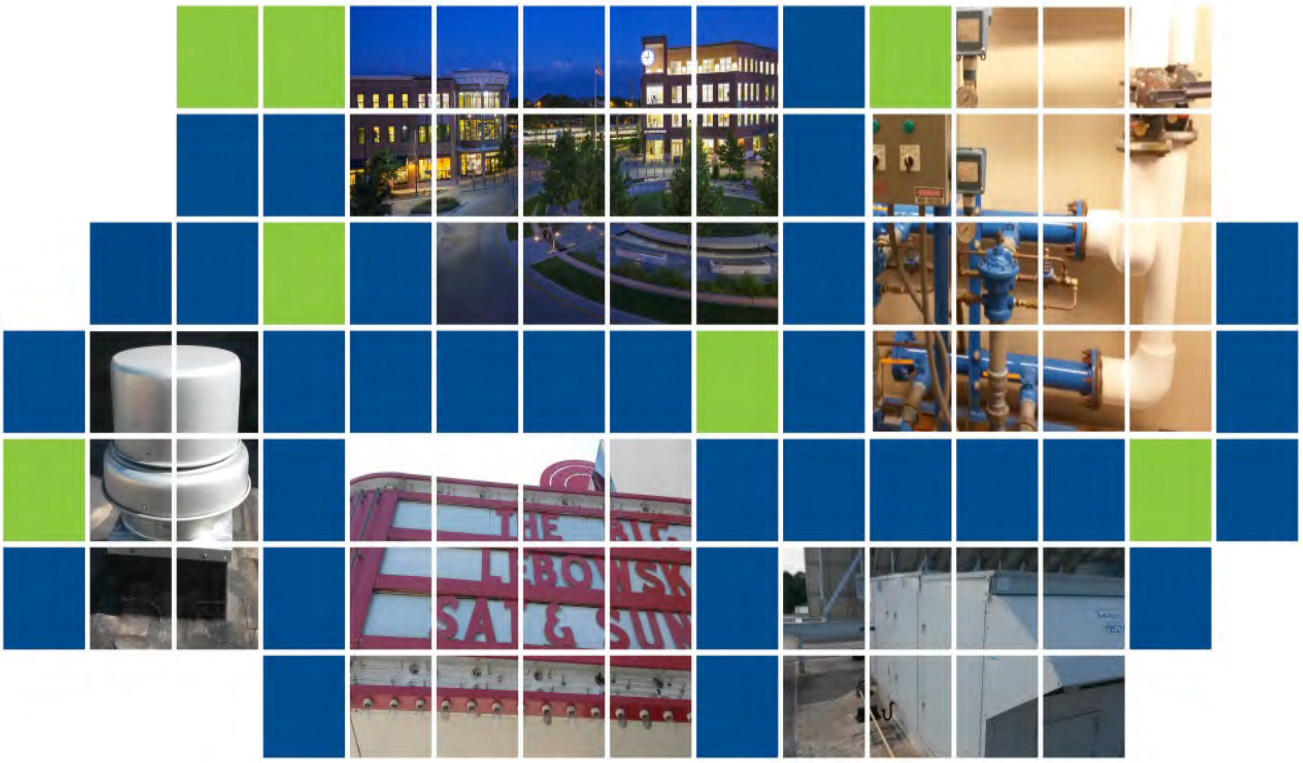
TOWN OF NORMAL

FACILITY AND ENERGY MANAGEMENT MASTER PLAN



*Uptown Normal photo by Ken Kashian

2014

Town of Normal Facilities Management

Farnsworth GROUP

Report Menu

Facility Summary Report

Community Activity Center

Beaufort Street Marriot Parking Deck

Children's Discovery Museum

College Avenue Parking Deck

Engineering

Public Works

Normal Theater

Uptown Parking Deck

Uptown Station

Police Station

City Hall Annex

2014 Facility Condition Assessment – Deficiency Report

2014 Current Equipment List

Preventive Maintenance Template List

200 West College Ave., Suite 301
Normal, Illinois 61761
309.663.8436 f 309.663.8862

Facility Summary Report

Project Scope & Overview

Between May and July 2014, the Town of Normal worked with the Farnsworth Group auditing eleven buildings totaling 798,145 square feet with an insured value of $77,704,893. The buildings were selected based on significance to Town function. The buildings that Facilities Management is not directly responsible for were intentionally left out of the assessment. The Water Department buildings and Parks and Recreation aquatic centers are examples of excluded facilities. The Fire Stations were also left out because of the plan to replace the stations. The Fire Department facilities will be maintained by typical and routine Facilities Management operations and ultimately added to the Energy and Asset Master Plan as the new stations are commissioned. A truly comprehensive plan is expected to develop through a continuous, progressive and collaborative process.

The scope of work for this project included two assessments conducted by a team of engineers: Facility Condition Assessment (FCA) and an energy audit. The energy audit of the buildings was a modified ASHRAE Level One Energy Audit, and the FCA was direct survey as defined by industry standards (**Appendix A**). To validate and compile data for the FCA and the energy assessment, the auditing team coordinated with facility staff and conducted one site visit per building. The facility staff accompanied the Farnsworth team during the inspection, which allowed access throughout the facility. Also at that time, the Town of Normal staff conveyed building specifics, such as recent updates, reoccurring issues, occupant comfort complaints, room or area utilization, and areas of concern.

Facility Condition Index [FCI= Maintenance, repair, and replacement of deficiencies of a facility (work orders) divided by the current replacement value of the facility] is used to provide a benchmark to compare the relative condition of a facility or a group of facilities. To define the ratings, industry standards were used: good (under 0.05), fair (0.05 to 0.10), and poor (over 0.10). For this report, FCI values were calculated using current data obtained on July 15. FCI is a dynamic value, and it should be monitored on a regular basis.

Energy Utilization Index (EUI) is a metric that expresses the total energy (fossil fuel and electricity) used by a facility in a given period (month, year, etc.) in terms of kBtu's/gross conditioned square feet. A higher number equates to more energy being consumed, and subsequently, the building is less efficient. For the information in the chart below, the EUI was calculated using one year of energy data from facility utility bills.

Averaged Component Index is a calculated metric that expresses the facility's present condition by assessing and rating all the building components as defined in the ASTM Uniformat Level III (sum of individual ratings divided by the number of components).

Energy Star is a rating system developed by the U.S. EPA. The Energy Star program has developed energy performance rating systems for several commercial and institutional building types. These ratings, on a scale of 1 to 100 with 100 being the most energy efficient, provide a means for benchmarking the energy efficiency of specific buildings and industrial plants against the energy performance of similar facilities. Energy Star uses a database of over 100,000 buildings across the U.S. to group facilities into categories that have similar energy use profiles. For example, a school would use less energy than a hospital and be in a separate category. It should be noted that certain categories do not exist, for instance parking structures and theaters, and therefore an Energy Star score was estimated or not able to be obtained.

Assessment Overview

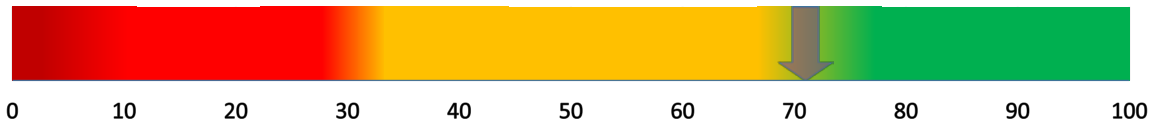
Building	Square Footage	Facility Condition Index	Averaged Component Index	Energy Star	EUI (kBTU/SqFt)
Community Activity Center (CAC)	23,478	Poor (0.130)	O+ (60)	44**	86
Beaufort Street Marriot Parking Deck (BMPD)	168,611	Good (0.001)	G- (73)	NA**	9.27
Children's Discovery Museum (CDM)	29,517	Good (0.012)	G- (76)	53**	87
College Avenue Parking Deck (CAPD)	222,876	Good (0.001)	G (77)	NA**	7.57*
Engineering (ENG)	5,880	Good (0.024)	O+ (60)	79	49
Public Works (PW)	43,552	Good (0.004)	G- (71)	44	90
Normal Theater (NT)	5,635	Poor (0.108)	O+ (64)	01**	205
Uptown Parking Deck (USPD)	198,920	See UTS	G (80)	NA**	11.22
Uptown Station (UTS)	57,776	Good (0.005)	G+ (92)	11*	133*
Police Station (PS)	25,140	Good (0.030)	O+ (62)	88**	65
City Hall Annex (CHA)	16,760	Good (0.037)	O+ (61)	70	61
Total	798,145				
Averaged Value			G- (71)		

**Utility billing for the Uptown Station and the Uptown Parking Deck are combined. The data (Total usage – Parking Deck usage) used to generate the performance ratings was an estimated value based on present site conditions.*

***Energy Star does not currently have a building category for this facility. The Energy Star score is undefined or estimated using the "office" type occupancy category.*

Facility Condition Index	
Facility's Insured Value	$77,704,893
Work Orders	$1,274,906
Facility Condition Index	Good (0.016)

The Averaged Building Component Rating



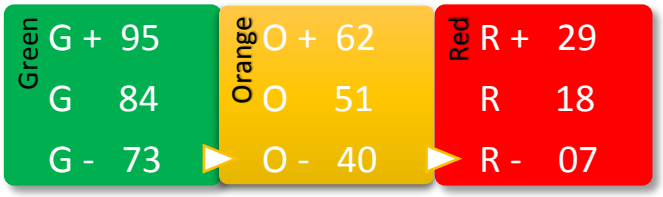
The overall general condition of the buildings reviewed is good. Work orders and preventative maintenance issues are being thoroughly identified by the FM staff and effectively tracked in the Computerized Maintenance Management System (CMMS). Major components that are in poor condition have been identified, and they are in the process of being systematically replaced.

The overall energy efficiency of the buildings audited shows a wide range in performance. Some of the older buildings reviewed have undergone replacement and have been retrofitted with more efficient lighting in recent years and are performing at or above the median building type. However, some of the newer-constructed buildings are operating at a lower level of efficiency when compared to the median building type. The median property and the associated values referred to in this report are derived from the Energy Star program.

Facility Condition Assessment

The Farnsworth team was given access rights to the Town of Normal's CMMS to retrieve and review data for each of the buildings. As part of the pre-inspection process, the team generated and reviewed an equipment list and a work order list from the CMMS. Also, the team reviewed the building drawings when they were available. A thorough review of the data prior to the site visit was a key component in this process's efficiency as the team was able to highlight areas of concern and develop a stragetic approach to the inspection.

While on site, the Farnsworth team conducted a direct survey of the facility's assets at a component level as defined as per the ASTM Uniformat Level III. Verification and validation of equipment information and work orders logged into the CMMS took place at this time as well. The verification and validation process was on a random sample basis. The direct survey method entailed a visual inspection of the asset with no intrusive diagnostic investigation. A nine point rating system (figure 1) that utilizes industry standards to define and rate the components was developed and adapted to align with the CMMS; see **Appendix A** for more information. Green indicates good condition, orange indicates average condition, and red indicates poor condition / at the end of the component's service life. Additionally, there are three minor levels, indicated as "+" and "-", to each major condition category. For the sake of future considerations and possibilities, such as forecasting, prioritizing, and budgeting, a numerical value was also assigned to each of the nine categories. The values are based on a 0-100 scale with 100 being new or like new condition.



Typically, the components were assessed as a whole group; however, some of the mechanical components were assessed individually due to the disparity in the condition of like components. The assessment viewed each component through the lens of "what amount of effort would it take to bring the component back to new condition". The vintage of a component does not necessarily affect the rating. Likewise, compliance to present-day codes for older components does not affect the assessment value. Overall, the assessment strives to consistently document the present condition of the component in the context of when it was installed.

Next Steps

The Town would ultimately like to develop a strategy to link quantifiable data from facility assessments directly to budgetary numbers. In order to accomplish this, all major building assets need to be tracked in the CMMS, which is currently in progress, and include data such as remaining service life (RSL) and estimated cost of replacement. Further developing RSL information would provide the Town with metrics to make decisions regarding capital expenses, energy improvements, or possibly deference of upgrades or repairs in order to pick up an unforeseen or emergency cost.

Another important next step would be for the Town of Normal to develop an order of importance for buildings as a whole and for components within the buildings themselves. Again, this is valuable information that could add to the Town's decision making criteria and allow budgeting flexibility.

FCA should be considered as a next step as well. The condition of a building is a dynamic state, and it should be monitored and periodically re-assessed. Farnsworth has worked closely with the Facility Management staff throughout the process, and the system developed is reproducible and sustainable.

The component rating definitions are applicable to anything that is tangible, and the FM staff can continue this process throughout the remainder of the facilities. Condition assessment is the first step in a sustained management system, and it is also a process that should be reiterated. Re-assessing assets ensures your forecasting and budget inputs are valid and re-assessment can indicate areas of opportunities in the maintenance program as well.

Energy Assessment

Preliminary Energy-Use Analysis

Preliminary Energy-Use Analysis (PEA) is a review of the utility data for a building or facility. The Town of Normal provided Farnsworth with the utility bills for a 24-month span. There were a few gaps in the billing data due to the utility providers and their estimated consumption corrections, and those gaps were filled in by interpolated data. During the PEA, the utility bills were analyzed to identify usage anomalies or inconsistencies. Results from the building PEA are reported in the individual building reports. The data is logged and charted against the environmental influences for this area. Environmental influences on utility usage is normal for a typical building or facility. For reference, the central Illinois geographical region typically has 6000-6500 Heating Degree Days and 1000 Cooling Degree Days as per the National Oceanic and Atmospheric Administration (NOAA).

Heating degree-days (HDD) are determined by subtracting the mean temperature for the day from the reference, or indoor, temperature. Thus, if the mean temperature for a day is 50F and the reference temperature is 65F, there would be 15(65-50) heating degree-days on this day. On days when the mean temperature is above the reference temperature, there are no heating degree-days. Therefore, the lower the average daily temperature, the more heating degree-days and the greater the consumption of fuel.

Cooling degree-days (CDD) are used during warm weather to estimate the energy needed to cool indoor air to a comfortable temperature. Mean daily temperature is converted to cooling degree-days by subtracting the reference, or indoor, temperature from the mean outdoor temperature. For example, a day with a mean temperature of 80F and a reference temperature of 65F would correspond to (80-65), or 15 cooling degree-days. Higher values indicate warm weather and result in a higher power consumption for means of cooling.

Once the data was entered and the graphic chart was populated, the team could visualize the usage when compared to the HDD or CDD. With this information, the team developed hypothesized Energy Conservation Measures (ECMs) prior to the site visit and also generated the Energy Utilization Index. As another form of energy data analysis, the team utilized the Energy Star program, which is a rating system developed by the Environmental Protection Agency (EPA).

