

## **APPENDIX E**

### **FACILITY ASSESSMENT FORMS**

Charles Co. Public Library Master Plan  
La Plata Branch Building Survey  
2 Garrett Ave, La Plata, MD

Site Visits, November, 2016



	Yr. Built	Yr. renov. / replaced	Description	Condition	Comments
General	1966		Building was constructed in 1966, and hasn't been added to since. Building consists of Adult & Child's pavilions and flat roof section at staff area.	Fair	Library's original high-ceiling spaces, in all probability remain, although now are concealed by later dropped ceilings. This later 'renovation' removed singular design features which could be recovered. Original acoustic plaster ceiling could be restored, or replaced. Indirect pendant LED lighting would greatly improve lighting levels at an energy efficiency not achievable in 1966, while restoring attention to the original spaces.
<b>Building Envelope</b>					
exterior walls	1966		12" Brick and CMU bear walls w/ wd framed siding sections below windows. Foundation walls are 12" CMU.	Fair	
windows		1998	window replacement	Good	residential style mtl-clad
storefront	1966		Kawneer storefront entry	Fair	Vestibule has power act operators
curtainwall	-	-	-	-	
pitched roof 4:12		?	shingles (on bldg paper?)	Poor	> 50 years old by Co. records? No roof insulation indicated on 1966 dwgs.
flat roof		?	mod. bitum/thermoplastic	Poor	CD's show roof has no slope, which is against current building code. >50 years old by Co. records?
skylights	1966		Two skylights shown on 1966 dwgs.	-	Removed in roof project? Not found in interior.
curbed rooftop units	-		none	-	
rooftop units on dunnage	-		No documentation.	Unknown	See comment on HVAC below.
roof structure	1966		wd joists on CMU bear walls	Unknown	Roof dead load not shown on 1966 dwgs.
floor structure	1966		conc slab on grade and 2nd Fl. mtl deck on bar joists	Unknown	Roof dead load not shown on 1966 dwgs.
<b>Building Interiors</b>					
CMU walls	1966		painted	Fair	
drywall	1966		painted	Fair	
ceiling finishes		?	Dropped 2x4 SAT added in renovation is in poor condition	Poor	Orig sloping clng in Adult & Chld's is acoustie plaster; tested for asbestos?
carpet		?	tight loop carpet	Fair	
vinyl tile			Replaced in renovation	Good	
toilet rooms	1966		No public restrooms on main library level.	Poor	Public toilet rms in Basement level w/ no elevator access. Toilet Rms do not meet ADA clearances.
Pub Mtg Rm	1966		1,040 SF multi-purpose room is located on lower level; seats 148 by current code.	Poor	MP Rm is not supervised from staff areas. Meeting Rm asbestos floor tile was abated. No elevator access from main level; does not meet ADA for access.
Dumbwaiter	1966?		Accessed only from Staff area on main level	Poor	Dumbwaiter is impractical for book handling.

**Bldg Mechanical**

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Charles Building Survey.xlsx

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	Yr. Built	Yr. renov. / replaced	Description	Condition	Comments
<b>HVAC</b>					Mech spaces have been tested and are clean of asbestos piping and lead.
central boiler		1999	Smith boiler	Adequate	> 17 yr.
single air handler	1966		Trane 'Climate Changer'	Fair	> 30 yr. - ductwork is original
cooling tower	-		none	-	
chiller		2000		Fair	> 17 yr. located w/in wood fence directly adjacent to the front door
compressor		2000?	Carrier	-	
split DX system	-		none	-	
EMS (energy management system)		?	Siemens EMS	Good	Landis & Gyr Apogee 600 annunciator
<b>Bldg Plumbing</b>					
sanitary	?			-	
rain leaders		?	mtl gutters & downspout	Good	gutters & downspouts on 2 pavilions & flat roof areas
storm system	?			-	
<b>Fire Protection</b>					
sprinklers			Building has no fire sprinklers	Poor	Recommend sprinklers be installed throughout bldg.
dry pipe			none	-	
<b>Electrical</b>					
elect. service	1966		600 amp bldg. service	Fair	Bldg. service is original, fed from pole mounted transformer behind (north) of building. Service is brought underground from the pole. Has limited expansion capability.
switchgear	1966		Cutler + Hammer 120V/208V	Fair	switchgear is original
elect. distribution			elect panels	-	panels distributed throughout both floors
emerg generator	-		none	Fair	
lighting		?	4x4 & 2x4 (T8 fluorescent) in SAT clngs (2x2 and 2x4 grids). Added in renovation	Fair	Original bldg. had sloped plaster ceilings in Adult & Child's pavilion spaces
emerg lighting			battery pack wall units	Adequate	
fire alarm		?	PowerSonic PS 1270 F1	-	Has remote monitoring
HVAC piping	1966?			Fair	Insulation appears to be original. Was this tested for asbestos?
<b>IT/Tel/Comm</b>					
IT service		?	MD fiber connect. to Internet	Good	Wi-Fi service is spotty in the building
IT LAN		?		Good	LAN equip & servers located in main Elect. Room - no independent AC
server room			none	Poor	no separate server/LAN room

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**Charles Co. Public Library Master Plan**  
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**Site Visits, November, 2016**



