Evaluation of Physical Barriers – Riverside Downtown Station

Address: 4066 Vine St, Riverside, CA 92507 Evaluation Date: 07-26-2021



These elements were assessed to identify any physical barriers:

- 1) Curb ramps (1a-1b, 2a-2b, 2c-2d, 3a-3b,5a, 4a-4b)
- 2) Pedestrian road crossings
 - a. Pedestrian push button signals (where applicable)
- 3) Accessible routes
 - a. Walking surfaces
 - b. Elevators
- c. Pedestrian Bridge
- d. Stairs
- e. Ramps
- 4) Platforms
 - a. Walking surfaces
 - b. Mini High platforms and ramps
- 5) Pedestrian rail crossings
- 6) Access to public amenities
 - a. Ticket Vending/validation machines (TVM).
 - b. Drinking fountain
 - c. Communication Systems-passenger information phones, blue emergency phones, yellow call boxes, service phones, emergency phones.
 - d. Trash cans,
 - e. Vending machines
 - f. Benches
- 7) Accessible parking spaces
- 8) Bus stops
- 9) Signage
- 10) Public Address Systems
- 11)Staff facilities
 - a. (SOC)
 - b. Dumpster.

Year of Construction: Riverside Downtown Station- 11/15/1995; Alterations and Additions: South Platform and Pedestrian Crossing Addition- 12/16/1999; Parking Lot Upgrades- 1/4/2007, SOC- 12/4/2015. **Applicable ADA Standards**: Station, South Platform and Pedestrian Crossing, and Parking Lots:1991 Standards or UFAS, DOT's ADA Standards (2006) and, SOC: DOJ 2010 ADA Standards. **Note**: Criteria used to assess the elements were based on DOJ 2010 standards, DOT's ADA standards (2006), DIB 82-06, and PROWAG. Elements where the safe harbor clause per 28 CFR 35.151 (b) (4) (ii) (C) applies are assessed against 1991 standards.

28 CFR 35.151 (b) (4) (ii) (C) Safe harbor. If a public entity has constructed or altered required elements of a path of travel in accordance with the specifications in either the 1991 Standards or the Uniform Federal Accessibility Standards before March 15, 2012, the public entity is not required to retrofit such elements to reflect incremental changes in the 2010 Standards solely because of an alteration to a primary function area served by that path of travel.

Issues/Barriers Identified	Pacammandations	Comments /ADA Requirements
1. Curb Ramps		Curb ramps are labeled on the aerial view on page 1
1a, 1b- Not on the accessible route 2a, 2b, 2d- OK 2c – trip hazard due to chipped concrete and open gaps between Detectable Warning Surface (DWS) and concrete 3a, 3b- OK 4a, 4b – Not on the accessible route 5a- Portion of ramp at the loading zone has a slope exceeding 8.33%. The remaining portion of the ramp is accessible.	Repair trip hazards and fill open gaps between DWS and concrete at 2c. Repair slope of the inaccessible portion of ramp	See item 3 for ADA requirements This evaluation does not include curb ramps outside the RCTC boundary. RCTC is not responsible for maintaining the accessible routes outside of RCTC boundary. When repairs begin, use proper and precise instruments (4-foot smart level and 2-foot smart level) to fit within the curb ramp width and the adjacent gutter to measure ramp slopes, cross slopes, and counter slopes at all curb ramps (all stations). The long slope of ramp shall not exceed 1:12 (8.33%). Slope of flared sides shall not exceed 1:10 (10%), the gutter slope shall not exceed 1:20 (5%). Cross slope of the ramp and landing shall not exceed 1:50 (2%) Use smart level instruments, calibrated in accordance with manufacturer's instructions before taking measurements.
2. Pedestrian Road crossings		
No issues found at the main accessible pedestrian crossing 2a-2b, 2c 2d	No action by RCTC	
a) Pedestrian Push Button- No pedestrian pushbuttons are located within RCTC Boundary	No action by RCTC	

