



## Manchester-by-the-Sea, Massachusetts

January 2021



## Municipal Buildings

Prepared by the



Institute for Human Centered Design

## Fire Department



## Town of Manchester-by-the-Sea ADA Transition Plan

February 2020



Institute for Human Centered Design

200 Portland Street, Boston, MA 02114

www.IHCDesign.org • info@IHCDesign.org

617-695-1225 voice/tty

### Background

The Fire Department is located at 12 School Street. The Station is open to the public Monday to Fridays from 8:00 AM – 4:00 PM. Services offered to the public includes inspections, and school tours. Employee parking is located on the west side of the building and on-street parking is available on School Street.

The accessible entrance to the fire station is located on School Street. An emergency exit is located on the west side on the ground level and an employee inaccessible entrance/exit is located on the south side of the building (ground level).

The building houses fire fighters and administrative staff, a staffed service counter (near main entrance) and a meeting room in the rear. The meeting room is used for classes, training for firefighters, police and EMS. Inaccessible single-user toilet rooms are located near the main entrance and an employee men's multi-user toilet room is located near the meeting room – this toilet room is also used by member of the public when events are being hosted at the fire station.

### Key Accessibility Issues

#### Toilet Rooms

Accessibility issues include lack of single-user men's and women's toilet rooms, lack of an accessible wheelchair compartment in the multi-user toilet room and lack of an accessible urinal. Other accessibility issues include lack of insulated pipes under the lavatory and lack of faucets that do not require tight grasping, pitching or twisting of the wrist.

#### Signage

Accessibility issues include lack of tactile signs (braille and raised characters), lack of compliant directional signs at the inaccessible exits and inaccessible toilet rooms and lack of the illuminated International Symbol of Accessibility (ISA) at the accessible emergency exits.

### Additional Accessibility Issues

- Lack of a van accessible parking space (employee parking lot).
- Lack of securely attached walk-off mats.

### Order of Magnitude Cost Estimates

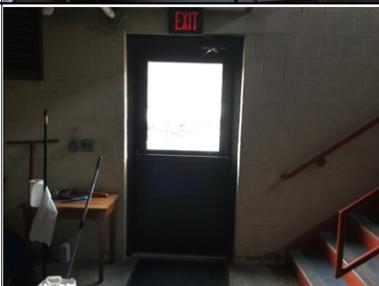
- Provide an accessible van parking space (accessible space, accessible access aisle and sign): \$1,850
- Provide an accessible single-user toilet room: \$26,604
- Renovate the men's multi-user toilet room (near meeting room): \$10,764
- Provide compliant signage (directional, designation and egress signs): \$2,636
- Miscellaneous corrective actions (handrail extensions, etc.): \$1,600

**Total: \$43,454**

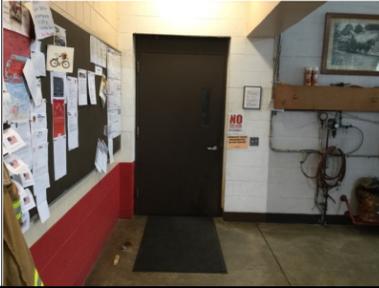
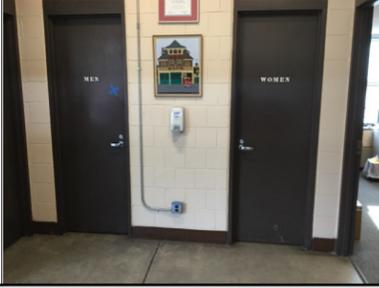
**Town of Manchester by-the-Sea  
Fire Department**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
<b>Approach and Entrance</b>												
<b>Exterior Access Route</b>												
1	Towards Main Entrance	Ext.		Exterior Access Route	Sidewalk		Cross slope > 1:50 (2.00%)	3.3%	Reduce cross slope to be no steeper than 1:50 (2.00%) in all directions.	1	-	\$0
<b>Off-Street Parking Lot or Garage</b>												
2	Parking Lot	Ext.		Off-Street Parking Lot or Garage	Employee		Total # of designated van accessible spaces Vehicle space < 132" wide at van space Access aisle < 60" wide at car/van space Sign not provided Sign does not have the designation "Van Accessible"	-	Provide a van accessible space that is at least 132" wide with an access aisle that is at least 60" wide. Provide a sign with the bottom of the sign 60" min. above the ground and the top 96" max. above the ground. Add the designation "Van Accessible" to the sign.	1	1850	\$1850
<b>Exterior Ramp</b>												
3	Main Entrance	Ext.		Exterior Ramp	N/A		Handrails do not extend 12" past top & bottom	-	Alter handrails to extend horizontally above the landing for 12" min. beyond the top and bottom of ramp runs.	2	800	\$1600
<b>Entrance</b>												
4	Employee Entrance	Ext.		Entrance	Secondary Entrance		Entrance not on an accessible route Directional sign to accessible entrance not provided	- -	Provide a directional sign indicating the location of the nearest accessible entrance.	1	346	\$346
<b>Access to Goods and Services</b>												

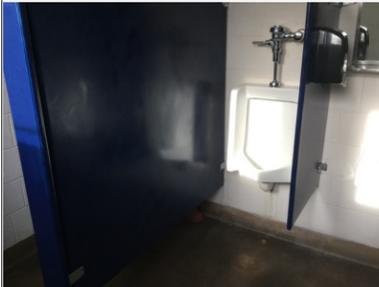
**Town of Manchester by-the-Sea  
Fire Department**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
<b>Means of Egress</b>												
5				Means of Egress	N/A		Tactile exit sign not provided	-	Ensure tactile exit signs with raised characters and braille are provided at exit doors. Mount signs between 48"- 60" above finished floor located on the latch side of the door.	1	232	\$232
6	Meeting Room	1		Means of Egress	N/A		Tactile exit sign not provided Directional sign to accessible emergency exit not provided	-	Ensure a tactile exit sign with raised characters and braille is provided at exit door. Mount sign between 48"- 60" above finished floor located on the latch side of the door. Provide a directional sign indicating the location of the nearest emergency exit.	1	232	\$232
7	Exit to Parking	B		Means of Egress	N/A		Tactile exit sign not provided Directional sign to accessible emergency exit not provided	- -	Ensure a tactile exit sign with raised characters and braille is provided at exit door. Mount sign between 48"- 60" above finished floor located on the latch side of the door. Provide a directional sign indicating the location of the nearest emergency exit.	1	232	\$232
8	Exit to Apparatus	B		Means of Egress	N/A		Tactile exit sign not provided Illuminated ISA symbol not provided (MAAB)	- -	Ensure tactile exit signs with raised characters and braille are provided at exit doors. Mount signs between 48"- 60" above finished floor located on the latch side of the door. Provide an illuminated International Symbol of Accessibility.	1	432	\$432
9	Towards Meeting Room	1		Means of Egress	N/A		Floor level designation not provided	-	Provide a sign on the interior of the stairway enclosure indicating the floor level.	1	232	\$232

**Town of Manchester by-the-Sea  
Fire Department**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
10	Exit	1		Means of Egress	111		Illuminated ISA symbol not provided (MAAB)	-	Provide an illuminated International Symbol of Accessibility.	1	200	\$200
<b>Doors, Doorways, &amp; Gates</b>												
11	Towards Meeting Room	1		Doors, Doorways, & Gates	Meeting Room		Mat not securely attached Door requires > 5 lbs. of force to open	- 10 lbs	Secure the mat. Adjust closers so doors do not require more than 5 pounds of force to open.	2	Labor	\$0
12	Men's Toilet Room			Doors, Doorways, & Gates	Toilet Room		Door requires > 5 lbs. of force to open	-	Adjust closers so doors do not require more than 5 pounds of force to open.	1	Labor	\$0
<b>Signage</b>												
13	Men's Toilet Room	1		Signage	Designation		Signage is not provided	- -	Locate compliant signage alongside the door on the latch side.	1	232	\$232
14	Men's and Women's Toilet Room	1		Signage	Designation		Raised characters not provided on sign Raised characters < 48" or > 60" above ground Sign not located on the latch side of the door Directional sign to access toilet not provided	- - - -	Provide text with raised characters duplicated in braille on sign. Mount signs between 48" min. and 60" max. above finished floor. Locate sign alongside the door on the latch side. Install a sign indicating the location of the nearest accessible toilet room.	3	232	\$696
<b>Toilet &amp; Bathing Rooms</b>												

