













### NEEDS SUMMARY



# WHITNALL SCHOOL DISTRICT

Greenfield, Wisconsin

Monday | August 28, 2017



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#### **Whitnall High School**

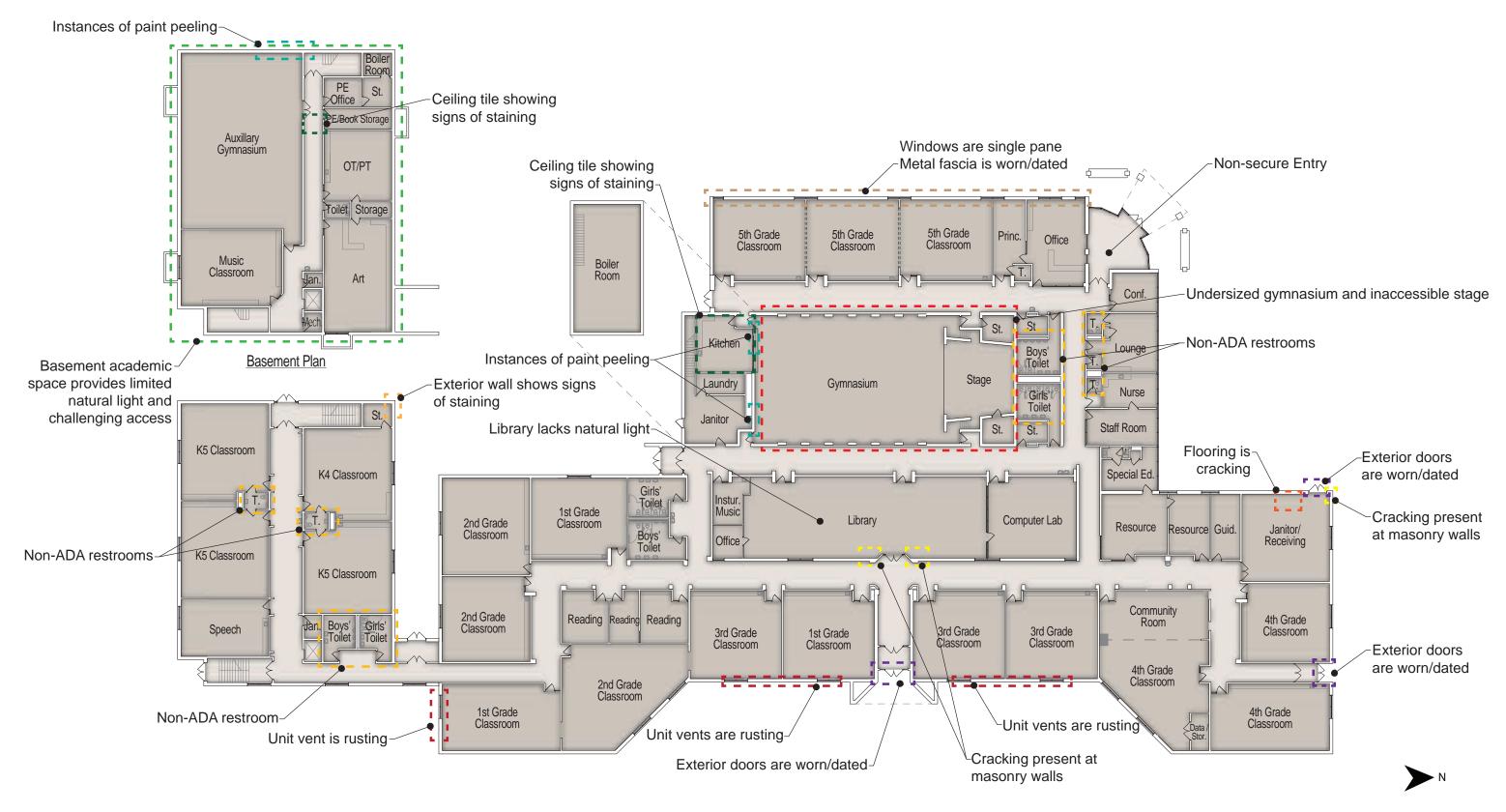
- a. Needs Assessment
- b. ADA Needs Assessment



