

**APPENDIX F**  
**RETROFIT PLAN FOR LANIER POINTE II**

**Safe Harbors used to develop the retrofit scope:**

ADA – Evaluation of Items to Retrofit: 1991 ADAAG

Standard for Retrofit Work: 2010 ADA Standards

FHA – Evaluation of Items to Retrofit: FHA, FHA Regulations, Guidelines, ANSI A117.1 1986

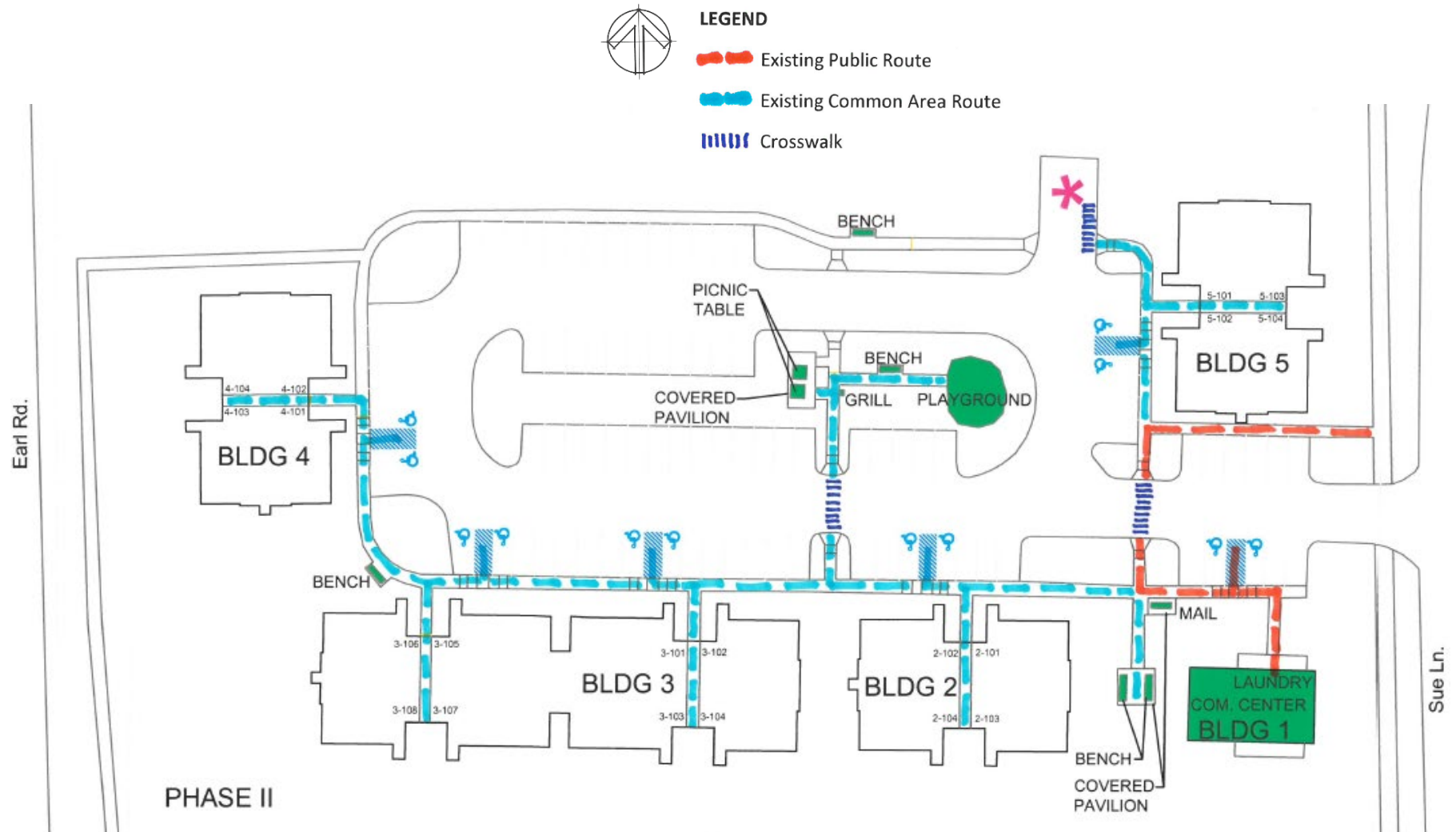
Standard for Retrofit Work: FHA, FHA Regulations, Guidelines, ANSI A117.1 1986