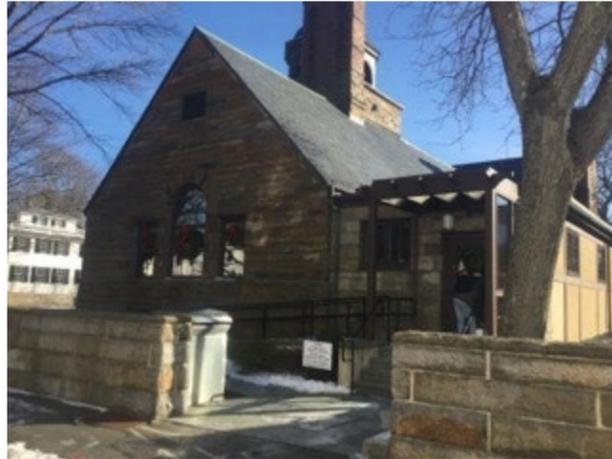
**Town of Manchester by-the-Sea  
Fire Department**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
<b>Overall Access</b>												
15	Women's Toilet Room	1		Overall Access	Toilet Room		Turning space not provided Accessible plumbing fixtures or stalls not provided	- -	Provide one accessible single-user toilet room.	1	24604	\$24604
16	Men's Toilet Room	1		Overall Access	Toilet Room		Turning space not provided Accessible plumbing fixtures or stalls not provided	- -	Provide one accessible single-user toilet room.  See ID #15.	1	-	\$0
17	Men's Toilet Room	1		Overall Access	Toilet Room		Accessible plumbing fixtures or stalls not provided	-	Provide one accessible wheelchair compartment.	1	6182	\$6182
<b>Lavatory</b>												
18	Men's Toilet Room	1		Lavatory	N/A		Faucet is not operable with a closed fist Plumbing underneath is exposed Mirror above lavatory w/reflective surface > 40"	- - 48"	Provide a faucet that can be operable with one hand and not require tight grasping, pinching, or twisting of the wrist for at least one lavatory. Insulate or otherwise configure pipes to prevent contact, for at least one lavatory. Lower mirror so that the bottom surface is at 40" max. above finished floor.	1	1334	\$1334
<b>Urinal</b>												
19	Men's Toilet Room	1		Urinal	N/A		Rim > 17" high	-	Provide an urinal with the rim no higher than 17" above the finished floor.	1	3248	\$3248

**Town of Manchester by-the-Sea  
Fire Department**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
<b>Best Practice</b>												
<b>Transfer Shower</b>												
20	Men's Toilet Room	1		Transfer Shower	N/A			-	Recommend providing an accessible shower.	1	-	\$0

# Public Library



## Town of Manchester-by-the-Sea ADA Transition Plan

February 2020



Institute for Human Centered Design

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### Background

Year Built: 1886

The Manchester-by-the-Sea library is located at 15 Union Street. The library has a main floor, a small basement area used by Friends of the Library, and a mezzanine primarily used by teenagers and young adults.

The building has two accessible entrances including the main entrance on the north side of the library off Union Street, and an entrance off Church Street on the west side of the library that opens to the children’s area. The Church Street entrance is connected to an accessible ramp and is close to four on-street parking spaces.

The main floor has a circulation desk where reading and magnifying glasses are available. The main floor also has computers, the majority of the available books and periodicals, and an inaccessible single-user toilet room. Staircases provide access to the basement Friends of the Library area and to the mezzanine.

### Key Accessibility Issues

#### Exterior Access Routes

Accessibility issues include lack of accessible routes to exterior library amenities, and exterior access routes with cross slopes or changes in level greater than the maximum allowed.

#### Interior Access Routes

Accessibility issues include lack of an accessible route to the mezzanine and to the Friends of the Library area in the basement\*, and lack of the minimum required clear width at some routes through the main library area.

**\*Note:** Providing access to the Friends of the Library area in the basement may be technically infeasible. To provide program access, relocate the Friends of the Library area to an accessible location as needed.

#### Toilet Rooms

Accessibility issues include lack of the minimum required turning space in the single-user toilet room.

#### Interior Stairs

Accessibility issues include lack of closed risers and lack of handrails that extend at least 12” at the stairs leading to the mezzanine.

#### **Additional Accessibility Issues**

- Lack of door hardware that can be used without requiring tight grasping, pinching, or twisting of the wrist.
- Lack of compliant egress signs.

#### **Order of Magnitude Cost Estimates**

- Provide an accessible single-user toilet room: \$24,604
- Provide an accessible route to the mezzanine (interior lift): \$21,660
- Renovate stairs to mezzanine: \$3,192
- Provide exterior access routes to library amenities and correct issues with existing exterior access routes: \$2,010
- Miscellaneous corrective actions (accessible egress signage, accessible door hardware, etc.): \$2,316

**Total: \$53,782**

#### **Best Practice and Inclusive Design**

Best practice and inclusive design recommendations include elements that are not required in the standards but may create enhanced experiences for all users.

- Recommend providing an automatic door opener at the exterior door to the children’s area. IHCD team was told some library users have difficulty opening the door when carrying books, using a walker, etc.).
- Recommend designating the street parking space closest to the route to the ramp by the children’s area entrance as

accessible by installing a sign with the International Symbol of Accessibility (ISA).

- Recommend providing a baby changing station in the toilet room when it is made accessible. IHCD was told that at present some parents change their children's diapers in the children's book area because there is insufficient space in the existing toilet room to do so there.
- Recommend providing a sign at the entrance to the Friends of the Library area in the basement that reads, 'Low Ceiling' as the ceiling is just 72" high.

**Town of Manchester-by-the-Sea  
Public Library**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
<b>Approach and Entrance</b>												
<b>Exterior Access Route</b>												
1	Central/ Union Street at Path to Main Entrance	Ext.		Exterior Access Route	Sidewalk		Cross slope > 1:50 (2.00%)	4.5%	Reduce cross slope to be no steeper than 1:50 (2.00%).  (Cost for 3'x3' of asphalt to correct slope.)	1	90	\$90
2	Path to Children's Area Entrance	Ext.		Exterior Access Route	Exterior		Level changes > 1/4"	1"	Alter change in level to be 1/4" high max.  (Cost for a 3'x3' concrete patch.)	1	144	\$144
3	By Ramp	Ext.		Exterior Access Route	Exterior		Accessible route not provided	-	Ensure an accessible route is provided to the bike rack.  (Cost for a 3'x3' concrete patch.)	1	144	\$144
4	Front of Library Near Union Street	Ext.		Exterior Access Route	Walkway		Accessible route not provided	-	Ensure an accessible route is provided to the table and chairs in front of library along Union Street.  (Cost based on a 48" wide 30' long stone dust walkway to table area.)	1	960	\$960
5	Near Church Street Ramp	Ext.		Exterior Access Route	Walkway		Accessible route not provided	-	Ensure an accessible route is provided to the pet tie-up area.  (Cost based on a 48" wide x 6' long stone dust path.)	1	192	\$192
<b>Access to Goods and Services</b>												

**Town of Manchester-by-the-Sea  
Public Library**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
<b>Means of Egress</b>												
6	Exit to Ramp	1		Means of Egress	N/A		Tactile exit sign not provided Illuminated Int. Symbol of Acc. not provided	-	Ensure tactile exit signs with raised characters and braille are provided at exit doors. Mount signs between 48"- 60" above finished floor located on the latch side of the door. Provide a sign with an illuminated International Symbol of Accessibility (ISA).	1	432	\$432
7	Central/ Union Street Exit	1		Means of Egress	N/A		Tactile exit sign not provided Illuminated Int. Symbol of Acc. not provided	-	Ensure tactile exit signs with raised characters and braille are provided at exit doors. Mount signs between 48"- 60" above finished floor located on the latch side of the door. Provide a sign with an illuminated International Symbol of Accessibility (ISA).	1	432	\$432
<b>Interior Access Route</b>												
8	Main Room	1		Interior Access Route	N/A		Route < 36" wide	30"	Ensure that a clear width of 36" min. is maintained at the accessible route (shift location of large stand).	1	Labor	\$0
9	Path to Stairs to Mezzanine	1		Interior Access Route	N/A		Route < 36" wide	33"	Ensure that a clear width of 36" min. is maintained at the accessible route (relocate items to create a 36" min. wide path to stairs).	1	Labor	\$0
10	Friends of Library Volunteer Area	1		Interior Access Route	N/A		Accessible route not provided	-	Providing an accessible route to the basement Friends of Library area may be technically infeasible. To provide program access, recommend relocating the Friends of the Library area to an accessible location as needed.	1	Labor	\$0

**Town of Manchester-by-the-Sea  
Public Library**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
11	Stairs to Mezzanine	1		Interior Access Route	N/A		Accessible route not provided	- -	Provide an accessible route to the mezzanine teen area.  (Cost based on a new interior lift.)	1	21660	\$21660
<b>Doors, Doorways, &amp; Gates</b>												
12	Staff Office	1		Doors, Doorways, & Gates	Office		Hardware not operable with a closed fist	-	Provide hardware that can be operable with one hand and not require tight grasping, pinching, or twisting of the wrist.	1	484	\$484
13	Single-User Toilet Room	1		Doors, Doorways, & Gates	Toilet Room		Hardware not operable with a closed fist	-	Provide hardware that can be operable with one hand and not require tight grasping, pinching, or twisting of the wrist.	1	484	\$484
14	Friends of Library Volunteer Area	b		Doors, Doorways, & Gates	Other		Hardware not operable with a closed fist	-	Provide hardware that can be operable with one hand and not require tight grasping, pinching, or twisting of the wrist.	1	484	\$484
<b>Stairways</b>												
15	Mezzanine	M		Stairways	Interior		Handrails do not extend 12" from stairs	-	Top: Ensure handrails extend horizontally above the landing for 12" min. beginning above the first riser nosing. Bottom: Ensure handrails extend to one tread depth beyond the last riser.  (Cost based on welding extensions on existing railing at top and bottom of stairs.)	4	142	\$568