	Yr. Built	Yr. renov. / replaced	Description	Condition	Comments
bldg security		?	unknown	Fair	Security monitoring reports to Library staff, and not to County's.
phone system		?	VOIP systesm connect by fiber	Good	
Site					
sidewalks	1966		from parking to entry	Poor	steep stair/ramp from parking lot
parking	1966		26 spaces in lot	Fair	newly paved w/ new curbing
drop off	1966		Entry & Mtg Rm drop offs	Adequate	
ADA parking		?		Poor	See comment on ADA access
ADA drop off		?		Poor	drop off spaces exceed 2% slope
ADA access?		?		Poor	HC ramp from parking lot > 8% No sidewalks along Charles & Garrett Sts.
stormwater	1966		unknown	Poor	appears to tie directly into town stormwater system
stormwater detention			none	Poor	
landscaping		?		-	
lighting		?		-	
oil tank		1999		-	Above-grade oil tank located at front of building. (relocated from previous below-grade tank)

**General Site Assessment**

Access to and from site on Charles St. is good, however the parking lot entrance is too close to the intersection with Garrett St., and for that reason is a traffic problem as well as a safety issue. 26 long-term parking spaces are provided, but are only accessible by a steep stair/ramp. Drop off to the building has signed ADA spaces, however the pavement slope is greater than 2% and doesn't meet code. The library sits across the street from MD University Charles Regional Medical Center. Thus the site is within walking distance of a major employment center in LaPlata. This supports the fact that the site is well located within its service area.

**Building Layout**

The current library layout is coherent and easily understood at the main level, however the lower level meeting room is isolated from the rest of the public rooms as are the public toilet rooms. The current Library is undersized for the community it serves. Spaces to be considered in a renovation project include tutor and group study rooms, quiet study rooms, Children's program room, additional stack space and reading areas in Adult and Children, Young Adult area, additional computer space, additional staff space.

**General Building Assessment**

The building's primary physical problems stem from its age. Roofing (and insulation) should be replaced. The flat roof should be rebuilt to add insulation and create positive drainage (min. 1/4" / ft. slope. Roof dead load likely doesn't meet current code requirements. The exterior building envelop is substandard by today's energy standards, with minimum insulation, and doubtful air/water barriers. This could be confirmed by a thermal heat loss analysis. Increased thermal insulation and added air/water barriers would reduce energy usage and improve patron comfort. Though the building appears to be well maintained, the interior is hard worn and outdated, particularly the suspended acoustic ceilings. A complete HVAC replacement should be done. Electrical service, and distribution system should be replaced and brought up to code. Lighting should be replaced with high efficiency lighting, and a lighting control system introduced.

**Building Code & ADA Violations**

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Yr. renov. / Yr. Built replaced		Description	Condition	Comments
No ADA toilets available on lower level. No public ADA toilets are available on upper level (disabled patrons and staff must use staff office toilet room.) No comparable ADA access between levels – no elevator – this is true for both patrons and staff, and violates ADA guidelines for that reason. Fire exits on south side of bldg. from Adults and Children do not continue to a public way and are not ADA accessible routes. Entrance short term / drop off parking exceeds 2% slope in both directions. ADA ramp from lower level parking lot exceeds 1:8 max. slope. Existing roofs do not meet current 30 lb/sq. ft. dead load. Existing building envelop (does not meet current ASHRAE energy standards.				

Expansion / Renovation

Charles Co. Public Library Master Plan  
PD Brown Branch Building Survey  
50 Village St, Waldorf, MD

Site Visits, November, 2016



	Yr. Built	Yr. renov. / replaced	Description	Condition	Comments
General	1980 *	ca 2001		Fair	Library is located remotely on separate 'pad' from adjacent shopping area; pedestrian traffic thus is discouraged.
Building Envelope					
exterior walls	1980 *	ca 2001	The original building is in the form of a four-sided sloping pavilion, with the 40'x60' high bay central space topped by skylights. Addition was built ca. 2001 adding Children's, staff offices & new toilets. Construction dwgs show original building's exterior masonry is 10", with 1 1/2" insulation and 1/2" air space. No mention of an air-water barrier is given on construction dwgs.	Adequate	Addition reversed building entrance from original location, reorienting it to face the now-primary parking lot. Record drawings of the addition were unavailable. Deferred exterior masonry repointing of grout and sealant at windows from 2003 to 2026 and deferred exterior painting of trim and soffits to 2018.
windows	1980	ca 2001	Windows are original wood-framed w/ insulated glass. The wood window frames are non-thermally broken, and the glass panels are not sealed (inside lights are removable).	Poor	Several windows are missing their interior glass lites. Evidence of dry rot of the frames can be seen; possibly due to poor flashing behind the frames. Glass is mostly discolored, possibly from applied film. Windows should be replaced with new Low-E glazed, insulated units, properly flashed to the masonry surrounds. Due to the limited areas of natural light, unless additional glazing were added, the building will remain fully dependent on electrical lighting. Likewise, natural ventilation via the fenestration is not possible.
storefront	-	ca 2001	Storefront entrance vestibule is the only storefront	Adequate	
curtainwall	-	-	None	-	
pitched roof > 6:12	1980	ca 2001	Orig. pavilion & Addition roofs	Poor	1980 sloped roofs need replacing. Deferred by Co. to 2018. Entry porch, where it joins the two pavilion roofs, creates deep valleys for trapping snow and ice.
flat roof	1980	-	Orig. flat roof	Poor	1980 flat roof area is slated for replacement. Deferred by Co. to 2018.
skylights	1980	-	. Two large (10' x 20' acrylic) skylights are featured in the high bay space.	Unknown	Original exterior wood louvers, designed to block direct sunlight from the skylights, appear to have been removed, leaving the large skylights to introduce uncontrolled solar heat gain in the warmer months.
curbed rooftop units	-	-		-	