**Notes:**

Current NC Building Code will apply to all work requiring a building permit. Local code requirements for retrofits may be more stringent than the safe harbor listed above.



Alternate accessible routes may be considered. Routes identified in the approved retrofit plan may not be revised unless the change is approved by the DOJ. Survey all portions of the routes affected by concrete and asphalt work done on or after February 2018 to confirm scope of required work.

## ACCESSIBLE ROUTE DIAGRAM



Lanier Pointe II Retrofit Plan – 2

**A. PUBLIC AND COMMON AREA FEATURES (ADA & FHA)**


	<b>Inaccessible Restroom Features</b>		
1	 <p><i>Flush control at women's restroom.</i></p>	Toilet flush control in the women's restroom is located on the side opposite the side of approach (not allowed).	Replace tank.
	<b>Protruding Object</b>		
2	 <p><i>Drinking fountain in community center.</i></p>	The leasing office/community center drinking fountain protrudes 19 inches into the circulation path at a height of 27-1/2 inches at the low fountain and at a height of approximately 31 inches at the high fountain (maximum 4 inch protrusion allowed at heights between 27 inches and 80 inches above the floor).	Install shroud or other cane detectable barrier. Barrier may not obstruct required knee and toe space at lower unit.



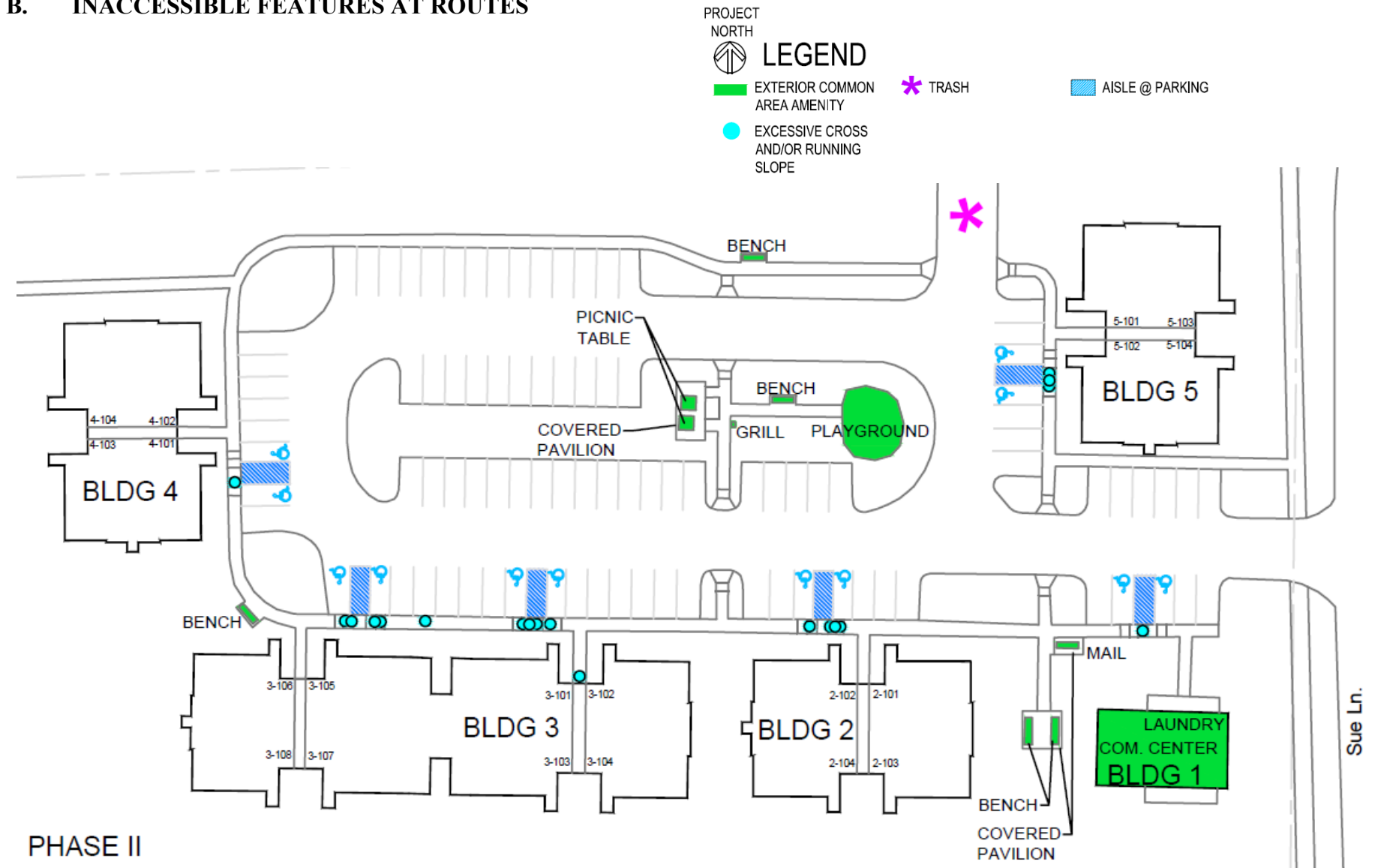
*Protruding height at low fountain.*




*Projection from the wall.*



	ADA						
3	 <p><i>Measurement of centerline of men's restroom sign.</i></p>	<p>The men's restroom signage is not centered on an 18 inch clear floor space (minimum 9 inches from door jamb to centerline of sign required).</p> <table> <tr> <th><u>Location</u></th> <th><u>Centerline (inches)</u></th> </tr> <tr> <td>Men's Restroom</td> <td>7-1/2</td> </tr> </table>	<u>Location</u>	<u>Centerline (inches)</u>	Men's Restroom	7-1/2	Relocate sign.
<u>Location</u>	<u>Centerline (inches)</u>						
Men's Restroom	7-1/2						

## B. INACCESSIBLE FEATURES AT ROUTES



Lanier Pointe II Retrofit Plan – 6

	<b>Lack of Accessible Route</b>		
4	 <p><i>Dumpster location at the end of a vehicular lane.</i></p>	There is no accessible route to the dumpsters (accessible route is required). Dumpster enclosure is at the end of a vehicular lane.	Stripe accessible route to dumpster from east curb ramp.
	<b>Crosswalks</b>		
5	<i>See Accessible Route Diagram.</i>	Crosswalks at vehicular drives are incorporated into the accessible route(s).	Stripe crosswalks.