Issues/Barriers Identified	Recommendations	Comments /ADA Requirements
3. Accessible Routes		
a) Walking surface		
i. General: At all walking surfaces including but not limited to ramps for mini high platforms and landing near the pedestrian bridge tower, there are uneven joints and cracks observed in the concrete walkway along the accessible route. Sealant/filler in some deep joints is missing. This causes trip hazards and creates openings deeper than ½" and wider than ½ inch.	Examine all joints, cracks and level changes along the accessible route. Every joint in concrete deeper than ¼" and wider than ½" shall be filled. Every level change along the accessible route greater than ¼" and less than ½" height needs to be beveled (1:2) slope or repaired. Every level change greater than ½" needs to have a ramped surface (1:12) slope.	½ max 13
ii. Diamond plate utility cover is unevenly installed and causes a trip hazard.	Reinstall all diamond plate covers with edges flush or no higher than ¼" and gaps no wider than ½"	

	Issues/Barriers Identified	Recommendations	Comments /ADA Requirements
iii.	On all three visits to the station, out of the two accessible routes, one route remained temporarily closed. The ramps on either side of the pedestrian rail crossing at this main entrance (closed route) are inaccessible. See Item e), Ramps, below.	Take prompt action to effect repairs, if the accessible route was closed for repairs.	206.4.1 Public Entrances. In addition to entrances required by 206.4.2 through 206.4.9, at least 60 percent of all public entrances shall comply with 404.
iV.	Curved portion of the ramp near SOC may (or may not) have a cross slope exceeding 2% as it curves and continuously changes direction.	Measure to confirm that the cross slope is less than 2% using proper instruments. If cross slope is less than 2%, no action required. If cross slope exceeds, 2% repair the ramp to provide a level landing in the curved portion with a cross slope less than 2%.	Advisory 405.7 Landings. Ramps that do not have level landings at changes in direction can create a compound slope that will not meet the requirements of this document. Circular or curved ramps continually change direction. Curvilinear ramps with small radii also can create compound cross slopes and cannot, by their nature, meet the requirements for accessible routes. Note: Both the routes designated with ISA signage for "Accessible Route" do not seem to comply with accessibility requirements. Prompt repairs are needed to ensure accessibility.
b) Elevator		
а	udible signals which sound as the car passes or is about to stop at floor are rather low and missed especially when a train passes the tation [407.4.8]	Check the annual elevator certification for compliance with all code and ADA requirements.	For new elevators, the audible signal and verbal annunciator shall be 10 dB minimum above ambient, but shall not exceed 80 dB, measured at the hall call button.
С) Pedestrian Bridge		
	No issues found with the slope and cross slope of the pedestrian bridge.	No action by RCTC	
d) Stairs		
	No issues found with stairs	No action by RCTC	
е) Ramps		

Issues/Barriers Identified

Recommendations Comments /ADA Requirements

i. At pedestrian rail crossing in the middle of North loading platform, the ramp slope exceeds 1:12 (8.33%). Slope measured as 8.8 % on one side and 9.6% on the other side. The route was kept closed on the day of evaluation. The ramp is 36 inches wide (not including DWS) with handrails only on one side. The rise is greater than 6 inches.

Existing ramps do not comply with the then applicable 1991 standards nor with current DOT or 2010 ADA standards for

ramps.





Remove handrails and replace the ramps with walkways no more than 1:20 slope.

Note: Safe Harbor does not apply as the ramp slope requirements in 1991 and 2010 ADA standards are the same

DOT and 2010 ADA Standards: 405.2 Slope. Ramp runs shall have a running slope not steeper than 1:12. EXCEPTION: In existing sites, buildings, and facilities, ramps shall be permitted to have running slopes steeper than 1:12 complying with Table 405.2 where such slopes are necessary due to space limitations.

