

# Underwood Park



## Town of Belmont ADA Transition Plan

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Institute for Human Centered Design

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### Background

Underwood Park is adjacent to Underwood Pool, located on Cottage and School Streets. The main entrance to the park is on Cottage Street. The park has three playground areas, three picnic tables, a grassy field located on a steep slope and a tetherball court. Additional amenities include a trash bin, a bench and a bike rack.

There is no designated parking lot for the park. Visitors can park at the Underwood Pool during the off-season when the pool is closed or at the school across School Street when the school is closed. At other times, park visitors must park on the street.

### Key Accessibility Issues

#### Exterior Access Routes

Accessibility issues include exterior routes that are not maintained in operable working condition. In addition, accessible routes are not provided to park amenities including the tetherball court, trash bin, bench and bike rack.

#### Picnic Tables

Picnic tables are provided in the park. However, none of the picnic tables are accessible with toe and knee clearance, and none are on an accessible route.

#### Playground

Accessibility issues include lack of an accessible route around the playgrounds with the swings and slides. There is also a lack of an impact attenuating accessible route to the play components inside the boundary of the playgrounds. See the following diagram depicting accessible routes around the playgrounds (in black) and to the play components in the playgrounds (in red). The route to the tetherball court is also shown:



**Note:** The ADA allows engineered wood fiber as an accessible surface when it is installed properly and maintained to be stable, firm and slip-resistant. Engineered wood fiber surfaces will require frequent maintenance to comply because of surface displacement due to weather, user activity and other factors.

The Massachusetts Architectural Access Board (MAAB) has long considered engineered wood fiber and wood chips as noncompliant and problematic materials. While it reserves the right to reevaluate this in the future, it is currently MAAB’s opinion that such material is not clearly compliant with the requirements of 521 CMR.

### Additional Accessibility Issues

- Visual characters at the informational sign at the park entrance are located lower than allowed.

Order of Magnitude Cost Estimates

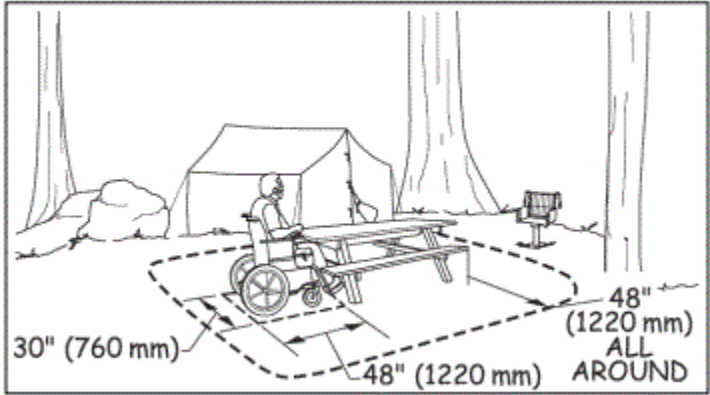
- Provide an accessible picnic table on an accessible route: \$1,400
- Provide an accessible route around the playgrounds with the swings and slides: \$10,240
- Provide an accessible impact-attenuating surface to and around each play component in each playground: \$40,182
- Provide an accessible route to the tetherball court: \$2,688
- Miscellaneous corrective actions (signage, exterior routes to the bench, trash bin, bike rack, etc.): \$1,000

Total: \$55,510

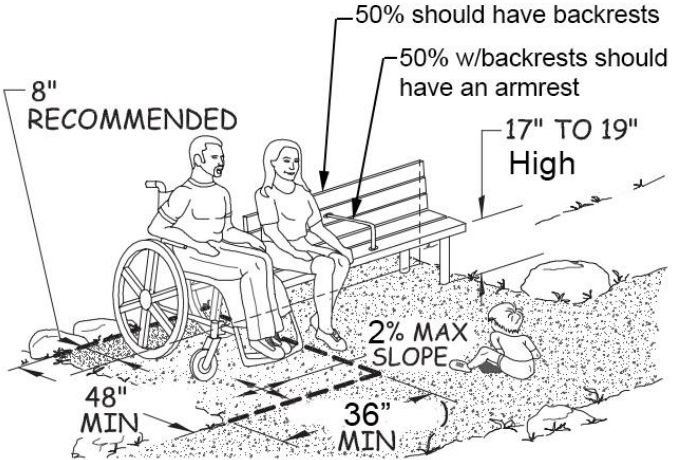
Best Practice and Inclusive Design

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

- IHCD strongly recommends exploring the possibility of an alternative surface to engineered wood fiber (EWF). Over time, EWF requires continuous maintenance to ensure the surface is maintained in operable working condition (stable, firm and slip-resistant). In addition, when used in combination with other surfaces required for accessible routes to play components in Massachusetts, it will present a challenge to prevent level changes at the transition points between EWF and other surfaces, and to keep the accessible routes clear of EWF.
- Recommend providing a 48" wide min. stable, firm and slip resistant surface under and around an accessible picnic table once it is placed in the picnic area and connected to an accessible route. See the following diagram:







- Recommend providing clear floor space of 36" wide minimum by 48" deep alongside one bench so that a wheelchair user can sit alongside someone sitting on the bench. See the following diagram:



- Recommend providing an on-street accessible parking space with a sign displaying the International Symbol of Accessibility (ISA) and a curb ramp by the entrance to the park.







