

FINAL REPORT

Facility Condition Assessment

321 Grove Street #1

321 Grove St.
St. Paul, MN 55155

September 13, 2013

MN Department of Administration
Real Estate and Construction Services
Facility Condition Assessments – Property Management
Buildings

State of MN, Project Manager:

Gene Peterman
50 Sherburne Ave.
St. Paul, MN 55155



CR-Building Performance Specialists, Incorporated Contact:

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CR-BPS Project No: MNADM0002



September 13, 2013

RE: Final Report – FCA of PMD Buildings
Bldg: 321 Grove St #1

Gene Peterman
MN Department of Administration,
Real Estate and Construction Services
50 Sherburne Ave.
St. Paul, MN 55155

Dear Mr. Peterman,

CR-Building Performance Specialists, Incorporated (CR-BPS) is pleased to present this report summarizing our results of the Facilities Condition Assessment of the 321 Grove St. building located in St. Paul, MN. Following the *MERP FCA Process*, CR-BPS conducted a detailed assessment of this building resulting in the documentation of the current condition the building and its respective systems, identification of accurate cost models as illustrated in the *Building Systems Condition Reference Guide*, and identification of the critical deficiencies needing immediate improvement.

In this report you will find an Executive Summary, Assessment Methodology, FCA MN Filed Form and Staff Interview Form for:

Building: 321 Grove St. #1
321 Grove St., St. Paul, MN 55155

If you have any questions regarding this report or need further detail or explanation, please contact me via email at nshultz@cr-bps.com or via phone at 612-360-3889.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Nancy Schultz", written in a cursive style.

Nancy Schultz, AIA, LEED AP BD+C
Principal and Owner



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Executive Summary

Facility Condition Analysis:
321 Grove St. #1

Prepared for the MN Dept. of Administration

1.0 Executive Summary

The Department of Administration contracted with CR-BPS to perform a building assessment of the 321 Grove St. #1 structure located in St. Paul, MN. The building gross area is approximately 49,498 square feet. Original Construction was completed in 1946 based on Ramsey County records. The type of construction is described in the M01 cost model (Warehouse Building). Major interior renovations upgrades appear to have been completed in 1990. Major structural systems consist of poured concrete, steel and CMU. Major finishes are sealed concrete, carpet and ceramic tile. The structure used to serve as warehouse and office space but is no longer in use and vacant. Mechanical: Mechanical systems consist of central plant boiler, some space exhaust and residential style furnaces for office space. Electrical: Electrical consists of T8 lighting and branch wiring. Several code requirements were present; non compliant kitchenettes or countertops, non compliant access to water closets and non compliant rise and runs for stairs. It is recommended that an Accessibility Assessment be completed in the future. Access to the structure and exterior was provided by Stacy Folske. The primary intent of the project is:

To provide an analysis of deferred maintenance and average age and condition of systems based on the most relevant cost model developed from the *MERP FCA Process*.

1.1 Current Facility Conditions Analysis

The following is a Priority List of Critical Deficiencies for use in capital improvement project planning and budgeting. The following deficiencies are deemed 'critical' because they have a Condition Rating of 1 - Crisis Failure or 2 – Poor (refer to the *MN FCA Process Explanation*) or because certain areas within a system should be addressed to alleviate accumulative effected damage resulting in costly repairs.

It is our recommendation that the following systems have a **Condition Ranking of 1 or 2**, thus are in need of immediate attention:

- A. **B2210 Exterior Windows: Major System:** Glass block windows appear to be original and is in poor condition.

Other Systems: Individual Aluminum Windows (punch). System was installed around 1980 and is in poor condition

Reason for Condition Rating: The seals are broken on approximately 20% of the windows. Some windows are leaking and broken. Age of system (Lifespan: 5 years remaining).



(Picture of deficiency A - B2210 Exterior Windows)

- B. **B2030 Exterior Doors: Major System:** Storefront doors are not original but are in fair condition based on age.

Other Systems: Hollow metal and overhead sectional doors are in poor condition based on age.

Reason for Condition Rating: The overhead sectional doors and hollow metal doors appear to be installed in the 1980s. These doors are in fair to poor condition and are showing signs of rust.



(Picture of deficiency B - B202 Exterior Windows)

- C. **C3010 Interior Walls: Major System:** Standard paint on gypsum and masonry walls. System is in poor condition based on age and damage.

Other Systems: Ceramic tile system is in good condition based on age and damage.

Reason for Condition Rating: Approximately 25% of the paint on CMU walls is seeing water damage, worn or peeling and should be addressed.



(Picture of deficiency C – C3010 Interior Walls)

- D. **D2010 Plumbing Systems and Fixtures: Major System:** Bathroom groups located throughout. Some have been abandoned. Age of fixtures is unknown.

Reason for Condition Rating: The fixtures have exceeded their useful life and should be considered for replacement



(Picture of deficiency D – D2010 Plumbing Systems and Fixtures)

2.0 Assessment Methodology

2.1 Building Survey

The CR-BPS assessment team consisted of an architectural/structural and a mechanical/electrical professional. Prior to the field assessment, assessment information was gathered with respect to problems previously encountered, corrective solutions used and related effectiveness, identification of previous relevant conditions and/or unseen conditions within the buildings, and anticipated future capital projects. In addition to detailed descriptions, each system was assigned a Condition Rating (based on the *MERP FCA Process*) to designate its current condition based on lifespan and/or need of replacement.

The criteria used to determine the rating categories and primary systems are described in the following section.

The scope of this project does not include intrusive or destructive testing such as Infrared Testing, roofing core sampling, soil testing, Asbestos Containing Materials (ACM), or hazardous material testing. Some code items may be noted but do not affect the overall Condition Rating nor should it be treated as an in depth accessibility and life safety code assessment.