Table 405.2 Maximum Ramp Slope and Rise for Existing Sites, Buildings, and Facilities

Slope ¹	Maximum Rise
Steeper than 1:10 but not steeper than 1:8	3 inches (75 mm)
Steeper than 1:12 but not steeper than 1:10	6 inches (150 mm)

A slope steeper than 1:8 is prohibited.

1991 Standards

4.8.2* Slope and Rise. The least possible slope shall be used for any ramp. The maximum slope of a ramp in new construction shall be 1:12. The maximum rise for any run shall be 30 in (760 mm) (see Fig. 16). Curb ramps and

ramps to be constructed on existing sites or in existing buildings or facilities may have slopes and rises as *allowed in 4.1.6(3)(a)* if space limitations prohibit the use of a 1:12 slope or less.

(3) Special Technical Provisions for Alterations to Existing Buildings and Facilities:

(a) Ramps: Curb ramps and interior or exterior ramps to be constructed on sites or in existing buildings or facilities where space limitations prohibit the use of a 1:12 slope or less may have slopes and rises as follows:

(i) A slope between 1:10 and 1:12 is allowed for a maximum rise of 6 inches.

4. Platforms

a. Walking Surfaces

 The cross slope towards the center portion of the platform exceeds 2%, (at brick paving features)

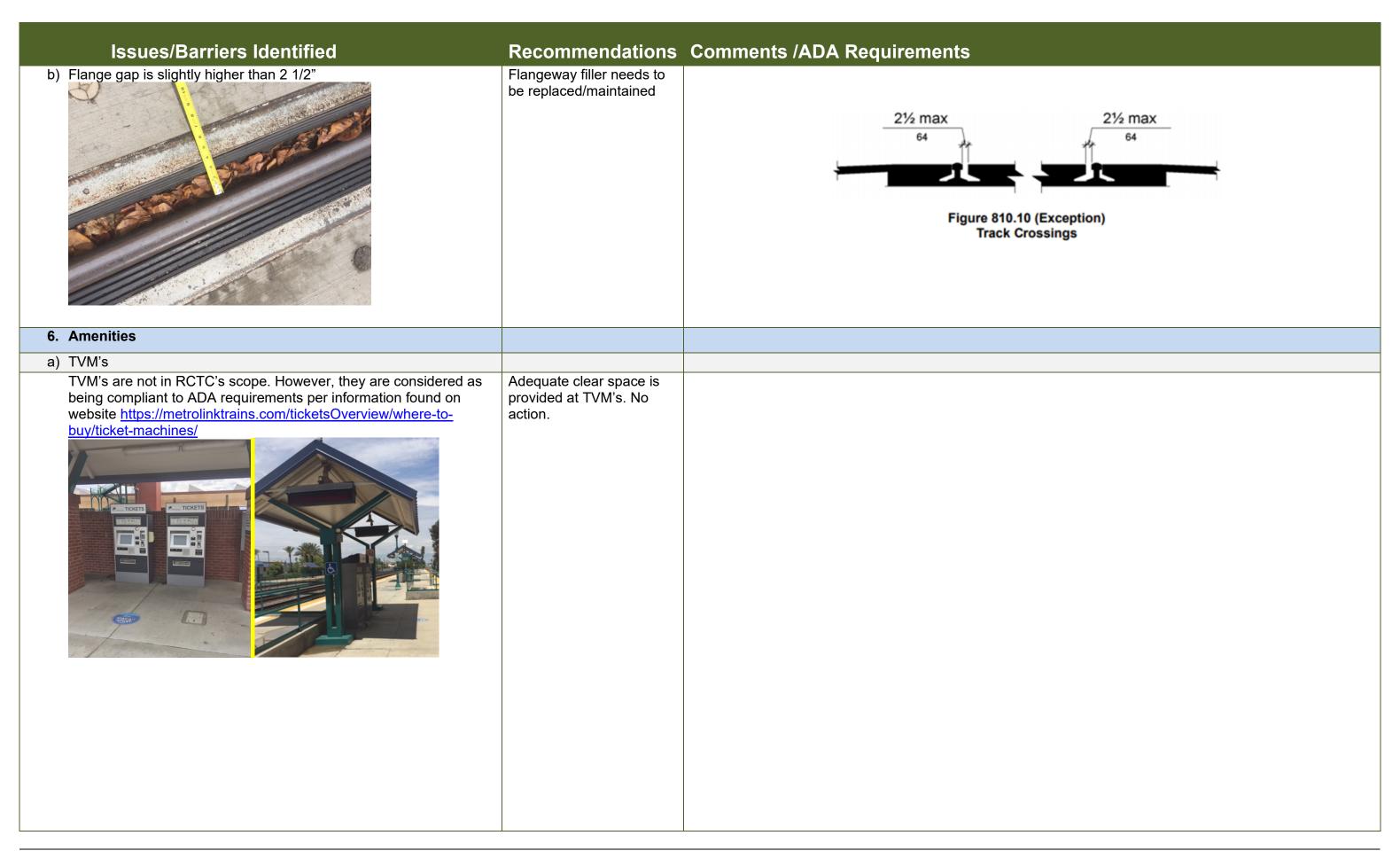


Repair cross slopes at paving features on accessible walking route or provide barriers at the inaccessible portions of the platform while ensuring alternate accessible routes

403.3 Slope. The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of walking surfaces shall not be steeper than 1:48 (2%)

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ii. The wheel of rolling gate in open position on the platform protrudes into the circulation width, reducing it to 46 inches from the DWS. This is more than the 36 inches required by the 1991, DOT and 2010 ADA Standards. However, ponding water was observed due to rains.	Replace gate or gate hardware with one that allows at least 48 inches circulation width in compliance with PROWAG R302.3 Maintain accessible routes to permit safe ambulation.	