments, lockable	
a. b.	1. 2. 3. 4. 5. 6. 7. Firef 1. 2. 3. 4.	Double occupancy sleeping room (capacity of 2 / room) Twin size mattresses with nightstands Desks / chair Direct and indirect lighting Eight (8) cubbie compartments, lockable Hard surface flooring Adjacent to Restrooms, Lockers ighter's / EMS Bunk Rooms Five (5) @ 100 Individual sleeping rooms (capacity of 1 / room) Twin size mattresses with nightstands Desks / chairs within individual sleeping rooms Direct and indirect lighting	

Restrooms / Showers	Three (3) @ 120	360
1 Individual restrooms / sh	owers / changing rooms	
	0 0	
	torict, armar, sink, shower ame	
5. Convenience outlets		
Property Lockers		480
-		
1. Twenty-eight (28), minin	num, full size lockers for firefighter's	s personal
use.	-	_
2. Locker size: 24" x 24" x	72" with storage drawer, power rece	eptacles for
recharging, ventilation		
3. Adjacent to Bunk Rooms	, Restrooms	
ical Training Room		
Physical Training Room		350
1 Cailing algerance for wai	abtlifting / from weights	
8		
	ottle filler	
1 &	onary fitness equipment	
	 Individual restrooms / sheeled Each restroom to contain Robe hooks Wall mirror Convenience outlets Twenty-eight (28), mining use. Locker size: 24" x 24" x recharging, ventilation Adjacent to Bunk Rooms Cal Training Room Ceiling clearance for weight 2. Drinking fountain with began Mirrored wall surfaces Sports flooring surface Electrical outlets for stating 	 Individual restrooms / showers / changing rooms Each restroom to contain toilet, urinal, sink, shower unit Robe hooks Wall mirror Convenience outlets Property Lockers Twenty-eight (28), minimum, full size lockers for firefighter use. Locker size: 24" x 24" x 72" with storage drawer, power received recharging, ventilation Adjacent to Bunk Rooms, Restrooms Cal Training Room Ceiling clearance for weightlifting / free weights Drinking fountain with bottle filler Mirrored wall surfaces Sports flooring surface

2,880

10. Apparatus Bays

a.

b.

c.

Apparatus Bays

apparatus bays preferred)
14' wide x 14' high apparatus bay doors at each bay
120 V. @ each bay
Exhaust system for apparatus (complete capture and exhaust)
Trench style floor drains centrally located at each bay with oil and grease entrapment system
Radio speakers / intercom system / paging/alert tone
Compressed air overhead with shut down disconnects at each apparatus
Overhead tank water fill at select apparatus
Multiple hose bibb connections (inside and outside bays)
Pressure washer hookups located in multiple locations with soap solution pickup tube.
Auto door openers with remotes on all bay doors (both ends)
Markerboard / apparatus status and daily check clipboard area
Radio charging station
Networked printer location
Radiant heating throughout floor slabs
out Gear Locker Area 480
Lockers for gear storage, 24" x 24" x 72", open style
Total number: Twenty-eight (28), minimum
Floor drains
Ventilated
Seamless flooring with radiant heating
Radio recharge station and supplies storage
Adjacent to Apparatus Bays
de Room 150

- 1. Cascade fill system for air packs
- 2. Air pack storage racks and fill station
- 3. Workbench area
- 4. Adjacent to Apparatus Bays

d.	Deco	ontamination / Washer and Dryer Room	280
	1.	Direct entrance from exterior of Apparatus Bays	
	2.	Industrial sized washer/extractor and dryer for gear	
	3.	Decontamination deluge shower enclosure (for full gear)	
	4.	Commercial washer / dryer for towels / department use	
	5.	Directly vent dryers to exterior	
	6.	Larger slop sink to pre-wash gear	
	7.	Drying racks (coats/pants and boots)	
	8.	Eye wash station	
	9.	Floor drains with capture system for runoff	
	10.	Cleaning of soiled equipment according to NFPA 1581 standards	
	11.	Wall dispenser for cleaning soaps and degreasers	
	12.	Adjacent to Apparatus Bays and Exterior Entry	
e.	Gene	eral Storage	500
	1.	Emergency lighting / electric generators	
	2.	Portable pumps	
	3.	Speedy dry	
	4.	Air compressor tools and supplies	
	5.	Foam storage	
	6.	Haz-mat equipment	
	7.	Cleaning supplies	
	8.	Protective clothing	
	9.	Portable extinguishers	
	10.	Emergency lighting	
	11.	Adjacent to Apparatus Bays	
f.	Gear	Supply Storage	100
	1.	Protective clothing storage shelving	
	2.	Storage of helmets, boots, department issued equipment	
g.	Hose	e Storage	180
	1.	Double door entry	
	2.	Portable hose rack storage	
	3.	Floor drain	
	4.	Adjacent to Apparatus Bays	