#### EDGERTON ELEMENTARY SCHOOL: NEEDS ASSESSMENT

Area of Need	Elementary Schools
	Replace the Lochinvar boiler and pump
	Replace aging unit ventilators, constant volume multi-zone hvac unit and air cooled chiller
	Remove existing door transfer grill system and modify system to meet code compliance
	Replace electrical service panelboards including surge protection devices
	5. Replace the generator and update / integrate the emergency egress lighting
	Replace all existing electrical branch panel boards throughout facility
	7. Install additional electrical receptacles recommended throughout
	8. LED light fixture replacement throughout recommended
	9. Install additional exterior lighting for added visibility and code compliant emergency egress lighting
Infrastructure &	10. Replace existing fire alarm system to achieve required code compliance
Building	11. Extend existing data distribution and add additional data racks as required
Systems	12. Replace existing master clock / bell scheduler
	13. Extend security cameras, keyless entry system and intrusion alarm
	14. Replacement of existing grease interceptor in kitchen
	15. Replace hot water circulating pump and water heater, installation of water softening system recommended
	14. Replace plumbing fixtures with water conserving and ADA compliant fixtures
	15. Patch / repair cracked interior and exterior masonry
	16. Patch / replace damaged interior flooring and ceiling surfaces
	17. ADA code compliance challenges at existing interior doors, restrooms and stage accessibility
	18. Replace exterior hollow metal doors and frames
	19. Main secure building entry lobby acts as large airlock vestibule, inefficient HVAC control and human comfort
Safety &	Recommended HVAC code compliance recommendations (also see Infrastructure / Building Systems)
Security	2. Recommended electrical updates, security camera extension and fire alarm replacement (also see Infrastructure / Building Systems)
	Increase transparency from traditional double-loaded corridors into learning environments
	2. Lack sufficient small group instructional and general resource areas to support PLeX delivery
Educational Space	3. Basement academic space provides limited natural light and challenging access
оразо	4. Undersized gymnasium and underutilized (inaccessible) stage
	5. Due to redundant circulation and high density, the Library location provides no natural light to key educational space
Site	Partial asphalt patching / repair recommended
Other	Building circulation is inefficient and wayfinding challenging





#### FIRST FLOOR PLAN NEEDS ASSESSMENT





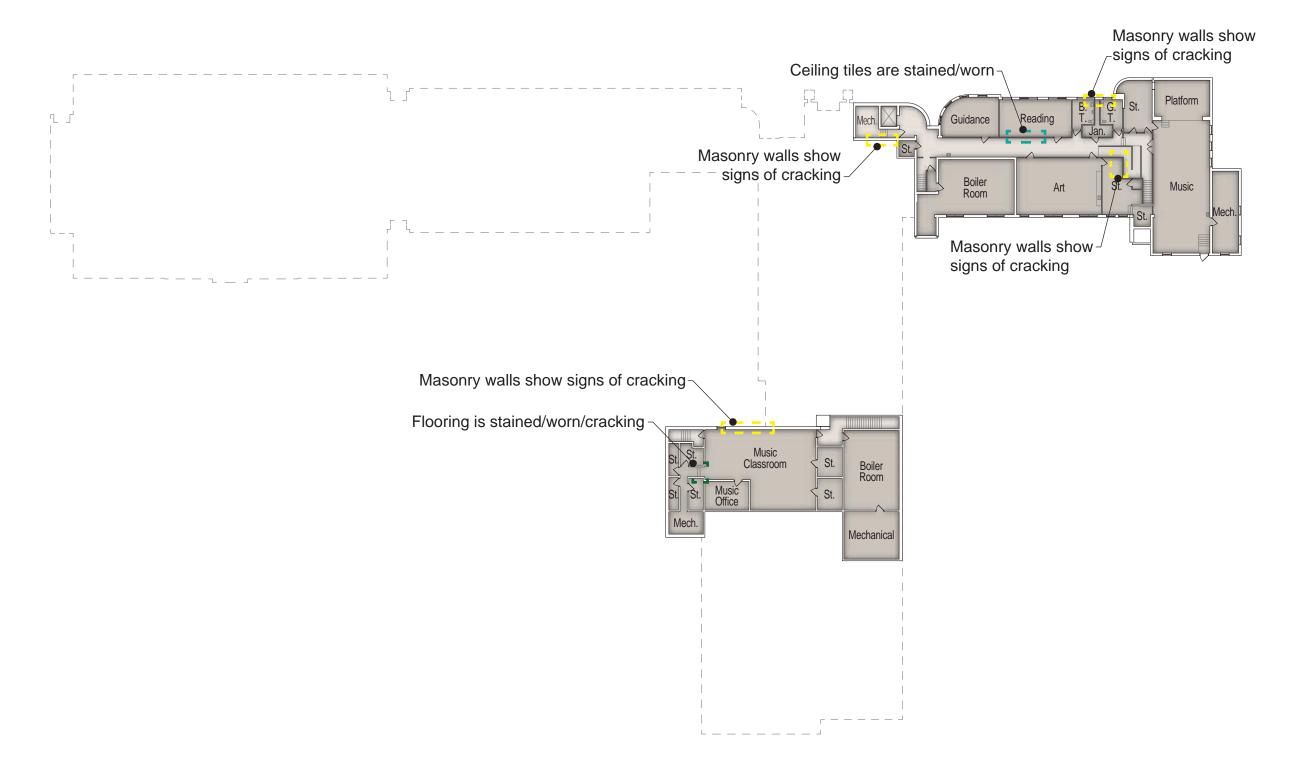
#### HALES CORNERS ELEMENTARY SCHOOL: NEEDS ASSESSMENT