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Site Visits, November, 2016



	Yr. Built	Yr. renov. / replaced	Description	Condition	Comments
rooftop units on dunnage	-	ca 2001	The building's HVAC system consists of gas-fired rooftop units.	Poor	Installed as part of the 2001 renovation, the equipment has been damaged from hail storms, and the units' roof-mounting contributes to ongoing roof leaks in the Children's Area. Access to the rooftop equipment is only made by ladder via roof hatch, making maintenance unnecessarily difficult. In severe weather, the existing condition is hazardous. Strongly recommend an internal ships ladder (or better, a stair) be planned for any upcoming renovations. Recommend that a pre-fab HVAC penthouse be investigated (with direct interior access) when planning the replacement, to extend life of the equipment, and provide better weather protection for the occupied space (Children's) below. Noise transmitted from the rooftop units is another important consideration in any renovation project.
roof structure	1980	-	The original building was in the form of a four-sided sloping pavilion, with the 40'x60' high bay central space topped by skylights. Glu-lam columns support glu-lam roof beams, and structural T&G wood deck, creating a well-proportioned interior 'room' primarily housing the Adult Area. The wood columns are on a 20' x 20' grid in this area. The size of the wood members qualify them as heavy timber construction, essentially providing a 1-hour fire rated structure.	Adequate	
floor structure			Conc slab on grade	Adequate	
<b>Building Interiors</b>					
CMU walls	1980	ca 2001	In the public areas of the original building, 4" face brick was added; given that the brick color is very dark, these contribute to under-lit space currently used for some seating. Where CMU is exposed along the northwest wall, it has been painted. 2001 addition appears to be brick and CMU cavity walls, with the CMU painted on the interior face.	Adequate	Deferred interior painting of CMU to 2020.
drywall	1980	ca 2001		Adequate	Deferred interior painting of drywall to 2020.
ceiling finishes	1980	ca 2001	Dropped SAT ceilings exist in the original bays surrounding the central high bay space, creating an oddly proportioned disparity between them. The existing wood deck and beams in these areas unfortunately remain hidden from view. The created interstitial space was used to run ductwork and recessed 2x4 fluorescent lighting. The SAT ceilings and lighting further visually separate them, and making the high bay space seem misproportioned, even though the exposed wood ceiling coffers remain handsome.	Poor	Ceiling tile needs replacement; possibly ceiling grid as well.

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	Yr. Built	Yr. renov. / replaced	Description	Condition	Comments
carpet	1980		Broadloom in several different patterns/colors. Existing carpeting is drab. Changing to more appealing patterned carpet tile would help energize the interior.	Poor	Replacement overdue by Co. records.
vinyl tile		ca 2001	In vestibule & break area	Unknown	
toilet rooms		ca 2001	Ceramic tile	Adequate	
Pub Mtg Rm	-	-	No public meeting room	Poor	
<b>Bldg Mechanical</b>					
HVAC		2001	The building's HVAC system consists of gas-fired rooftop units. Installed over Children's Area as part of the 2001 renovation.	Poor	County has deferred replacement to 2018. The equipment was damaged by hail, and needs replacement. The units' roof-mounting contributes to ongoing roof leaks in the Children's Area. Rooftop equipment is only accessed by ladder via roof hatch, making maintenance unnecessarily difficult. In severe weather, ladder access can be hazardous. Strongly recommend an internal ships ladder (or better, a stair) be planned for any upcoming renovations. When planning the replacement system, recommend that a pre-fab HVAC penthouse be investigated (with direct interior access) to extend life of the equipment, and provide better weather protection for the occupied space (Children's) below. Noise transmitted from the rooftop units is another important consideration in any renovation project.
boiler	-	-	See HVAC above.	-	
air handler	-	-	See HVAC above.	-	
cooling tower	-	-	See HVAC above.	-	
chiller	-	-	See HVAC above.	-	
compressor	-	-	See HVAC above.	-	
split DX system	-	-	See HVAC above.	-	
EMS (energy management system)				-	
HVAC piping	-	-	In dropped ceiling spaces; not visible.	-	
<b>Bldg Plumbing</b>					
sanitary	-	-	Unknown.	Unknown	
rain leaders	-	-	Gutters and downspouts on pavilions.	-	
storm system	-	-	Unknown.	Unknown	
<b>Fire Protection</b>					
sprinklers	-	-	No sprinklers	Poor	Recommend sprinklers be installed throughout bldg.
dry pipe	-	-	Unknown.	Unknown	