2.2 Cost Model for Current Replacement Value (CRV)

The cost model for each structure is chosen based on 23 standard models currently developed by the Dept. of Administration. Several factors are cross checked to choose the most relevant model for each individual structure. An average of major systems will be used to determine the closest cost model.

2.3 Primary Systems

Primary systems used in the database include the following:

- A. Substructure**
 - A10: Foundations
 - A20: Basement
- B. Structure**
 - B10: Superstructure
 - B20: Exterior Enclosures
 - B30: Roofing
- C. Interior**
 - C10: Interior Construction
 - C20: Stairs
 - C30: Interior Finishes
- D. Services**
 - D10: Conveying
 - D20: Plumbing
 - D30: HVAC
 - D40: Fire Protection
 - D50: Electrical
- E. Equipment and Furnishings**
 - E10: Equipment
 - E20: Furnishings
- F. Special Construction**
 - F1020: Integrated Construction
 - F1040: Special Facilities

2.4 Rating Definitions

Each system is provided a Condition Rating based on the condition of the system. An average condition is created based on age and deferred maintenance. It is possible that a system may be fairly new, but due to various circumstances, the system is damaged and deemed 'in failing' condition. If multiple systems are present, the major system is chosen, but the condition of all systems is included in the average.

2.4.1 Rating 5: Excellent

No immediate concerns and system is in excellent condition. Percent of deficiencies is on average 0%-5% of the overall system.

2.4.2 Rating 4: Good

The system is performing as intended and is in good condition. Percent of deficiencies is on average 5%-10% of the overall system

2.4.3 Rating 3: Fair

System is over half way through its useful life and signs of age and damage are starting to be present. Percent of deficiencies is on average 10%-25% of the overall system.

2.4.4 Rating 2: Poor

The system shows obvious evidence of damage and repairs are needed in several locations. Percent of deficiencies is on average 25%-50% of the overall system.

2.4.5 Rating 1: Crisis/Failure

System has failed and no longer serves its purpose. Percent of deficiencies is on average over 50% of the overall system.

3.0 FCA Field Form

General Information	
*! Facility Name	Grove St - 1
*! Project ID	G0231023762
*! Site ID	G02310
*! Building ID	G0231023762
* Age of Building	1946
*! Historical ID	01
*! County ID	63
*! Soft Cost ID	05
* Date Requested	2013-08-05
* Date To Perform	2013-08-13
* Date Assessed	2013-08-13
*! Surveyor	CR-BPS
*! Cost Model ID	M01

Deficiency Range	Condition Rating
Element not present	0-Not Entered
0 to 5%	5-Excellent
5 to 10%	4-Good
10 to 25%	3-Fair
25 to 50%	2-Poor
>50%	1-Unacceptable

Configure Data Transfer

Building Information	
# of Levels	2
Average Building Height FT	14
Perimeter LF	886
Length LF	184
Width LF	260
Footprint SF	46,498
Building Gross SF	49,498

* General Building Notes	
Original Construction was completed in 1946 based on Ramsey County records. The type of construction is described in the M01 cost model (Warehouse Building). Major interior renovations upgrades appear to have been completed in 1990. Major structural systems consist of poured concrete, steel and CMU. Major finishes are sealed concrete, carpet and ceramic tile. The structure used to serve as warehouse and office space but is no longer in use and vacant. Mechanical: Mechanical systems consist of central plant boiler, some space exhaust and residential style furnaces for office space. Electrical: Electrical consists of T8 lighting and branch wiring. Several code requirements were present; non compliant kitchenettes or countertops, non compliant access to water closets and non compliant rise and runs for stairs. It is recommended that an Accessibility Assessment be completed in the future. Access to the structure and exterior was provided by Stacy Folske.	

WBS Uniformat Code	System Description	Changes Required Yes/No	*! Present Yes/No	*! Cost ID	* Quantity or Area Served	Unit of Measure	Condition Rating	Notes
A. Substructure								
A10 Foundations								
A1010	Standard Foundations	No	Yes	M01-A1010-01	46,498	Bldg FP SF	5-Excellent	Major System: Poured concrete Strip and spread footings. System was installed in 1946 and is in excellent condition.
A1030	Slab-on-Grade	No	Yes	M01-A1030-01	46,498	Bldg FP SF	4-Good	Major System: Reinforced slab on grade. System was installed in 1946 and is in good condition. Reason for Condition Rating: 5% of the flooring is showing signs of cracking and should be addressed.
A20 Basement								
A2020	Basement Wall Structures	No	Yes	M01-A2020-02	780	Basement SF	4-Good	Major System: CMU walls. System was installed in 1946 and is in good condition. Reason for Condition Rating: Approximately 5% of the walls have step cracking that should be addressed.
B. Structure and Shell								
B10 Superstructure								
B1010	Elevated Floor Structures	No	Yes	M01-B1010-03	3,000	Elev FI SF	5-Excellent	Major System: CIP columns/beams with cast in place concrete deck - System was installed in 1946 and is in excellent condition.
B1020	Roof Structural System	No	Yes	M01-B1020-01	46,498	Bldg FP SF	5-Excellent	Major System: Steel columns/beams supporting wood and metal decking. System was installed in 1946 and is in excellent condition.
B20 Exterior Enclosure								
B2010	Exterior Walls	No	Yes	M01-B2010-03	49,498	Bldg Gross SF	3-Fair	Major System: Brick wall with CMU backup and punch windows. Metal panels can be found at the front of the structure. System was installed in 1946 and is in fair condition. Reason for Condition Rating: The CMU is cracking in multiple areas and contains water damage. The structural integrity is good but the water infiltration and cracking should be addressed.
B2020	Exterior Windows	No	Yes	M01-B2020-05	49,498	Bldg Gross SF	2-Poor	Major System: Glass block windows appear to be original and is in poor condition. Other Systems: Individual Aluminum Windows (punch). System was installed around 1980 and is in poor condition Reason for Condition Rating: The seals are broken on approximately 20% of the windows. Some windows are leaking and broken. Age of system (Lifespan: 5 years remaining).
B2030	Exterior Doors	No	Yes	M01-B2030-05	49,498	Bldg Gross SF	2-Poor	Major System: Storefront doors are not original but are in fair condition based on age. Other Systems: Hollow metal and overhead sectional doors are in poor condition based on age. Reason for Condition Rating less than 5: The overhead sectional doors and hollow metal doors appear to be installed in the 1980s. These doors are in fair to poor condition and are showing signs of rust.
B30 Roofing								