Area of Need	Elementary Schools
	1. Replace existing windows
	2. Replace aging steam boilers, consider switch to hot water heating system
	3. Replace existing hot water heat exchanger and hot water pumps
	4. Replace existing air handling unit serving the Gymnasium / Stage needed
	5. Replace Office-area fan coil unit
	6. Replace exhaust system with increased volume system
	7. Install volume dampers in 1993 return duct system
	8. Replace pneumatic controls system with digital controls system
	9. Replace the 120/240-volt electical service
	10. Replace the generator and updated / integrated emergency egress lighting
	11. Replace all existing electrical branch panel boards throughout building
	12. Install additional electrical receptacles throughout
	13. LED light fixture replacement throughout recommended
l	14. Install additional exterior lighting for added visibility and code compliant emergency egress lighting
Infrastructure & Building	15. Replace existing fire alarm system to achieve required code compliance
Systems	16. Extend existing data distribution and add additional data racks as required
	17. Replace existing master clock / bell scheduler
	18. Extend security cameras, keyless entry system and intrusion alarm recommended
	19. Replace water distribution piping and fittings
	20. Water service to the building is at capacity, any additional fixtures will required addition service to be installed
	21. Replace cast iron sanitary and storm sewer systems
	22. Replace existing grease interceptor cover in kitchen
	23. Replace Art room sinks / traps
	24. Replace existing hot water heaters
	25. Replace plumbing fixtures with water conserving and ADA compliant fixtures
	26. Patch / repair cracked interior and exterior masonry
	27. Patch / replace damaged interior flooring and ceiling surfaces
	28. ADA code compliance challenges at existing interior doors, restrooms, stage access and multiple user occupied floor levels
	29. Replace exterior hollow metal doors and frames
	30. Repair entry canopy roof edge
	So. repair starty sampy root edge
	Site circulation challenges pose safety concern on-site (also see Site)
Safoty 8.	2. Lack permanent staffed secure entry sequence at main entry
Safety & Security	3. Recommended HVAC code compliance recommendations (also see Infrastructure / Building Systems)
	4. Recommended electrical updates, security camera extension and fire alarm replacement (also see Infrastructure / Building Systems)