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	Yr. Built	Yr. renov. / replaced	Description	Condition	Comments
<b>Electrical</b>					
elect. service	1979		400 amp, 3 phase	Poor	Very limited expansion capability.
switchgear	1979		Westinghouse	Poor	38 years old.
elect. distribution			Unknown.	-	
emerg generator	-	-	No generator	-	
lighting	-	-	In the 1980 structure, lighting is provided by recessed 2x4 and surface-mounted 4x4 fluorescent fixtures. Recessed 2x4 and linear fluorescent pendant fixtures are provided in the 2001 addition.	Poor	The fixtures use T8 lamps, which are energy-inefficient compared to T-2 and LED lamps now available. Lighting generally is poor throughout the facility and should be upgraded. Indirect/direct fixtures for the Adults' high bay would greatly improve the aesthetics, and provide less glare in contrast. Pendant fixtures in the 2001 addition are hung too close to the ceiling, creating hot spots, and poor light distribution. The curved 'vault' ceiling is set too low, and is partly responsible for the poor lighting in Children's. If it were replaced by a flat, higher ceiling area it would aid the lighting in this area. Cove lighting in the 'spine' creates glare, and should be controlled by dimming system to balance the light to the rest of the library.
emerg lighting	-	-	Battery packs	Adequate	
fire alarm	-	-	Unknown.	-	
HVAC piping	-	-	In dropped ceiling spaces; not visible.	-	
<b>IT/Tel/Comm</b>					
IT service	-	-	Fiber WAN	-	
IT LAN	-	-	Unknown.	-	
server room	-	-	IT equipment kept in storage room - no AC	-	
bldg security	-	-	Unknown.	-	
phone system	-	-	Unknown.	-	
<b>Site</b>					
sidewalks	-	-	In good repair.	Adequate	Pedestrian connection to adjacent shop center is minimal.
parking	-	-	No. parking spaces appears to be OK.	Fair	Parking lot needs resurfacing; deferred to 2020.
drop off	-	-	Drop off isn't signed, but is located directly in front of entry portch w/ curb cut for width of porch.	Good	
ADA parking	-	-	ADA parking is signed.	Good	
ADA drop off	-	-	See drop off comment above.	Good	
ADA access?	-	-	ADA access appears to be good.	Good	
stormwater	-	-	No documentation	-	
stormwater detention	-	-	No documentation	-	

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	Yr. Built	Yr. renov. / replaced	Description	Condition	Comments
landscaping	-	-	Minimal	Poor	No shade at front of Library, nor in parking lot.
lighting	-	-		-	
oil tank	-	1999		Poor	Above-grade oil tank located at front of building. (relocated from previous below-grade tank)

Summary Notes

The library is organized generally in a coherent manner, and laid out with traditional circulation desk near the entrance, and the reference desk further back along the 'spine'. The building's entrance is functional but not inviting. Generally, the building suffers from a lack of natural light and views to the exterior. The lack of windows is particularly noticeable in Children's. The aesthetics of the Adult high bay area continues to be the interior's best feature, and should be emphasized in any interior renovation. Removal of the SAT ceilings in the adjacent areas would offer significant opportunity to enliven the interior character. Extending round-oval ducts with integrated linear lights would provide greatly improved lighting, while indirect LED directed at the wood ceiling would celebrate the building's most important interior. Library shelving in Adult is tall, and closely spaced, contributing to poor lighting; some aisles appear to be less than 3 ft. wide, violating building code. Shelving appears to be relatively new and in good condition. Shelving in Children's is too high for visual security of the space.

\* 1980 is date included in revision block on original building plans , presumably revisions made during construction.

Ratings: Unknown, poor, fair, adequate, good, new Anything less than 'adequate' should be considered substandard; 'poor' indicates a short term need to redress the subject.

Charles Co. Public Library Master Plan  
**Potomac Branch Building Survey**  
 3225 Ruth B Swann Dr, Indian Head, MD

Site Visit, March 1, 2017



	Yr. Built	Yr. renov.	Description	Condition	Comments
General	1995 *		Building is free-standing on site adjacent to Ruth B Swann Park.	Good	Site is accessible only from southbound Rt. 4. Recommend that median crossing be introduced for northbound access; site lines and wide median make this possible.
<b>Building Envelope</b>					
exterior walls	1995 *	-	4" face brick, 2" cavity 8" CMU w/ 3-5/8" mtl studs and insul on interior side, drywall finished interior.	Fair	The wall is of durable construction. However, there's no cavity insulation & no air-water barrier. Moisture moves easily through the wall and likely contributes to moisture issues on the interior. 1995 documents give wall R-value of 3.5 and roof R-value of 25. No fire code analysis included w/ 1995 dwgs.
windows	1995 *		Residential (Pella) clad-wood awning windows appear to be original.	Poor	All windows are clerestory height; no direct-view windows in facility. Residential windows of this vintage provide poor R-value and heat gain performance. <b>Residential windows are more prone to breakage from high wind than commercial windows due to 1/8" vs 1/4" glass lites.</b>
storefront	1995 *		Storefront entry & vestibule doors.	Fair	Are these original? Old-style door pulls don't appear to meet ADA on pull side.
curtainwall	-	-	None	Fair	
pitched roof 6:12	1995 *		Shingles on 1/2" roof sheathing.	Poor	Shingles need replacement; substrate appears to subside in several areas, possibly from rot. 1/2" sheathing is substandard; should be min. 3/4" for 24" span. See Summary Comments below.
flat roof (low slope)	1995 *	?	1/4"/ft low-slope roof directly joins to shingle roof w/ flashed mtl joint. Age of flat roof is unknown.	Poor	<b>Min. flashing shown at joint between roofs. Suspect water ponding occurs at the joint. This edge condition is very susceptible to damage in high winds. See Summary Comments below.</b>
skylights	-	-	None	-	
curbed rooftop units	-	-	None	-	
rooftop units on dunnage	-	-	None	-	
roof soffits	1995 *	?	Mtl ventilated soffits of unknown age.	Adequate	
roof structure	1995 *		2x8 manufactured wood trusses, with 1/2" ply sheathing.	-	<b>Structural notes calls for 30 psf snow load &amp; 70 mph design wind speed; current code is 90 mph wind speed. See Summary Comments below.</b>
floor	1995 *		5" slab on grade	-	<b>Underslab foundation drainage trenches. See comment in LAN below. See comments re. high humidity in Summary Notes below.</b>
<b>Building Interiors</b>					
CMU walls	1995 *	-	Interior CMU (at toilet rms & Mtg Rm) are furred & drywall-faced.	Fair	
drywall on studs	1995 *	-	No insulation; walls stop at ceiling.	Poor	Likely sound problems with staff office areas.
ceiling finishes	1995 *	-	2x4 SAT ceilings throughout Adult & Child's. Entry, Circ area and public restrooms are drywall.	Poor	SAT ceilings in several areas appear to be in poor condition.
carpet	1995 *	Unknown	Carpet throughout Adult and Child's areas. Appears to be broadloom.	Fair	Age is unknown, but appears to be in need of replacement. Same drab color throughout library.
vinyl tile	1995 *	?	See comments re humidity.	Poor	Workroom tile shows signs of high moisture in slab. See Summary Comments re. humidity issue.