Site Energy Survey

A modified ASHRAE Level 1 Walk-Through Analysis was conducted and identified Energy Conservation Measures (ECM). In order to keep the cost as low as possible, the team discussed options with the Town of Normal staff and modified the ASHRAE Level 1 walk-through to provide the most cost-effective information. The team utilized the information attained from the PEA to streamline the process. The site survey was a non-invasive site inspection of the building and its services. The team reviewed the building and compiled ECMs, which are listed in the individual building reports. The below charts list the compiled potential saving per building and per ECM. The listed ECMs are viable projects where the cost of implementation will be offset by the saving throughout the life-span of the ECM.

Potential Energy Savings	
Building	**Potential Savings**
Community Activity Center	**$8,000/yr**
Beaufort Street Marriot Parking Deck	**$2,200/yr**
Children's Discovery Museum	**$500/yr**
College Avenue Parking Deck	**$2,200/yr**
Engineering	**-**
Public Works	**$1,200/yr**
Normal Theater	**$1,400/yr**
Uptown Station	**$1,000/yr**
Uptown Parking Deck	**-**
Police Station	**$650/yr**
City Hall Annex	**$325/yr**

Combined Energy Savings (All Facilities)	
ECM Projects	**Potential Savings**
Exit and Emergency Light Upgrade	**$900/yr**
Local Lighting Control (occupancy sensors and daylight harvesting)	**$3,800/yr**
HVAC systems (CAC and Theater)	**$8,000/yr**
High Efficient Exterior lights (including parking deck)	**$2,400/yr**

Next Steps

- Implement ECMs in order of precedence that aligns with the Town of Normal's overall goals.
- Review the parking deck illuminance levels by conducting a photometric study. If lighting levels greatly exceed the requirements set forth by IES / DOE (Illuminating Engineering Society/Department of Energy), the number of light fixtures in the parking decks can be reduced. See Appendix E for recommendations.
- Conduct a more thorough energy audit (ASHRAE Level Two) for the Normal Theater and Children's Discovery Museum.
- Re-commission the Beaufort Street Marriot Parking Deck, Children's Discovery Museum, Engineering, Public Works, Uptown Station, and City Hall Annex to identify programming issues with the HVAC system, misaligned setpoints, faulty sensors, and other specific energy efficiency opportunities.

Definitions	
ECM -	Energy Conservation Measures
SF -	Square Footage
FCA -	Facility Condition Audit
EUI -	Energy Utilization Index
FCI -	Facility Condition Index
PEA -	Preliminary Energy -Use Analysis
kWh -	Kilowatt Hour
HDD -	Heating Degree Day
CDD -	Cooling Degree Day
kBtu -	Kilo British Thermal Units
Proj. -	Indicates a project expense for recommended ECMs
UTL -	Utility
FM -	Facility Maintenance
CMMS -	Computerized Maintenance Management System
RS Means -	Industry's standards for estimating purposes
HVAC -	Heating -Ventilation-Air-Conditioning
BAS -	Building Automation System
MEP -	Mechanical, Electrical, and Plumbing
Occ. -	Occupancy Sensor

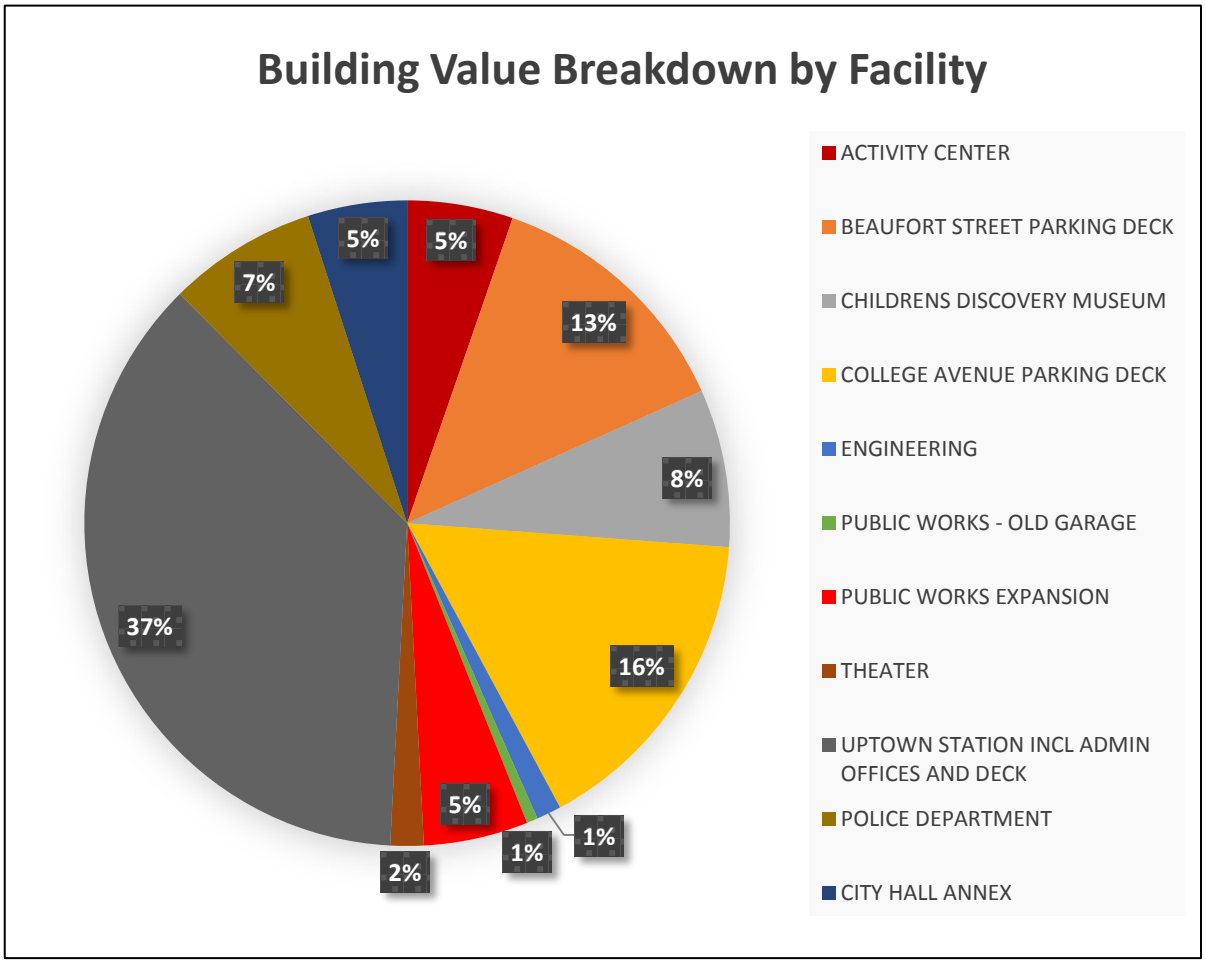
Condition Rating Definitions

Green (+)	Sustainment consisting of possible preventive maintenance (where applicable).	Entire component-section or component-section sample free of observable or known distress.
Green	Sustainment consisting of possible preventive maintenance (where applicable) and minor repairs (corrective maintenance) to a possibly few or some subcomponents.	No component-section or sample serviceability or reliability reduction. Some, but not all, minor (non-critical) subcomponents may suffer from slight degradation or few major (critical) subcomponents may suffer from slight degradation.
Green (-)		Slight or no serviceability or reliability reduction overall to the component-section or sample. Some, but not all, minor (non-critical) subcomponents may suffer from minor degradation or more than one major (critical) subcomponent may suffer from slight degradation.
Orange (+)	Sustainment or restoration to any of the following: minor repairs to several subcomponents; or significant repair, rehabilitation, or replacement of one or more subcomponents, but not enough to encompass the component-section as a whole; or combination thereof.	Component-section or sample serviceability or reliability is degraded, but adequate. A very few major (critical) subcomponents may suffer from moderate deterioration with perhaps a few minor (non-critical) subcomponents suffering from severe deterioration.
Orange		Component-section or sample serviceability or reliability is definitely impaired. Some, but not a majority, major (critical) subcomponents may suffer from moderate deterioration with perhaps many minor (non-critical) subcomponents suffering from severe deterioration.
Orange (-)		Component-section or sample has significant serviceability or reliability loss. Most subcomponents may suffer from moderate degradation or a few major (critical) subcomponents may suffer from severe degradation.
Red(+)	Sustainment or restoration required consisting of major repair, rehabilitation, or replacement to the component-section as a whole.	Significant serviceability or reliability reduction in component-section or sample. A majority of subcomponents are severely degraded and other may have varying degrees of degradation.
Red		Severe servicability or reliability reduction in component-section or sample such that it is barely able to perform. Most subcomponents are severely degraded.
Red(-)		Overall component-section degradation is total. Few, if any, subcomponents salvageable. Complete loss of component-section or sample serviceability.

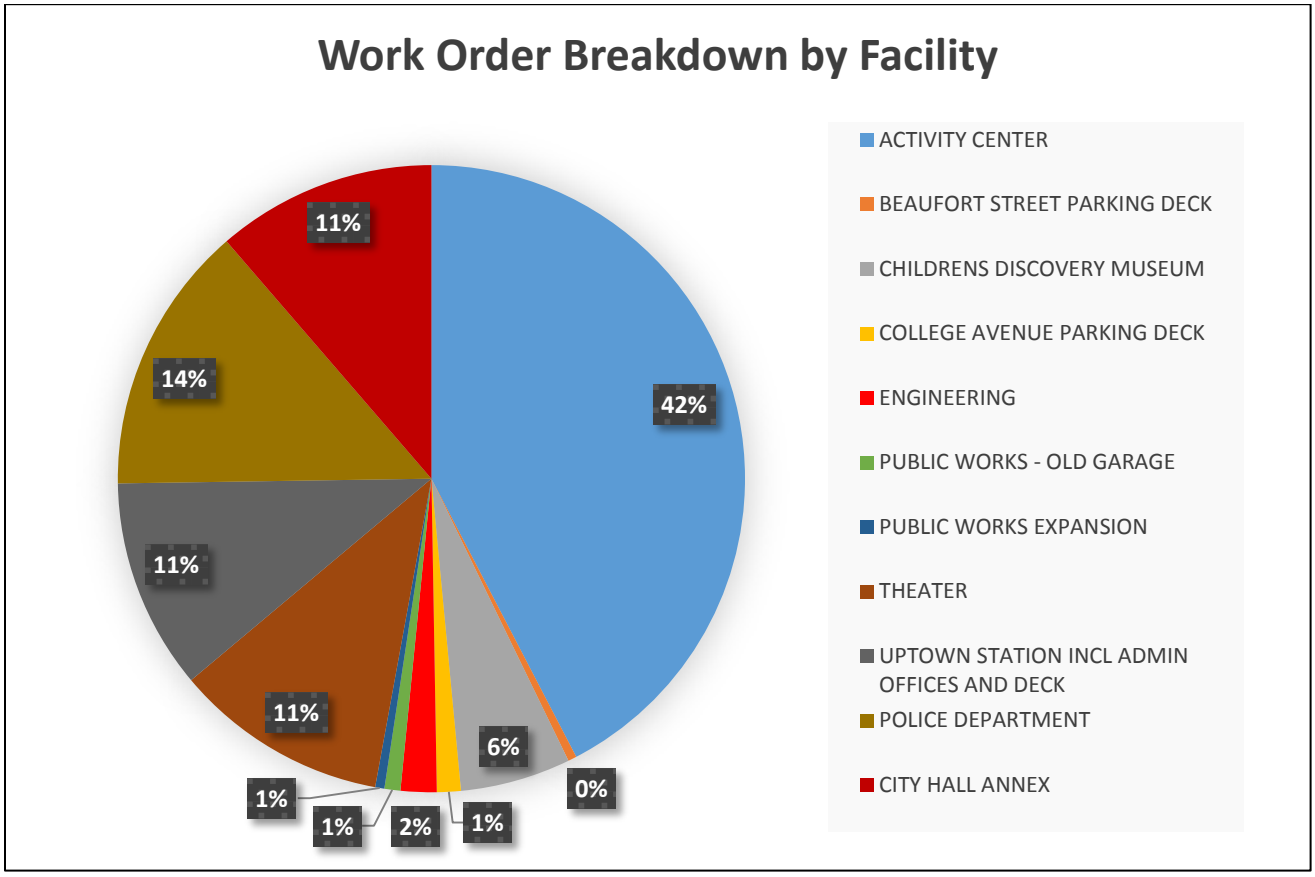
Appendix B-Facility Condition Index

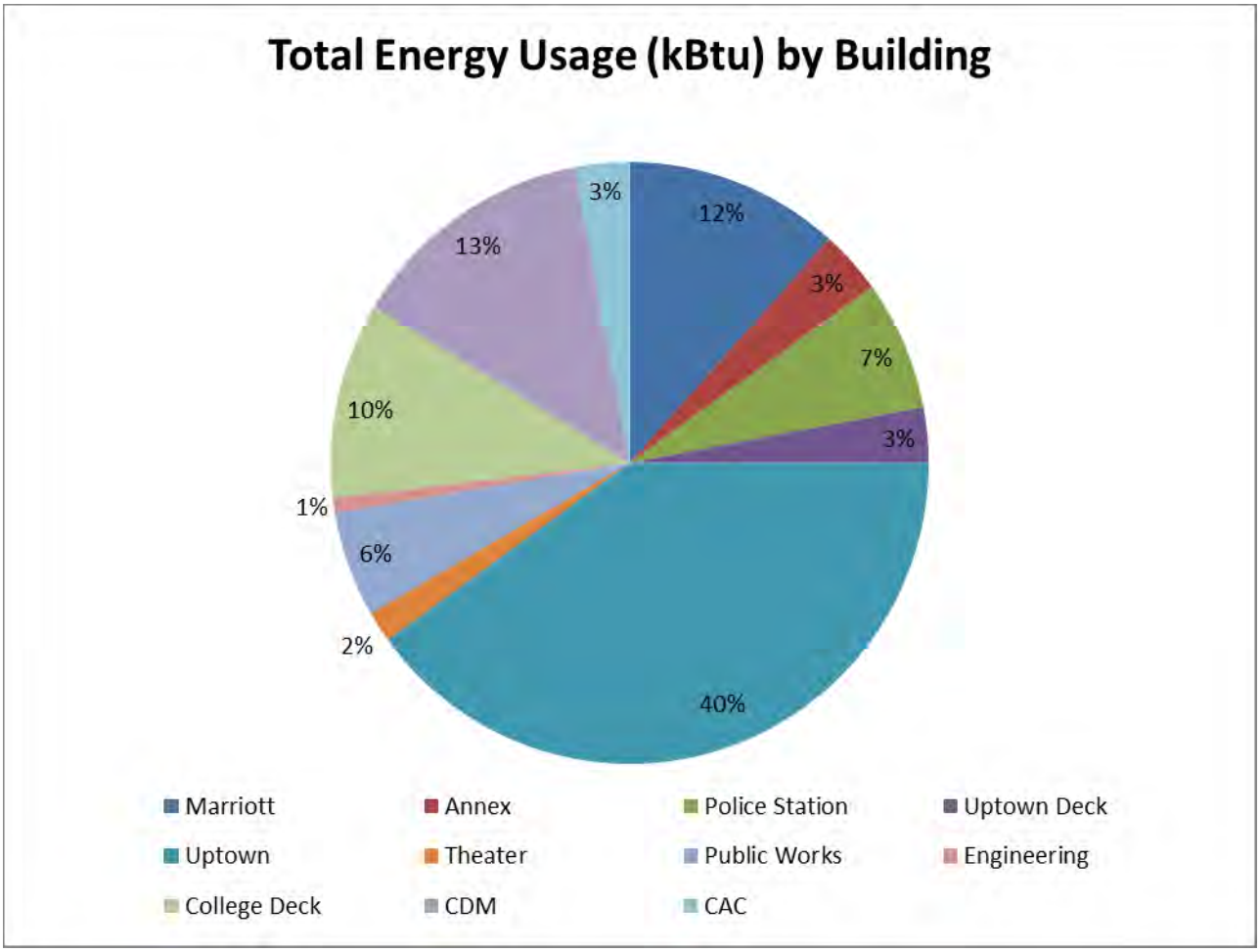
Building	Work Orders	Building Value	FCI
ACTIVITY CENTER	$535,953	$4,118,505	0.130
BEAUFORT STREET PARKING DECK	$5,592	$10,088,708	0.001
CHILDRENS DISCOVERY MUSEUM	$72,036	$6,142,551	0.012
COLLEGE AVENUE PARKING DECK	$15,581	$12,400,703	0.001
ENGINEERING	$23,427	$963,850	0.024
PUBLIC WORKS - OLD GARAGE	$10,394	$431,923	0.024
PUBLIC WORKS EXPANSION	$6,000	$4,063,046	0.001
THEATER	$139,432	$1,294,718	0.108
UPTOWN STATION INCL ADMIN OFFICES AND DECK	$137,483	$28,537,635	0.005
POLICE DEPARTMENT	$175,970	$5,797,952	0.030
CITY HALL ANNEX	$143,372	$3,865,302	0.037