B3010	Roof Coverings	No	Yes	M01-B3010-01	46,498	Bldg FP SF	3-Fair	<p>Major System: Single ply EPDM. System appears to be installed in the early 2000s and is in fair condition.</p> <p>Major System: Built up roof system with ballasts. System appears to be installed in the 1990s and is in poor condition.</p> <p>Reason for Condition Rating: System is aged and damaged. Minor leaks have been patched but a full replacement is needed. Pooling is evident on the built up system.</p>
C. Interiors								
C10	Interior Construction							
C1010	Interior Partitions	No	Yes	M01-C1010-02	46,498	Finished SF	4-Good	<p>Major System: Gypsum walls over metal studs. System was installed around 2000 and is in good condition.</p> <p>Other Systems: Painted CMU walls are in good condition.</p> <p>Reason for Condition Rating: Age of system (Lifespan: 10 years remaining).</p>
C1020	Interior Doors	No	Yes	M01-C1020-05	46,498	Finished SF	4-Good	<p>Major System: Hollow metal frames with wood doors w/hardware and closers. Systems appear to be installed in the 2000s and are in good.</p> <p>Other Systems: Hollow metal doors and frames. Systems appear to be installed in the 1980s and are in fair.</p> <p>Reason for Condition Rating: System is in good condition based on age and damage. Approximately 5% should be replaced.</p>
C1030	Fittings (Lockers, Restroom Partitions, Railings)	No	Yes	M01-C1030-05	46,498	Finished SF	3-Fair	<p>Major System: Metal toilet partitions are in fair condition.</p> <p>Reason for Condition Rating: Age of system (Lifespan: 10 years remaining).</p> <p>Code: Non-compliant stalls for handicap access.</p>
C20	Stairs/Fire Escapes							
C2010	Stair Structure	No	Yes	M01-C2010-03	49,498	Bldg Gross SF	5-Excellent	<p>Major System: Cast in place concrete stairs are in excellent condition.</p> <p>Code: Non-Compliant rise and run at treads and risers.</p>
C30	Interior Finishes							
C3010	Interior Walls	No	Yes	M01-C3010-05	46,498	Finished SF	2-Poor	<p>Major System: Standard paint on gypsum and masonry walls. System is in poor condition based on age and damage.</p> <p>Other Systems: Ceramic tile system is in good condition based on age and damage.</p> <p>Reason for Condition Rating: Approximately 25% of paint on the CMU walls is seeing water damage, worn or peeling and should be addressed.</p>
C3020	Interior Floors	No	Yes	M01-C3020-05	46,498	Finished SF	3-Fair	<p>Major System: Main systems are sealed concrete, carpet, vinyl and ceramic tile. Systems are in fair condition based on age.</p> <p>Other Systems: Ceramic tile system is in good condition based on age.</p> <p>Reason For Condition Rating: Approximately 20% of the systems are worn due to age or damage. The carpet is reaching the end of its useful life and is missing on two floors.</p>
C3030	Interior Ceilings	No	Yes	M01-C3030-03	46,498	Finished SF	4-Good	<p>Major System: Main system is paint and is in good condition based on age.</p> <p>Other Systems: Other systems include 2x4 ACT and is in excellent condition.</p> <p>Reason for Condition Rating: Age of system (Lifespan: 10 years remaining).</p>
D. Services								
D10	Conveying Systems							
D1010	Elevators and Lifts							
D20	Plumbing							
D2010	Plumbing Systems and Fixtures	No	Yes	M01-D2010-05	49,498	Served SF	1-Unacceptable	<p>Major System: Bathroom groups located throughout. Some have been abandoned. Age of fixtures is unknown.</p> <p>Reason for Condition Rating: The fixtures have exceeded their useful life and should be considered for replacement.</p>
D2020	Domestic Hot Water (Heaters and Exchangers)	No	Yes	M01-D2020-05	49,498	Served SF	3-Fair	<p>Major System: Water heater only heats water for one bathroom bank in half of the building.</p> <p>Reason for Condition Rating: The water heater works but has reached the end of its useful life. (lifespan: Less than 5 years remaining).</p>