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 3225 Ruth B Swann Dr, Indian Head, MD

Site Visit, March 1, 2017



toilet rooms	1995 *	-	Men's is not ADA accessible. Woman's has been retrofitted and may meet ADA. Ceramic tile to 6'. Floors are ceramic tile. See Summary Comments below.	Poor	
park toilets	1995 *	-	Are the outdoor toilet rms still in use?	Unknown	Rooms were not accessible; cannot confirm ADA compliance.
Pub Mtg Rm	1995 *	-	See comments.	Adequate	By bldg code, 38'-10" x 24' mtg space seats a max of 133 occupants. A more realistic number of seats would be 50-60. Insufficient table storage. See Summary Comments re. humidity issue.
Public Computer Rm	1995 *	-	Computer Rm was retrofitted to house 4 stations in inadequate space.	Poor	Does not meet ADA clearance standard; does not meet min width for safe egress. Glass was removed to improve room's temperature and ventilation.
Book security system	-	?	County has RFID security for Potomac Branch	Good	PD Brown, Waldorf West & Potomac use TechLogic RFID equip. La Plata will be last to be converted to RFID.
Staff workroom	1995 *	-	Original wood casework w/ overhead cabinets. 3 workstations.	-	
<b>Bldg Mechanical</b>					
HVAC				-	
central boiler	-	-	Heating generated inside AHU's.	-	
Library air handlers	1995 *	-	2 AHU's at 6,000 BTU cover public areas and staff areas.	Poor	Carrier heat pump AHU's w/ exterior condensing units. Located in 2 separate rooms; air return is directly into Children's and Staff workroom. No acoustic separation; fan noise is highly noticeable. Units are 22 years old and inefficient. Filter section draws air directly from floor level, i.e. bringing in dust.
Mtg Rm air handler	1995 *	2015	1 AHU at 3,000 BTU serves Mtg Rm.	Fair	This unit was recently replaced. Humidity control was not included for this system, and humidity in Mtg. Rm continues to a severe problem with condensation on desk surfaces during summer cooling. See comments re humidity in Physical Conditions below.
cooling tower	-	-	None	-	
HVAC piping	1995 *	-	No comments.	-	
chiller	-	-	None	-	
compressor	1995 *	?	Exterior compressor units.	Poor	Compressors for AHU 2 & 3 should be replaced due to age.
split DX system	-	-	None	-	
EMS (energy management system)	1995 *	?	Siemen's control box located in Mech Rm; system appears to be dated	Adequate	Recommend upgrade w/ replacement of AHU 2 & 3.
<b>Bldg Plumbing</b>					
sanitary	1995 *	?	Sanitary sewer is shown on 1995 dwgs connecting to sewer running to Rt 201.	Poor	Several sewer blockages in line leaving the building (in Staff workroom) has been reported.
gutters & rain leaders	1995 *	?	May have been replaced since 1995.	Fair	
storm system	1995 *	?	Stormwater leaving building is not indicated on 1995 dwgs.	Adequate	
domestic water	1995 *	?	Well system - equip located in Mechanical Rm..	Fair	Tested daily according to staff. Are there issues w/ water quality in this part of the County?

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<b>Fire Protection</b>				
sprinklers	-	-	No sprinklers installed.	Poor
dry pipe	-	-		-
<b>Electrical</b>				
elect. service	1995 *	-	1995 dwgs indicate 1,200A service capacity at C/T cabinet, but does not indicate site transformer capacity; could be less.	Fair
switchgear	1995 *	-	Switchboard rated at 1,200A service at 120/208 V.	Fair
elect. distribution	1995 *	-	2 elect panels in Mech. Rm.	Fair
emerg generator	-	-	None.	-
lighting	1995 *	?	2x4 recessed fluor fixtures.	Poor
emerg lighting	1995 *	-	Battery packs indicated on Lighting Plans.	Fair
fire alarm	1995 *	-	Fire alarm appears to be original 1995 equip.	Fair
<b>IT/Tel/Comm</b>				
IT service	?	Unknown	Unknown service.	Unknown
IT LAN	?	Unknown	Currently, IT ports appear to be fed from above and don't use the underslab conduits. See comments.	Unknown
server room		Unknown	No.	Poor
bldg security	Unknown	?	Not shown on 1995 dwgs.	Unknown
phone system	Unknown	?	Incoming phone service in staff lounge/storage rm. Unknown service.	Unknown
<b>Site</b>				
site grading	1995 *	-	Site is flat w/ very flat slope for drainage.	Fair
sidewalks	1995 *	-	Appear to be in good condition.	Good
parking	1995 *	-	Appears to be adequate.	Good
drop off	1995 *	-	Under porte cochere	Good
ADA parking	1995 *	-	ADA parking is signed.	Good
ADA drop off	1995 *	-	See comment above.	Good
ADA access?	1995 *	-	Appears to be good.	Good
stormwater	1995 *	-	1965 dwgs do not show stormwater leaving building & civil dwg doesn't show it either.	Adequate
stormwater detention	1995 *	-	Stormwater detention pond is visible at NW corner of site.	Good
landscaping	1995 *	-	Library site lies adjacent to Ruth B. Swann Park.	Adequate

Recommend sprinklers be installed throughout bldg, including 'park restrooms.'