Appendix B-Facility Condition Index



Appendix B-Facility Condition Index




Total Energy Usage (kBtu) by Building
12%
3%
7%
3%
40%
2%
6%
1%
10%
13%
3%
Marriott
Annex
Police Station
Uptown Deck
Uptown
Theater
Public Works
Engineering
College Deck
CDM
CAC

SEDAC

DCEO Illinois Energy Now Incentives: Quick Reference Guide

	IMPORTANT INFORMATION	
This is a general guide to energy efficiency incentives available through the Illinois Department of Commerce and Economic Opportunity's Illinois Energy Now program. This page is intended as a quick reference guide only - please refer to the incentive application to see the exact values. All incentive Pre-approval Applications are due by April 1, 2015 and Final Applications (and completed projects) are due by May 8, 2015.		
Incentive Application:	http://www.illinois.gov/dceo/whyillinois/KeyIndustries/Energy/Pages/EnergyEfficiencyForms.aspx	
Boiler Tune-Up Application:	http://www.illinois.gov/dceo/whyillinois/KeyIndustries/Energy/Pages/PublicSectorNaturalGasBoilerTuneUp.aspx	
Most Up-to-Date version of this guide:	http://smartenergy.illinois.edu/energy-incentives.html	
Contact DCEO	illinois.energy@illinois.gov	(217) 785-5081
The Smart Energy Design Assistance Center (SEDAC) is available to help with completing DCEO applications. Contact us for assistance!		
www.sedac.org	info@sedac.org	1-800-214-7954

	PROMOTIONS
Sweet Deal	An extra 10% on projects completed and Final Applications submitted by October 31, 2014 An extra 5% on projects completed and Final Applications submitted by February 14, 2015
Double-Up Natural Gas Bonus	Incentives for many natural gas projects were doubled from their values at the start of the 2012 program year (June 2012). Individual incentives highlighted in red below are listed at their doubled values. The values for these projects are expected to go down in the future, so act now to get the most funding possible.
Clean Water Energy Efficiency Initiative	Custom incentives for Turbo Blowers can receive up to 100 percent of the project cost, at the rate of $0.36/kWh. Use special addendum application forms found at http://www.illinois.gov/dceo/whyillinois/KeyIndustries/Energy/Pages/EnergyEfficiencyForms.aspx
Partner Bonus	Partner Bonus: organizations attending a SEDAC training, Trade Ally training, or participating in the MEEA STEP program can get a 15% bonus on projects and final applications completed by April 1, 2015.

	ELECTRIC INCENTIVES	
HVAC - Electric		
Air Cond.	Unitary, Split Syst AC and Air Source Heat Pumps	$100/ton
	Room Air Conditioners	$83/ton
PTAC / PTHP	PTAC/ PTHP Replacement	$50/ton
	PTAC/PTHP New	$50/ton
Chillers	Water-Cooled Chillers (Level 1)	$33/ton
	Water-Cooled Chillers (Level 2)	$66/ton
	Air-Cooled Chillers (Level 1)	$50/ton
	Air-Cooled Chillers (Level 2)	$100/ton
	Variable Speed Drive (VSD) on chiller	$92/hp
Water Heaters	Low Flow Pre-Rinse Spray Valve, for Elec. WH	$32/valve
	Low Flow Faucet Aerators, for Elec. WH	$8/valve
Air Comp.	Air Compressor with Integrated VSD≤100hp	$120/unit
	Compressed Air Low Pressure Drop Filters	$5/hp
	Compressed Air No-Loss Condensate Drain	$150/drain
Misc.	VFD Retrofit (DCEO HVAC VFD only, other types of pumps are custom)	$92/hp

SEDAC

DCEO Illinois Energy Now Incentives: Quick Reference Guide

	ELECTRIC INCENTIVES	
Lighting		
CFL Screw-In	26 W or less	$1.50/lamp
	27 W or more	$2/lamp
CFL Hard-Wired	29 W or less	$45/fixture
	30 W or more	$82/fixture
T12 to T8	(8ft) HP lamp and ballast retrofit	$22/lamp
	(4ft) HP lamp and ballast retrofit	$13/lamp
	(3ft) lamp and ballast retrofit	$12/lamp
	(2ft) lamp and ballast retrofit	$7/lamp
	U-tube lamp and ballast retrofit	$7/lamp
HP T8 to RW T8	(8ft) lamp and ballast	$2.50/lamp
	(4ft) lamp and ballast	$1.50/lamp
T8, T5 (includes highbay)	New fixture, new ballast	$0.75/W reduced
Permanent Delamp	(8ft) with reflector	$29/lamp
	(4ft) with reflector	$22/lamp
	(8ft) No reflector	$15/lamp
	(4ft) No reflector	$12/lamp
Induction Lighting	New Exterior Induction Fixture	$1.30/ W reduced (<4,380 hours operation) or $0.30/kWh reduced (>4.380 hours operation)
	New Induction Wall Pack	$50-$100/fixture
	Interior Induction Lighting ≤ 160W	$0.60/W reduced
Cold Cathode Lighting	Cold Cathode Interior Fixtures	$0.60/W reduced
	Cold Cathode Exterior Fixtures	$1.30/ W reduced (<4,380 hours operation) or $0.30/kWh reduced (>4.380 hours operation)
Exit Signs	New LED, T-1, or Electroluminescent Exit Signs	$25/sign
	LED Exit Sign Retrofit Kit <6W	$25/sign
LED	LED Lamp or Fixture <20W	$15/Lamp
	LED Lamp or Fixture >20W	$0.60/W reduced
	New LED Wall Pack	$50-$100/fixture
	New Exterior LED Fixture	$1.30/ W reduced (<4,380 hours operation) or $0.30/kWh reduced (>4.380 hours operation)
Traffic Signals	8" Traffic LED Signal Head	$50/lamp
	12" Traffic LED Signal Head	$50/lamp
	8" Arrow LED Module or Single Ball	$50/lamp
	12" Arrow LED Module or Single Ball	$50/lamp
	12" Pedestrian LED Module	$50/lamp
Interior Sensors	Lighting Occupancy/Vacancy Sensor	$0.16/Watt
	Bilevel sensor (ComEd-stairwell/hall/garage)	$70/fixture
	Multi-level switch	$0.05/Watt
Solar Light Tubes	<= 10" diameter	$70/fixture
	>10" diameter and <21" diameter	$100/fixture
	>=21" diameter	$130/fixture

SEDAC

DCEO Illinois Energy Now Incentives: Quick Reference Guide

	ELECTRIC INCENTIVES	
Kitchen Equipment - Electric		
Refrigerators/ Freezers	Solid Door Freezer	$5/ft3
	Glass Door Freezer, Refrigerator	$6/ft3
	Anti-Sweat Heater Controls	$35/linear ft
	EC Motor for Walk-In Cooler, Freezer	$75/motor
	EC Motor for Reach-In Cooler, Freezer	$52/motor
	Evaporator Fan Controls on Shaded Pole Motor	$90/motor
	Refrigeration Economizer	$120/compressor hp
	Auto Door Closer for Walk-Ins	$100/door
	LED Refrigeration Case Lighting (Closed)	$60/door
	LED Refrigerated Display Case (Open)	$60/door
Misc.	Steam Cookers, 3 to 6 pan, > 50% eff	$450-$600/unit
	High-Efficiency Ice Maker	$225-$600/unit
	Electric Griddle	$50/Linear ft width
	Hot Food Holding Cabinet	$240-$600/unit
	Demand Controlled Ventilation, New Exhaust Hood	$450/hp
	Demand Controlled Ventilation, Retrofit	$600/hp
Dishwashing & Water Conservation	ENERGY STAR Dishwasher	$475-$1,800/unit
	Low-Flow Pre-Rinse Spray Valve	$32/unit
	Faucet Aerators	$8/unit
Specialty Equipment		
Vending	Refrigerated Vending Machine	$150/unit
	Beverage Machine, Snack Controls	$110/unit; $45/unit
GSHP	Ground Source Heat Pump (All Electric)	See Application
Custom		
Custom	Custom Electric Incentives	$0.12/kWh

SEDAC

DCEO Illinois Energy Now Incentives: Quick Reference Guide

	NATURAL GAS INCENTIVES	
HVAC		
Furnace	Furnace, ≥92% AFUE	**$10/MBH**
	Furnace, ≥94% AFUE	**$12/MBH**
	Furnace, ≥96% AFUE	**$14/MBH**
Boiler	HW Non-Condensing, ≤ 1,000 MBH, AFUE > 85%	**$7/MBH**
	HW Condensing, < 1,000 MBH, AFUE > 90%	**$14/MBH**
	HW Condensing, 1,000 MBH, TE > 90%	**$8/MBH**
	Boiler Tune-Up, ≥ 200 MBH	$0.50/MBH ($1,500max)
	Boiler Reset	**$0.75/MBH**
	Hot Water Boiler Pipe Insulation	**$8-$20/linear ft**
	Parallel Positioning Control System	**$3/therm saved**
Steam	Steam Boiler Pipe Insulation	**$8-$20/linear ft**
	Steam Trap Repair/Replace	**$200-$600/trap**
Water Heater	Tank, ≥ 75 MBH, ≥ 0.65% Energy Factor	**$600/unit**
	Tankless, ≥ 0.82% Energy Factor	**$1500/unit**
Misc.	Infrared Heater, Low intensity heater	$850/unit
	Condensing Unit Heater, TE ≥ 90%	$3/MBH
DCV	Natl Gas Heat, Elec or Natl Gas Absorp. AC	$40/1,000 sf
	Natl Gas Heat, No AC	$40/1,000 sf
Kitchen Equipment		
Ovens	Convection Oven	$650/unit
	Combination Oven	$1250/unit
	Infrared Rotisserie Oven	$650/unit
	Infrared Upright Broiler	$780/unit
	Infrared Charbroiler	$420/unit
	Conveyer Oven	$950/unit
	Rack Oven, Double Oven	$650/unit
	Pasta cooker with infrared burner	$300/unit
	Infrared Salamander Broiler	$240/unit
Cookers	Fryer	$350/unit
	Griddle	$50/linear ft (width)
	Steam Cooler, 3-6 pan, eff ≥38%	**$500-$800/unit**
Vent. Hoods	DCV for Kitchen Vent Hoods	$450-600/hp
Washing Equip.	Dishwasher, No Booster/With Booster	$475-$1800/unit
	Pre-Rinse Spray Valve (Gas Water Heater)	**$64/unit or FREE**
Specialty Equipment		
Misc.	Faucet aerators	**$16/unit**
	Low-flow showerheads	$6/unit
	Ground Source Heat Pump (natural gas heating)	See Application
Custom		
Custom	Custom Natural Gas Incentive	**$3/therm**

Recommended Light Levels for Parking Garages

Area		Minimum Horizontal Illuminance[2] lux (fc)	Maximum Max-to-Min Ratio	Minimum Vertical Illuminance[3] lux (fc)
Basic[1]		10 (1.0)	10:1	5 (0.5)
Ramps[4]	Day[5]	20 (2.0)	10:1	10 (1.0)
	Night	10 (1.0)	10:1	5 (0.5)
Entrance Areas	Day[5]	500 (50)		250 (25)
	Night	10 (1.0)	10:1	5 (0.5)
Stairways		20 (2.0)		10 (1.0)

1 = Typical conditions
2 = Measured on the parking surface without any shadowing effects.
3 = Measured 1.5m above parking surface at point of lowest horizontal illuminance (not including points on the boundaries facing outward.)
4 = Applies to clearway ramps (no adjacent parking) but not to sloping floor designs.
5 = Daylight may be considered in the design calculation.

Community Activity Center

Building Overview

The Farnsworth team audited the Community Activity Center for the Town of Normal on May 14, 2014. The building was originally part of the State run children's home complex, which it served as a school facility within the complex. The building was purchased by the Town of Normal and subsequently renovated in 1997 for its present use as a community activity center. The building areas and estimated-average number of people that use the facility is shown in the table below.

Space	Total Area (SF)	Visitors	Equivalent to Full Time
Office	1,148	10	10
School	6,550	30	-
Theater	2,500	*	-
Social/activity	6,000	70	-
Garage	2,500	3	-
Other	4,780	2	-
Total	23,478	115	10

**Theater daily-average visitors was not defined due to the sporadic usage of the theater.*

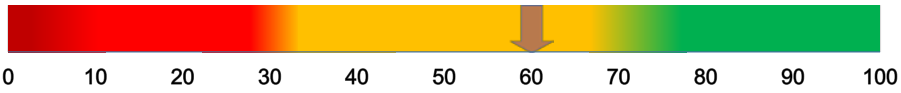
The scope of this project contained two key assessment areas: Facility Condition Assessment (FCA) and an energy audit. The Farnsworth team reviewed and analyzed asset data collected by the Town of Normal staff. On-site assessments, which were conducted with a team of engineers, verified asset data collected by the staff, assessed the facility's assets, and performed an energy audit of the facility.