h.	Maintenance Room	150
	1. Workbench with vise	
	2. Workstation for one (1)	
	3. File storage for maintenance paperwork	
	4. Welding machine	
	5. Drill press / parts washer	
	6. Equipment / tools storage racks	
	 Adjacent to Parts Storage, Apparatus Bays 	
i.	Medical Supply Storage	150
	•	
	1. Access controlled point of entry	
	2. Adjustable shelving for medical supply inventory	
	3. Refrigerator	
	4. Adjacent to Apparatus Bays / Ambulance Bay	
j.	Toilet Rooms (Unisex)	60
	1. Handicap accessible	
	2. Toilet / sink / urinal	
	3. Exhaust ventilation	
	4. Adjacent to Apparatus Bays	
Cus	stodial Services	
a.	Custodial Closets One (1) @ 60	60
	1. One per floor (minimum)	
	2. Floor sink	
	3. Janitorial supplies / cart storage	
	4. Equipment storage	
	Equipment storage	

12. Mechanical

a.	Boiler Room		400
	1. Two boiler	ers, minimum, for redundancy	
	2. Circulation	n pumps	
	3. Hot water	heater	
	4. Floor drain	ns	
	5. Chimney b	breaching	
b.	HVAC Equipmen	nt	w/in Boiler Room / Roof
	 Ducted sup 	pply and returns	
	2. High effici	iency filters	
	3. VAV boxe	es with DDC controls	
	4. Zoned syst	tems	
	5. Radiant flo	oor heating within Apparatus Bays	and adjacent spaces
	6. Host comp	puter w/in Computer Data Room	
		cations throughout facility / roof top)
c.	Emergency Gener	rator	Exterior pad mounted
	1. See Exterio	ior Considerations	
d.	Electrical Switchg	gear Room	150
	1. Main Distr	ribution Panel (MDP)	
	2. Electrical s	, ,	
e.	Emergency Electr	rical Room	80
	1. Electrical s	subpanels for life safety power requ	irements
		c transfer switch	
f.	Fire Suppression		80
		water supply	
		nkled facility per NFPA 13 standard	ls
	3. Code designation	gned minimum	

13. Computer Data Room

a.	Computer Data Room	
		۰

150

- Workstation for one (1) 1.
- Manual storage shelving 2.
- Wall mounted and rack mounted data equipment 3.
- Server location and head end location for data, telephone, access control, 4. CCTV, radio equipment, antennas
- Patch panels for data / telephone wiring 5.
- UPS system for all rack mounted equipment, E.O.C. functions, Watch 6. Room
- 7. Conduit pathways to Watch Room, E.O.C., antenna mounts

14. Circulation

Corridors w/in net to gross calculation a.

5. 48" clear width (min.)

b. Stairs w/in net to gross calculation

- 1. 48" clear width (min.)
- 2. Incorporate exterior openings for training exercises, confined space training, training use
- Hard, washable surfaces 3.
- 4. Floor drain

Vehicle Carport Shelter *15.*

Vehicle Carport Shelter a.

1,600

- Sheltered parking for eight (8) official vehicles, equipment 1.
- 2. Overhead lighting
- Weatherproof, electrical outlets for recharging, convenience outlets 3.
- Adjacent to Firefighter's Functions, Exterior Entry 4.