	Inaccessible Curb Ramp Features														
6	<div><p><i>West curb ramp north of Building 3.</i></p><p><i>Measurement of running slope.</i></p></div>	<p>Running slopes of curb ramps are more than 8.3% (maximum 8.3% allowed).</p> <table><thead><tr><th>Location</th><th>Slope</th></tr></thead><tbody><tr><td>North of Building 2, top of east curb ramp</td><td>9.7%</td></tr><tr><td>North of Building 2, top of west curb ramp</td><td>9.8%</td></tr><tr><td>North of Building 3, east entry, top of east curb ramp</td><td>9.4%</td></tr><tr><td>North of Building 3, east entry, top of west curb ramp</td><td>10.3%</td></tr><tr><td>North of Building 3, west entry, top of west curb ramp</td><td>9.2%</td></tr></tbody></table>	Location	Slope	North of Building 2, top of east curb ramp	9.7%	North of Building 2, top of west curb ramp	9.8%	North of Building 3, east entry, top of east curb ramp	9.4%	North of Building 3, east entry, top of west curb ramp	10.3%	North of Building 3, west entry, top of west curb ramp	9.2%	<p>Replace curb ramps at accessible route(s) as required to retrofit sections with excessive running slope.</p>
Location	Slope														
North of Building 2, top of east curb ramp	9.7%														
North of Building 2, top of west curb ramp	9.8%														
North of Building 3, east entry, top of east curb ramp	9.4%														
North of Building 3, east entry, top of west curb ramp	10.3%														
North of Building 3, west entry, top of west curb ramp	9.2%														



7



*Curb ramp at the east entry of Building 3.*




*Measurement of cross slope.*

Cross slopes of curb ramps are more than 2.0% (maximum 2.0% allowed).

<u>Location</u>	<u>Slope</u>
Building 5, top of south curb ramp	3.2%
Building 2, top of east curb ramp	3.2%
Building 3, east entry, bottom of west curb ramp	3.6%
Building 3, west entry, top of east curb ramp	3.3%

Replace curb ramps at accessible route(s) as required to retrofit sections with excessive cross slope.

## C. COMMON USE AREAS

	Inaccessible Mail Center Features																																		
8	 <p>Mailbox center.</p>	<p>Of 40 mailboxes at this location, 14 mailboxes that serve covered units are above reach range (maximum 54 inches allowed to lock). The top five rows of mailboxes are above reach range.</p> <table> <tr> <th>Location</th> <th>Height (inches)</th> </tr> <tr> <td colspan="2">Building 2:</td> </tr> <tr> <td>Box 1020-2 Sue Ln./ 101</td> <td>69-5/8</td> </tr> <tr> <td>Box 102</td> <td>66-3/4</td> </tr> <tr> <td>Box 103</td> <td>63-1/4</td> </tr> <tr> <td>Box 104</td> <td>59-3/4</td> </tr> <tr> <td colspan="2">Building 3:</td> </tr> <tr> <td>Box 104</td> <td>69-1/2 +/-</td> </tr> <tr> <td>Box 105</td> <td>66-3/4 +/-</td> </tr> <tr> <td>Box 106</td> <td>63-1/8</td> </tr> <tr> <td>Box 107</td> <td>59-3/8</td> </tr> <tr> <td>Box 108</td> <td>56-1/4</td> </tr> <tr> <td colspan="2">Building 4:</td> </tr> <tr> <td>Box 1020-4 Sue Ln./ 101</td> <td>56 +/-</td> </tr> <tr> <td colspan="2">Building 5:</td> </tr> <tr> <td>Box 1020-5 Sue Ln./ 101</td> <td>66-3/4 +/-</td> </tr> </table>	Location	Height (inches)	Building 2:		Box 1020-2 Sue Ln./ 101	69-5/8	Box 102	66-3/4	Box 103	63-1/4	Box 104	59-3/4	Building 3:		Box 104	69-1/2 +/-	Box 105	66-3/4 +/-	Box 106	63-1/8	Box 107	59-3/8	Box 108	56-1/4	Building 4:		Box 1020-4 Sue Ln./ 101	56 +/-	Building 5:		Box 1020-5 Sue Ln./ 101	66-3/4 +/-	<p>Rearrange mail box frames or reassign boxes such that all covered dwelling units are assigned mail boxes that have locks within reach range.</p>
Location	Height (inches)																																		
Building 2:																																			
Box 1020-2 Sue Ln./ 101	69-5/8																																		
Box 102	66-3/4																																		
Box 103	63-1/4																																		
Box 104	59-3/4																																		
Building 3:																																			
Box 104	69-1/2 +/-																																		
Box 105	66-3/4 +/-																																		
Box 106	63-1/8																																		
Box 107	59-3/8																																		
Box 108	56-1/4																																		
Building 4:																																			
Box 1020-4 Sue Ln./ 101	56 +/-																																		
Building 5:																																			
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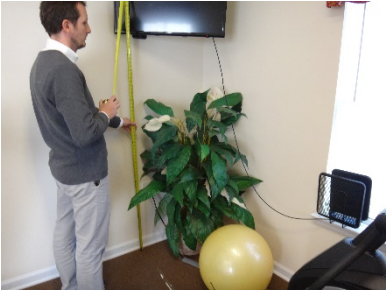