#### HALES CORNERS ELEMENTARY SCHOOL: NEEDS ASSESSMENT

Educational Space	Increase transparency from traditional double-loaded corridors into learning environments     Lack sufficient small group instructional and general resource areas to support PLeX delivery     Undersized gymnasium and underutilized (inaccessible) stage
Site	<ol> <li>Music and Art classrooms' size and proportion lack adequate flexibility and storage needs</li> <li>Significant drop-off and pick-up challenges throughout site</li> <li>Partial asphalt patching / repair recommended</li> <li>No on-site visitor parking near main entry available, reliance on W. Godsell Ave.</li> </ol>
Other	Building has at least (7) different finish floor elevations with multiple locations lacking ADA accessible code compliance     Underutilized kitchen / office / locker rooms within the 1963 building portion     Three separate building wings with double-loaded corridors and multiple levels provides an inefficient and congested building circulation

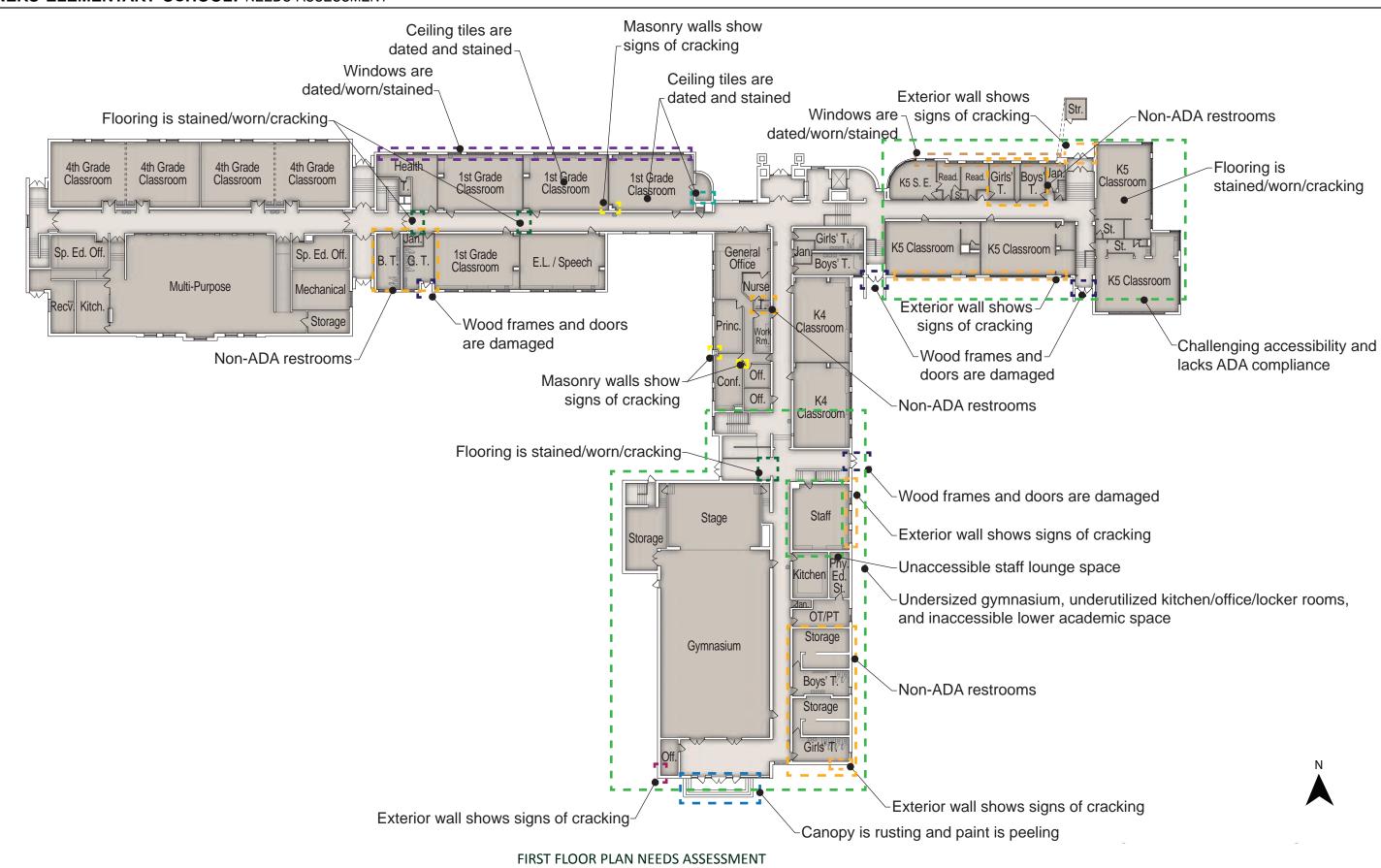














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SECOND FLOOR PLAN NEEDS ASSESSMENT