Comments /ADA Requirements Figure R302.3 Continuous Width Curb PAR within width of sidewalk The continuous clear width requirements in PROWAG R302.3 apply to sidewalks and other pedestrian circulation paths. 405.10 Wet Conditions. Landings subject to wet conditions shall be designed to prevent the accumulation of water. 302.1 General. Floor and ground surfaces shall be stable, firm, and slip resistant and shall comply with 302
b. Mini High Platforms		
i. The wide ramp at rail crossing (towards SOC) has a cross slope exceeding 2% (3.3%)	Repair cross slope.	403.3 Slope. The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of walking surfaces shall not be steeper than 1:48 (2%)

Recommendations Comments /ADA Requirements Issues/Barriers Identified 405.10 Wet Conditions. Landings subject to wet conditions shall be designed to prevent the accumulation of Ponding rainwater was observed on the platforms in several Repair slopes and where locations and also on mini high platforms. required, provide scuppers water. to allow water to drain away. 5. Pedestrian Rail Crossings a) Detectable Warning Surface (DWS) is missing at all rail crossings. Apply DWS per PROWAG R305.2.5 R305.2.5 Pedestrian At-Grade Rail Crossings Detectable warnings at At pedestrian at-grade rail crossings not located within a street or highway, detectable warning surfaces shall be placed on each side of the rail track crossings shall be 36 crossing. The edge of the detectable warning surface nearest the rail crossing shall be 1.8 m (6.0 ft) minimum and 4.6 m (15.0 ft) maximum inches in the direction of from the centerline of the nearest rail. Where pedestrian gates are provided, detectable warning surfaces shall be placed on the side of the pedestrian travel and gates opposite the rail. extend the full width of the Figure R305.2.5 Pedestrian At-Grade Rail Crossings circulation path. Pedestrian Gate 1.8 m - 4.6 m 6 ft - 15 ft