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ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
Approach and Entrance												
Exterior Access Route												
1	Walkway by South Playground	Ext.		Exterior Access Route	Walkway		Route not maintained in operable working condition	-	Ensure the accessible route is maintained in operable working condition.	1	160	\$160
2	Sidewalk by Cottage Street Entrance	Ext.		Exterior Access Route	Sidewalk		Route not maintained in operable working condition	-	Ensure the sidewalk is maintained in operable working condition.	1	Labor	\$0
3	South Playground Trash Bin	Ext.		Exterior Access Route	Walkway		Accessible route not provided	-	Locate trash bin on an accessible route.	1	Labor	\$0
4	Bike Rack Along Walkway to Cottage Street Entrance	Ext.		Exterior Access Route	Walkway		Accessible route not provided	-	Provide an accessible route to the bike rack. (Cost estimate for a 6' long 4' wide asphalt route.)	1	240	\$240
Access to Goods and Services												

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ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
Signage												
5	Park Entrance Signage	Ext.		Signage	Informational		Visual characters < 40" above ground	-	Mount visual sign so that the baseline of the lowest character is 40" min. above the finished floor.	1	Labor	\$0
Picnic Tables												
6	Main Playground Picnic Table	Ext.		Picnic Tables	N/A		Toe or knee clearance at tables not provided Picnic table not on an accessible route	- -	Provide at least 1 dining surface that has toe and knee clearance. Locate the dining surface on an accessible route.	1	1400	\$1400
Exterior Benches												
7	Bench by Entrance and Bike Rack	Ext.		Exterior Benches	N/A		No accessible route to one bench in area	-	Provide an accessible route to at least one bench in the park. (Cost estimate for a 15' long 4' wide asphalt route to the bench.)	1	600	\$600
Play and Sport Areas												
Play Areas												
8	South Playground	Ext.		Play Areas	N/A		Accessible route not provided around playground	- -	Provide an accessible route around the play area with the slides and the play area with the swings. (Cost estimate for 256' long 4' wide asphalt route.)	1	10240	\$10240

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ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
9	Main Playground	Ext.		Play Areas	N/A		Accessible route not provided to play components	-	Provide a compliant impact-attenuating surface to and around the play components. (Cost estimate for 1300 sq. ft. of poured in place rubber surface.)	1	18200	\$18200
10	Bucket Swings	Ext.		Play Areas	N/A		Accessible route not provided to play components	- -	Provide a compliant impact-attenuating surface to and around the play components. (Cost estimate for 456 sq. ft. of poured in place rubber surface.)	1	6384	\$6384
11	Standard Swings	Ext.		Play Areas	N/A		Accessible route not provided to play components	- -	Provide a compliant impact-attenuating surface to and around the play components. (Cost estimate for 174 sq. ft. of poured in place rubber surface.)	1	2436	\$2436
12	South Playground, Slide for Young Children	Ext.		Play Areas	N/A		Accessible route not provided to play components	-	Provide a compliant impact-attenuating surface to and around the play components. (Cost estimate for 376 sq. ft. of poured in place rubber surface.)	1	5264	\$5264
13	South Playground, Slide for Older Children	Ext.		Play Areas	N/A		Accessible route not provided to play components	-	Provide a compliant impact-attenuating surface to and around the play components. (Cost estimate for 396 sq. ft. of poured in place rubber surface.)	1	5544	\$5544



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ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
14	South Playground, Balance Beam	Ext.		Play Areas	N/A		Accessible route not provided to play components	-	Provide a compliant impact-attenuating surface to and around the play components. (Cost estimate for 168 sq. ft. of poured in place rubber surface.)	1	2354	\$2354
Court												
15	Tetherball Court	Ext.		Court			Court is not connected to an accessible route	-	Provide an accessible route to the court. (Cost estimate for 84 ft long 4' wide stone dust route.)	1	2688	\$2688
Best Practice												
16	Main Playground Picnic Table	Ext.						-	Recommend providing a 48" wide min. stable, firm and slip resistant surface under and around an accessible picnic table once it is placed in the picnic area and connected to an accessible route.	1	-	\$0
17	Bench by Entrance and Bike Rack	Ext.						-	Recommend providing a 36" wide by 48" deep firm stable and slip resistant clear floor space alongside the bench so that a wheelchair user can sit shoulder to shoulder with a person seated on the bench.	1	-	\$0
18	Cottage Street by Park Entrance	Ext.							Recommend providing an on-street accessible parking space and curb ramp by the entrance to the park.	1	-	\$0