D2040	Internal Roof Rain Water Drainage	No	Yes	M01-D2040-01	49,498	Bldg FP SF	3-Fair	<p>Major System: Majority of rain leader piping is cast iron with some PVC repairs being made. There are no known leaks.</p> <p>Reason for Condition Rating: The piping is nearing the end of its useful life. (lifespan: Less than 5 years remaining).</p>
D30 HVAC								
D3010	Energy Supply to Building	No	Yes	M01-D3010-02	49,498	Bldg Gross SF	3-Fair	<p>Major System: Natural gas if fed to building for boilers, water heater and unit heater.</p> <p>Reason for Condition Rating less than 5: Age of system is unknown Life expectancy for gas service is 60 years. (lifespan: Approximate 20 years remaining based on life of boiler).</p>
D3020	Central Plant Heating (Within Building)	No	Yes	M01-D3020-03	49,498	Served SF	3-Fair	<p>Major System: Gas fired boiler. Boiler still works but is nearing the end of its useful life.</p> <p>Reason for Condition Rating: Age of system . (lifespan: less than 5 years remaining).</p>
D3020.300	Fireplaces	Yes	Yes	M08-D3020.300-02	1	Each	3-Fair	<p>Major System: Masonry Chimney within boiler room. Chimney is in fair condition.</p> <p>Reason for Condition Rating: Age of system . (lifespan: less than 15 years remaining).</p>
D3040 Distribution Systems								
D3040.100	Central Plant - Heat Distribution Systems	No	Yes	M01-D3040.100-03	49,498	Served SF	3-Fair	<p>Major System: Majority of building heated by hot water unit heaters Age of system is unknown but average age of unit heaters is about 35 years. These systems are working but are nearing the end of its useful life.</p> <p>Reason for Condition Rating: Age of system (lifespan: less than 5 years remaining).</p>
D3050 Terminal and Packaged Units								
D3050.100	Split Systems/Forced Air Furnaces/Package Units	No	Yes	M01-D3050.100-05	7,608	Served SF	4-Good	<p>Major System: There are three residential style furnaces feeding the small office space.</p> <p>Reason for Condition Rating: Age of system (lifespan: less than 15 years remaining).</p>
D3060	Heat/Cooling Controls	No	Yes	M01-D3060-05	49,498	Served SF	3-Fair	<p>Major System: There are thermostats for the unit heaters and programmable thermostats for the furnaces. The thermostats for the furnaces are less than 10 years old but the thermostats for the unit heaters are nearing the end of their useful life.</p> <p>Reason for Condition Rating: Age of system (lifespan: less than 10 years remaining).</p>
D40 Fire Protection								
D4010	Sprinklers	No	Yes	M01-D4010-05	49,498	Served SF	3-Fair	<p>Major System: Age of sprinkler system is unknown. The system appears to be in working order. The average life expectancy is 50 years.</p> <p>Reason for Condition Rating: Age of system (lifespan: Approximately than 10 years remaining).</p>
D50 Electrical								
D5010	Electrical Service to Building	No	Yes	M01-D5010-05	49,498	Bldg Gross SF	3-Fair	<p>Major System: The building has two electrical services. 480/277 3 phase and 240/120 3 phase. Age of service was unknown. The older system is used only minimally.</p> <p>Reason for Condition Rating: Age of system (lifespan: Approximately than 10 years remaining).</p>
D5020	Lighting and Branch Wiring	No	Yes	M01-D5020-05	49,498	Bldg Gross SF	3-Fair	<p>Major System: The main branch wiring is older with age unknown. Lighting has been replaced with T8 fluorescent.</p> <p>Reason for Condition Rating: Age of system (lifespan: Approximately than 10 years remaining on the branch wiring and 40 years on the fixtures).</p>
D5030	Communication/Security/Fire Alarm	No	Yes	M01-D5030-05	49,498	Served SF	3-Fair	<p>Major System: There is a fire alarm system which is operational. Unknown on age.</p> <p>Other Systems: There are a few cameras and card entry points. There is also some data wiring in the office both of unknown age.</p> <p>Reason for Condition Rating: Age of system (lifespan: Approximately than 5 years remaining)</p>
D5090	Emergency Power	Yes	Yes	M11-D5090-02	49,498	Served SF	4-Good	<p>Major System: There is an emergency generator on site. It has power out to it but there are no transfer switches inside the building so it can't now supply back-up power to building.</p> <p>Reason for Condition Rating: Age of system (lifespan: Approximately than 30 years remaining)</p>
E. Equipment and Furnishings								
E10 Equipment								
E1030	Vehicular Equipment							
E1090	Other Equipment							

E1090.900	Agricultural Equipment							
E20	Furnishings							
E2010	Fixed Furnishings							
E2010.200	Fixed Furnishings-Casework	No	Yes	M01-E2010.200-05	12	Length LF	4-Good	Major System: Fixed Cabinets - System was installed around 2000 and is in good condition. Reason for Condition Rating: Age of equipment (lifespan:15 years remaining). Code: (Non-compliant height).
F. Special Construction and Demolition								
F10	Special Structures							
F20	Integrated Construction							
F40	Special Facilities							

4.0 Appendix: Staff Interview Form

Person Responding _____	Position: _____
Time Worked at Facility _____	Phone Number: _____
	Date of Response: _____

GENERAL INFORMATION

What is the year of Construction of the original building? _____ Are there additions: Yes No

Year of Addition #1: _____ Addition #2: _____ Addition #3: _____ Addition #4: _____

Please outline locations of additions on attached floor plan. If more than 4 additions, indicate and date on plan.

Do you have any drawings more current/accurate than the attached: Yes No

Do you have any original architectural or structural drawings: Yes No If Yes (check all that apply):

Are they?: Hardcopy only PDF AutoCAD

Contact Name/Phone # to obtain electronic copies: _____

A10 - SUBSTRUCTURE

Type of Foundation: Perimeter footings with slab-on-grade Deep Foundations (piers, structural floor)
 Unknown

Do you have HVAC support tunnels? Yes No Unknown (If Yes, please show on drawing)

Any known foundation problems? Yes No Unknown (If Yes, please describe below)

Any previous foundation repairs? Yes No Unknown (If Yes, please describe below)

Any history of Radon issues? Yes No Unknown (If Yes, please describe below)

Have studies been conducted or reports prepared for Structure/Foundation? Yes No Unknown

Other Comments:

A20 - BASEMENT

Is a Basement Present? Yes No

If yes, show the location on the drawing.

Are there any leaks? Yes No

If yes, describe: _____

Is there any damage? Yes No

If yes, describe: _____

B10 - SUPERSTRUCTURE

Is an Elevated Floor Present? Yes No If yes, what type?

- Cast-In-Place Concrete Steel Framing w/concrete&metal deck
- Precast frame CIP columns/beams with precast deck Wood Framing on Load Bearing Walls
- Wood Stick Framed Construction Heavy Timber

Type of Roof Structure?