*Typical mailbox frame.*



*Measurement to 1020-3 Sue Lane, Box 108.*

Box 102	63-1/4 +/-
Box 103	59-1/2 +/-
Box 104	56 +/-

<p>9</p>	 <p><i>Television at Fitness Center.</i></p>  <p><i>Height of bottom edge.</i></p>	<p>The television in the fitness center projects approximately 10 inches into the circulation path at 65 inches above the floor (maximum 4 inches allowed at heights greater than 27 inches and less than 80 inches).</p>	<p>Provide permanent cane detectable barrier under the TV.</p>
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#### **D. COVERED DWELLING UNITS**

Lanier Pointe Phase II has four 2-story residential buildings. Three buildings have four 2-bedroom units per floor and one building has four 2-bedroom units and four 3-bedroom units per floor. All 20 first-floor units are covered by FHA.

Unit counts:

Covered 2 Bedroom / 2 Bath Unit = 15 total

Covered 2 Bedroom / 2 Bath Unit (Type A) = 1 total

Covered 3 Bedroom / 2 Bath Unit = 3 total

Covered 3 Bedroom / 2 Bath Unit (Type A) = 1 total

Second Floor 2 Bedroom / 2 Bath Unit = 16 total

Second Floor 3 Bedroom / 2 Bath Unit = 4 total

40 total units (32 – 2 bedroom and 8 – 3 bedroom)

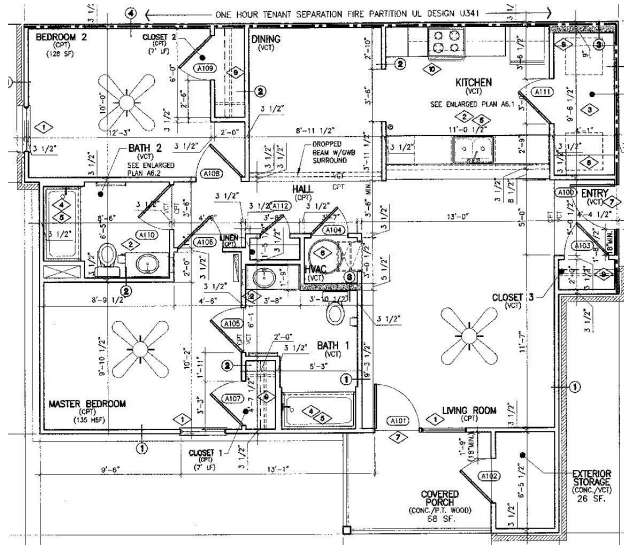
20 total covered units (2 designated accessible units)

#### **Typical Inaccessible Unit Features Common to All Residential Buildings/Units**

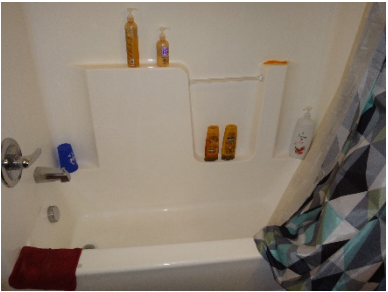
The extent of existing blocking in bathrooms cannot be determined without destructive testing. Additional blocking at unit toilets, tubs and showers may be required as part of unit retrofits.