Facility Condition Index (FCI= Maintenance, repair, and replacement of deficiencies of a facility divided by the current replacement value of the facility) is used to provide a benchmark to compare the relative condition of a facility or a group of facilities. To define the ratings, industry standards were used: good (under 0.05), fair (0.05 to 0.10), and poor (over 0.10).

Facility Condition Index	
Facility's Insured Value	$4,118,505
Work Orders (App. A)	$535,953
Facility Condition Index	Poor (0.13)

Along with the FCI, the Farnsworth team developed an Averaged Building Component Rating, which was attained by averaging all the building component ratings for the facility. The Averaged Rating for the CAC is 60. This is based on a 100 point scale, so the CAC falls into the above average category.

The Averaged Building Component Rating

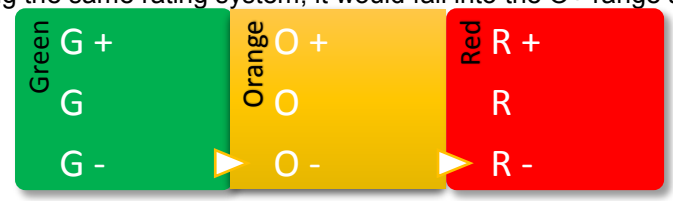


The Farnsworth team received the Community Activity Center's utility usage and entered the data into the Energy Star program and attained the performance data below.

Metric	Community Center	Median Property	% Diff
E-STAR score	46	50	-8%
EUI (kBtu/ft²)	90	86	105%

Facility Condition Assessment

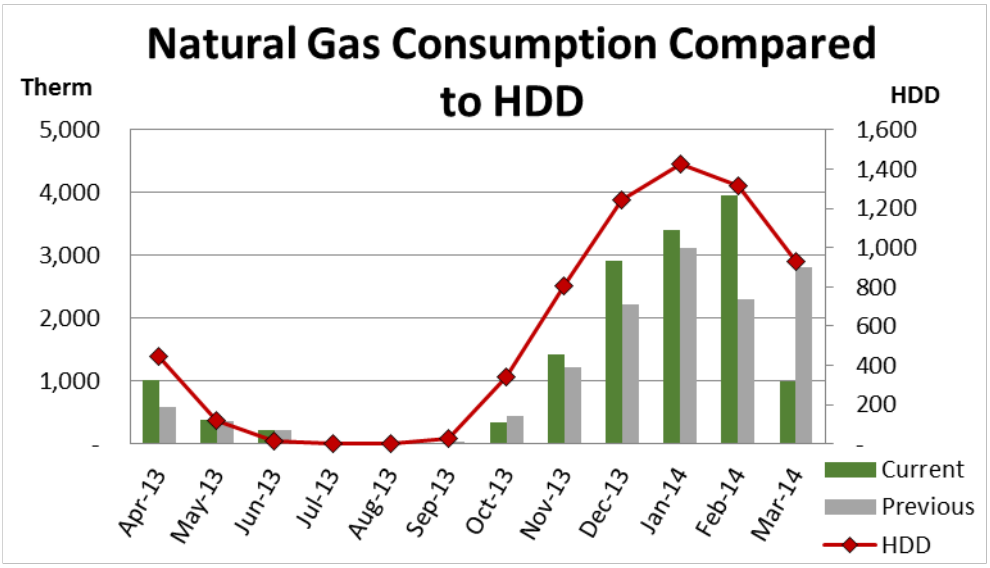
The Farnsworth team assessed the individual building components, e.g., foundations, walls, roofs, windows, doors, interior finishes, landscape (hard and soft), and MEP services (Mechanical, Electrical, and Plumbing). A direct survey of the facility's assets was conducted to verify data collected by the facility's staff and rate the building components. The direct survey method entailed a visual inspection of the asset with no intrusive diagnostic investigation. Industry standards were used to define and rate the building components; a nine point rating system was used, which employs a Green-Orange-Red primary rating assessment. The Community Activity Center rates at an above average condition with an index within the O+ range. The rating of O+ was attained by taking the average of all the component ratings. If the building was assessed as one asset utilizing the same rating system, it would fall into the O+ range as well. The Community Activity Center overall in above average condition with the roof covering being the only major component in poor condition. See **Appendix B** for detailed breakdown of components.



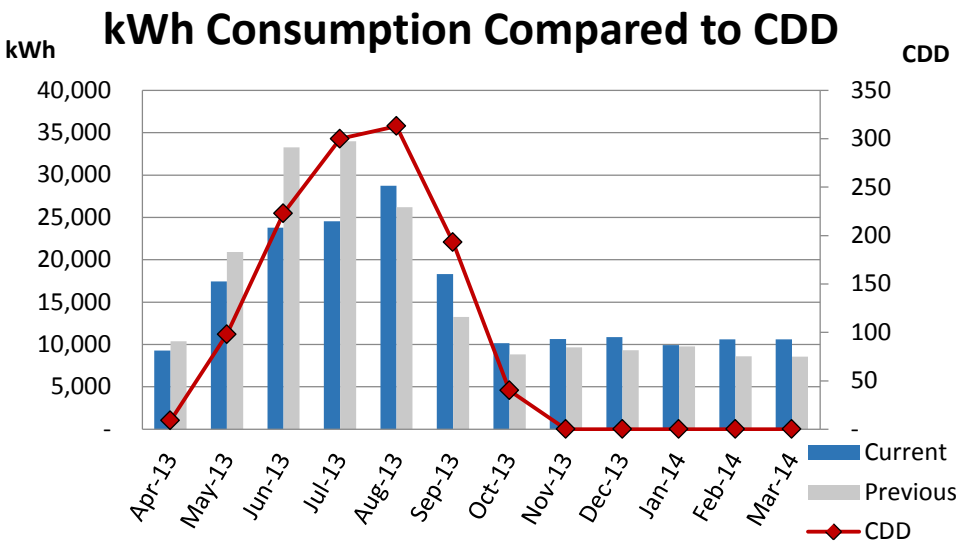
Energy Assessment

Preliminary Energy-Use Analysis

The energy assessment for the Community Activity Center included a Preliminary Energy-Use Analysis (PEA). During the PEA, the utility bills were reviewed to identify any efficiency or usage modification opportunities before conducting the walk-through. The analysis of the Natural Gas billing, see below graph, indicated energy consumption is influenced by environmental conditions with a substantial variance in March. The HDD variance between March 2013 and March 2014 does not warrant the substantial variance in consumption as depicted in the graph. Increased usage of the building or a possible change in control sequencing for the heating system are possible explanations; however, further investigation and monitoring is recommended into this issue.



The below graph of electrical consumption indicates baseline load of approximately 9,000 kWh / month with a substantial increase in consumption during the summer months. Variations the electrical usage between like months can be attributed to the difference in the CDD within the same time period.
See **Appendix C** for further information.



Metric	Community Center	Median Property	% Difference
ENERGY STAR score	46	50	-8%
EUI (kBtu/ft²)	90	86	105%

Energy Utilization Index (EUI) is a reference that expresses the total energy (fossil fuel and electricity) used by a facility in a given period (month, year, etc.) in terms of kBtu's/gross conditioned square feet. In comparing the CAC EUI to the median property, the Community Activity Center is consuming more (105%) energy per SqFt than the median property.

Energy Star Rating is a rating system developed by the U.S. EPA. The Energy Star program is an energy performance rating systems for several commercial and institutional building types. These ratings, on a scale of 1 to 100 with 100 being very efficient, provide a means for benchmarking the energy efficiency of specific buildings and industrial plants against the energy performance of similar facilities. In order to attain an Energy Star benchmark, the CAC was entered into the program as 23,478 SqFt office building operating 50hrs/wk. with 10 main shift workers and 6 computers. The Community Activity Center Energy Star rating at this time is 46, which indicates the building is less efficient than the median property by 8%.

Site Energy Survey

A modified ASHRAE Level 1 Walk-Through Analysis was conducted and identified Energy Conservation Measures (ECM). The site survey was a non-invasive site inspection of the building and its services. The team reviewed the compiled ECMs for recommendation of implementation based on prior experiences. See table below.

Energy Improvement Opportunities					
	Description	**Class**	**Potential savings**	**Recommended priority**	**Available Rebate**
CAC 01	Photo cells and occupancy sensors for the remaining non-automated interior lighting.	Proj.	$700/yr	High	X
CAC 02	Time clock in conjunction with present photo eyes for the parking lot/exterior pole lighting.	Proj.	$260/yr	High	X
CAC 03	Exterior building light fixtures to be replaced with high efficient fixtures.	Proj.	$100/yr	High	X

CAC 04	Replace old battery packs and Exit lights with LED fixtures.	Proj.	$250/yr	High	X
CAC 05	Update heating plant to a high efficient boiler.	Proj.	$3100/yr	Medium	X
CAC 06	Update temperature controls.	Proj.	$900/yr	Medium	X
CAC 07	Update air handling equipment to variable volume units.	Proj.	$1000/yr	Medium	X
CAC 08	Update pumps for HW and CHW to variable speed units.	Proj.	$900/yr	Medium	X
CAC 09	Update chilled water plant to high efficient chiller.	Proj.	$1000/yr	Low	X
CAC 10	Insulate existing garage door and provide weather strip/seal for jambs and header	O&M	$25/yr	Medium	
CAC 11	Re-caulk windows and doors. Existing caulk is past its life expectancy.	O&M	Savings is negligible, but this action would be improving and protecting the asset.		
CAC 12	Replace exterior windows	Proj.	$200/yr, but this action would be improving and protecting the asset.		

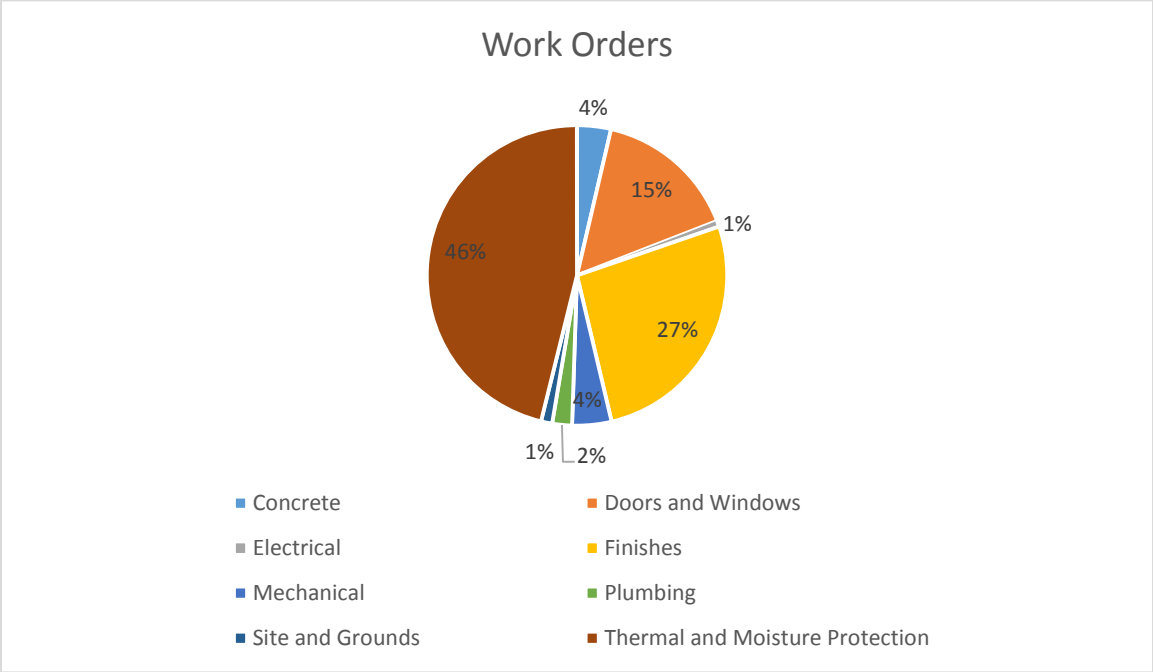
The listed ECMs represent great opportunities for the Town of Normal to achieve some of their goals and objectives: being good stewards of the taxpayer's money, providing value-added services to the community, maintaining the community's assets to a definable, acceptable level.

Building Summary

The Community Activity Center rated at an above average condition. It is a structure that has only one major deficiency, the roof, which is in the process of being replaced. Upon completion it is expected that the rating will improve. The interior finishes, systems, and services are aged but serviceable; they can be addressed in an order of precedence defined by variables, e.g., alignment with the Town's goals, financial (feasibility and value added), impact building efficiency, importance on building function. Energy improvement opportunities can be implemented on a scheduled basis and with little or no disruption in the building usage. The Community Activity Center is operating at an efficiency level that is 8% below the median property. The PEA indicates the Community Activity Center consumes most of its energy in a temperature control function. Therefore, the services within the building represent opportunities for improvements in energy conservation and occupant comfort. An upgrade in the HVAC system (CAC 5-9) would improve the building efficiency. If the Town of Normal chooses to pursue such ECM, it is recommended to have the heating and cooling calculations done for the building; a system improperly sized will not provide the full benefits that correctly sized system will. Often, the correctly sized systems are smaller (actual BTU output) than the original units. ECMs CAC 1-4 are some easier, low-cost solutions that could possibly be done "in-house" if the facility staff has the available manpower.

Work Order Estimate Total	$535,953
Concrete	$19,548
Doors and Windows	$82,737
Electrical	$3,488
Finishes	$142,299
Mechanical	$22,717
Plumbing	$11,395
Site and Grounds	$6,385
Thermal and Moisture Protection	$247,383

Deficiencies were noted by FM staff. Farnsworth team validated logged work orders on a random sampling basis and compiled additional work orders to be logged into the CMMS. FM staff used RS Means for estimating the work orders. Estimates were peer reviewed for accuracy, but are susceptible to a variety of factors including current economy, timing, contractor and product selection. Cost opinions were derived from field observations, assumption of reasonable scope and typical remedies. Cost opinions are not inclusive of exploratory observations, or the opinion of specialty consultants. Probable cost estimates are included as reference to quantitatively identify the financial impact a noted deficiency may represent. The information is also necessary to quantify the variable needed to calculate Facility Condition Index (FCI) ratings.