- Cast-In-Place Concrete Steel Framing w/concrete&metal deck Steel Framing w/ metal only deck
- Precast frame CIP columns/beams with precast deck Wood Framing on Load Bearing Walls
- Wood Stick Framed Construction Heavy Timber

Are there any problems, movement, or distress associated with the elevated floor structure? Yes No

If yes, describe: _____

Are there any problems, movement, or distress associated with the roof structure? Yes No

If yes, describe: _____

B20 - EXTERIOR WALLS/WINDOWS

Are the Exterior Wall Systems original: Yes No Unknown Date Installed: _____

Are the Doors original: Yes No Unknown If No, year(s) of replacement: _____

Are the Windows original: Yes No Unknown If No, year(s) of replacement: _____

Type of Windows Single Pane ____% Double Pane ____% Other _____

Are there exterior wall leaks? Yes No Unknown (If yes, please describe below.)

- Isolated/Sporadic Seasonal Chronic

Are there exterior window/door leaks? Yes No Unknown (If yes, please describe below.)

- Isolated/Sporadic Seasonal Chronic

Other Comments:

B30 - ROOFING

Type of Roof Systems (check all that apply):

- Built-up with Gravel Surfacing Built-up with Granule Cap EPDM TPO Hypalon
 Metal Polyurethane Foam Shingles - Asphalt Concrete Tile Clay Tile Plaza Deck

Please describe age of roof by Area and indicate if any of the roofs are under warranty (ex: main building – original; K-wing – replaced 2001- manufacturer warranty, Gym – 2012 - 20 YR NDL, etc.)

Do any roof areas have multiple roofs? If so, please describe by Area (ex: main building – original BUR with foam recover roof.)

Do you have active roof leaks? Yes No

If leaks, how often? Every Rain Periodically 1-2 per year

Other Comments:

C30 - INTERIOR PARTITIONS AND FINISHES

Type of Wall Finishes (check all that apply)

Present	Material	Average Age		Present	Material	Average Age
	Painted Drywall				Vinyl Composite Tile	
	Painted Concrete Block				Vinyl Tile	
	Painted Woodwork				Natural Clay Tile	
	Medium Weight Vinyl				Natural Stone Tile	
	Heavy Weight Vinyl				Synthetic Marble Tile	
	Wood Paneling				Natural Marble Tile	

Type of Floor Finishes (check all that apply)

Present	Material	Average Age		Present	Material	Average Age
	Exposed Concrete				Vinyl Composite Tile	
	Traffic Coating				Vinyl Tile	
	Epoxy Coating				Natural Clay Tile	
	Terrazzo				Natural Stone Tile	
	Nylon Carpet w/o Padding				Synthetic Marble Tile	
	Nylon Carpet w/ Padding				Natural Marble Tile	
	Wool Carpet w/ Padding				Hardwood Flooring	

Type of Ceiling Finishes (check all that apply)

Present	Material	Average Age		Present	Material	Average Age
	Gypsum Board				Plaster	
	Acoustic Ceiling Tiles				Crown Molding	

% of finishes that are standard (Class B): _____

% of finishes that are deluxe (Class A): _____

Please describe any interior renovations within the last 10 years below (by location and year):

Are the Doors original: Yes No Unknown If No, year(s) of replacement: _____

Is the Door hardware original: Yes No Unknown If No, year(s) of replacement: _____

Are toilet partitions original: Yes No Unknown If No, year(s) of replacement: _____

D1010 - ELEVATORS (CONVEYING SYSTEMS) N/A

Number of Elevators: _____ Age of elevators: Original Date _____ Unknown
 Are elevators regularly maintained? Yes No Unknown
 Are parts available for maintenance? Yes No Unknown
 Has the control system been upgraded? Yes Date: _____ No Unknown
 Are state/local certificates current? Yes No
 Are the elevators reliable? Yes No If yes briefly describe below:
 Any Major problems or repairs within the last 5 years? (Describe by issue and date): _____

D1013 - LIFTS (CONVEYING SYSTEMS) N/A

Number of lifts: _____ Age of lifts: Original Date _____ Unknown
 Are lifts regularly maintained? Yes No Unknown
 Are parts available for maintenance? Yes No Unknown
 Are state/local certificates current? Yes No Unknown
 Are the lifts reliable? Yes No If yes briefly describe below:
 Any Major problems or repairs within the last 5 years? (Describe by issue and date): _____

D2010 – PLUMBING FIXTURES

Type of Plumbing Fixtures (check all that apply)

Present	Fixture	Average Age		Present	Fixture	Average Age
	Water Closet – Floor Mounted				Lavatory	
	Water Closet – Wall Mounted				Service Sink	
	Urinal – Wall Mounted					

Do building's fixtures function properly? Yes No
 Do building's fixtures leak on the water supply side? Frequently Infrequently No
 Do building's fixtures leak on the drain side? Frequently Infrequently No

Please describe any renovations/replacements within the last 10 years below (by type and year) or any comments:

Water supply source: On-site well Municipal supplier

Have backflow preventers been installed? Yes No Unknown

Type of water piping? Galv. Steel Copper CPVC Polybutylene Other _____

Problems with Pinholes? Yes No Unknown

Age of water piping: _____

Do building's water lines leak? Frequently Infrequently No

Sanitary System Discharge:

Septic field: Location: _____

Does septic field work properly? Yes No If no, describe problem: _____

Are state/local certificates current? Yes No Unknown

On-site plant: Age: _____ Unknown N/A Capacity: _____ (gpd) Unknown

Is sewage treatment plant reliable? Yes No If no, describe problem: _____

Are state/local certificates current? Yes No Unknown

Municipal System: Utility Authority: _____

Do you have on site lift stations? Yes No Unknown - Frequency of Maintenance?: _____