**Town of Manchester-by-the-Sea  
Public Library**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
16	Stairs to Mezzanine	1		Stairways	Interior		Stair has open risers	-	Ensure stairs have closed risers.  (Cost based on filling in 16 metal risers.)	1	2624	\$2624
<b>Service Counter</b>												
17	Circulation Desk	1		Service Counter	N/A				Keep accessible service counter clear of stored and displayed items.	1	Labor	\$0
<b>Benches</b>												
18	Front of Library Near Union Street	Ext.		Benches	N/A		No accessible route to 20% of benches 20% of benches have clear space < 36" x 48"	- -	Provide an accessible route to bench in this area. Ensure bench has a stable, firm and slip resistant clear floor space of 36" wide min. by 48" deep min. adjacent to the bench at one end. (Cost based on a 48" wide 15' long stone dust walkway to table area.)	1	480	\$480
<b>Toilet &amp; Bathing Rooms</b>												
<b>Overall Access</b>												
19	Single-User Toilet Room	1		Overall Access	Toilet Room		Turning space not provided	-	Add an accessible single-user toilet room.	1	24604	\$24604
<b>Best Practice</b>												

**Town of Manchester-by-the-Sea  
Public Library**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
<b>Ceiling Height</b>												
20	Friends of Library Volunteer Area	B		Ceiling Height	N/A				Recommend providing a sign at the entrance to the Friends of the Library area that reads, 'Low Ceiling' as the ceiling is just 72" high.	1	-	\$0
<b>Entrance Door</b>												
21	Door at Ramp to Children's Area	Ext.		Entrance Door	N/A				Recommend providing an automatic door opener.  (The opening force for the door is at the heavy end of the allowable range, but multiple library users have said the door is too heavy for them to open when carrying books and in similar situations.)	1	-	\$0
<b>On-Street Parking</b>												
22	Church Street Parking	Ext.		On-Street Parking	N/A				Recommend designating the street parking space closest to the route to the ramp by the children's area entrance as accessible by installing a sign with the International Symbol of Accessibility (ISA) with the base of the sign 60" min. and the top of the sign 96" max. above the ground.	1	-	\$0

# Police Department



## Town of Manchester-by-the-Sea ADA Transition Plan

March 2020



Institute for Human Centered Design

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617-695-1225 voice/tty

### Background

The Police Department is located at 10 Central Street. The Police Station is a two (2) story building connected by a set of interior stairs. The public accessible entrance/exit is through the Town Hall. The entrance/exit used to transport detainees is located on the ground level of the Police Station. The parking lot is shared with the Town Hall and the Wastewater Treatment Plant.

On the first floor the Station houses a reception area, a meeting room and an interview room. The detention area that includes a fingerprint area, four male and one female/juvenile holding cells are located on the ground level. A bathing room is also in this area.

**Note:** IHCD team only surveyed the areas used by the public.

### Key Accessibility Issues

Accessibility issues include excessive running and cross slopes at the walkways leading to the main entrance.

**Note:** IHCD team was told that the Town Common area is going to be redesigned later in the spring.

#### Holding Cells

The major accessibility issues include lack of a male accessible holding cell (this includes lack of the minimum required turning space and lack of a compliant toilet/lavatory combo unit). Other accessibility issues are the lack of a turning space and a compliant toilet/lavatory combo unit at the female/juvenile holding cell and lack of an accessible bathing facility in the detention area. (See attached document from the Department of Justice regarding requirements for accessible holding cells).

#### **Additional Accessibility Issues**

- Lack of securely attached walk-off mats (main entrance).
- Lack of a compliant service counter.
- Lack of compliant signage (egress and designation signs).
- Excessive opening force required at a few doors.

### Order of Magnitude Cost Estimates

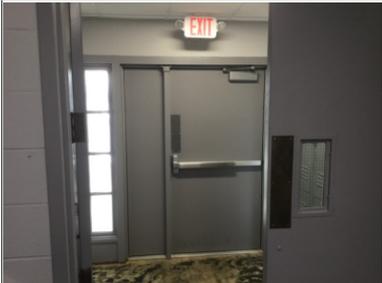
- Provide an accessible bathing room (detention area): \$24,604
- Provide a compliant lavatory/toilet combo unit: \$10,010
- Miscellaneous corrective actions (compliant signage, accessible service counter, etc.): \$2,586

**Total: \$37,200\***

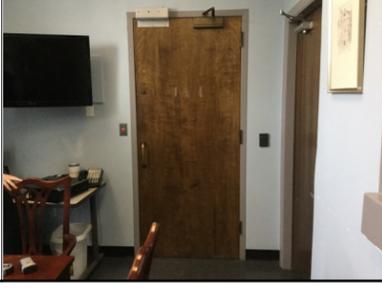
#### **\*Note:**

- Cost for the renovation of the Town Common is not included.
- Cost to provide one accessible male holding cell is not included.

**Town of Manchester by-the-Sea  
Police Department**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
<b>Approach and Entrance</b>												
<b>Exterior Access Route</b>												
1	Across From Seaside 1 Building	1		Exterior Access Route	Walkway		Route not maintained in operable working condition	-	Ensure the accessible route is maintained in operable working conditions.	1	-	\$0
2	Towards Main Entrance	Ext.		Exterior Access Route	Walkway		Cross slope > 1:50 (2.00%)	2.7%	Reduce cross slope to be no steeper than 1:50 (2.00%).	1	-	\$0
<b>Entrance</b>												
3	Main Entrance	Ext.		Entrance	Main Entrance		Entrance not on an accessible route Directional sign to accessible entrance not provided Mat not securely attached	- - -	Provide a directional sign indicating the location of the nearest accessible entrance. Secure the mat.	1	346	\$346
<b>Access to Goods and Services</b>												
<b>Means of Egress</b>												
4	Emergency Exit	G		Means of Egress	N/A		Tactile exit sign not provided Emergency exit not on an accessible route Directional sign to accessible emergency exit not provided	- - -	Ensure a tactile exit sign with raised characters and braille is provided at exit door. Mount signs between 48"- 60" above finished floor located on the latch side of the door. Provide a directional sign indicating the location of the nearest emergency exit.	1	232	\$232

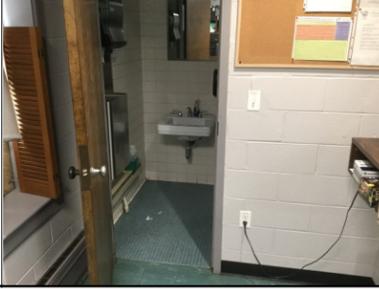
**Town of Manchester by-the-Sea  
Police Department**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
5	Emergency Exit	G		Means of Egress	N/A		Tactile exit sign not provided Illuminated ISA symbol not provided (MAAB)	- -	Ensure a tactile exit sign with raised characters and braille is provided at exit door. Mount sign between 48"- 60" above finished floor located on the latch side of the door. Provide an illuminated sign with the International Symbol of Accessibility.	1	432	\$432
<b>Interior Access Route</b>												
6	Executive Officer	1		Interior Access Route	N/A		Route < 36" wide	-	Rearrange furniture to ensure that a clear width of 36" min. is maintained at the accessible route.	1	Labor	\$0
7	Police Station - Meeting Room	1		Interior Access Route	N/A		Route < 36" wide	29.5"	Rearrange furniture to ensure that a clear width of 36" min. is maintained at the accessible route.	1	Labor	\$0
<b>Doors, Doorways, &amp; Gates</b>												
8	Police Station - Meeting Room	1		Doors, Doorways, & Gates	Meeting Room		Maneuvering clearance(s) not provided	-	Rearrange furniture to ensure that the maneuvering clearance is maintained at the door.	1	Labor	\$0
9	Police Station - Meeting Room	1		Doors, Doorways, & Gates	Office		Maneuvering clearance(s) not provided Door requires > 5 lbs. of force to open	- 7 lbs	Rearrange furniture to maintain the maneuvering clearance at the door. Adjust closers so doors do not require more than 5 pounds of force to open.	1	Labor	\$0

**Town of Manchester by-the-Sea  
Police Department**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
<b>Signage</b>												
10	Executive Officer & Criminal Investigation Division	1		Signage	Designation		Raised characters not provided on sign Braille not provided on sign Sign not located on the latch side of the door	- - -	Provide text with raised characters duplicated in braille on sign. Locate sign alongside the door on the latch side.	1	232	\$232
11	Towards Holding Cells	G		Signage	Designation		Signage is not provided	-	Locate signage alongside the door on the latch side.	1	232	\$232
12	Female /Juvenile Holding Cell	G		Signage	Designation		Raised characters not provided on sign Braille not provided on sign Sign not located on the latch side of the door	- - -	Provide text with raised characters duplicated in braille on sign. Provide braille on sign. Locate sign alongside the door on the latch side.	1	232	\$232
<b>Service Counter</b>												
13	Lobby	1		Service Counter	234		Counter > 36" high	41.5"	Provide a counter that is 36" max. above the finished floor.	1	880	\$880
<b>Detention Facilities</b>												
14	Male Holding Cells	G		Detention Facilities	Men's		< 3% of holding cells have mobility features	-	Ensure that at least one holding cell has mobility features.	1	-	\$0