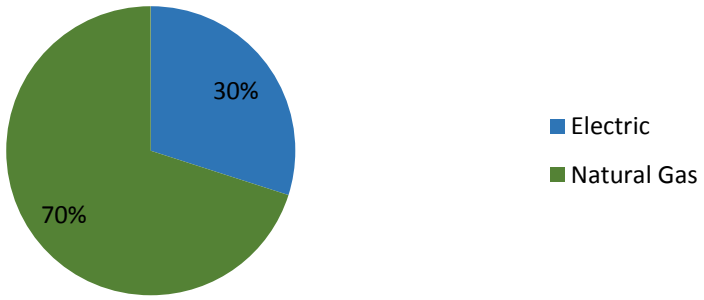


Component system	Asset component	Condition Assessment	
		Grade	Scale
A10 Foundations	A1010 Standard Foundations	G-	73
	A1020 Special Foundations	G-	73
	A1030 Slab on Grade	G-	73
A20 Basement Construction	A2020 Basement Walls	G	84
B10 Superstructure	B1010 Floor Construction	G-	73
	B1020 Roof Construction	O+	62
B20 Exterior Enclosure	B2010 Exterior Walls	O	51
	B2020 Exterior Windows	O-	40
	B2030 Exterior Doors	O-	40
B30 Roofing	B3010 Roof Coverings	R	18
	B3020 Roof Openings	O-	40
C10 Interior Construction	C1010 Partitions	O	51
	C1020 Interior Doors	O	51
	C1030 Fittings	O	51
C20 Stairs	C2010 Stair Construction	O+	62
	C2020 Stair Finishes	O+	62
C30 Interior Finishes	C3010 Wall Finishes	O+	62
	C3020 Floor Finishes	O	51
	C3030 Ceiling Finishes	O	51
D10 Conveying	D1010 Elevators & Lifts	R+	29
D20 Plumbing	D2010 Plumbing Fixtures	O+	62
	D2020 Domestic Water Distribution	O+	62
	Elec water heater 1	G-	73
	Elec water heater 2	G-	73
	Galvanized piping	R+	29
	Copper piping	O+	62
	D2030 Sanitary Waste	O+	62
	D2040 Rain Water Drainage	O+	62
	D2090 Other Plumbing Systems	G	84
	Irrigation system	G	84
D30 HVAC	D3010 Energy Supply	G-	73
	D3020 Heat Generating Systems	O+	62
	LBG-17 Weil McLain (basement)	O+	62
	D3030 Cooling Generating Systems	O+	62
	Carrier 30GTP070-510	O+	62
	D3040 Distribution Systems	O+	62

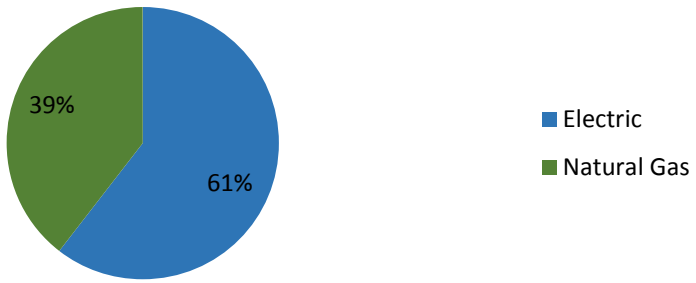
	AHU-1	**O+**	62
	AHU-2	**O+**	62
	AHU-3	**O+**	62
	AHU-4	**O+**	62
	Cabinet units	**O**	51
	D3050 Terminal & Package Units	**G**	84
	AUX cooling units	**G**	84
	D3060 Controls & Instrumentation	**R**	18
	D3070 System Testing & Balancing	**R**	18
D40 Fire Protection	D4010 Sprinklers	**G-**	73
	D4020 Standpipes	**G-**	73
	D4030 Fire Protection Specialties	**O+**	62
	D4090 Other Fire Protection Systems	**G-**	73
D50 Electrical	D5010 Electrical Service & Distribution	**O**	51
	Switchboard and Panel boards	**O-**	40
	Conduit	**G-**	73
	D5020 Lighting and Branch Wiring	**G-**	73
	D5030 Communications & Security	**O+**	62
	D5090 Other Electrical Systems (time clock)	**O**	51
E20 Furnishings	E2010 Fixed Furnishings	**O-**	40
	E2020 Movable Furnishings	**O**	51
F20 Selective Building Demolition	F2020 Hazardous Components Abatement	**O**	51
G20 Site Improvements	G2010 Roadways	**O+**	62
	G2020 Parking Lots	**O+**	62
	G2030 Pedestrian Paving	**O**	51
	G2040 Site Development	**G-**	73
	G2050 Landscaping	**G-**	73
G30 Site Mechanical Utilities	G3010 Water Supply	**G-**	73
	G3050 Cooling Distribution	**O-**	40
G40 Site Electrical Utilities	G4010 Electrical Distribution	**O+**	62
	G4020 Site Lighting	**G-**	73
Averaged Building Component Rating		O+	60

Totals		
Total kBtu Usage (Annual)		2,106,130.40
Site EUI		89.71
Total Cost Utilities		$ 22,389.60
Average $/kBtu		$ 0.011
% Consumption	Electric	30%
% Consumption	Natural Gas	70%
% Consumption	Other Energy 1	0%
% Consumption	Other Energy 2	0%
% Cost	Electric	61%
% Cost	Natural Gas	39%
% Cost	Other Energy 1	0%
% Cost	Other Energy 2	0%
$$ paid for Electric over Gas		$ 4,702.64
$$ paid for Electric over Gas/kBtu		$ 0.02

Utility Consumption %



Utility Cost %



Beaufort Street Marriot Parking Deck

Building Overview

The Farnsworth team reviewed the Beaufort Street Marriot Parking Deck (BMPD) for the Town of Normal. The BMPD construction was completed in 2009. There are 5 levels including space allowed for future development of retail spaces. The deck areas and estimated-average number of people that use the facility is shown in the table below.

Space	Total Area (SF)	Visitors	Equivalent to Full Time
Parking	162,657.5	-	-
None Parking	4,880.5	-	-
Mech/Elec	1,373	-	-
Total	168,611	-	-

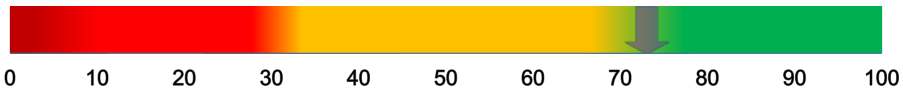
The scope of this project contained two key assessment areas: Facility Condition Audit (FCA) and an energy audit. The Farnsworth team reviewed and analyzed asset data collected by the Town of Normal staff. On-site assessments, which were conducted with a team of engineers, verified asset data collected by the staff, assessed the facility's assets, and performed an energy audit of the facility.

Facility Condition Index (FCI= Maintenance, repair, and replacement of deficiencies of a facility divided by the current replacement value of the facility) is used to provide a benchmark to compare the relative condition of a facility or a group of facilities. To define the ratings, industry standards were used: good (under 0.05), fair (0.05 to 0.10), and poor (over 0.10).

Facility Condition Index	
Facility's insured value	$10,088,708
Work Orders (App. A)	$5,592
Facility Condition Index	Good (0.0001)

Along with the FCI, the Farnsworth team developed an Averaged Building Component Rating, which was attained by averaging all the building component ratings for the facility. The Averaged Rating for the BMPD is 73. This is based on a 100 point scale, so the BMPD falls into the good category.

The Averaged Building Component Rating

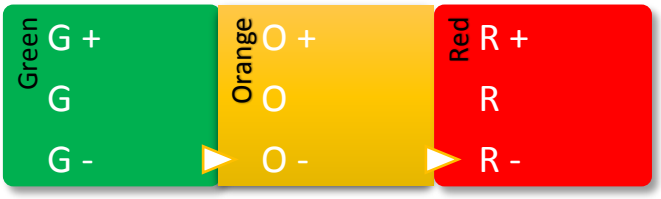


The Farnsworth team received the BMPD's utility usage and entered the data into the Energy Star program and attained the performance data below.

Metric	BMPD	Median Property	% Diff
E-STAR score	N/A	N/A	N/A
EUI (kBtu/ft²)	9.27	N/A	N/A

Facility Condition Assessment

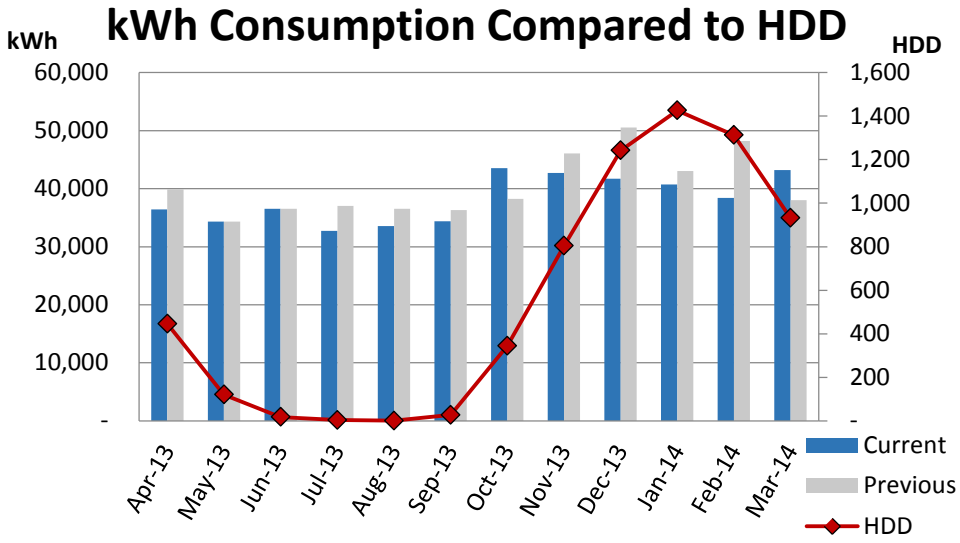
The Farnsworth team assessed the individual building components, e.g., foundations, walls, roofs, windows, doors, interior finishes, landscape (hard and soft), and MEP services (Mechanical, Electrical, and Plumbing). A direct survey of the facility's assets was conducted to verify data collected by the facility's staff and rate the building components. The direct survey method entailed a visual inspection of the asset with no intrusive diagnostic investigation. Industry standards were used to define and rate the building components; a nine point rating system was used, which employs a Green-Orange-Red primary rating assessment. The BMPD rates at an above average condition with an index within the G- range. The rating of G- was attained by taking the average of all the component ratings. If the building was assessed as one asset utilizing the same rating system, it would fall into the G- range as well. The building has one component, condensing unit-1, that is in poor condition, which has little effect on the building function. See **Appendix B** for detailed breakdown of components.



Energy Assessment

Preliminary Energy-Use Analysis

The energy assessment for the BMPD included a Preliminary Energy-Use Analysis (PEA). During the PEA, the utility bills were reviewed to identify any efficiency or usage modification opportunities before conducting the walk-through. The analysis of the electric bills indicated a fairly consistent power consumption with a base line load of 30,000 kWh with a small variance in the winter months due to electric heat. The chart below, however, shows higher use during the spring and fall months over the peak cooling demand in July and August. The functioning of the HVAC system should be further investigated to save energy. See **Appendix C** further information.



Metric	BMPD	Median Property	% Difference
ENERGY STAR score	N/A	N/A	N/A
EUI (kBtu/ft²)	9.27	N/A	N/A

Energy Utilization Index (EUI) is a reference that expresses the total energy (fossil fuel and electricity) used by a facility in a given period (month, year, etc.) in terms of Btu's/gross conditioned square feet.

Energy Star Rating Cannot be generated for a parking deck structure.

Site Survey

A modified ASHRAE Level 1 Walk-Through Analysis was conducted and identified Energy Conservation Measures (ECM). The site survey was a non-invasive site inspection of the building and its services. The team reviewed the compiled ECMs for recommendation of implementation based on prior experiences. See table below.

Energy Improvement Opportunities					
	Description	**Class**	**Potential Savings**	**Recommended Priority**	**Available Rebate**
BMPD 01	Daylight sensors for the exterior and interior lighting in areas with windows.	Proj.	$1400/yr	Med.	X
BMPD 02	Lighting retro-fit for parking area lighting.	Proj.	$1000/yr	Med.	X
BMPD 03	Upgrade Exit signs to LED's	Proj.	$160/yr	Med.	X
BMPD 04	Investigate lumen levels throughout the structure	Proj.	-	High	

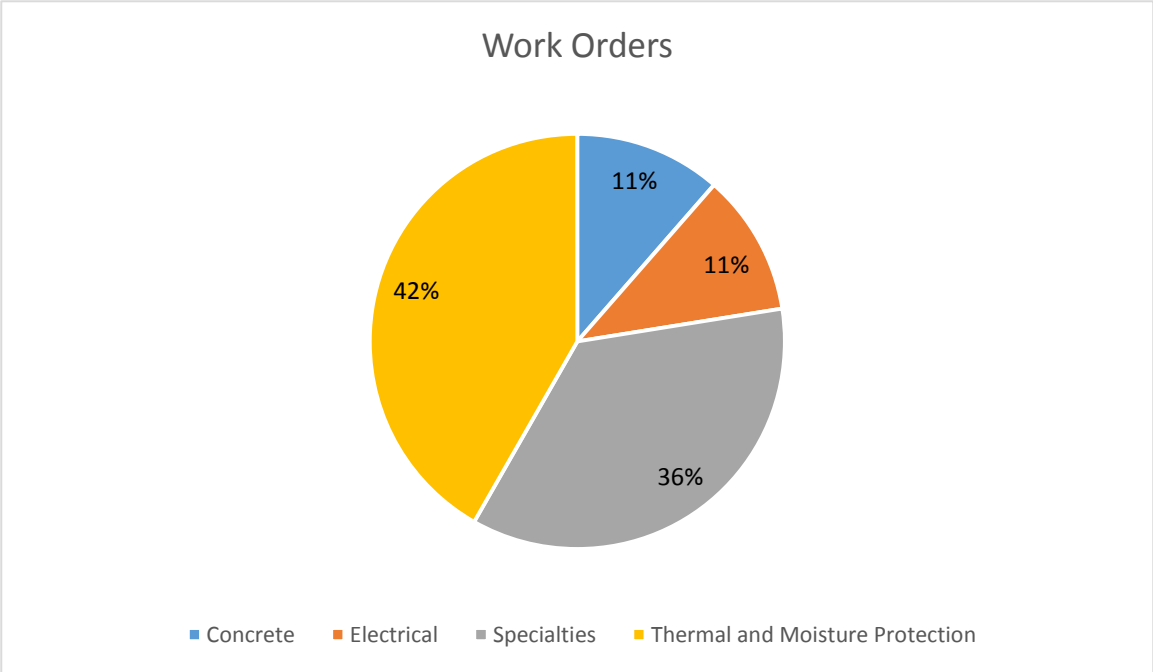
The BMPD energy consumption is lighting and some temperature control through electric heat. The listed ECMs represent some opportunities to reduce the energy consumption of the BMPD. There are illumination requirement for parking structures and survey of the lumen levels is recommended and may reveal addition opportunities (removal of some lights).