Issues/Barriers Identified	Recommendations	Comments /ADA Requirements
b) Drinking Fountains		
 i. Water flow in drinking fountain needs to be adjusted. ii. Near the main entrance, clear space for an existing fountain is blocked by a trash can. 	Adjust waterflow and Relocate trash can.	602.6 Water Flow. The spout shall provide a flow of water 4 inches (100 mm) high minimum and shall be located 5 inches (125 mm) maximum from the front of the unit. The angle of the water stream shall be measured horizontally relative to the front face of the unit. Where spouts are located less than 3 inches (75 mm) of the front of the unit, the angle of the water stream shall be 30 degrees maximum. Where spouts are located between 3 inches (75 mm) and 5 inches (125 mm) maximum from the front of the unit, the angle of the water stream shall be 15 degrees maximum.
c) Telephones/ Communication Systems	See Attachment 9, Action Plan for recommendations	Clear space and reach ranges are found to be compliant. All instruments are to be tested regularly for compliance by the responsible authorities.
i. Passenger Information Phone: Clear space and reach ranges are found to be compliant.		
ii. Blue Emergency Phone. Not applicable at this station.		

Issues/Barriers Identified	Recommendations	Comments /ADA Requirements
iii. Yellow call box. Clear space and reach ranges are found to be compliant.		
d) Trash cans		
No issues found with the height of trash can	No action by RCTC	
e) Vending Machines		Not under RCTC's authority.
No issues found with heights of operable components.	No action by RCTC	The Americans with Disabilities Act (ADA) requires all operable components of the vending machine to be between 15" and 48" up from the floor.

Issues/Barriers Identified	Recommendations	Comments /ADA Requirements
f) Benches		
i. Back less benches do not comply with ADA Section 903 as there are no back supports. However, Section 903 applies to indoor benches only.	It is a recommendation to apply Section 903 standards to benches in outdoor public environments, in order to ensure seating opportunities for people of all mobility.	xem 2 2½ max 64 (b)
ii. There is no clear space provided for wheelchairs in the platform shelters.	Remove/ relocate and replace benches to provide clear space at all shelters per PROWAG	Figure 903.4 Bench Back Support 903.5 Height. The top of the bench seat surface shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the finish floor or ground. 903.2 Clear Floor or Ground Space. Clear floor or ground space complying with 305 shall be provided and shall be positioned at the end of the bench seat and parallel to the short axis of the bench. R212.6 Benches. At least 50 percent, but no less than one, of benches at each location shall provide clear space complying with R404 adjacent to the bench. The clear space shall be located either at one end of the bench or shall not overlap the area within 460 mm (1.5 ft) from the front edge of the bench. Benches at tables are not required to comply. Advisory R212.6 Benches. Benches that provide full back support and armrests to assist in sitting and standing are more usable by pedestrians with disabilities.
	R212.6	

Issues/Barriers Identified

Recommendations Comments /ADA Requirements

iii. Back less benches do not comply with ADA Section 903 as there are no back supports. However, Section 903 applies to indoor benches only.



iv. There is no clear space provided for wheelchairs in the platform shelters.

It is a recommendation to apply Section 903 standards to benches in outdoor public environments, in order to ensure seating opportunities for people of all mobility.

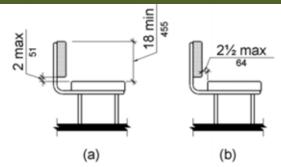


Figure 903.4 Bench Back Support

903.5 Height. The top of the bench seat surface shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the finish floor or ground.

Remove/ relocate and replace benches to provide clear space at all shelters per PROWAG R212.6

903.2 Clear Floor or Ground Space. Clear floor or ground space complying with 305 shall be provided and shall be positioned at the end of the bench seat and parallel to the short axis of the bench.

R212.6 Benches. At least 50 percent, but no less than one, of benches at each location shall provide clear space complying with R404 adjacent to the bench. The clear space shall be located either at one end of the bench or shall not overlap the area within 460 mm (1.5 ft) from the front edge of the bench. Benches at tables are not required to comply.

Advisory R212.6 Benches. Benches that provide full back support and armrests to assist in sitting and standing are more usable by pedestrians with disabilities.