**Town of Manchester by-the-Sea  
Police Department**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
15	Female/ Juvenile Holding Cell	G		Detention Facilities	Women's		Mobility cell lacks 60" turning space	-	Remove one of the beds to ensure that a 60" turning space is provided.	1	Labor	\$0
16	Female/ Juvenile Holding Cell	G		Detention Facilities	Other		Mobility cell lacks access to accessible toilet/lavatory	-	Ensure an accessible toilet room is provided.	1	10010	\$10010
<b>Toilet &amp; Bathing Rooms</b>												
<b>Overall Access</b>												
17	Bathing Room	G		Overall Access	Bathing Room		Turning space not provided Accessible plumbing fixtures or stalls not provided	- -	Provide an accessible bathing room.	1	24604	\$24604

# Seaside 1 Firehouse



## Town of Manchester-by-the-Sea ADA Transition Plan

February 2020



Institute for Human Centered Design

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### Background

Year Built: 1885    Year Renovated: 1995

Manchester-by-the-Sea Seaside 1 Firehouse building (Seaside 1) is located at 22 Central Street, and is part of the Essex National Heritage Area. The first floor of the building is a museum that contains antique firefighting equipment. The first floor also serves as a public meeting space and has an accessible single-user toilet room. The second floor of the building is the location for the offices of the conservation and planning departments. It also includes a staff kitchenette and an inaccessible single-user toilet room.

A set of exterior stairs on the southeast side of the building connects to the main entrance for the first floor museum and meeting space. This entrance is near a small parking area. There is also a walkway that leads to an accessible first floor museum and meeting space entrance on the west side of the building. The second floor is accessed by a set of exterior stairs on the northeast side of the building that connect to an interior stairway. There is no accessible vertical access to the second floor.

### Key Accessibility Issues

#### Parking

Accessibility issues include lack of a van accessible parking space with a marked access aisle and sign including the International Symbol of Accessibility (ISA) and the words 'Van Accessible'.

#### Vertical Access

Accessibility issues include lack of accessible vertical access to the conservation and planning department offices on the second floor of the Seaside 1 building.

**Note:** IHCD team noted a doorbell and intercom at the exterior entry door leading to the conservation and planning department offices on the second floor of Seaside 1. IHCD team was told that program access is achieved by meeting with scheduled or

unscheduled visitors who can't access the offices at an accessible location in the nearby Town Hall.

#### Toilet Room

Accessibility issues at the single-user toilet room in the museum and meeting space include a flush control not on the open/transfer side of the toilet, a toilet paper dispenser mounted farther from the toilet than allowed, and a coat hook mounted higher than the maximum height allowed. Also, at the lavatory there is a lack of insulated pipes and a mirror mounted higher than the maximum height allowed.

#### Doors

Accessibility issues include lack of the required minimum maneuvering clearance at the museum and meeting space accessible entrance door, and lack of door hardware that does not require tight grasping, pinching, or twisting of the wrist throughout the building.

#### **Additional Accessibility Issues**

- Lack of an accessible work surface in the museum and meeting space.
- Lack of a cane-detectible barrier where a portion of a fire apparatus exhibit protrudes into the interior circulation path.
- Intercom, doorbell and coat hooks mounted higher than the maximum height allowed.
- Walkways around the building and leading to all entrances not kept free of snow and maintained in operable working condition.

**\*Note:** IHCD team was told that tree roots have caused excessive changes in level on the walkway leading to the accessible entrance to the first floor museum and meeting space. The walkways could not be completely surveyed with regard to issues of this kind because on the day of IHCD's visit snow obscured the ground surface.

#### **Order of Magnitude Cost Estimates**

- Renovate parking: \$1,850

- Provide accessible door hardware throughout the building and provide the required maneuvering clearance at the accessible entrance to the museum and meeting space (an automatic door opener is required): \$5,480
- Renovate museum and public meeting space toilet room: \$1,684
- Miscellaneous corrective actions (accessible work surface, cane detectible barrier, etc.): \$2,238

**Total: \$11,252**

### **Best Practice and Inclusive Design**

Best practice and inclusive design recommendations include elements that are not required in the standards but may create enhanced experiences for all users.

- Recommend providing handrails with extensions at the bottom landing on both sides of the stairs at the east-side entrances to the conservation and planning offices and to the museum and meeting space.
- Recommend providing a vertical handrail above the existing railing at the top of stairs leading to the conservation and planning offices.
- Recommend providing edge protection along the elevated portion of the walkway on the north side of the building that leads to the museum and meeting space accessible entrance.

**Town of Manchester-by-the-Sea  
Seaside 1 Firehouse**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
<b>Approach and Entrance</b>												
<b>Exterior Access Route</b>												
1	Walkway by Parking	Ext		Exterior Access Route	Walkway		Route not maintained in operable working condition	-	Ensure the accessible route is maintained in operable working condition (remove snow).	1	Labor	\$0
2	Walkway to Museum Accessible Entrance	Ext		Exterior Access Route	Exterior		Route not maintained in operable working condition	-	Ensure the accessible route is maintained in operable working condition (remove snow).	1	Labor	\$0
<b>Off-Street Parking Lot or Garage</b>												
3	Parking	Ext.		Off-Street Parking Lot or Garage	N/A		Total # of parking Total # of designated accessible parking spaces Vehicle space < 132" wide at van space Access aisle < 60" wide at car/van space Sign not provided Sign does not have the designation "Van Accessible"	4 - - -	Provide a van accessible parking space that is at least 132" wide min. with a marked access aisle that is at least 60" wide min. Provide a sign with the International Symbol of Accessibility (ISA). Add the designation "Van Accessible" to the sign located at the van accessible space, and mount the sign 60" min. and 96" max. above the ground.	1	1850	\$1850
<b>Entrance</b>												
4	Entrance to Museum and Meeting Room	Ext		Entrance	Main Entrance		Entrance not on an accessible route Directional sign to accessible entrance not provided Hardware not operable with a closed fist	- -	Provide a directional sign indicating the location of the nearest accessible entrance. Provide hardware that can be operable with one hand and not require tight grasping, pinching, or twisting of the wrist.	1	830	\$830
<b>Access to Goods and Services</b>												

**Town of Manchester-by-the-Sea  
Seaside 1 Firehouse**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
<b>Means of Egress</b>												
5	Egress to Stairs	1		Means of Egress	N/A		Illuminated exit sign not provided Tactile exit sign not provided	- -	Ensure illuminated exit signs are provided at exits and exit doors. Ensure tactile exit signs with raised characters and braille are provided at exit doors. Mount signs between 48"- 60" above finished floor located on the latch side of the door.	1	432	\$432
6	Accessible Exit to Ramp	1		Means of Egress	N/A		Illuminated exit sign not provided Tactile exit sign not provided Illuminated Int. Symbol of Acc. not provided (MAAB)	- -	Ensure illuminated exit signs are provided at exits and exit doors. Ensure tactile exit signs with raised characters and braille are provided at exit doors. Mount signs between 48"- 60" above finished floor located on the latch side of the door. Provide an illuminated International Symbol of Accessibility (ISA).	1	964	\$964
<b>Interior Access Route</b>												
7	Museum	1		Interior Access Route	N/A		Obstructed by protruding objects	19"	Provide a cane-detectable barrier.	1	306	\$306
<b>Doors, Doorways, &amp; Gates</b>												
8	Accessible/ Rear Museum Entrance	Ext		Doors, Doorways, & Gates	Other		Maneuvering clearance(s) not provided	14"	Provide an automatic door opener.	1	3060	\$3060
9	Single-User Toilet Room in Museum and Meeting Space	1		Doors, Doorways, & Gates	Toilet Room		Hardware not operable with a closed fist	-	Provide hardware that can be operable with one hand and not require tight grasping, pinching, or twisting of the wrist.	1	484	\$484

**Town of Manchester-by-the-Sea  
Seaside 1 Firehouse**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
10	Planning Office	2		Doors, Doorways, & Gates	Circulation		Hardware not operable with a closed fist	-	Provide hardware that can be operable with one hand and not require tight grasping, pinching, or twisting of the wrist.	1	484	\$484
11	Entrance to Conservation and Planning Offices	Ext		Doors, Doorways, & Gates	Other		Hardware not operable with a closed fist	-	Provide hardware that can be operable with one hand and not require tight grasping, pinching, or twisting of the wrist.	1	484	\$484
<b>Operable Parts</b>												
12	By Ground Floor Exit from Conservation and Planning Offices	1		Operable Parts	Clothes Rod/Hooks		Side reach > 54"	72"	Relocate coat hooks so that they are between 15" - 48" above finished floor.	1	256	\$256
13	Single-User Toilet Room	1		Operable Parts	Clothes Rod/Hooks		Side reach > 54"	62"	Relocate coat hooks so that they are between 15" - 48" above finished floor.	1	256	\$256
14	Entrance to Conservation and Planning Offices	Ext		Operable Parts	Equipment		Side reach > 54"	61"	Relocate intercom and doorbell so that controls are between 15" - 48" above finished floor.	1	884	\$884