Building Summary

The BMPD is a structure with only a deficiency noted in condensing unit-1, which has little effect on the building function. The lighting within building represent opportunities for improvements in energy conservation. It is recommended to survey the lumen levels throughout the parking structure to ensure lighting level are not greatly exceeding the requirements for a parking structure.

Work Order Estimate Total	$5,592
Concrete	$639
Electrical	$617
Specialties	$2,003
Thermal and Moisture Protection	$2,333

Deficiencies were noted by FM staff. Farnsworth team validated logged work orders on a random sampling basis and compiled additional work orders to be logged into the CMMS. FM staff used RS Means for estimating the work orders. Estimates were peer reviewed for accuracy, but are susceptible to a variety of factors including current economy, timing, contractor and product selection. Cost opinions were derived from field observations, assumption of reasonable scope and typical remedies. Cost opinions are not inclusive of exploratory observations, or the opinion of specialty consultants. Probable cost estimates are included as reference to quantitatively identify the financial impact a noted deficiency may represent. The information is also necessary to quantify the variable needed to calculate Facility Condition Index (FCI) ratings.



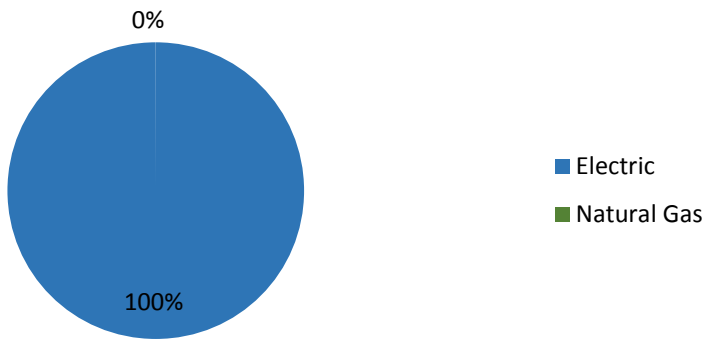
Appendix B-*Component Assessment*

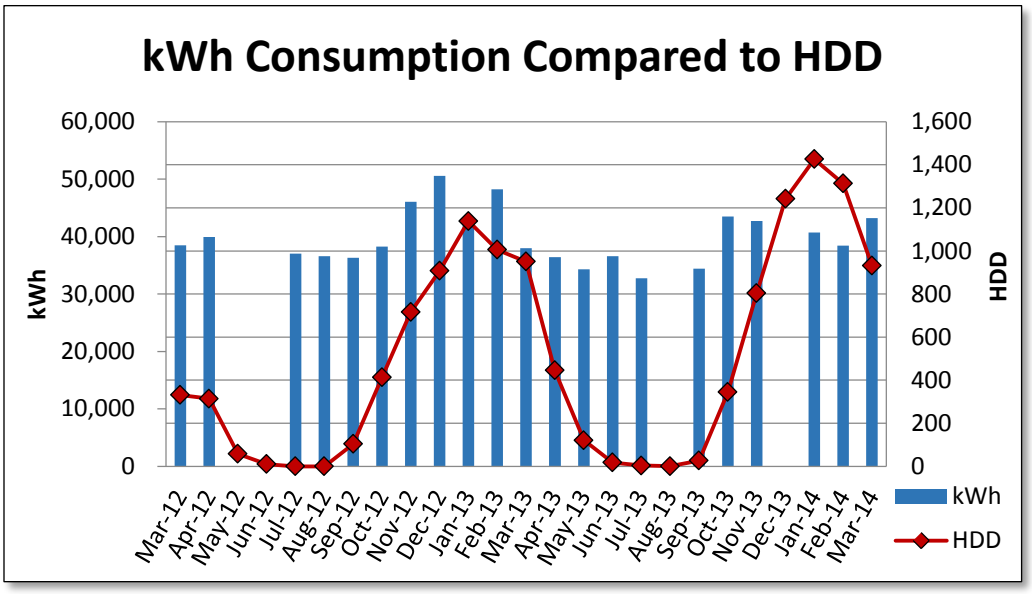
Component system	Asset Component	Condition Assessment	
		Grade	Scale
A10 Foundations	A1010 Standard Foundations	G	84
	A1020 Special Foundations	G	84
	A1030 Slab on Grade	G	84
A20 Basement Construction	A2020 Basement Walls	G	84
B10 Superstructure	B1010 Floor Construction	G	84
	B1020 Roof Construction	G	84
B20 Exterior Enclosure	B2010 Exterior Walls	G-	73
	B2020 Exterior Windows	G-	73
	B2030 Exterior Doors	O+	62
B30 Roofing	B3010 Roof Coverings	O+	62
	B3020 Roof Openings	O+	62
C10 Interior Construction	C1010 Partitions	G-	73
	C1020 Interior Doors	G-	73
	C1030 Fittings	O+	62
C20 Stairs	C2010 Stair Construction	O+	62
	C2020 Stair Finishes	O+	62
C30 Interior Finishes	C3010 Wall Finishes	O+	62
	C3020 Floor Finishes	G-	73
	C3030 Ceiling Finishes	G-	73
D20 Plumbing	D2010 Plumbing Fixtures	O	51
	D2020 Domestic Water Distribution	G	84
	Copper piping	G-	73
	D2040 Rain Water Drainage	G	84
D30 HVAC	D3010 Energy Supply	G	84
	D3050 Terminal & Package Units	O+	62
	Split System-1	G-	73
	Condensing Unit-1	R+	29
	Split System-2	G-	73
	Condensing Unit-2	O	51
	Split System-3	G-	73
	Condensing Unit-3	O	51
	Various Unit Heaters	G	84
	D3060 Controls & Instrumentation	G	84
D50 Electrical	D5010 Electrical Service & Distribution	G	84
	Generator	G	84
	Switchboard and Panel boards	G	84
	Conduit	G	84
	D5020 Lighting and Branch Wiring	G-	73

	D5030 Communications & Security	**G**	84
G20 Site Improvements	G2010 Roadways	**O+**	62
	G2020 Parking Lots	**O+**	62
	G2030 Pedestrian Paving	**O+**	62
	G2040 Site Development	**G**	84
	G2050 Landscaping	**G**	84
G30 Site Mechanical Utilities	G3010 Water Supply	**G**	84
G40 Site Electrical Utilities	G4010 Electrical Distribution	**G**	84
	G4020 Site Lighting	**G-**	73
Averaged Building Component Rating		**G-**	73

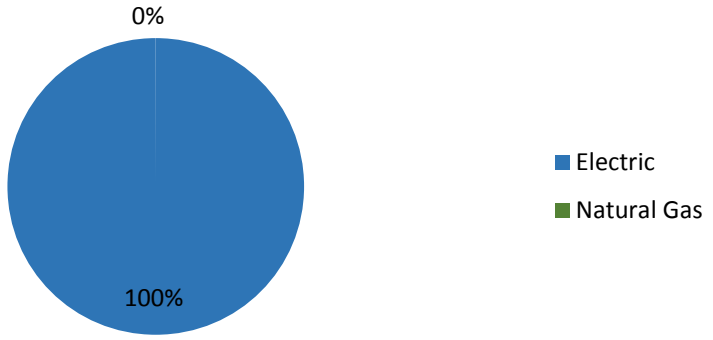
Totals	
Total kBtu Usage (annual)	**1,563,514.88**
Site EUI	**9.27**
Total Cost Utilities	**$ 32,161.86**
Average $/kBtu	**$ 0.021**
% Consumption Electric	**100%**
% Consumption Natural Gas	**0%**
% Consumption Other Energy 1	**0%**
% Consumption Other Energy 2	**0%**
% Cost Electric	**100%**
% Cost Natural Gas	**0%**
% Cost Other Energy 1	**0%**
% Cost Other Energy 2	**0%**
$$ paid for Electric over Gas	**$ 32,161.86**
$$ paid for Electric over Gas/kBtu	**$ 0.02**

Utility Consumption %





Utility Cost %



*No Natural Gas Service

Children's Discovery Museum

Building Overview

The Farnsworth team audited the Children's Discovery Museum for the Town of Normal. The Children's Discovery Museum is museum where touching and interacting with the exhibits is for all ages. The CDM is three-story 29,517 SqFt LEED building built in 2004. The building areas and estimated-average number of people that use the facility is shown in the table below.

Space	Total Area (SF)	Visitors[1]	Equivalent to Full Time
Office	1,515	-	25
Classroom	1,352	22	-
Storage	2,347	-	-
Exhibits/Activity	19,465	130	-
Retail	1,496	18	-
Other	3,342	2	-
Totals	29,517	172	25

The scope of this project contained two key assessment areas: Facility Condition Audit (FCA) and an energy audit. The Farnsworth team reviewed and analyzed asset data collected by the Town of Normal staff. On-site assessments, which were conducted with a team of engineers, verified asset data collected by the staff, assessed the facility's assets, and performed an energy audit of the facility.

Facility Condition Index (FCI= Maintenance, repair, and replacement of deficiencies of a facility divided by the current replacement value of the facility) is used to provide a benchmark to compare the relative condition of a facility or a group of facilities. To define the ratings, industry standards were used: good (under 0.05), fair (0.05 to 0.10), and poor (over 0.10).

Facility Condition Index	
Facility's Insured Value	$6,142,551
Work Orders (App. A)	$72,036
Facility Condition Index	Good (0.012)

Along with the FCI, the Farnsworth team developed an Averaged Building Component Rating, which was attained by averaging all the building component ratings for the facility. The Averaged Rating for the Children's Discovery Museum is 76. This is based on a 100 point scale, so the CDM falls into the higher range, which is to be expected with the newly constructed building.

The Averaged Building Component Rating

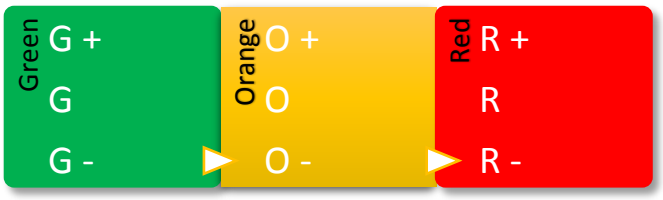
The Farnsworth team received the Children's Discovery Museum's utility usage and entered the data into the Energy Star program and attained the performance data below.

Metric	CDM	Median Property	% Diff
E-STAR score	53	50	6%
EUI (kBtu/ft²)	87	92	5%

[1] 172 total visitors are broken out into different areas based on the observation during the energy assessment.

Facility Condition Assessment

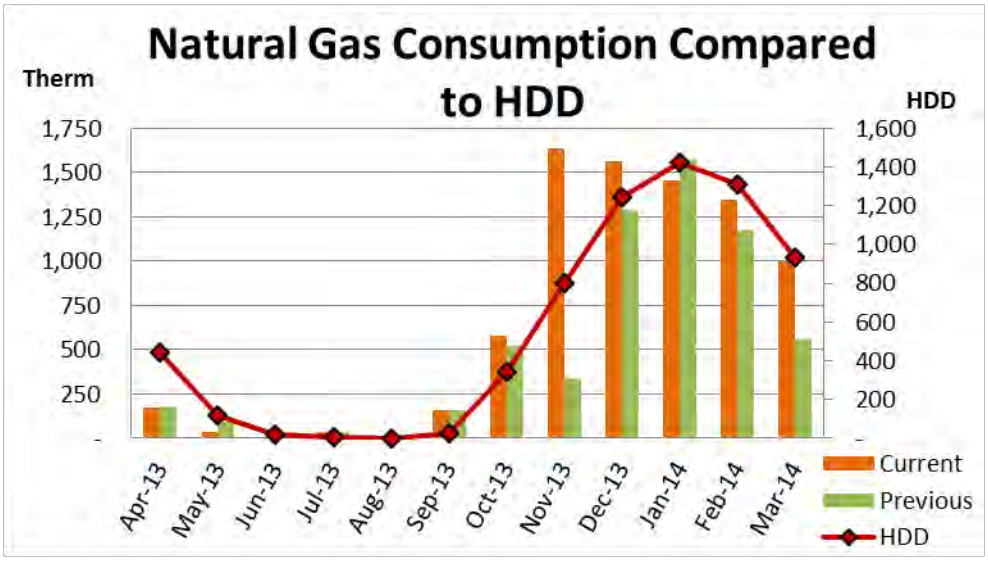
The Farnsworth team assessed the individual building components, e.g., foundations, walls, roofs, windows, doors, interior finishes, landscape (hard and soft), and MEP services (Mechanical, Electrical, and Plumbing). A direct survey of the facility's assets was conducted to verify data collected by the facility's staff and rate the building components. The direct survey method entailed a visual inspection of the asset with no intrusive diagnostic investigation. Industry standards were used to define and rate the building components; a nine point rating system was used, which employs a Green-Orange-Red primary rating assessment. The Children's Discovery Museum is in good condition with an index within the G- range. The rating of G- was attained by taking the average of all the component ratings. If the building was assessed as one asset utilizing the same rating system, it would fall into the G- range as well. The CDM rated well with a G- rating and has no deficiencies within major components. See **Appendix B** for detailed breakdown of components.



Energy Assessment

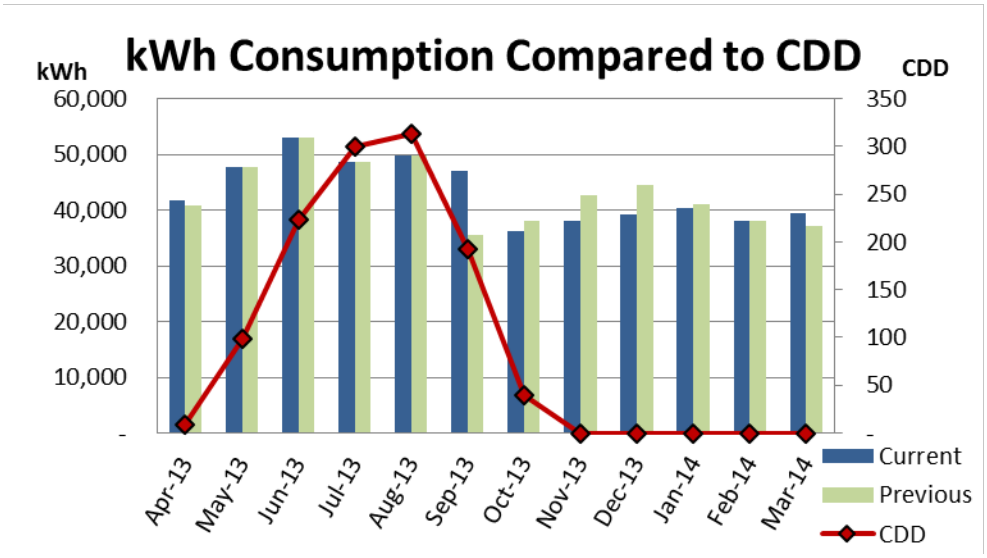
Preliminary Energy-Use Analysis

The energy assessment for the CDM included a Preliminary Energy-Use Analysis (PEA). During the PEA, the utility bills were reviewed to identify any efficiency or usage modification opportunities before conducting the walk-through. The below graph for natural gas usage identified usage indicative of a typical building influenced by environmental conditions with the exception of the variance in the November and December months. The 2013 gas consumption for that time period does not correlate with the HDD. The usage normalizes as the heating demand increases. This could be caused by control sequencing, the heating and cooling systems fighting each other; variations in building usage, a major increase is use would necessitate an increase in energy consumption; and/or an unbalanced system, which is creating hot areas in the building that occupants or users remedy by opening windows and doors.