SPACE NEEDS SUMMARY

Summary Sheet Square Ft. required

Summary Sheet Square Fts	· required
BRIDGEWATER FIRE HEADQUARTERS	S
Public	880
Training Classroom / E.O.C. / Community Meeting Room	1,480
Training Supplies Storage	80
Medical Exam Room	75
Emergency Management Director's Office	125
Fire Prevention Office	645
Administrative Offices	1,640
Watch Room / Dispatch	410
Equipment Storage Room	150
Roll Call	300
Tour Commander	125
Firefighter's Functions	1,125
Bunk Rooms / Restrooms / Lockers	1,830
Physical Training Room	400
Apparatus Bays	6,585
Custodial Services	120
Mechanical	960
Computer Data Room	200
Circulation	w/in net to
	gross
Equipment Storage Bays	1,500
Total Net Square Footage	18,630
Net to Gross Factor for Apparatus Bays (x 1.10)	660
Net to Gross Factor for all other spaces (x 1.35)	4,200
Total Gross Square Footage Required	23,490

SPACE NEEDS SUMMARY

Summary Sheet

Square Ft. required

BRIDGEWATER STATIONS #2 & #3	
Public	430
Training Classroom / Community Meeting Room	630
Supplies Storage	100
Medical Exam Room	75
Watch Room / Copy Room / Workroom	430
Supervisor's Office	125
Firefighter's Functions	825
Bunk Rooms / Restrooms / Lockers	1,490
Physical Training Room	350
Apparatus Bays	4,930
Custodial Services	60
Mechanical	710
Computer Data Room	150
Circulation	w/in net to
	gross
Vehicle Carport Shelter	1,600
Total Net Square Footage	11,905
Net to Gross Factor for Apparatus Bays (x 1.10)	500
Net to Gross Factor for all other spaces (x 1.35)	2,445
Total Gross Square Footage Required	14,850

EXTERIOR CONSIDERATIONS

a. Public Parking		ic Parking
	1.	Total number of spaces preferred = to support Training Classroom occupancy
	2.	Vehicle drop off area
	3.	Handicap parking spaces = minimum, van accessible
b.	Fire /	/ EMS Vehicle and Staff Parking
	1.	Total number of spaces required (fire) = preferred for Fire / EMS staff vehicles
	2.	Motorcycle parking required =
	3.	Motorcycle parking on concrete pad
c.	<u>Flag</u>	poles
	1.	USA
	2.	State
	3.	Memorial stone dedication area adjacent to flagpoles
	4.	Internal halyard
	5.	Ground mounted lighting
d.	Sign	s
	1.	Department identification
	2.	Located at roadside
	3.	Located on building
	4.	Illuminated
	5.	Conforms to Local Zoning
e.	<u>Ligh</u>	ting
	1.	Lighting in public areas
	2.	Lighting in all parking areas
	3.	Illuminated walkways
	4.	Illuminated entry locations
	5.	Lighting coordinated with CCTV locations
f.	Hanc	dicap accessibility
	1.	Entire facility handicap accessible
	2.	Wheelchair access to public entry

g. <u>CCTV Cameras</u>

- 1. Color, multi-sensor cameras preferred
- 2. Weatherproof housings
- 3. Pole mounted away from structure to control points of entry
- 4. Provide surveillance for exterior and interior security needs

h. Plant Material

- 1. Minimize grass areas and required lawn maintenance
- 2. Low ground cover preferred
- 3. Decorative trees not to conflict with snow storage locations

i. Trash Storage

- 1. Number of dumpsters required = One (1) general trash, one (1) recycling container, minimum
- 2. Fenced enclosure with gate
- 3. Concrete pad for rodent control

j. <u>Snow Storage</u>

Lawn Areas

1. Provide snow storage capacity adjacent to paved areas

k. Exterior Hose Bibb Locations

- 1. Provide varied locations around building
- 2. Exterior wash down locations at Apparatus Bays preferred

1. Communications Antenna

- 1. Roof mounted antennas anticipated
- 2. Conduit paths to Computer Data Room / Watch Room location

m. Emergency Generator

- 1. Diesel fueled generator preferred
- 2. Automatic transfer switch in Emergency Electrical Room
- 3. Weatherproof enclosure on concrete pad
- 4. Sized for 100% load of facility

n. Patio / Picnic Area

- 1. Outdoor seating / dining area for staff use
- 2. Grill area with natural gas connection
- 3. Adjacent to Firefighter's Functions

Serving the Public Safety Community



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