## UNIT TYPE: 2 Bedroom, 2 Bathroom



Surveyed Units 2-102 and 5-102 – Typical for 15 total units





Unit Plan. (PENDERGRAPH04197).

<p>10</p>	 <p><i>Bathtub/shower surround in Unit 2-102.</i></p>	<p>The shape of the bathtub surrounds precludes the installation of future grab bars with firm attachment to blocking (ability to install grab bars required).</p>	<p>Replace tub surround or install custom grab bars that can be mounted in the required locations at the existing surrounds. If not replacing the tub surround, fabricate at least two custom grab bars for the tub back walls. Maintain a stock of two such grab bars on site at all times. Install on request at no charge.</p>
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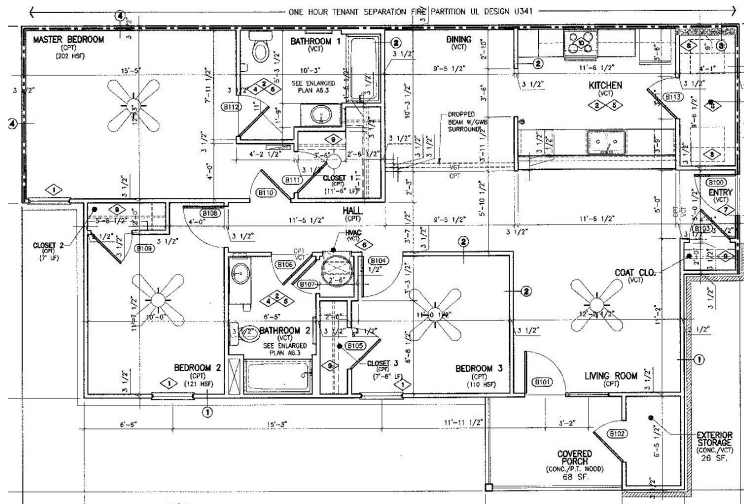
11	 <p><i>Dimension from side wall to centerline of lavatory in Unit 2-102.</i></p>	<p>Lavatory centerlines are less than 24 inches to the side wall (minimum 24 inches required) and the cabinets are not removable.</p> <table><tr><th><u>Location</u></th><th><u>Distance (inches)</u></th></tr><tr><td>Unit 2-102 master bath</td><td>21-3/8</td></tr><tr><td>Unit 2-102 hall bath</td><td>18-3/4</td></tr><tr><td>Unit 5-102 master bath</td><td>21-1/4</td></tr><tr><td>Unit 5-102 hall bath</td><td>18-3/4</td></tr></table>	<u>Location</u>	<u>Distance (inches)</u>	Unit 2-102 master bath	21-3/8	Unit 2-102 hall bath	18-3/4	Unit 5-102 master bath	21-1/4	Unit 5-102 hall bath	18-3/4	<p>Install removable base cabinet with 30 inch wide knee space in compliance with safe harbor knee and toe clearance requirements.</p> <p>Attach a durable-material placard stating: “THIS CABINET IS REMOVABLE FOR PERSONS WITH DISABILITIES. CONTACT MANAGEMENT.”</p>
<u>Location</u>	<u>Distance (inches)</u>												
Unit 2-102 master bath	21-3/8												
Unit 2-102 hall bath	18-3/4												
Unit 5-102 master bath	21-1/4												
Unit 5-102 hall bath	18-3/4												
12	<p><i>Dimension from toilet side wall to lavatory Unit 2-102.</i></p> 	<p>The clear width of the spaces at the wall behind the toilet are 29 inches to 29-1/2 inches wide (minimum 33 inches required).</p> <table><tr><th><u>Location</u></th><th><u>Width (inches)</u></th></tr><tr><td>Unit 2-102 hall bathroom</td><td>29</td></tr><tr><td>Unit 5-102 hall bathroom</td><td>29-1/2</td></tr></table>	<u>Location</u>	<u>Width (inches)</u>	Unit 2-102 hall bathroom	29	Unit 5-102 hall bathroom	29-1/2	<p>Reduce lavatory/vanity cabinet width to the maximum extent possible to widen the space.</p>				
<u>Location</u>	<u>Width (inches)</u>												
Unit 2-102 hall bathroom	29												
Unit 5-102 hall bathroom	29-1/2												