Type of Sanitary Piping? Cast Iron PVC V. Clay Other, describe: _____

Age of Sanitary Piping: Original Date _____ Unknown

Do the sanitary lines leak or have problems at joints/piping? Frequently Infrequently No

Do building's sanitary lines leak from the plumbing fixture? Frequently Infrequently No

Do clean-outs exist? Yes No Unknown Properly placed and identified? _____

Any Major Renovations/Repairs completed? (Describe by location and date):

D2020 – WATER HEATERS

How is water heated: Domestic Water Heater (s) Transfer from Heating Boilers Unknown

Age of domestic water heater(s): _____

Have studies been conducted or reports prepared for the water distribution system? Yes No

Any Major Renovations/Repairs completed? (Describe by location and date):

D2040 – STORM DRAINAGE

Storm Drainage Piping Through and Under the Building Only: (Does not extend beyond 5-ft from the building)

Type of Storm Piping? Cast Iron PVC Concrete Steel HDPE Other: _____

Any Major Renovations/Repairs completed? (Describe by location and date):

D3010 – ENERGY SUPPLY SYSTEMS

Natural Gas: Yes No Fuel Oil: Yes No

Coal: Yes No Solar: Yes No

Wind: Yes No

Who owns the transformers: Building Local Utility

Capacity of main electrical site transformer: _____ Amps Unknown

Age of Solar Components: Original Date _____ Unknown

Portion of building Served: _____

Age of Wind Components: Original Date _____ Unknown

Portion of building Served: _____

D3011 – GEOTHERMAL HEATING/COOLING SUPPLY

N/A

Type of system? In-ground Wells Ponds Ground Fields

Other (please describe): _____

Age of System: Original Date _____ Unknown

Type of Piping: _____

Number of Wells: _____

Any Major Problems or Repairs required since original construction? (Describe by issue and date):

D3020 – FIREPLACES

N/A

Type of Fireplace: Gas Wood Pellet Combo: _____

Are there any problems with the chimney? Yes No If yes, briefly describe below:

D3020 – HVAC SYSTEMS - SUMMARY/MISC QUESTIONS

Provide a brief summary description of how the building is heated (example: boiler with hot water loop feeding radiators and unit ventilators, split system with gas furnace, air handlers with electric re-heat coils, etc.):

Provide a brief summary description of how the building is cooled (example: swamp coolers in the common corridors, individual split system for computer room, window unit in break room, chiller with cold water loop feeding AHUs, condensing unit installed within original AHUs, etc):

Is outside air provided and distributed through the building (example: swamp coolers in the common corridors, roof top air handling units, or forced air ventilation, If so, how?)

D3020 – CENTRAL PLANT – STEAM AND HEATING HOT WATER SYSTEMS

N/A

Type of Boilers: Standard High Efficiency **Boiler Fuels:** Natural Gas Heating Oil Coal

% Building Heated by Boiler System _____

Number of Boilers: _____ Year(s) installed: _____ Unknown

When were they last inspected? Date _____ Unknown

Is sufficient heating capacity provided to distribution system? Yes No

Is Water Treatment Provided? Yes No

Any problems with pipe corrosion, frequent leaks, etc? Yes No

Any Major problems, repairs, or proactive maintenance performed within the last 10 years? (Describe by issue and date):

D3030 - HVAC – CHILLED WATER COOLING SYSTEMS N/A

% Building Cooled by Central Plant System: _____

Number of Chillers: _____ Year(s) installed: _____ Unknown

Is maintenance regularly scheduled? Yes No

Is sufficient cooling capacity provided to distribution system? Yes No

Any Major problems, repairs, or proactive maintenance performed within the last 10 years? (Describe by issue and date):

Number of Cooling Towers: _____ Year(s) installed: _____ Unknown

Is maintenance regularly scheduled? Yes No

Is Water Treatment Provided? Yes No

Any Major problems, repairs, or proactive maintenance performed within the last 10 years? (Describe by issue and date):

D3040 - HVAC – CENTRAL PLANT AIR DISTRIBUTION SYSTEMS N/A

% Building Heated by Distribution System (radiators, unit ventilators, AHUs, etc): _____

% Building Cooled by Air Handling System: _____

Age of Systems: Original Date _____ Unknown

Type of air handling systems?

Internal air handling unit with heating and cooling coils (4 pipe system)

Internal air handling unit with single coil (2 pipe system)

VAV Boxes with reheat coils VAV Boxes with no coils

Exterior air handling units with heating and cooling coils (4 pipe system)

Exterior air handling units with single coil (2 pipe system)

4 pipe system with heat pumps

2 pipe system with heat pumps

Describe your preventative maintenance approach for the air handlers:

Do the systems provide outside air? Yes No Unknown, If Yes, how is it controlled/monitored:

What is your typical schedule for filter replacement and condensate pan inspection?

Type of ductwork system?

- Metal with internal insulation Metal with external insulation Ductboard Flexduct

Age of Ductwork: Original Date _____ Unknown

Any Major problems, repairs, or proactive maintenance performed within the last 10 years? (Describe by issue and date):

D3050 - HVAC – SPLIT SYSTEM AND PACKAGE UNITS	<input type="checkbox"/> N/A
--	------------------------------

Package units present: N/A - # of Units: _____ Year(s) installed: _____ Unknown

Areas heated/cooled by package units: _____

Split System units present: N/A-

of Condenser Units/heat pumps: _____ Year(s) installed: _____ Unknown

of interior fan coils/air handlers: _____ Year(s) installed: _____ Unknown

Areas heated/cooled by split system units: _____

Forced Air Furnaces units present: N/A- # of Units: _____ Year(s) installed: _____ Unknown

Areas heated by forced air furnaces units: _____

Is cooling adequate for areas served? Yes No Is heating adequate for areas served? Yes No

Do the systems provide outside air? Yes No, If Yes, how is it controlled/monitored:

What is your typical schedule for filter replacement and condensate pan inspection?