**Town of Manchester-by-the-Sea  
Seaside 1 Firehouse**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
<b>Dining or Work Surfaces</b>												
15	Museum Meeting Room	1		Dining or Work Surfaces	Work Surface		Knee or toe clearance not provided	24'	Provide at least 1 work surface with 27" min. knee and toe clearance.	1	700	\$700
<b>Toilet &amp; Bathing Rooms</b>												
<b>Overall Access</b>												
16	Single-User Toilet Room	1		Overall Access	Toilet Room		International Symbol of Acc. not provided Hardware not operable with a closed fist	-	Provide hardware that can be operable with one hand and not require tight grasping, pinching, or twisting of the wrist. Provide a sign with the International Symbol of Accessibility.	1	716	\$716
<b>Lavatory</b>												
17	Single-User Toilet Room	1		Lavatory	N/A		Plumbing underneath is exposed Mirror above lavatory w/reflective surface > 40"	- 48"	Insulate or otherwise configure pipes to prevent contact, for at least one lavatory. Lower mirror so that the bottom surface is at 40" max. above finished floor.	1	352	\$348
<b>Single-User Toilet</b>												
18	Single-User Toilet Room	1		Single-User Toilet	N/A		Flush control not on open side Toilet paper dispenser is not compliant	- 16"	Relocate the flush control to the open side. Relocate toilet paper so that it is 15" min. high, located under the grab bar, and between 7" and 9" from the front of the toilet.	1	1080	\$1080
<b>Additional Access</b>												

**Town of Manchester-by-the-Sea  
Seaside 1 Firehouse**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
<b>Sink</b>												
19	Museum	1		Sink	N/A		Exposed plumbing underneath sink	-	Insulate or otherwise configure pipes at sink.	1	92	\$92
<b>Best Practice</b>												
<b>Stairs</b>												
20	Entrance to Conservation and Planning Offices	Ext		Stairs	N/A				Recommend providing handrails with extensions at bottom landing on both sides of stair.	1	-	\$0
<b>Stairway Railing</b>												
21	Stairway to Offices	2		Stairway Railing	N/A				Recommend providing vertical handrail above existing railing at top of stairs.	1	-	\$0
<b>Stairways</b>												
22	Entrance to Museum and Meeting Space	Ext		Stairways	N/A				Recommend providing handrails with extensions at bottom landing on both sides of stair.	1	-	\$0

**Town of Manchester-by-the-Sea  
Seaside 1 Firehouse**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
<b>Walkway</b>												
23	Elevated Walkway to Museum and Meeting Space Accessible Entrance	Ext		Walkway	N/A				Recommend providing edge protection along the elevated portion of walkway along the north side of the building that leads to the museum and meeting space accessible entrance.	1	-	\$0

# Town Hall



## Town of Manchester-by-the-Sea ADA Transition Plan

February 2020



Institute for Human Centered Design

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### Background

Town Hall is located at 10 Central Street and is open to the public Monday through Thursday. There are two (2) entrances to the building; the main entrance to the Town Hall is on Central Street – this entrance is accessible via a ramp. There is a second accessible entrance on the lower level on the east side. The parking lot is shared with the Police Department and the Wastewater Treatment Plant. The accessible parking spaces closest to Town Hall are located on the south side of the building. There are two (2) accessible parking spaces and five (5) electric vehicle spaces. There is an additional accessible van parking space located on north side and on-street parking is also available.

The Town Hall is a three (3) story building connected by two sets of interior stairs and an elevator. The Council on Aging and the Harbormaster's Office are located in the basement. The Selectmen's Town Administrator, the Assessor's Office, the Town Clerk Parking Office and the Collector's Office are located on the first floor. The Parks and Recreation Office, the Public Works Office and Water Sewer Office, the Board of Health Office and two meeting rooms including the Selectmen's Meeting Room are located on the second floor. Men's and women's toilet rooms are located on the first and second floors and an accessible single-user toilet room is located on the first floor.

### Key Accessibility Issues

#### Exterior

Accessibility issues include excessive running and cross slopes at the walkways leading to the main entrance. Other accessibility issues include the lack of the required minimum width at the ramp leading to the main entrance.

**Note:** IHCD team was told that the Town Common area is going to be redesigned later in the spring.

#### Signage

Accessibility issues include lack of tactile signs (braille and raised characters) at some locations and signs not located on the latch side of the door. Other accessibility issues include lack of

directional signs at the inaccessible entrance and inaccessible toilet rooms and lack of the illuminated International Symbol of Accessibility (ISA) at the accessible emergency exits.

#### Assembly Area

Assistive listening systems are not provided in the meeting rooms.

**Note:** Where a sound system, microphone and/or speaker are integral to the use of the space an assistive listening system must be provided. If an assistive listening system is present, a sign indicating its availability is required.

#### Doors

Accessibility issues include doors throughout the building that lack hardware that does not require tight grasping, pinching, or twisting of the wrist, lack of the required maneuvering clearance due to the location of furniture and doors that require excessive force to open.

#### Toilet Room

Accessibility issues include lack of accessible toilet rooms on the second floor. Minor accessibility issues at the single-user toilet room on the first floor, include lack of insulated pipes at the lavatory and the mirror over the lavatory is mounted slightly higher than the maximum height allowed.

### Additional Accessibility Issues

- Lack of compliant service counters at many locations.
- Lack of securely attached walk-off mats.
- AED dispenser and pamphlets rack are mounted higher than the maximum height allowed.
- Lack of an accessible access aisle at the van accessible parking space located to the north side of the building and lack of compliant access aisles at the accessible parking spaces located at the parking lot (south side of the building).

### Order of Magnitude Cost Estimates

- Provide a compliant exterior ramp: \$14,646
- Provide an accessible single-user toilet room (2<sup>nd</sup> floor) and minor renovations to the accessible single-user toilet room: \$24,952

## Town Hall

- Provide compliant signage (directional, designation and egress signs): \$3,616
- Provide assistive listening systems: \$2,428
- Provide compliant door hardware: \$4,356
- Provide accessible service counters: \$3,520
- Miscellaneous corrective actions (threshold, parking, etc.): \$1,262

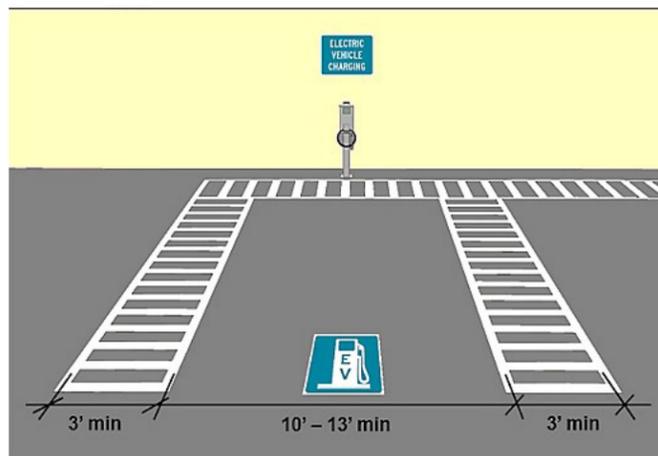
**Total: \$ 54,780\***

**\*Note:** Cost for the renovation of the Town Common is not included.

## Best Practice and Inclusive Design

Best practice and inclusive design recommendations include elements that are not required in the standards but may create enhanced experiences for all users.

- Recommend adding contrasting strips at the edge of each step at the stairs leading to the main entrance and the interior stairs.
- Recommend relocating the directory located near the accessible entrance on the first floor to avoid glare.
- Recommend providing an accessible route on both sides of the vehicle spaces that connects to the charging station.