Original 1995 equipment.

Switchboard, distribution panels & fire alarm located in mech room, with gas source in AHU units. This is a fire hazard.

In SAT and gyp bd ceilings.

4" schedule 40 pipe below floor slab is shown on const. docs, identified as for "computer wire." Is this system still in use? See Summary Comments below.

Server is located in staff workroom with no 24-7 AC.

Exposed patch panel for phone service is located in staff workroom adj to IT server.

Water table appears to be close to grade. See Summary Comments.

Underslab and perimeter drainage is shown on bldg. sections. Rain leaders go into PVC boots. Both suggest underground stormwater piping.

3'x16' oil-grit separator for water quality shown on civil dwg C-4, but not located on C-1 Site Plan. Was this installed?

No mature trees, some base planting. No attempt at making pedestrian connection to the park?. Great potential given the size and location of the site.

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lighting 1995 \* - Pole lighting in parking lots.

Poor One pole has auxiliary lights aimed at adjacent residences.

Summary Notes

**Physical Condition** A structural evaluation of roof should be done to determine whether structural reinforcement is required. 1/2" ply sheathing on 2' centers likely exceeds the capacity of the sheathing under current design wind loads (90 mph). Truss roofs of this type can be vulnerable to failure due to loss of diaphragm strength of the sheathing. Given the Library's location in a tornado-prone area, this facility may not be a safe place of refuge in high wind conditions. Where the sloped roof meets the low slope roof (at the center of the roof), the change-in-slope joint is particularly vulnerable in high wind conditions. Recommend that this detail be replaced w/ a real construction joint and internal roof drains or scuppers be added for the low slope roof. Recommend roof hatch w/ 30 degree ship's ladder be installed for regular roof inspections; current condition risks injuries to maintenance staff.

Toilet Rms - Airport-style entryway to Men's is too narrow for ADA. The room does not appear to have 5' dia. turning radius. Urinal stall is less than 3' in width. Women's has only 2 stalls, verses 2 stalls plus urinal for Men. There is no Family Toilet Rm. If 'outdoor' toilet rms. are no longer in use, the space could be repurposed for library use.

Staff complain of high humidity, particularly in Meeting Room. Mtg Rm humidifier cannot maintain humidity control. VCT adhesive in staff workroom appears to be pushing up between the joints, suggesting water presence above the floor slab. **Recommend moisture analysis of the floor slab be done in test patches prior to flooring being replaced.** Original 1965 documents call for under-slab drainage channels & perimeter foundation drains, suggesting the site has always been wet. It may be possible to inspection the 4" under-slab pipes at multiple cleanouts to investigate below-slab water level, along with core samples where required. If a site sump has not been installed, recommend investigation to see if sump pump would help with under-slab condition.

Main two heating/cooling units appear to be the original equipment (52 years old), with suspect air filtration, and do not meet current ASHRAE standards for air quality and energy efficiency.

**Library Layout** Library is coherently laid out, but suffers from restricted sight lines from Circ Desk into Adult and Children's. The current areas occupied by the Circ and Reference desks could be better used if these oversized elements were consolidated into a single combination desk, augmented by standing reference stations in Adult's and Children's. Back of house workrooms appear to be inefficiently laid out, and could be consolidated to recapture study space.

Missing program spaces include quiet study, group study & tutor rooms. Also missing is an identifiable Young Adult space, and Children's Program Rm. Recommend that a programming / pre-planning study be performed to: determine quantifiable space needs and options for renovation of this facility. As part of the renovation evaluation, cost to renovate or replace the existing roof should be included.

Recladding the exterior to improve R-value and air-water barriers to create a more energy efficient envelope should be studied. Rain-screen technology using thin-panel stone or precast, covering air/water barriers & rigid insulation are available. Commercial-grade low-E windows should replace the existing 'clerestory' windows, and in select areas the existing could be replaced with full-view windows to open up the interior and make the facility more inviting from the parking area. Evaluate repurposing existing porte cochere as an interior casual reading space, or quiet reading room as part of a redesigned entrance area might help open up the library from the parking lot.

\* 1995 date of Bid Set

**Ratings:** Unknown, poor, fair, adequate, good, new Anything less than 'adequate' should be considered substandard; 'poor' indicates a short term need to redress the subject.