	<p><i>Dimension from toilet side wall to lavatory Unit 2-102.</i></p> 								
13	 <p><i>Dimension from side wall / bathtub to toilet centerline in Unit 2-102.</i></p>	<p>Toilet centerlines are less than 18 inches to the bathtub side wall (minimum 18 inches required).</p> <table><tr><th><u>Location</u></th><th><u>Distance (inches)</u></th></tr><tr><td>Unit 2-102 hall bathroom</td><td>15-3/8</td></tr><tr><td>Unit 5-102 hall bathroom</td><td>15-1/8</td></tr></table>	<u>Location</u>	<u>Distance (inches)</u>	Unit 2-102 hall bathroom	15-3/8	Unit 5-102 hall bathroom	15-1/8	<p>Install offset flange to shift toilet centerline to a position as close to 18 inches from the tub as is possible.</p>
<u>Location</u>	<u>Distance (inches)</u>								
Unit 2-102 hall bathroom	15-3/8								
Unit 5-102 hall bathroom	15-1/8								




14	<div><p><i>Tape at edge of bathroom door leaf in open position at Unit 2-102.</i></p><p><i>Dimension from door leaf in open position to bathtub.</i></p></div>	<p>The clear floor space in the bathroom is less than 48 inches long (minimum 48 inches required).</p> <table><tr><td></td><td>Clear</td></tr><tr><td>Dimension</td><td></td></tr><tr><td><u>Location</u></td><td><u>(inches)</u></td></tr><tr><td>Unit 2-102 hall bathroom</td><td>34-1/2</td></tr><tr><td>Unit 5-102 hall bathroom</td><td>33-5/8</td></tr></table>		Clear	Dimension		<u>Location</u>	<u>(inches)</u>	Unit 2-102 hall bathroom	34-1/2	Unit 5-102 hall bathroom	33-5/8	<p>Reverse the door so that it does not swing into the bathroom.</p>
	Clear												
Dimension													
<u>Location</u>	<u>(inches)</u>												
Unit 2-102 hall bathroom	34-1/2												
Unit 5-102 hall bathroom	33-5/8												

**UNIT TYPE: 3 Bedroom, 2 Bathroom**  
 Surveyed Unit 3-104 – Typical for 3 total units



Unit Plan. (PENDERGRAPH04198).

**Inaccessible Features:**

<p>15</p>	 <p><i>Bathtub/shower surround in Unit 3-104.</i></p>	<p>The shape of the bathtub surrounds precludes the installation of future grab bars with firm attachment to blocking (ability to install grab bars required).</p>	<p>Replace tub surround or install custom grab bars that can be mounted in the required locations at the existing surrounds. If not replacing the tub surround, fabricate at least two custom grab bars for the tub back walls. Maintain a stock of two such grab bars on site at all times. Install on request at no charge.</p>
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*Dimension from side wall to centerline of lavatory in Unit 3-104 hall bathroom.*



*Interior of vanity in Unit 3-104 hall bathroom.*

Lavatory centerlines are less than 24 inches to the side wall (minimum 24 inches required) and the cabinets are not removable.

<u>Location</u>	<u>Distance (inches)</u>
Unit 3-104 master bathroom	19

Install removable base cabinet with 30 inch wide knee space in compliance with safe harbor knee and toe clearance requirements.

Attach a durable-material placard stating:  
“THIS CABINET IS REMOVABLE FOR PERSONS WITH DISABILITIES.  
CONTACT MANAGEMENT.”