7. Parking

Parking Inventory

I diking inventory	
<i>l</i> tem	Quantity
Parking Lots	4
Parking Spaces	771
ADA Spaces	25
Rideshare Spaces	11
Reserved Spaces	5
Electric Vehicle Spaces	3
Total Current Spaces	815
Parking Capacity	
Parking Utilization	
Future Plans	
Eastside Parking Lot	325
Vine St. Triangle Lot - 2010	-120
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No action by RCTC. Number of ADA spaces is compliant

208.2 Minimum Number. Parking spaces complying with 502 shall be provided in accordance with Table 208.2 except as required by 208.2.1, 208.2.2, and 208.2.3. Where more than one parking facility is provided on a site, the number of accessible spaces provided on the site shall be calculated according to the number of spaces required for each parking facility.

Table 208.2 Parking Spaces

Total Number of Parking Spaces Provided in Parking Facility	Minimum Number of Required Accessible Parking Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2 percent of total
1001 and over	20, plus 1 for each 100, or fraction thereof, over 1000

Issues/Barriers Identified	Recommendations	Comments /ADA Requirements
 ii. Four Van Accessible spaces are provided which complied with 1991 ADA standards. 5 van spaces are required for 25 ADA spaces provided per 2010 ADA standards and DOT's ADA Standards (2006). Note: The 1991 Standards required one van-accessible space for every eight accessible spaces. The DOT and 2010 Standards require one van-accessible space for every six accessible spaces 	Provide sign and striping for one more van accessible space to comply with DOT ADA Standards, section 208.2.4. as the parking lots were upgraded in 2007	208.2.4 Van Parking Spaces. For every six or fraction of six parking spaces required by 208.2 to comply with 502, at least one shall be a van parking space complying with 502. 216.5 Parking. Parking spaces complying with 502 shall be identified by signs complying with 502.6. 502.6 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign
8. Bus Stop		
No issues found		Maintain accessible routes to permit safe ambulation to all stops.
9. Signage		
a) Post mounted signs in the accessible route were evaluated to confirm minimum/ maximum projections and minimum clearances from the finished floor. Standard station signage is required to comply with SCRRA /Metrolink standard details (ES 3000) found at this link. https://metrolinktrains.com/globalassets/about/engineering/3000-stations.pdf	No action BY RCTC. Signage is by SCRRA/Metrolink	810.6 Rail Station Signs. Rail station signs shall comply with 810.6. EXCEPTION. Signs shall not be required to comply with 810.6.1 and 810.6.2 where audible signs are remotely transmitted to hand-held receivers, or are user- or proximity-actuated. SCRRA/Mertolink is responsible for the signage.

Issues/Barriers Identified	Recommendations	Comments /ADA Requirements
Public Address		Not under RCTC's authority. Assessed for general complince to ADA standards
i. There are LCD/LED Message screens at the stations that will show information that is conveyed on the public address system, both of which are controlled by SCRRA. These are not under RCTC's authority.	No action by RCTC	810.7 Public Address Systems. Where public address systems convey audible information to the public, the same or equivalent information shall be provided in a visual format.
available F	Update any existing emergency evacuation procedures to include evacuation of individuals with disabilities during an emergency.	Special procedures are required for assisting individuals with disabilities from a facility during an emergen
Staff Facilities		
a) <u>SOC</u>		SOC is a restricted entry building, designed for ADA compliance except for the items noted below.
comply with 903 and does not allow turning space in front of	Provide an ADA compliant bench and provide turning space for wheelchairs.	803 Dressing, Fitting, and Locker Rooms 803.4 Benches. A bench complying with 903 shall be provided within the room. 803.2 Turning Space. Turning space complying with 304 shall be provided within the room. 903.3 Size. Benches shall have seats that are 42 inches (1065 mm) long minimum and 20 inches (510 m deep minimum and 24 inches (610 mm) deep maximum. 903.4 Back Support. The bench shall provide for back support or shall be affixed to a wall. Back support shall be 42 inches (1065 mm) long minimum and shall extend from a point 2 inches (51 mm) maximum above the seat surface to a point 18 inches (455 mm) minimum above the seat surface. Back support shall be 2½ inches (64 mm) maximum from the rear edge of the seat measured horizontally.
		Figure 903.4 Figure 304.3.2 Bench Back Support T-Shaped Turning Space

Issues/Barriers Identified

Recommendations Comments /ADA Requirements

SOC Entrance Call Button for Telephone is higher than 48 inches and is not compliant with the reach range requirement.