Any Major problems or repairs within the last 10 years? (Describe by issue and date):

D3060 – HVAC & HEATING CONTROLS

Type of Controls: Pneumatic _____% of building DDC _____% of Building

Controls Age: _____

If blended system, describe (pneumatic actuators with digital control, etc.): _____

Describe control system (ex: one per room, two rooms per single control, etc): _____

Any problems with air leaks/function? Yes No If yes, describe? _____

Are controls adequate? Yes No If no, explain problems? _____

Any Major problems or repairs within the last 10 years? (Describe by issue and date): _____

D40 - FIRE PROTECTION and ALARMS

Age of fire protection (sprinkler) system: Original Date _____ Unknown N/A
_____ % of building covered by sprinkler systems.

Age of alarm systems: Original Date _____ Unknown N/A
_____ % of building covered by systems.

Do sprinkler lines leak? Frequently Infrequently No

Type of last repairs/upgrades and dates: _____

Date of last inspection: _____ Location of inspection report: Local District Office

Have studies been conducted or reports prepared for fire protection and alarm systems? Yes No

D50 – ELECTRICAL SYSTEMS

Is distribution wiring aluminum or copper? Aluminum Copper

Age of Wiring: Original Date _____ Unknown

Do you have enough capacity to the facility (exterior primary transformer)? Yes No Unknown

Do you have enough circuits/capacity within the facility to support technology? Yes No Unknown

Are the outlets conveniently placed for use? Yes No

Has there been any major electrical work or renovations? No Yes Date _____

Description: _____

Do you have an emergency generator? Yes No ,

If Yes please describe system and age: _____

D50 – COMMUNICATION/SECURITY SYSTEMS

Type and location of Communication Systems: _____

Age of communication system: _____

Are computer systems interconnected via hardwire or wireless? Wireless Hard Wired Both

Age of computer system: _____

Technology Backbone: Coax CAT5 Cable CAT6 Cable Fiber Optics Wireless

Age of technology backbone: _____

Do you have an internet and phone system drop in each office/room? Yes No Unknown

Do you have a security/alarm system? Yes No

Do you have security cameras? Yes No If Yes, location(s) _____

Other Comments:

COMMERCIAL EQUIPMENT – LAUNDRY FACILITY

N/A

Is a laundry facility provided? Yes No If yes, answer the following:

For those major components (counters, cabinets, washing machines, dryers, etc) that were not installed as part of original construction, please indicate component and date of replacement/installation below:

Any Major problems or repairs within the last 5 years? (Describe by issue and date):

INSTITUTIONAL – JAIL EQUIPMENT

N/A

Is the cell unit pre-fabricated? Yes No

If no, describe: _____

Are there working plumbing fixtures within the cell (check all that apply):

Lavatory Sink Urinal Other: _____

Age of Cells: Original Date _____ Unknown

Any Major problems or repairs within the last 5 years? (Describe by issue and date):

INSTITUTIONAL - LABORATORY

N/A

Type of Laboratory Components (check all that apply):

Built-In Laboratory Station Fume Hood Glassware Washer Wall Mounted Laboratory Cabinets

Other: _____

Age of Laboratory Components: Original Date _____ Unknown

Any Major problems or repairs within the last 5 years? (Describe by issue and date):

Are there working sinks at the laboratory stations? Yes No

Is there access to natural gas at the laboratory stations? Yes No

VEHICLE EQUIPMENT – OVERHEAD CRANES

N/A

Types of Cranes: _____ Capacity: _____ Number of Cranes: _____

Age of Crane and Components: Original Date _____ Unknown

Describe the safety features: _____

Any Major problems or repairs within the last 5 years? (Describe by issue and date):

VEHICLE EQUIPMENT – TRUCK WEIGHT SCALES

N/A

Type of Scale: _____ Capacity: _____ Number of Scales: _____

Age of Scale and Components: Original Date _____ Unknown

Describe the safety features: _____

Any Major problems or repairs within the last 5 years? (Describe by issue and date):

VEHICLE EQUIPMENT – BOAT LIFTS N/A

Type of Lift: _____ Capacity: _____ Number of Lifts: _____

Age of Lift and Components: Original Date _____ Unknown

Any Major problems or repairs within the last 5 years? (Describe by issue and date):

VEHICLE EQUIPMENT – GARAGE ACCESS EQUIPMENT N/A

Is the entrance to the garage manned? Yes No

Describe the ticketing and gate equipment at the entrance: _____

Age of Entrance Equipment: Original Date _____ Unknown

Is the exit to the garage manned? Yes No

Describe the ticketing and gate equipment at the exit: _____

Age of Exit Equipment: Original Date _____ Unknown

FOOD SERVICE EQUIPMENT N/A

What type of kitchen is present: Serving Kitchen Full Kitchen

Type of Appliances (check all that apply):

Present	Fixture	Average Age		Present	Fixture	Average Age
	Dishwasher				Warming Counter	
	Broiler				Range with oven	
	Reach in Freezer				Reach in Cooler	
	Walk-in Cooler				Walk-in Freezer	
	Ice Cube Maker				Pot Sink	
	Garbage Disposal				Serving Counter	

Any Major problems or repairs within the last 5 years? (Describe by issue and date):

RESIDENTIAL EQUIPMENT

N/A

Type of Kitchen Components (check all that apply):

- Refrigerator Garbage Disposal Dishwasher Cook Top Range Double Oven
 Fixed Microwave

Wall and Base Cabinets: Standard Deluxe

Counter Tops: Plastic Laminate Granite

Age of Equipment: Original Date _____ Unknown

ATHLETIC EQUIPMENT

N/A

Type of Athletic Space (check all that apply):

- Shooting Range Sport Court Sauna Racquet Ball Other: _____

Age of Equipment: Original Date _____ Unknown

Any Major problems or repairs within the last 10 years? (Describe by issue and date):