Charles Co. Public Library Master Plan  
Waldorf West Branch Building Survey  
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	Yr. Built	Yr. renov.	Description	Condition	Comments
General	2010 *		Two-story, 30,169 SF building	Good	On separate building pad.
<b>Building Envelope</b>					
exterior walls	2010 *	-	Brick masonry on 6" stud back up, with 1-1/2" insulated cavity. EIFS parapet above brick.	Fair	6" mtl studs (cold-formed not called out) appear to be less than what is recommended for unsupported walls of this height. Masonry control joint at north entry appears to be thinly-spread caulk w/ backer rod exposed in several areas; this is a water leak.
windows	2010 *	-	Alum storefront windows.	Adequate	3/4" insulated glass noted on dwgs.
storefront	2010 *	-	Alum storefront entries and vestibules.	Adequate	Tempered glass noted on dwgs.
curtainwall	-	-	Does not appear to have curtainwall.	-	
pitched roof 5:12	2010 *	-	Standing seam metal roof. 5:12 pitch.	Adequate	Plastic snow guards have broken off and need to be replaced throughout. Lack of functioning snow guards risks damage to the roof gutters with heavy ice/snow.
Curved mtl. Roof	2010 *	-	curved roof over high entry area.	Adequate	Curved roof is also steeply sloped and cannot be easily installed w/ snow guards. Staining on an adjacent masonry wall is one outcome.
flat roof	2010 *	-	Single-ply membrane roof	Good	Sloped at 1/2"/ft.
skylights	2010 *	-	22' x 24' pitched skylight	Adequate	No light control - glare and heat gain are both results.
curbed rooftop units	2010 *	-	3 RTU's mounted on curbs, with exposed ductwork running to mech shaft.	Fair	Exposed ductwork loses heat/cooling. RTU life expectancy is less than interior HVAC equipment would be.
rooftop units on dunnage	-	-		-	
roof structure	2010 *	-	Structural dwgs not available.	Unknown	
floor structure	2010 *	-	Structural dwgs not available.	Fair	Code sheet indicates only 'stack' areas as having 150# live load capacity; this limits ability to expand stacks from their current areas. Recommend that this be confirmed w/ structural engineer of record.
<b>Building Interiors</b>					
CMU walls	2010 *	-	Interior CMU used at fire stairs and elevator shaft.	Good	CMU is finished by painted drywall on furring.
drywall	2010 *	-	Most of interior walls are painted drywall.	Good	
hollow metal openings	2010 *	-	Interior hollow metal & glass assemblies in public and staff spaces..	Good	
ceiling finishes			2x2 and 2x4 SAT ceilings in majority of public and staff spaces.	Good	
carpet	2010 *	-	Carpet is provided in majority of public and staff spaces, including Mtg Rms.	Good	
ceramic tile	2010 *	-	Entry lobby has ceramic tile floor. 1st Fl public restrooms have ceramic tile floors and walls up to 5'-6".	Adequate	Ceramic tile at Entry Lobby contributes to noise spread to both floors. See Library Layout comment below.
vinyl tile	2010 *	-	Vinyl tile in storage rms, service corridor & fire stairs.	Good	
entry lobby	2010 *	-	Entry Lobby is two-story atrium space	Adequate	Atrium space needs acoustic panels to deaden loud sounds coming from Children's

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toilet rooms	2010 *	-	Restrooms appear to meet ADA clearance requirements. Family restroom provided in Child's.	Adequate	Can't see entrance to restrooms from circ desk; this is a concern for keeping an eye on people entering the restrooms. Restrooms are poorly balanced between floors; 2nd Fl has a single uni-sex restroom for public. See Physical Layout comments below.
Pub Mtg Rm	2010 *	-	3-section meeting room	Adequate	Lack of table storage inhibits setting up rooms for other functions.
Elevator	2010 *	-	Two 2100 lb. elevators	-	Note on dwgs says "ADA Compliant." Cab does not appear to be large enough to receive a stretcher.
Circ Desk	2010 *	-	Custom S-shape desk.	Poor	Shape of desk and location being too near to staff workroom entrance make its function problematical. Recommend wiring management system (e.g. DaisyLink by ECA ) be implemented under desk to clean up wiring. See Library Layout comments below.
Child's Program Rm	2010 *	-	Seats 20 kids max.	Poor	Program Rm capacity is less than many programs attract. Elect panels installed in program storage room eliminate 50% of the room's storage capacity.
Children's Room	2010 *	-	Shelving layout runs on diagonal to the bldg structure.	Fair	Diagonal shelving layout creates lost areas not easily programmed. High shelving blocks staff views. Lower ht shelving (36-44") would be better for visual supervision of this area.
Staff Workroom	2010 *	-	Workroom is laid out w/ systems furniture.	Fair	Lack of storage is the largest problem. Space beside workstations for book trucks makes the circulation space misleadingly generous. Staff complains of unbalanced heating & cooling in indiv offices and open area.
Staff Restroom	2010 *	-	Single uni-sex restroom.	-	With 30 person staff, a second restroom would be useful. IBC Plumbing Code calls for min. of 1 water closet/25 persons.
<b>Bldg Mechanical</b>					
<b>HVAC</b>					
single oil boiler	-	-	Not required; heat generated at RTU's.	Adequate	
air handler	2010 *	-	Three RTU units.	Adequate	
Variable Air Volume units	2010 *	-	VAV's shown in clngs throughout the bldg.	Good	
cooling tower	-	-	Not required; cooling generated at RTU's.	Adequate	
ductwork	2010 *	-	Ductwork runs exposed from RTU's to mech vent above the roof. Plans call for deduct bid alternate to remove under slab ductwork at 1st Fl; no indication that the bid alternate was accepted.	Fair	Exterior ductwork is an inefficient means of heating and cooling.
chiller	-	-		-	
compressor	2010 *	-	RTU's appear to have compressor sections included in the units	Adequate	See comments re. curbed rooftop units above.
split DX system	2010 *	-	Server Rm cooling unit.	Good	
EMS (energy management system)	2010 *	-	Manufacturer of EMS system not identified.	Unknown	