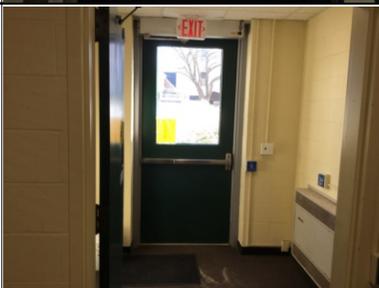
**Town of Manchester-by-the-Sea  
Town Hall**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
<b>Approach and Entrance</b>												
<b>Exterior Access Route</b>												
1	Route From Library			Exterior Access Route	Walkway		Cross slope > 1:50 (2.00%)		Reduce cross slope to be no steeper than 1:50 (2.00%).  Note: This area is going to be redesigned.	1	-	\$0
2	North Side Main Entrance	Ext.		Exterior Access Route	Walkway		Cross slope > 1:50 (2.00%)	4.2%	Reduce cross slope to be no steeper than 1:50 (2.00%).  Note: This area is going to be redesigned.	1	-	\$0
3	Towards the Police Station	Ext.		Exterior Access Route	Walkway		Running slope > 1:20 (5%)	13.3%	Reduce running slope to be no steeper than 1:20 (5%).  Note: This area is going to be redesigned.	1	-	\$0
4	Towards Accessible Entrance - East Side	Ext.		Exterior Access Route	Walkway		Running slope > 1:20 (5%)	9.5%	Reduce running slope to be no steeper than 1:20 (5%).  Note: This area is going to be redesigned.	1	-	\$0
<b>Off-Street Parking Lot or Garage</b>												
5	Parking Lot	Ext		Off-Street Parking Lot or Garage	Visitor		Access aisle < 96" wide at van space	69"	Provide a marked access aisle that is at least 96" wide.	1	300	\$300

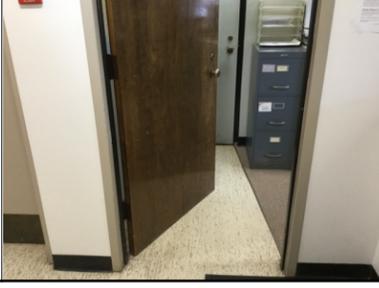
**Town of Manchester-by-the-Sea  
Town Hall**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
6	Parking - East Side	Ext.		Off-Street Parking Lot or Garage	Visitor		Access aisle not provided	-	Provide a marked access aisle that is at least 96" wide.	1	300	\$300
<b>Exterior Ramp</b>												
7	Towards Accessible Entrance - East Side	Ext.		Exterior Ramp	N/A		Ramp < 48" wide Running slope > 1:12 (8.3%) Not maintained in operable working condition	44.5" 11.8% -	Widen ramp so that the clear width is 48" min. Reduce running slope to be no steeper than 1:12 (8.3%). Ensure the ramp is maintained in operable working condition.	1	14646	\$14646
<b>Entrance</b>												
8	East Side - Accessible Entrance	B		Entrance	Secondary Entrance		Mat not securely attached Threshold not beveled	- -	Secure the mat. Bevel threshold.	1	150	\$150
<b>Access to Goods and Services</b>												
<b>Means of Egress</b>												
9	Exit - Near Selectmen Town Admin.	1		Means of Egress	N/A		Tactile exit sign not provided	-	Ensure a tactile exit sign with raised characters and braille is provided at exit door. Mount sign between 48"- 60" above finished floor located on the latch side of the door.	1	232	\$232

**Town of Manchester-by-the-Sea  
Town Hall**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
10	Exit - Near Selectmen Town Admin.	1		Means of Egress	N/A		Floor level designation not provided	-	Provide a sign on the interior of the stairway enclosure indicating the floor level.	1	232	\$232
11	Near Town Clerk - Parking Clerk	1		Means of Egress	N/A		Illuminated ISA symbol not provided (MAAB) Mat not securely attached	-	Provide an illuminated International Symbol of Accessibility. Secure the mat to prevent tripping hazard.	1	200	\$200
12	Egress Near Room 9	2		Means of Egress	111		Tactile exit sign not provided	-	Ensure a tactile exit sign with raised characters and braille is provided at exit door. Mount sign between 48"- 60" above finished floor located on the latch side of the door.	1	232	\$232
13	Exit Near Meeting Room	2		Means of Egress	N/A		Floor level designation not provided	-	Provide a sign on the interior of the stairway enclosure indicating the floor level.	1	232	\$232
14	Towards Parking Lot	B		Means of Egress	N/A		Illuminated ISA symbol not provided (MAAB)	-	Provide an illuminated International Symbol of Accessibility.	1	200	\$200

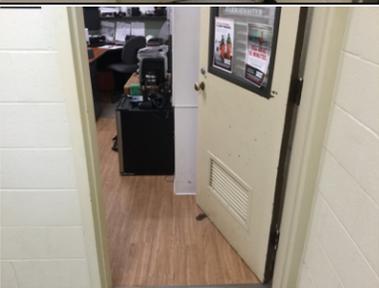
**Town of Manchester-by-the-Sea  
Town Hall**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
15	Hallway - Near Harbormaster Office	B		Means of Egress	N/A		Illuminated ISA symbol not provided (MAAB) Mat not securely attached	-	Provide an illuminated International Symbol of Accessibility. Secure the mat to prevent tripping hazard.	1	200	\$200
<b>Interior Access Route</b>												
16	Town Clerk - Parking Clerk	1	4	Interior Access Route	N/A		Route < 36" wide	29"	Relocate printer to ensure that a clear width of 36" min. is maintained at the accessible route.	1	Labor	\$0
17	Selectmen's Meeting Room	2	5	Interior Access Route	N/A		Route < 36" wide	-	Relocate chairs to ensure that a clear width of 36" min. is maintained at the accessible route.	1	Labor	\$0
18	Exit Near the Council on Aging	B		Interior Access Route	N/A		Mat not securely attached	-	Secure the mat.	1	Labor	\$0
<b>Doors, Doorways, &amp; Gates</b>												
19	Selectmen Town Admin.	1	3	Doors, Doorways, & Gates	Office		Hardware not operable with a closed fist	-	Provide hardware that can be operable with one hand and not require tight grasping, pinching, or twisting of the wrist.	1	484	\$484

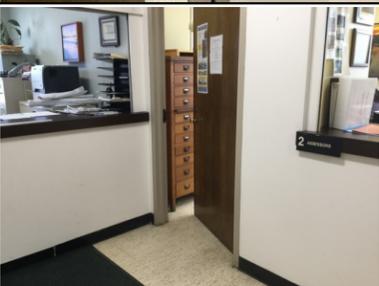
**Town of Manchester-by-the-Sea  
Town Hall**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
20	Assessors	1	2	Doors, Doorways, & Gates	Office		Hardware not operable with a closed fist		Provide hardware that can be operable with one hand and not require tight grasping, pinching, or twisting of the wrist.	1	484	\$484
21	Town Clerk - Parking Clerk	1	4	Doors, Doorways, & Gates	Office		Hardware not operable with a closed fist	-	Provide hardware that can be operable with one hand and not require tight grasping, pinching, or twisting of the wrist.	1	484	\$484
22	Public Works Water & Sewer	2	6	Doors, Doorways, & Gates	Office		Mat not securely attached Hardware not operable with a closed fist	- -	Install an ADA-compliant walk-off mat. Provide hardware that can be operable with one hand and not require tight grasping, pinching, or twisting of the wrist.	1	484	\$484
23	Meeting Room	2	7	Doors, Doorways, & Gates	Meeting Room		Hardware not operable with a closed fist	-	Provide hardware that can be operable with one hand and not require tight grasping, pinching, or twisting of the wrist.	1	484	\$484
24	Board of Health	2	8	Doors, Doorways, & Gates	Office		Hardware not operable with a closed fist	-	Provide hardware that can be operable with one hand and not require tight grasping, pinching, or twisting of the wrist.	1	484	\$484

**Town of Manchester-by-the-Sea  
Town Hall**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
25	Parks and Recreations	2	9	Doors, Doorways, & Gates	Office		Hardware not operable with a closed fist	-	Provide hardware that can be operable with one hand and not require tight grasping, pinching, or twisting of the wrist.	1	484	\$484
26	Council on Aging	B		Doors, Doorways, & Gates	Office		Maneuvering clearance(s) not provided Hardware not operable with a closed fist	- -	Remove coat hook to maintain the maneuvering clearance at the door. Provide hardware that can be operable with one hand and not require tight grasping, pinching, or twisting of the wrist.	1	484	\$484
27	Council on Aging	B		Doors, Doorways, & Gates	Office		Maneuvering clearance(s) not provided Door requires > 5 lbs. of force to open	- 10 lbs	Relocate table to maintain the maneuvering clearance at the door. Adjust closers so doors do not require more than 5 pounds of force to open.	1	Labor	\$0
28	Harbormaster	B		Doors, Doorways, & Gates	Office		Hardware not operable with a closed fist	-	Provide hardware that can be operable with one hand and not require tight grasping, pinching, or twisting of the wrist.	1	484	\$484
29	Harbormaster	B		Doors, Doorways, & Gates	Office		Door requires > 5 lbs. of force to open	10 lbs	Adjust closers so doors do not require more than 5 pounds of force to open.	1	Labor	\$0

**Town of Manchester-by-the-Sea  
Town Hall**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
<b>Signage</b>												
30	Employee Break Room	1		Signage	Designation		Raised characters not provided Braille not provided Sign not located on the latch side of the door	- - -	Provide text with raised characters duplicated in braille. Locate sign alongside the door on the latch side.	1	232	\$232
31	Selectmen Town Administration	1	3	Signage	Designation		Raised characters not provided on sign Raised characters < 48" or > 60" above ground Braille not provided on sign	- 63.5" -	Provide text with raised characters duplicated in braille on sign. Mount sign so that the baseline of the lowest tactile character is 48" min. above finished floor and the baseline of the highest tactile character is 60" max. above finished floor.	1	232	\$232
32	Assessors	1	2	Signage	Designation		Raised characters < 48" or > 60" above ground Sign not located on the latch side of the door	38.5" -	Mount signs so that the baseline of the lowest tactile character is 48" min. above finished floor and the baseline of the highest tactile character is 60" max. above finished floor. Locate sign at permanent rooms alongside the door on the latch side.	1	Labor	\$0
33	Employee Toilet Room	1		Signage	Designation		Sign not located on the latch side of the door Directional sign to access. toilet not provided	- -	Locate sign alongside the door on the latch side. Install a sign indicating the location of the nearest accessible toilet room.	1	232	\$232
34	Men's Toilet Room	1		Signage	Designation		Sign not located on the latch side of the door Directional sign to access. toilet not provided	- -	Locate sign alongside the door on the latch side. Install a sign indicating the location of the nearest accessible toilet room.	1	232	\$232