The below graph of electrical consumption indicates a baseline load of 40,000 kWh / month. Much like the gas consumption, there is a period of noted inefficiency prior to the peak CDD, which can be caused

by control sequencing, building usage, and/or unbalanced system. The high base level of electrical consumption is a product of the building operation. See **Appendix C** further utility information.



Metric	CDM	Median Property	% Difference
ENERGY STAR score	53	50	6%
EUI (kBtu/ft²)	87	92	5%

Energy Utilization Index (EUI) is a reference that expresses the total energy (fossil fuel and electricity) used by a facility in a given period (month, year, etc.) in terms of kBtu's/gross conditioned square feet. In comparing the CDM EUI to the median property, the CDM is consuming more (5%) energy per SqFt than the median property.

Energy Star Rating is a rating system developed by the U.S. EPA. The Energy Star program has developed energy performance rating systems for several commercial and institutional building types. These ratings, on a scale of 1 to 100 with 100 being very efficient, provide a means for benchmarking the energy efficiency of specific buildings and industrial plants against the energy performance of similar facilities. The CDM Energy Star rating is 53. In order to attain a benchmark Energy Star rating, the CDM was entered in as a 29,517 SqFt retail store with 25 main shift workers operating 50hrs/wk. with 50 computers, 2 cash registers, and 100% building conditioned and heated.

Site Survey

A modified ASHRAE Level 1 Walk-Through Analysis was conducted and identified Energy Conservation Measures (ECM). The site survey was a non-invasive site inspection of the building and its services. The team reviewed the compiled ECMs for recommendation of implementation based on prior experiences. See table below.

Energy Improvement Opportunities					
	Description	**Class**	**Potential savings**	**Recommended priority**	**Available Rebates**
CDM 01	Installing miser on vending machines and investigate installing on floor exhibits.	Proj.	$150/yr	High	X
CDM 02	Retrofit T-12 lighting to T-8 lighting	Proj.	$15/yr	Medium	X
CDM 03	Lighting controls	Proj.	$100/yr	High	
CDM 04	Timer for recirculation pump	O&M	-	High	
CDM 05	Air balancing	Proj.	-	High	
CDM 06	Relocation of thermostat that is above copier	O&M	-	High	
CDM 07	Sectioning out the basement with ceiling occupancy sensors	Proj.	$200/yr	High	X

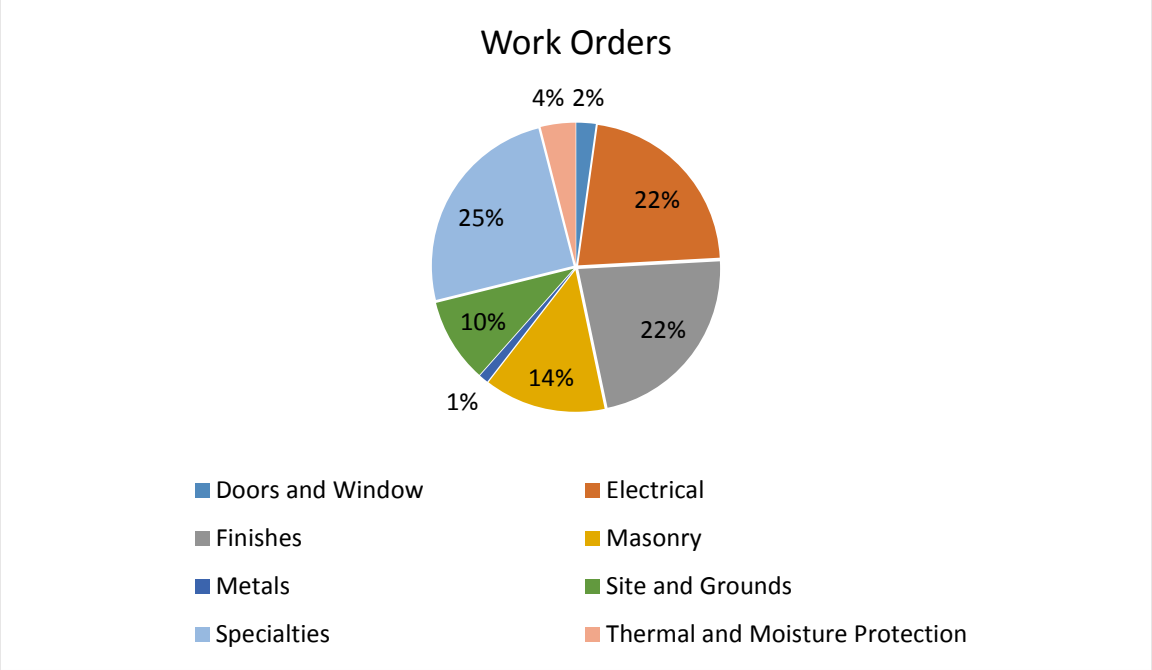
The listed ECMs represent great opportunities for the Town of Normal to achieve some of their goals and objectives: being good stewards of the taxpayer's money, providing value-added services to the community, maintaining the community's assets to a definable, acceptable level.

Building Summary

The Children's Discovery Museum is a structure that rated well (G-) and has no major deficiencies noted at the time of the inspection. The exterior joint sealant is an opportunity of improvement within the shell and substructure. The services within the building represent opportunities for improvements in energy conservation and occupant comfort. As suggested by the PEA, there are inefficiencies in the HVAC that require further investigation such as an ASHRAE Level II audit. Retro-commissioning would also improve the building performance by providing a balanced system and correcting any control sequencing issues discovered. Providing local controls for lighting and other electrical components and exchanging the present T12 lamps with the more efficient T8 offer a means to lower the base electrical usage.

Work Order Estimated Total	$72,036
Doors and Window	$1,589
Electrical	$15,799
Finishes	$16,255
Masonry	$9,933
Metals	$766
Site and Grounds	$6,896
Specialties	$17,924
Thermal and Moisture Protection	$2,874

Deficiencies were noted by FM staff. Farnsworth team validated logged work orders on a random sampling basis and compiled additional work orders to be logged into the CMMS. FM staff used RS Means for estimating the work orders. Estimates were peer reviewed for accuracy, but are susceptible to a variety of factors including current economy, timing, contractor and product selection. Cost opinions were derived from field observations, assumption of reasonable scope and typical remedies. Cost opinions are not inclusive of exploratory observations, or the opinion of specialty consultants. Probable cost estimates are included as reference to quantitatively identify the financial impact a noted deficiency may represent. The information is also necessary to quantify the variable needed to calculate Facility Condition Index (FCI) ratings.

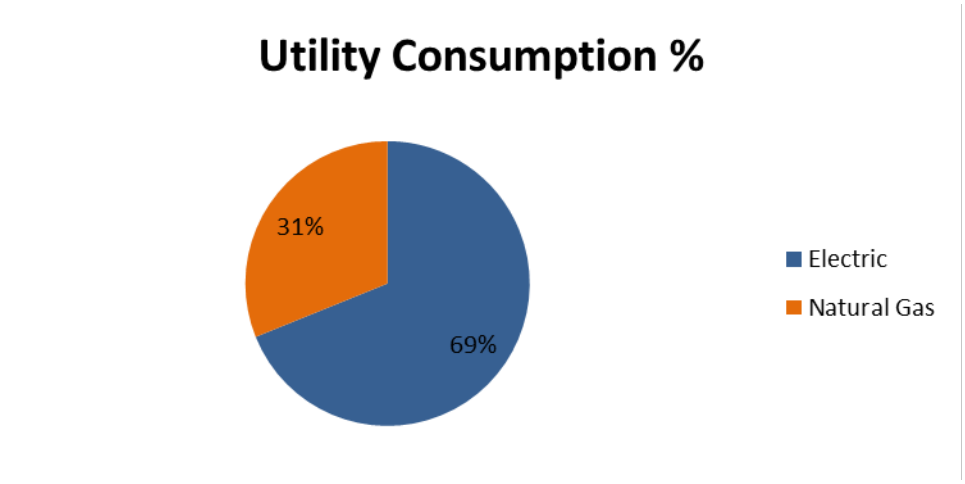


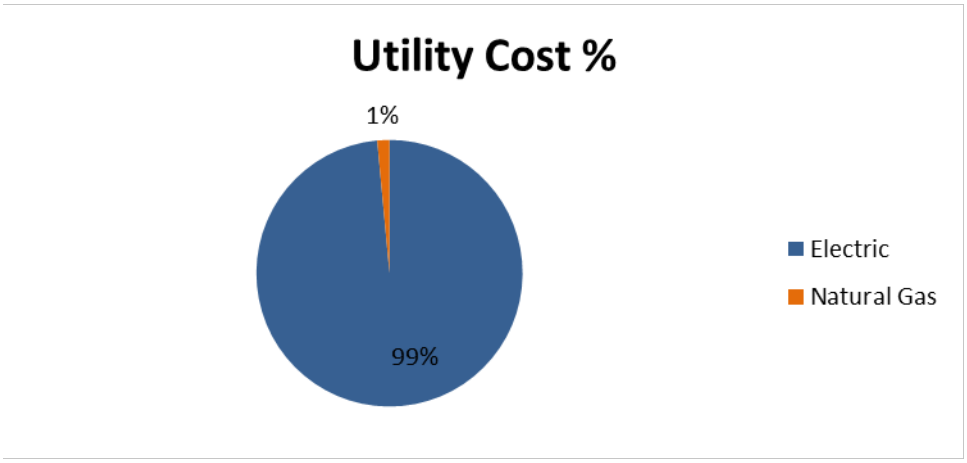
Appendix B-Component Assessment

Component system	Asset component	Condition Assessment	
		Grade	Scale
A10 Foundations	A1010 Standard Foundations	G-	73
	A1020 Special Foundations	G-	73
	A1030 Slab on Grade	G-	73
A20 Basement Construction	A2020 Basement Walls	G-	73
B10 Superstructure	B1010 Floor Construction	G-	73
	B1020 Roof Construction	G-	73
B20 Exterior Enclosure	B2010 Exterior Walls	O+	62
	B2020 Exterior Windows	O+	62
	B2030 Exterior Doors	G-	73
B30 Roofing	B3010 Roof Coverings	G-	73
	B3020 Roof Openings	G-	73
C10 Interior Construction	C1010 Partitions	G-	73
	C1020 Interior Doors	G-	73
	C1030 Fittings	G-	73
C20 Stairs	C2010 Stair Construction	G-	73
	C2020 Stair Finishes	G-	73
C30 Interior Finishes	C3010 Wall Finishes	G-	73
	C3020 Floor Finishes	G-	73
	C3030 Ceiling Finishes	G-	73
D10 Conveying	D1010 Elevators & Lifts	G-	73
D20 Plumbing	D2010 Plumbing Fixtures	G	84
	D2020 Domestic Water Distribution	G	84
	Booster Pump	R	18
	Elec water heater EWH1	G	84
	Elec water heater EWH2	G	84
	EWH2-Circ pump	G	84
	Elec water heater EWH3	G	84
	EWH3-Circ pump	G	84
	Elec water heater EWH4	G	84
	EWH4-Circ pump	G	84
	copper piping	G	84
	D2030 Sanitary Waste	G	84
	D2040 Rain Water Drainage	G	84
	D2090 Other Plumbing Systems	G	84
D30 HVAC	D3010 Energy Supply	G	84
	D3040 Distribution Systems	G	84
	RTU-0	G-	73

	RTU-1	G-	73
	RTU-2	G-	73
	RTU-3A	G-	73
	RTU-3B	G-	73
	EF-0	G	84
	EF-1	G	84
	EF-2	G	84
	EF-3A	G	84
	EF-3B	G	84
	DBF-1	G	84
	SEF-1	G	84
	SEF-2	G	84
	SEF-3	G	84
	SEF-4	G	84
	SEF-5	G	84
	SEF-6	G	84
	D3060 Controls & Instrumentation	G	84
	D3070 System Testing & Balancing	O-	40
D40 Fire Protection	D4010 Sprinklers	G	84
	D4020 Standpipes	G	84
	D4030 Fire Protection Specialties	G	84
	D4090 Other Fire Protection Systems	G	84
D50 Electrical	D5010 Electrical Service & Distribution	G	84
	Switchboard and Panel boards	G	84
	conduit	G	84
	D5020 Lighting and Branch Wiring	G	84
	Controls	R	18
	D5030 Communications & Security	G	84
	D5090 Other Electrical Systems	G	84
E20 Furnishings	E2010 Fixed Furnishings	O-	40
	E2020 Movable Furnishings	O	51
G20 Site Improvements	G2010 Roadways	O+	62
G20 Site Improvements G30 Site Mechanical Utilities	G2020 Parking Lots	O+	62
	G2030 Pedestrian Paving	O	51
	G2040 Site Development	G-	73
	G2050 Landscaping	G-	73
	G3010 Water Supply	G	84
G40 Site Electrical Utilities	G4010 Electrical Distribution	G	84
G40 Site Electrical Utilities	G4020 Site Lighting	G	84
Averaged Building Component Rating		G-	76

Totals		
Total kBtu Usage (annual)		2,573,120.65
Site EUI		87.17
Total Cost Utilities		$ 399,467.08
Average $/kBtu		$ 0.156
% Consumption	Electric	69%
% Consumption	Natural Gas	31%
% Consumption	Other Energy 1	0%
% Consumption	Other Energy 2	0%
% Cost	Electric	99%
% Cost	Natural Gas	1%
% Cost	Other Energy 1	0%
% Cost	Other Energy 2	0%
$$ paid for Electric over Gas		$ 387,686.44
$$ paid for Electric over Gas/kBtu		$ 0.22





College Avenue Parking Deck

Building Overview

The Farnsworth team reviewed the College Avenue Parking Deck (CAPD) for the Town of Normal. The CAPD construction was completed in 2009. There are 5 levels including space allowed for future development of retail spaces. The deck areas and estimated-average number of people that use the facility is shown in the table below.