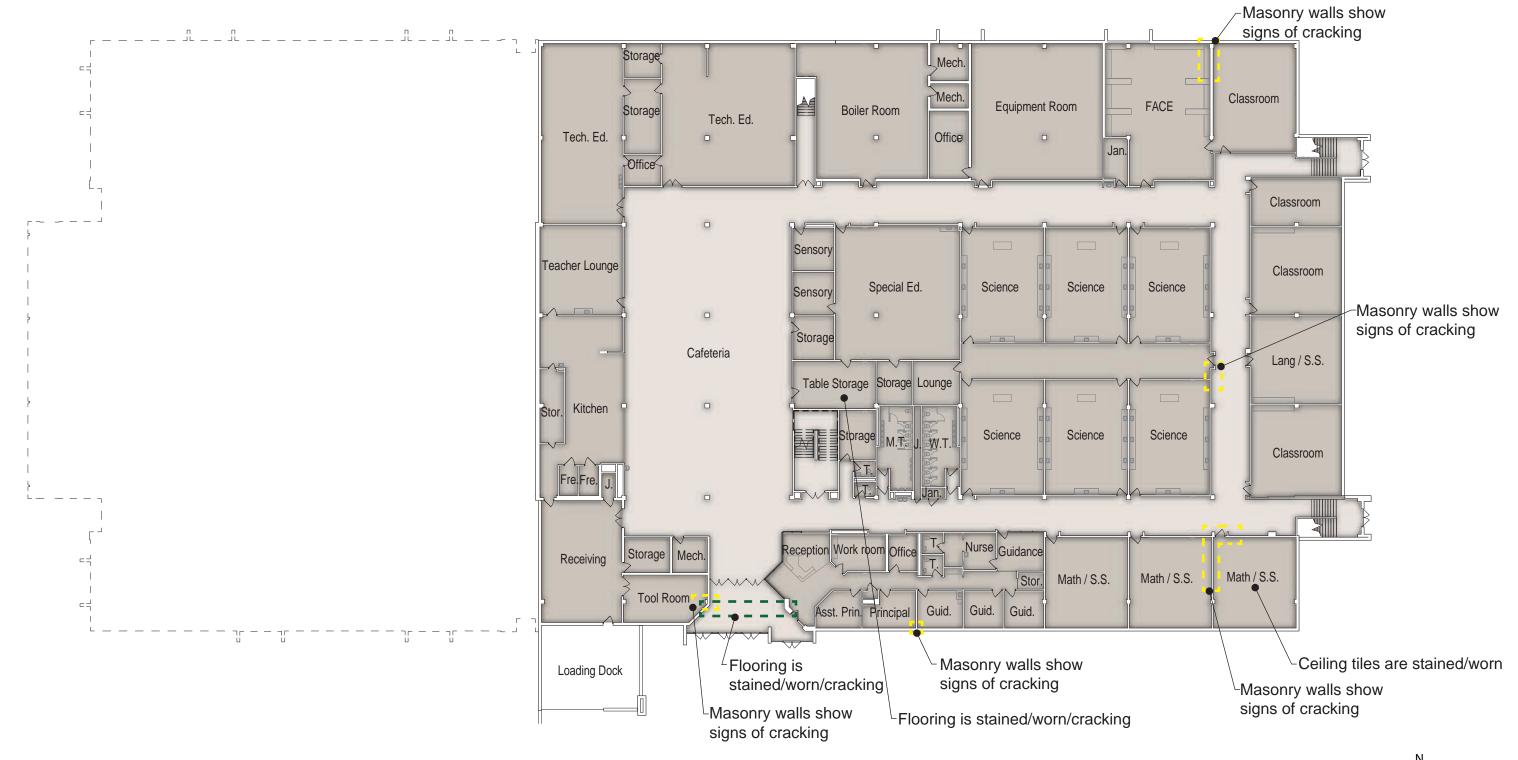


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#### WHITNALL MIDDLE SCHOOL: NEEDS ASSESSMENT