Replace with a compliant system with operable parts no higher than 48 inches per 308.3.1 and/ or 308.2.1.

Confirm that two-way communication System complies with 708.

230.1 General. Where a two-way communication system is provided to gain admittance to a building or facility or to restricted areas within a building or facility, the system shall comply with 708.

708 Two-Way Communication Systems

708.1 General. Two-way communication systems shall comply with 708.

Advisory 708.1 General. Devices that do not require handsets are easier to use by people who have a limited reach.

708.2 Audible and Visual Indicators. The system shall provide both audible and visual signals.

Advisory 708.2 Audible and Visual Indicators. A light can be used to indicate visually that assistance is on the way. Signs indicating the meaning of visual signals should be provided.

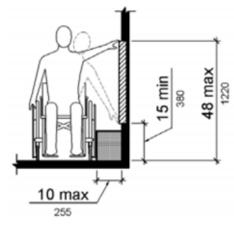


Figure 308.3.1 **Unobstructed Side Reach**

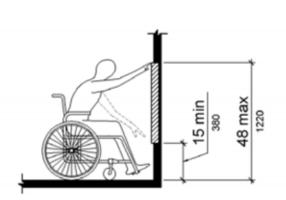


Figure 308.2.1 **Unobstructed Forward Reach**

- SOC: Room identification signs are missing.
- Signs on SOC restroom doors do not comply with 703.4.2.

Provide ADA compliant signage for all permanent spaces.

216.2 Designations. Interior and exterior signs identifying permanent rooms and spaces shall comply with 703.1, 703.2, and 703.5.

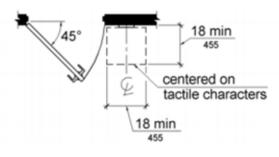


Figure 703.4.2

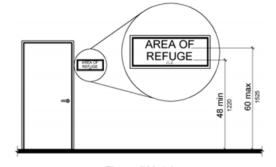


Figure 703.4.1 Location of Tactile Signs at Doors Height of Tactile Characters Above Finish Floor or Ground

Issues/Barriers Identified	Recommendations	Comments /ADA Requirements
b) <u>Trash / Dumpster Enclosure</u>		
i. The gate at trash dumpster is not on an ADA compliant route and gate does not appear to be accessible.	Provide an accessible gate to the dumpster enclosure on an accessible route.	203.9 Employee Work Areas. Spaces and elements within employee work areas shall only be required to comply with 206.2.8, 207.1, and 215.3 and shall be designed and constructed so that individuals with disabilities can approach, enter, and exit the employee work area. 1991 Standards. 4.1.1 (3) (3)* Areas Used Only by Employees as Work Areas. Areas that are used only as work areas shall be designed and constructed so that individuals with disabilities can approach, enter, and exit the areas. These guidelines do not require that any areas used only as work areas be constructed to permit maneuvering within the work area or be constructed or equipped (i.e., with racks or shelves) to be accessible
c) <u>Security Staff Facilities</u>		
The guard booth is provided as a shelter against weather and for use during breaks by security staff, who are expected to walk around the station site and physically address emergency situations.	Inform all contractors of their ADA obligations	Station Security services are contracted out and an ADA evaluation of the facilities used by the station security was not conducted as it is not Public Accessible and the Security Contractor requirements require the guards to be able to walk around the station site and physically address emergency situations.