**Bldg Plumbing**

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sanitary	2010 *	-	Size of interior sanitary lines not given?	Unknown	4" sanitary extends north from bldg.
rain leaders	2010 *	-	Gutters and leaders located on lower roof.	Fair	Barrel-vault roof cannot accept gutters; water sheds onto lower roofs and washes onto adjacent masonry.
storm system	2010 *	-	Stormwater lines join 10" main sewer.	-	
<b>Fire Protection</b>					
sprinklers	2010 *	-	Code Analysis (Sht A.01) calls for building to be fully sprinklered.	Good	
dry pipe	?	-	Was a dry pipe system installed at exterior Receiving Rm 125?	Unknown	Required by Code.
<b>Electrical</b>					
elect. service	2010 *	-	2,000A switchgear called for; actual incoming service not indicated.	Good	12-way ductbank detail called for by Sht E.02 and 1st Fl E2.1 Power Plan.
switchgear	2010 *	-	See above.	Good	
elect. distribution	2010 *	-	2 panels in Elect Rm, separate service to ea RTU.	Good	
emerg generator	2010 *	-	Emergency generator is called for by Elect Site Plan E.01 and E4.1 Elect Rm Plan. Separate ATS panel.	Good	60 KW diesel generator called for. Emerg lighting on batteries?
lighting	2010 *	-	In public areas, pendant fluor fixtures provided, with feature pendant and sconce fixtures in entry/elev lobby areas. 2x2 recessed fluor fixtures Mtg Rms and staff areas & 2x4 recessed fluor fixtures in public restrooms.	Adequate	Lutron lighting control system is referenced on Sht E1.1 and E2.1, Lighting Plans. Mtg Rm is on system; no further extent is shown?
emerg lighting	2010 *	-	Emerg battery packs called for by Sht E1.1 and E2.1, Lighting Plans.	Adequate	See comment re emerg generator above.
fire alarm	2010 *	-	Fire alarm riser diagram shown on E4.1. Unknown manufacturer.	Good	
<b>IT/Tel/Comm</b>					
IT service	2010 *	-	Comcast service; capacity not indicated.	Unknown	
IT LAN	2010 *	-	Networking equip and wiring not identified.	Unknown	Under separate contract?
server room	2010 *	-	Separate server room & AC provided.	Good	
bldg security	2010 *	-	Building cameras are located throughout Library.	Adequate	Camera at 1st Fl. Entry area is not able to see all parts of this area.
phone system	2010 *	-	Service provided by Comcast?	Unknown	
<b>Site</b>					
sidewalks	2010 *	-	No civil dwgs available.	Fair	North sidewalk does not continue beyond north entrance; vehicle service window interrupts pedestrian access on this side of bldg.
parking	2010 *	-	No civil dwgs available. Parking appears to be adequate.	Unknown	
drop off	2010 *	-	No drop off provided at north or south entrances.	Poor	
ADA parking	2010 *	-	Signed spaces observed at east side of building.	Good	
ADA drop off	2010 *	-	See above.	Poor	Technically equal access, however lack of a drop off to a public library is a deficient feature.
ADA access?	2010 *	-	Sidewalk from parking spaces accesses both north and south entrances.	Good	

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stormwater	-	-	No civil dwgs available.	Unknown	
stormwater detention	-	-	No civil dwgs available.	Unknown	E0.1 Elect Site Plan shows what appears to be a detention pond at SW corner of site.
landscaping	-	-	No civil dwgs available.	Unknown	Observed landscaping is minimal. See comment re Child's outdoor reading area in Library Layout below.
lighting	-	-	Parking lot lighting is fed from Library.	Good	Wall packs mounted on exterior for security lighting.

**Summary Notes**

Built after 2010, the Library is sited across a stormwater pond to St. Charles Town Center (2-story mall, built in 1988) on a separate building pad. The mall gets mixed reviews for security and popularity on Yelp. The Library site is, as its name suggests, not located in the core of Waldorf, but in a newer suburban development. The only commercial buildings within 5-minute walking distance of the library are a hotel and restaurant, each with its separate parking lot. The Library is visible from the community, but suffers from being remote from pedestrian traffic. The Center for Disease Control, Dr. Richard Jackson, and others have identified this type of suburban development, in the way that it encourages driving and discourages pedestrian activities, as a significant cause of obesity, diabetes, heart and other health issues.

**Physical Conditions**

Being recently constructed, building systems are generally good. However rooftop HVAC equipment and exposed ductwork will degrade at a more rapid rate than interior units would. Exposed ductwork running across the roof is less efficient than ductwork inside the building envelope would be. Roof access is via vertical ladder; ship's ladder from Stair #2 would be safer access for maintenance staff.

**Library Layout**

The first floor houses Children's, multi-purpose room (sub-dividable into 3) and Staff offices. Children's Program Rm. can hold no more than 20 max, and remains closed when not being used for programs. The second floor houses YA & Adult. A large atrium space w/ staircase joins the floors visually. Adults have group study, quiet study & tutor rooms; no such space is dedicated for YA. Layout of this floor offers several spaces adjacent to YA which could be easily captured for group study, and would reduce noise from their activities. There is only one public uni-sex restroom on the second floor, arguably with more patrons than the first floor.

Noise is also generated from the tall entry lobby 'spine' and hard surfaces. This could be ameliorated by acoustic wall/ceiling panels in that space.

Circulation desk is too far from the book security gates, and the AV alcove is too deep and cannot be well monitored, resulting in stolen media. S-shape desk is jammed at the door to the staff workroom, making for a congested operation at peak times. Recommend the desk be relocated one bay (+/- 20') closer to the security gates (to in front of the AV alcove). The present AV space could be repurposed for circ desk functions, and relocated to portable display shelving. By flipping these two elements, media thievery might be reduced.

A paved outdoor reading area, accessed from Children's, remains unused due to a lack of physical separation from the parking lot, and a lack of shading landscaping. An attractive, five-foot fence set immediately behind the low edge wall would take care of the one problem, and trees and/or planters would help with the other.

\* July 2010 - Date of Construction Docs

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