Area of Need	Elementary Schools
	Replace leaking base-mounted heating system pumps
	2. Replace aging constant volume air handling unity serving the East Gym
	3. Replace door transfer grille relief system with code approved system
	4. Install digital HVAC controls system throughout building
	5. Replace the electrical service switchboard, including surge protection device
	6. Replace all existing transformers, panelboards and switchboards throughout the facility
	7. Install additional electrical recepticals as needed to support operational and educational needs
	8. LED light fixture replacement throughout recommended
Infrastructure & Building	9. Install additional exterior (LED) lighting for added visibility and code compliant emergency egress lighting
Systems	10. Replace existing fire alarm system to achieve required code compliance
	11. Extend existing data distribution and add additional data racks as required
	12. Install new grease interceptor in kitchen for dishwasher to achieve code compliance
	13. Replacement of hot water systems with inclusion of water softening system
	14. Replace plumbing fixtures with water conserving and ADA compliant fixtures
	15. Patch / repair cracked interior and exterior masonry
	16. Patch / replace damaged interior flooring and ceiling surfaces
	17. ADA code compliance challenges at existing interior doors and restrooms
	18. Replace exterior hollow metal doors and frames
	Vehicle congestion and speed pose safety concern on 116th Street (also see Site)
Safety &	2. Recommended HVAC code compliance recommendations (also see Infrastructure / Building Systems)
Security	3. Recommended electrical updates, security camera extension and fire alarm replacement (also see Infrastructure / Building Systems)
	Increase transparency from traditional double-loaded corridors into learning environments
Educational Space	Create student-centered personalized learning spaces throughout
	3. Improve STEM / STEAM educational spaces to support evolving curricular development
Site	Vehicle congestion and speed pose safety concern on 116th Street (also see Safety & Security)
Other	