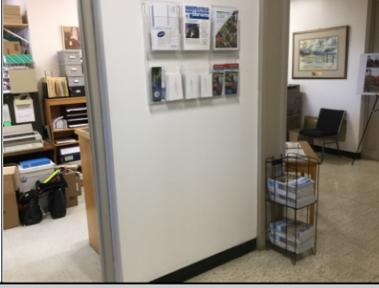
**Town of Manchester-by-the-Sea  
Town Hall**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
35	Collector Treasures	1	1	Signage	Designation		Non glare finish and contrast not provided on sign	-	Install a sign with a non-glare finish with characters that have a high contrast to the background.	1	232	\$232
36	Parks and Recreations	2	9	Signage	Designation		Raised characters not provided on sign Braille not provided on sign Sign not located on the latch side of the door	- - -	Provide text with raised characters duplicated in braille on sign. Locate sign at permanent rooms alongside the door on the latch side.	1	232	\$232
37	Public Works Water & Sewer	2	6	Signage	Designation		Sign not located on the latch side of the door	-	Locate sign at permanent rooms alongside the door on the latch side.	1	Labor	\$0
38	Selectmen's Meeting Room	2	5	Signage	Designation		Sign not located on the latch side of the door	-	Locate sign on the inactive door (left hand door).	1	Labor	\$0
39	Men's and Women's Toilet Rooms	2		Signage	Designation		Sign not located on the latch side of the door Directional sign to access. toilet not provided	- -	Locate signs on the nearest adjacent wall Install a sign indicating the location of the nearest accessible toilet room.	3	232	\$696

**Town of Manchester-by-the-Sea  
Town Hall**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
40	Council on Aging	B		Signage	Designation		18" by 18" clear space not provided	-	Ensure a clear 18" min. by 18" min. clear floor space is provided. Ensure the clear floor space is centered on the tactile characters	1	Labor	\$0
<b>Service Counter</b>												
41	Assessors	1	2	Service Counter	N/A		Counter > 36" high	42"	Provide a counter that is 36" max. above the ground or finished floor.	1	880	\$880
42	Collector Treasures	1	1	Service Counter	N/A		Counter > 36" high	42"	Provide a counter that is 36" max. above the ground or finished floor.	1	880	\$880
43	Selectmen Town Administration	1	3	Service Counter	N/A		Counter > 36" high Mat not securely attached	42" -	Provide a counter that is 36" max. above the ground or finished floor. Secure the mat to prevent tripping hazard.	1	880	\$880
44	Board of Health	2	8	Service Counter	N/A		Clear floor space is not provided	-	Relocate table to maintain the required 30" min. by 48" min. clear floor space at the counter.	1	Labor	\$0

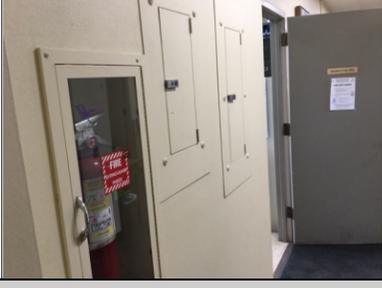
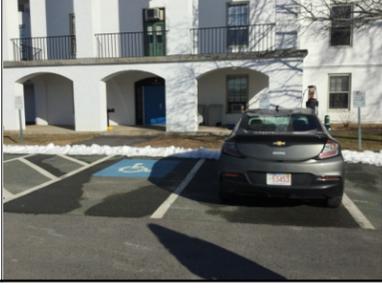
**Town of Manchester-by-the-Sea  
Town Hall**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
45	Parks and Recreations	2	9	Service Counter	234		Counter > 36" high	46"	Provide a counter that is 36" max. above the finished floor.	1	880	\$880
<b>Operable Parts</b>												
46	Lobby	1	1	Operable Parts	Other		Reach < 15" or > 48"(forward/side approach)	59"	Mount AED cabinet 48" max. above finished floor.	1	256	\$256
47	Hallway	1		Operable Parts	Other		Reach < 15" or > 48"(forward/side approach)	72.5"	Mount flyers rack 48" max. above finished floor.	1	256	\$256
<b>Dining or Work Surfaces</b>												
48	Hallway	B		Dining or Work Surfaces	Work Surface		Knee or toe clearance not provided	-	Remove items to maintain knee and toe clearance at the work surface.	1	Labor	\$0
<b>Assembly Area</b>												
49	Meeting Room	2	7	Assembly Area	N/A		Assistive listening devices not provided	-	If audible communication is integral to the use of the space, provide an assistive listening system.	1	1214	\$1214

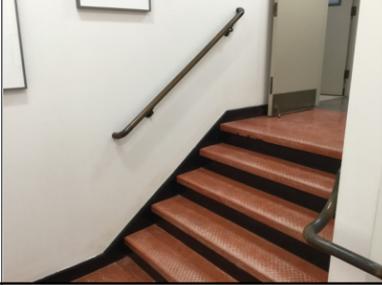
**Town of Manchester-by-the-Sea  
Town Hall**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
50	Selectmen's Meeting Room	2	5	Assembly Area	N/A		Assistive listening devices not provided	-	If audible communication is integral to the use of the space, provide an assistive listening system.	1	1214	\$1214
<b>Toilet &amp; Bathing Rooms</b>												
<b>Overall Access</b>												
51	Men's and Women's Toilet Rooms	2		Overall Access	Toilet Room		Turning space not provided Accessible plumbing fixtures or stalls not provided	- -	Provide an accessible single-user toilet room.	1	24604	\$24604
<b>Lavatory</b>												
52	Single-User Toilet Room	1		Lavatory	N/A		Plumbing underneath is exposed Mirror above lavatory w/reflective surface > 40"	- 42.5"	Insulate or otherwise configure pipes to prevent contact, for at least one lavatory. Lower mirror so that the bottom surface is at 40" max. above finished floor.	1	348	\$348
<b>Best Practice</b>												
<b>Benches</b>												
53	Town Common	Ext.		Benches	N/A				Recommend providing a 30" by 48" clear floor space adjacent to the benches.	1	-	\$0

**Town of Manchester-by-the-Sea  
Town Hall**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
54	South Side of Building	Ext.		Benches	N/A				Recommend providing a 30" by 48" clear floor space adjacent to the benches.	1	-	\$0
<b>Directory</b>												
55	Lobby	1	1	Directory	N/A				Recommend relocating the directory to avoid glare.	1	-	\$0
56	Across From Elevator	1	1	Directory	N/A				Recommend providing a directory here.	1	-	\$0
57	Across From Elevator	2		Directory	N/A				Recommend providing a directory here.	1	-	\$0
<b>EV Parking Space</b>												
58	Parking Lot - Accessible EV Space	Ext.		EV Parking Space	N/A				Recommend providing an accessible route on both sides of the vehicle spaces that connects to the charging station.	1	-	\$0

**Town of Manchester-by-the-Sea  
Town Hall**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
<b>Signage</b>												
59	Towards Elevator	B		Signage	N/A				Recommend providing a more visible sign.	1	-	\$0
<b>Stairs</b>												
60	From 1st Floor to 2nd Floor	1		Stairs	N/A				Recommend adding contrasting strips at the edge of each step at interior stairs.	1	-	\$0
61	From 1st Floor to 2nd Floor	2		Stairs	N/A			-	Recommend providing handrail extensions at top and bottom of stairs.	1	-	\$0
62	Main Entrance	Ext.		Stairs	N/A			-	Recommend adding contrasting strips at the edge of each step at exterior stairs.	1	-	\$0

# Wastewater Treatment Plant



## Town of Manchester-by-the-Sea ADA Transition Plan

March 2020



Institute for Human Centered Design

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617-695-1225 voice/tty

### Background

Year Built: 1997

Manchester-by-the-Sea Wastewater Treatment Plant is located at 12 Church Street. A one-story section of the primary building is the main location accessed by members of the public. On the rare occasions when public tours take place, visitors also enter a portion of the primary building that has a mezzanine and basement, and continue to the exterior of a second building and to two (2) large water tanks that are involved in the water treatment process.

**Note:** IHCD team was told that tour participants go to an accessible point in the main building to look up at a mezzanine and down towards a basement, but for safety reasons they don't actually visit those areas. Also, tour participants look into a second building to the southeast that does not have an accessible entrance due to a high door threshold, but they do not enter that building during the tour. Tour participants are allowed to climb stairs to look inside water aeration and clarifying tanks. There is no accessible means of access to look inside any of the tanks.

The public area in the primary building is accessed by a ramp on the west side that leads to an accessible main entrance. An accessible means of egress is located on the east side of the building. The public area contains two offices, a sink and accessible men's and women's multi-user toilet rooms. Showers in the toilet rooms are not used by members of the public.