AGRICULTURAL EQUIPMENT – ANIMAL STORAGE/CAGES

N/A

Type of Animal Stored: Carnivorous Non-carnivorous

Is the cage pre-fabricated: Yes No

Age of Cages: Original Date _____ Unknown

Any Major problems or repairs within the last 10 years? (Describe by issue and date):

AGRICULTURAL EQUIPMENT – FISH HATCHERY/CONCRETE TROUGHS N/A

Type and location of Water Circulation Systems: _____

Age of water circulation system: _____

Type Water Filtration Systems: _____

Age of water filtration system: _____

Depth and Size of Trough: _____

Any problems with water leaks or seepage? Yes No If yes, describe? _____

Any Major problems or repairs within the last 10 years? (Describe by issue and date):

FIXED FURNISHINGS - SEATING N/A

Type of Seating Available (check all that apply): Auditorium Bench Bleachers

Age of Seating: Original Date _____ Unknown

Are the auditorium, are the seats upholstered? Yes No N/A

Are the components functioning properly? Yes No

Age of Upholstery: Original Date _____ Unknown

Are the bleachers: Fixed Motorized N/A

Are the components functioning properly? Yes No

Age of Motor and Components: Original Date _____ Unknown

Any Major problems or repairs within the last 10 years? (Describe by issue and date):

FIXED FURNISHINGS - CLINIC N/A

Is a clinic or nurse's office provided? Yes No, If yes, answer the following:

For those major components (counters, hard wired equipment, exam tables, cabinets, etc) that were not installed as part of original construction, please indicate component and date of replacement/installation below:

Any Major problems or repairs within the last 5 years? (Describe by issue and date):

VAULT TOILET

N/A

Type of Structure: Lined Pit Concrete Vault (If prefabricated, use prefab form)

Age of Structure: Original Date _____ Unknown

Are there any active roof leaks? Yes No Are structural issues? Yes No

If yes, describe: _____

MULTI-PURPOSE ROOM

N/A

Room serves as (check all that apply):

Cafeteria Seating Gymnasium Auditorium

Age of score boards/sound systems? Original Other: _____

Age of curtains? Original Other: _____

Age of flooring? Original Other: _____

Age of lighting? Original Other: _____

Any Major problems, repairs, and/or component replacement within the last 10 years? (Describe by issue and date):

Please describe any renovations within the last 10 years below (indicate worked performed and year):

GYMNASIUM

N/A

Type of Gymnasium provided (Check all that apply)? Single Full Size Competition Floor

Auxiliary Gym Multiple Competition Floors within single room

Is an indoor track provided: Indoor Competition Track Indoor running track/loop No

of sets of locker rooms provided: _____ Described as:

Separate Locker Rooms provided for each Gym Locker rooms shared between multiple gyms

Separate Varsity/JV Locker Rooms

Age of score boards/sound systems? Original Other: _____

Age of seating systems? Original Other: _____ Any Issues: _____

Date of last floor refinishing? _____

Any Major problems, repairs, and/or component replacement within the last 10 years? (Describe by issue and date):

Please describe any renovations within the last 10 years below (indicate worked performed and year):

AUDITORIUM

N/A

Age of lighting systems? Original Other: _____

Are sufficient controls provided for lighting systems? Yes No If No, describe below:

Age of sound systems? Original Other: _____

Are sufficient controls provided for sound systems? Yes No If No, describe below:

Is a separate sound control room provided? Yes No

Any issue with stage floor/stage handling equipment? No Yes, If Yes, please describe below:

Any Major problems, repairs, and/or component replacement within the last 10 years? (Describe by issue and date):

Please describe any renovations within the last 10 years below (indicate worked performed and year):

REFRIGERATED STORAGE ROOM

N/A

Is the cold storage room pre-fabricated? Yes No

If no, describe: _____

(If stand-alone prefabricated “building”, use prefab form)

Age of Cold Storage Room: Original Date _____ Unknown

Are there any problems with the refrigeration system? Yes No

If yes, describe: _____

Is the refrigeration system original? Yes No

If no, when was it modified: _____

HAZMAT STORAGE ROOM

N/A

Type of Structure: CMU Block Stick Framed Pre-fabricated
(If stand-alone prefabricated “building”, use prefab form)

Age of Structure: Original Date _____ Unknown

Are there any active leaks? Yes No
If yes, describe: _____

Is a sprinkler system present? Yes No
If yes, describe: _____

Age of Room: Original Date _____ Unknown

Are there any problems with the sprinkler system? Yes No
If yes, describe: _____

AQUATIC FACILITIES

N/A

Type of pool treatment: Chemical Salt/Saline Other: _____

Age of pool filter/circulation systems? Original Other: _____

Date of last pool resurfacing? _____

Age of lighting systems? Original Other: _____

Are sufficient controls provided for lighting systems? Yes No, If No, please describe below:

Age of score boards/sound systems? Original Other: _____

Are separate Varsity/JV locker rooms provided? No Yes

Any issue with leaks? No Yes If Yes, describe below:

Any Major problems, repairs, and/or component replacement within the last 10 years? (Describe by issue and date):

Please describe any renovations within the last 10 years below (indicate worked performed and year):

Building Name: _____

Building Number: _____

ICE RINK

N/A

Are there any problems with the chillers? Yes No

If yes, describe: _____

Age of Chillers: Original Date _____ Unknown

Are there any problems with the dehumidification system? Yes No

If yes, describe: _____

Age of Dehumidification System: Original Date _____ Unknown

Are there any problems with the ice making system? Yes No

If yes, describe: _____

Age of Ice Making System: Original Date _____ Unknown

Are there any problems with the boards or glass? Yes No

If yes, describe: _____

Age of Boards and Glass: Original Date _____ Unknown

Please describe any renovations within the last 10 years below (indicate worked performed and year):