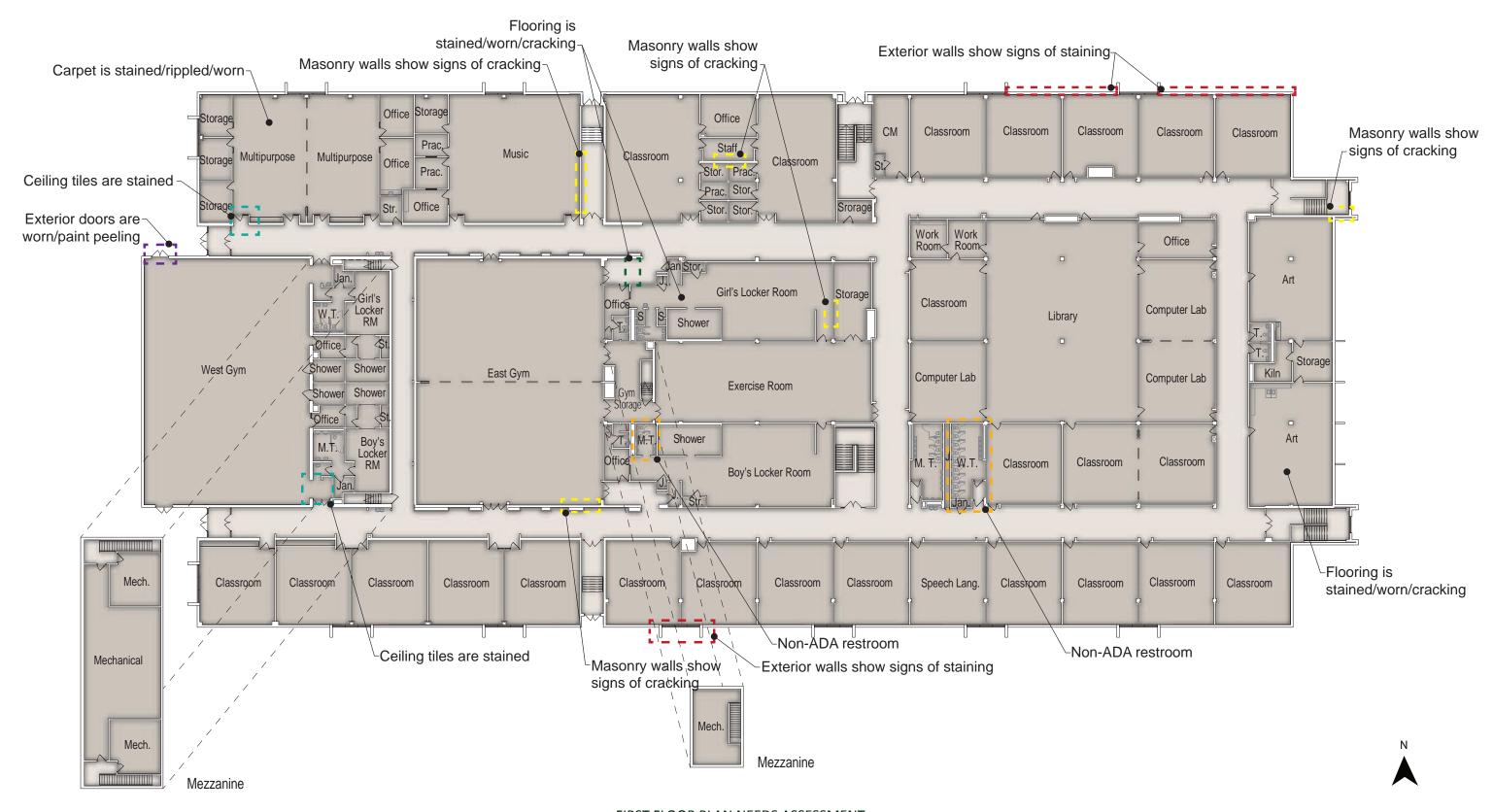
















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Area of Need	Elementary Schools
Infrastructure & Building Systems	1. Repair exterior building façade and site drainage to eliminate water infultration from internal courtyard to Cafeteria 2. Replace hot water boiler plant and associated pumping system 3. Replace unit ventilators 4. Replace fan coil units 5. Replace induction system 6. Replace air handlers original to the building (locker rooms, dance, classroom 280, south gym, band/music, etc.) 7. Replace HVAC system serving the Kitchen 8. Replace the pool ventilation system 9. Addition of air condition to the North Gym and Weight Room, including humidifaction controls 10. Install digital HVAC controls system throughout building 11. Replace switchboard 12. Install additional ventilation at sub-station rooms to extend transformer life 13. Replace existing panelboards original to 1959, 1966 and 1999 building sections 14. Install additional electrical recepticals as needed throughout 15. Consider LED lighting replacements 16. Install additional exterior lighting for added visibility and code compliant emergency egress lighting 17. Replace existing fire alarm system to achieve required code compliance 18. Extend existing data distribution and add additional data racks as required 19. Replace existing master clock / bell scheduler 20. Extend security cameras, keyless entry system and intrusion alarm recommended 21. Install new grease interceptor for kitchen dishwasher
Safety & Security	<ol> <li>Replace plumbing fixtures with water conserving and ADA compliant fixtures</li> <li>Vehicle congestion and speed pose safety concern on 116th Street (also see Site)</li> <li>Recommended HVAC code compliance recommendations (also see Infrastructure / Building Systems)</li> <li>Recommended electrical updates, security camera extension and fire alarm replacement (also see Infrastructure / Building Systems)</li> <li>Install additional exterior lighting to increase visibility and safety</li> </ol>

#### WHITNALL HIGH SCHOOL: NEEDS ASSESSMENT

Educational Space	1. Increase cafeteria seating capactiy as limited current space creates (3) lunch periods which has negatively impact on class scheduling and educational environments  2. Create adequate special education space  3. Update and enhance technical education and art space, coordinate with emmerging STEM curriculum  4. Review overall educational building organization to maximize educational adjacencies and staff / student movement  5. Repair, reognanize and udpate the music / fine arts department to support adequate accousical control and equipment storage  6. Reinvision library as student success / resournce center to maximize existing space utilization  7. Create student-centered personalized learning spaces throughout
Site	Vehicle congestion and speed pose safety concern on 116th Street (also see Safety & Security)
Other	Create dedicated spectator pool access and improve spectator seating