Parking is shared with the town hall and police station. Two car accessible parking spaces are located nearby in an area between the wastewater treatment plant and the town hall and police station buildings.

### Key Accessibility Issue

#### Parking

Accessibility issues include lack of a compliant van accessible parking space including a sign with the International Symbol of Accessibility (ISA) and the designation "Van Accessible". Also, a car accessible parking space lacks a sign with the International Symbol of Accessibility (ISA), and both the space and the access aisle are narrower than required.

#### Exterior Stairs

Accessibility issues include lack of a handrail on one side and lack of railing extensions 12" long min. at exterior staircases used during tours.

#### Toilet Rooms

Accessibility issues include lack of the required minimum maneuvering clearance at the entry door to the women's toilet room, and excessive opening force is required to open the door. The women's toilet room also has a paper towel dispenser that protrudes into the circulation path. The men's toilet room has a mirror and paper towel dispenser mounted higher than the maximum height allowed, and a malfunctioning self-closing hinge at the door to the accessible compartment. The lavatories in both the men's and women's toilet rooms have pipes that are not wrapped.

#### Signs

Accessibility issues include lack of tactile signs (braille and raised characters), and lack of directional and illuminated egress exit signs including signs lacking an illuminated International Symbol of Accessibility (ISA).

#### Program Access – Facility Tour

Accessibility issues include a lack of information in accessible formats and at an accessible location about the inaccessible areas on the tour such as the view into the water aeration and clarifying tanks. In order to provide program access, consider captioned videos, photographs, etc. in an accessible location that describe the inaccessible tour locations. (See the Policy and Procedures document for more information about this issue.)

### **Additional Accessibility Issues**

- Excessive change in level at the base of the exterior ramp to the main entrance, and lack of a rail extension 12" long min. at one of the ramp railings.
- Pipes not wrapped at a sink in the main public area.

### **Order of Magnitude Cost Estimates**

- Renovate parking (including relocating one of the two existing accessible parking spaces to an area near the ramp to the wastewater treatment plant accessible entrance as a compliant van accessible parking space.) : \$2,950
- Provide compliant exterior stair railings: \$2,504
- Renovate toilet rooms: \$1,856
- Provide compliant egress signs: \$1,792
- Miscellaneous corrective actions (change in level and railing extension at exterior ramp, sink pipes, etc.): \$270

**Total: \$9,372\***

**\*Note:** Costs to develop accessible materials to provide information about inaccessible portions of the plant tour are not included.

### **Best Practice and Inclusive Design**

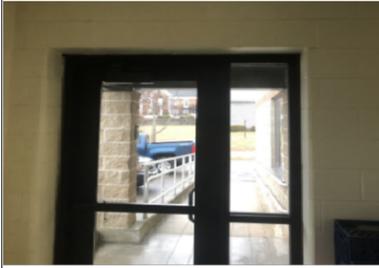
Best practice and inclusive design recommendations include elements that are not required in the standards but may create enhanced experiences for all users.

- Recommend providing striping by the exterior ramp landing so access to the ramp is not obstructed by parked cars.

**Town of Manchester-by-the-Sea  
Water Treatment Plant**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
<b>Approach and Entrance</b>												
<b>Off-Street Parking Lot or Garage</b>												
1	Parking Lot Near Wastewater Treatment Plant	Ext.		Off-Street Parking Lot or Garage	Visitor		Total # of parking Total # of designated accessible parking spaces Total # of designated van accessible spaces Vehicle space < 96" wide at car space Vehicle space < 132" wide at van space Access aisle < 96" wide at van space Sign not provided Sign does not have the designation "Van Accessible"	75 2 - 88" - 56" - -	Provide a car accessible space 96" wide min. with an access aisle 60" wide min. (re-stripe.) Provide a van accessible space near the ramp to the accessible entrance 96" wide min. with an access aisle 96" wide min. (Relocate one accessible space.) Provide a sign with the International Symbol of Accessibility (ISA) at both spaces. Add the designation "Van Accessible" to the van parking space sign.	1	2950	\$2950
<b>Emergency Exit</b>												
2	Main Entrance Vestibule	1		Emergency Exit	N/A		Tactile exit sign not provided Emergency exit not on an accessible route Directional sign to accessible emergency exit not provided	- -	Ensure tactile exit signs with raised characters and braille are provided at exit doors. Mount signs between 48"- 60" above finished floor located on the latch side of the door. Provide a directional sign indicating the location of the nearest accessible emergency exit.	2	232	\$464
<b>Access to Goods and Services</b>												
<b>Means of Egress</b>												
3	Main Building Path Back Towards Main Entrance and Egress	1		Means of Egress	N/A		Tactile exit sign not provided	-	Ensure tactile exit signs with raised characters and braille are provided at exit doors. Mount signs between 48"- 60" above finished floor located on the latch side of the door.	1	232	\$232
4	Exit to Vestibule and Ramp			Means of Egress	N/A		Tactile exit sign not provided	-	Ensure tactile exit signs with raised characters and braille are provided at exit doors. Mount signs between 48"- 60" above finished floor located on the latch side of the door.	1	232	\$232

**Town of Manchester-by-the-Sea  
Wastewater Treatment Plant**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
5	Main Building Emergency Egress	1		Means of Egress	N/A		Tactile exit sign not provided Illuminated Int. Symbol of Acc. not provided (MAAB)	-	Ensure tactile exit signs with raised characters and braille are provided at exit doors. Mount signs between 48"- 60" above finished floor located on the latch side of the door. Provide an illuminated International Symbol of Accessibility.	1	432	\$432
6	Exit to Ramp	1	A	Means of Egress	N/A		Tactile exit sign not provided Illuminated Int. Symbol of Acc. not provided (MAAB)	-	Ensure tactile exit signs with raised characters and braille are provided at exit doors. Mount signs between 48"- 60" above finished floor located on the latch side of the door. Provide an illuminated exit sign with an illuminated International Symbol of Accessibility.	2	216	\$432
<b>Doors, Doorways, &amp; Gates</b>												
7	Women's Toilet Room			Doors, Doorways, & Gates	Toilet Room		Maneuvering clearance(s) not provided	-	Relocate water cooler and refrigerator so as not to obstruct maneuvering clearance at door.	1	Labor	\$0
8	Men's Toilet Room	1		Doors, Doorways, & Gates	Toilet Room		Door requires > 5 lbs. of force to open	10 lbs	Adjust closers so doors do not require more than 5 pounds of force to open.	1	Labor	\$0
<b>Ramps</b>												
9	Main Entrance to Main Building	Ext.		Ramps	Exterior		Handrails do not extend 12" past top & bottom Level changes > 1/4"	-	Alter handrails to extend horizontally above the landing for 12" min. beyond the bottom of ramp run on one side. Alter change in level to be 1/4" high max.  (Cost based on welding on one rail extension and a 3'x3' asphalt patch at base of ramp.)	1	178	\$178

**Town of Manchester-by-the-Sea  
Wastewater Treatment Plant**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
<b>Stairways</b>												
10	Water Aeration Area	Ext.		Stairways	Exterior		Handrail not provided on both sides Accessible route not provided	-	Provide handrail on one side. During tours, provide information (photos, text) about aeration area at an accessible location.  (Cost based on one 30' wall-mounted metal handrail.)	1	2220	\$2220
11	Clarifier Tanks	Ext.		Stairways	Exterior		Handrails do not extend 12" from stairs Accessible route not provided	-	Bottom of stairs: Ensure handrails extend to one tread depth beyond the last riser. During tours, provide information (photos, text) about clarifier tanks at an accessible location. (Cost based on welding on rail extensions.)	2	142	\$284
<b>Kitchens and Kitchenettes</b>												
12	Main Building			Kitchens and Kitchenettes	N/A		Plumbing underneath is exposed	-	Insulate or otherwise configure pipes to prevent contact.	1	92	\$92
<b>Toilet &amp; Bathing Rooms</b>												
<b>Lavatory</b>												
13	Women's Toilet Room			Lavatory	N/A		Plumbing underneath is exposed Dispenser acts as a protruding object	-	Insulate or otherwise configure pipes to prevent contact, for at least one lavatory. Relocate plastic paper towel dispenser out of the circulation path.	1	798	\$798

**Town of Manchester-by-the-Sea  
Water Treatment Plant**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
14	Men's Toilet Room	1		Lavatory	N/A		Plumbing underneath is exposed Mirror above lavatory w/reflective surface > 40" Dispensers not within reach range	- 48" 60"	Insulate or otherwise configure pipes to prevent contact, for at least one lavatory. Lower mirror so that the bottom surface is at 40" max. above finished floor. Relocate dispenser to 42" max. above the floor.	1	1058	\$1058
<b>Toilet Compartment</b>												
15	Men's Toilet Room			Toilet Compartment	Accessible Compartment		Door has malfunctioning self-closing hinge	-	Repair hinge.	1	Labor	\$0
<b>Best Practice</b>												
<b>Exterior Route to Ramp Landing</b>												
16	Parking Near Exterior Ramp	Ext.		Exterior Route to Ramp Landing	N/A				Recommend providing striping by the exterior ramp landing so access to the landing is not obstructed by parked cars.	1	-	\$0