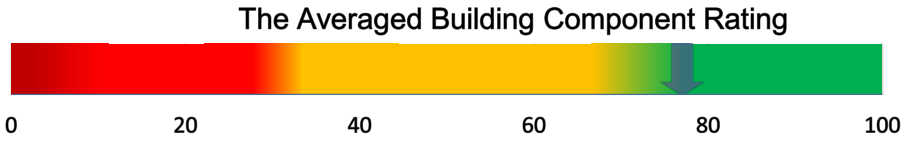
Space	Total Area (SF)	Visitors	Equivalent to Full Time
Parking	197,992.5	-	-
Office	306	1	1
Mech/Elec	1,734	-	-
Stair/Elev/Storage	8,599.5	-	-
Storage	4,224	-	-
Future Development	10,020	-	-
Totals	222,876	1	1

The scope of this project contained two key assessment areas: Facility Condition Audit (FCA) and an energy audit. The Farnsworth team reviewed and analyzed asset data collected by the Town of Normal staff. On-site assessments, which were conducted with a team of engineers, verified asset data collected by the staff, assessed the facility's assets, and performed an energy audit of the facility.

Facility Condition Index (FCI= Maintenance, repair, and replacement of deficiencies of a facility divided by the current replacement value of the facility) is used to provide a benchmark to compare the relative condition of a facility or a group of facilities. To define the ratings, industry standards were used: good (under 0.05), fair (0.05 to 0.10), and poor (over 0.10).

Facility Condition Index	
Facility's insured value	$12,400,703
Work Orders (App. A)	$15,581
Facility Condition Index	Good (0.001)

Along with the FCI, the Farnsworth team developed an Averaged Building Component Rating, which was attained by averaging all the building component ratings for the facility. The Averaged Rating for the CAPD is 77. This is based on a 100 point scale, so the CAPD falls into the good category.

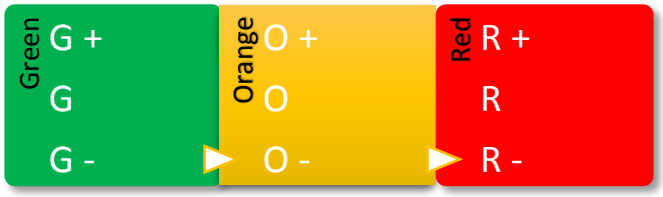


The Farnsworth team received the CAPD's utility usage and entered the data into the Energy Star program and attained the performance data below.

Metric	CAPD	Median Property	% Diff
E-STAR score	N/A	N/A	N/A
EUI (kBtu/ft²)	7.57	N/A	N/A

Facility Condition Assessment

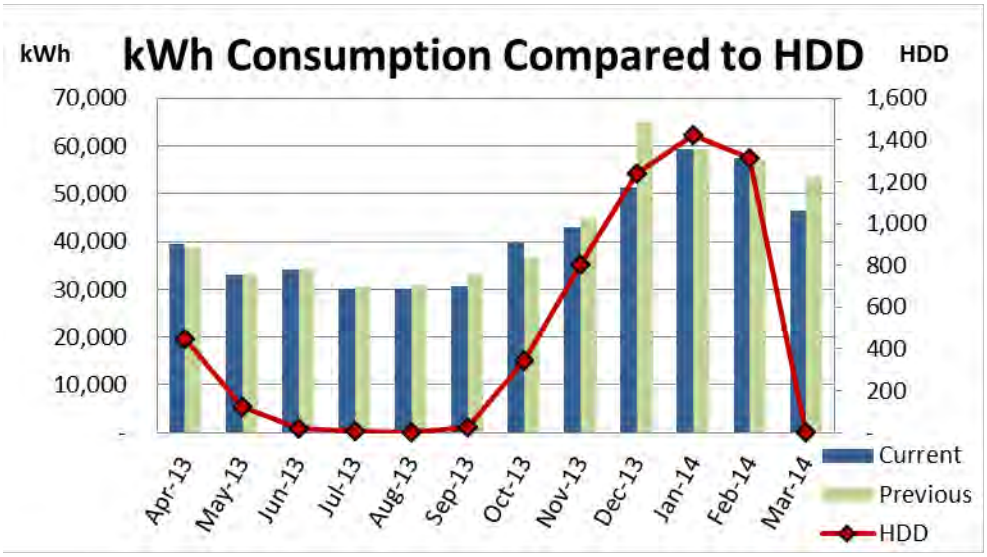
The Farnsworth team assessed the individual building components, e.g., foundations, walls, roofs, windows, doors, interior finishes, landscape (hard and soft), and MEP services (Mechanical, Electrical, and Plumbing). A direct survey of the facility's assets was conducted to verify data collected by the facility's staff and rate the building components. The direct survey method entailed a visual inspection of the asset with no intrusive diagnostic investigation. Industry standards were used to define and rate the building components; a nine point rating system was used, which employs a Green-Orange-Red primary rating assessment. The CAPD rates at an above average condition with an index within the G- range. The rating of G- was attained by taking the average of all the component ratings. If the building was assessed as one asset utilizing the same rating system, it would fall into the G- range as well. The College Avenue Parking Deck is in good condition with no components below average condition. See **Appendix B** for detailed breakdown of components.



Energy Assessment

Preliminary Energy-Use Analysis

The energy assessment for the CAPD included a Preliminary Energy-Use Analysis (PEA). During the PEA, the utility bills were reviewed to identify any efficiency or usage modification opportunities before conducting the walk-through. The analysis of the electric bills indicated a consistent power consumption of 30,000 kWh / month with a HDD influence due to electrical heat. It appears there are electric savings opportunities by comparing the relatively low heating demand / HDDs in March with the actual usage. Further investigation of the electric heat controls could reduce this usage significantly. See **Appendix C** further information.



Metric	CAPD	Median Property	% Difference
ENERGY STAR score	N/A	N/A	N/A
EUI (kBtu/ft²)	7.57	N/A	N/A

Energy Utilization Index (EUI) is a reference that expresses the total energy (fossil fuel and electricity) used by a facility in a given period (month, year, etc.) in terms of Btu's/gross conditioned square feet.

Energy Star Rating cannot be generated for a parking deck structure as this is not a building usage type as defined by Energy Star.

Site Survey

A modified ASHRAE Level 1 Walk-Through Analysis was conducted and identified Energy Conservation Measures (ECM). The site survey was a non-invasive site inspection of the building and its services. The team reviewed the compiled ECMs for recommendation of implementation based on prior experiences. See table below.

Energy Improvement Opportunities					
	Description	**Class**	**Potential Savings**	**Recommended Priority**	**Available Rebate**
CAPD 01	Daylight sensors for the exterior and interior lighting in areas with windows.	Proj.	$1,400/yr	Med	X
CAPD 02	Lighting retro-fit for parking area lighting.	Proj.	$1000/yr	Med	X
CAPD 03	Upgrade Exit signs to LED's	Proj.	$160/yr	Med.	X
CAPD 04	Investigate lumen levels throughout the structure	Proj.	-	High	
CAPD 05	Review controls and operation of electric heat	O&M	-	High	

The CAPD energy consumption is lighting and some temperature control through electric heat. The listed ECMs represent some opportunities to reduce the energy consumption of the CAPD. There are illumination requirement for parking structures and a survey of the lumen levels is recommended and may reveal addition opportunities (removal of some lights).

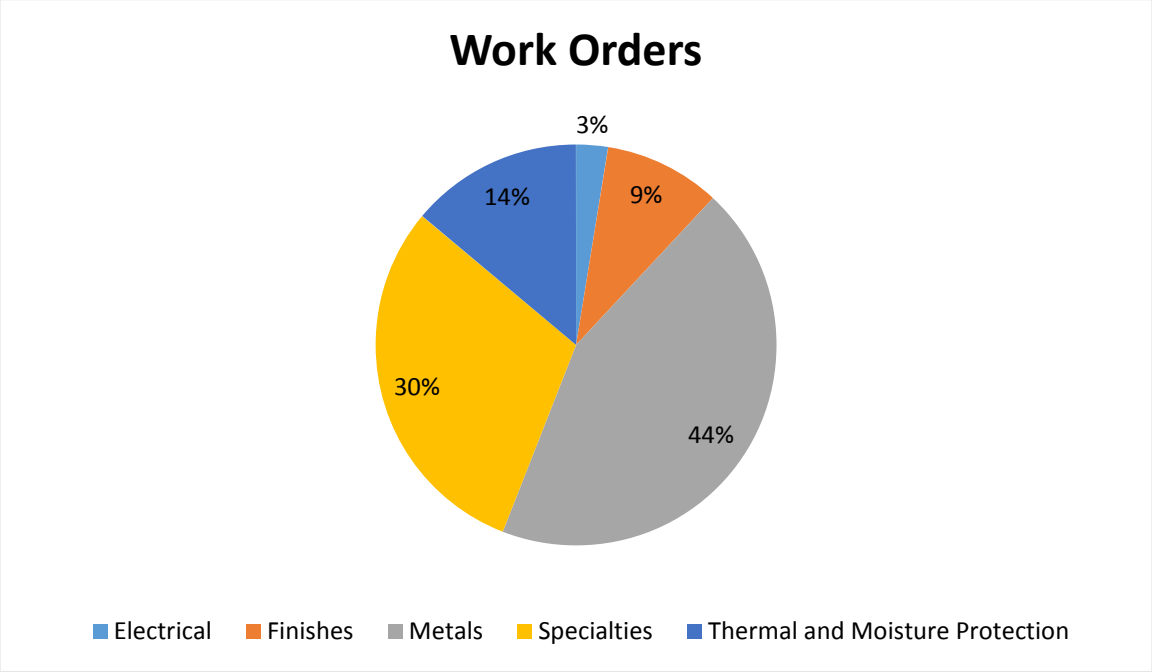
Building Summary

The CAPD is a structure with no major deficiencies noted, all components rate at an average condition or better. The lighting within building represent opportunities for improvements in energy conservation. It is recommended to survey the lumen levels throughout the parking deck to ensure levels are not greatly exceeding the requirements.

Appendix A-Work Orders

Work Order Estimate Total	$15,581
Electrical	$400
Finishes	$1,460
Metals	$6,859
Specialties	$4,695
Thermal and Moisture Protection	$2,167

Deficiencies were noted by FM staff. Farnsworth team validated logged work orders on a random sampling basis and compiled additional work orders to be logged into the CMMS. FM staff used RS Means for estimating the work orders. Estimates were peer reviewed for accuracy, but are susceptible to a variety of factors including current economy, timing, contractor and product selection. Cost opinions were derived from field observations, assumption of reasonable scope and typical remedies. Cost opinions are not inclusive of exploratory observations, or the opinion of specialty consultants. Probable cost estimates are included as reference to quantitatively identify the financial impact a noted deficiency may represent. The information is also necessary to quantify the variable needed to calculate Facility Condition Index (FCI) ratings.

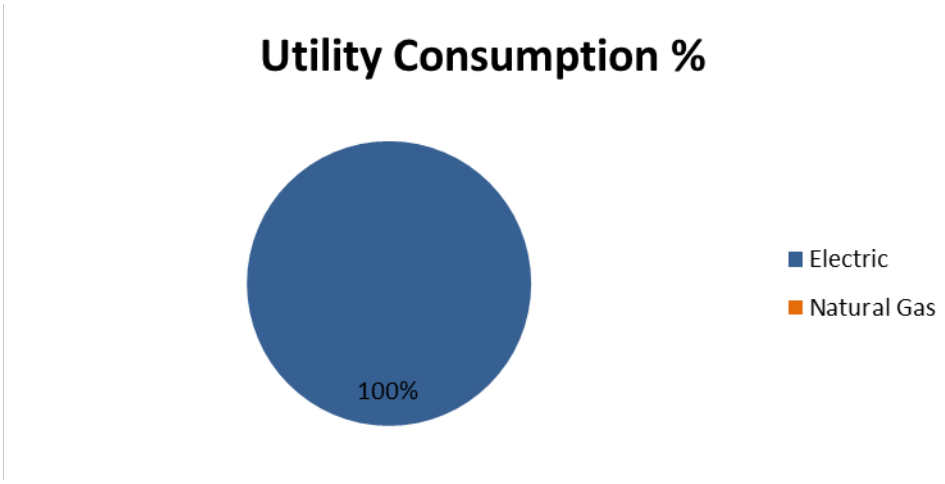


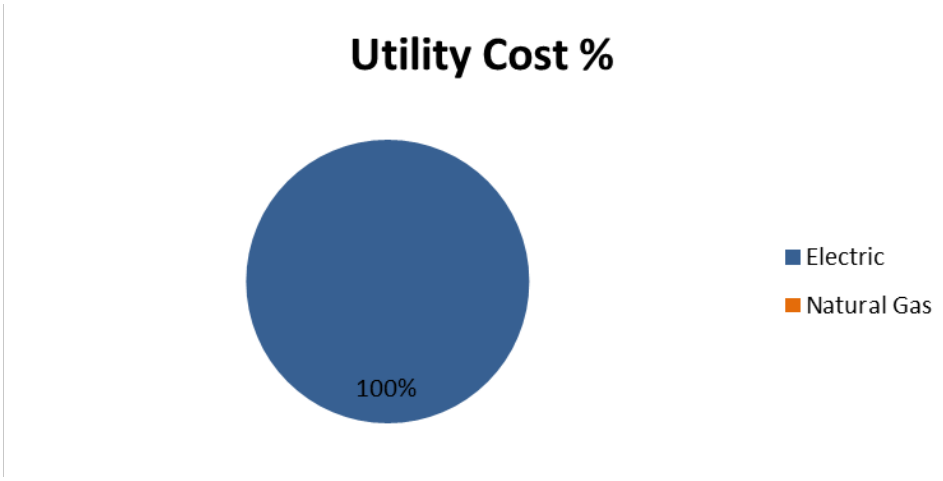
Appendix B-Component Assessment

Component system	Asset Component	Condition Assessment	
		Grade	Scale
A10 Foundations	A1010 Standard Foundations	G	84
	A1020 Special Foundations	G	84
	A1030 Slab on Grade	G	84
A20 Basement Construction	A2020 Basement Walls	G	84
B10 Superstructure	B1010 Floor Construction	G	84
	B1020 Roof Construction	G	84
B20 Exterior Enclosure	B2010 Exterior Walls	G	84
	B2020 Exterior Windows	G	84
	B2030 Exterior Doors	G-	73
B30 Roofing	B3010 Roof Coverings	G-	73
	B3020 Roof Openings	G-	73
C10 Interior Construction	C1010 Partitions	G-	73
	C1020 Interior Doors	G-	73
	C1030 Fittings	O+	62
C20 Stairs	C2010 Stair Construction	G-	73
	C2020 Stair Finishes	G-	73
C30 Interior Finishes	C3010 Wall Finishes	O+	62
	C3020 Floor Finishes	G-	73
	C3030 Ceiling Finishes	O	51
D20 Plumbing	D2010 Plumbing Fixtures	G	84
	D2020 Domestic Water Distribution	G	84
	Elec water heater	G	84
	Copper piping	G	84
	D2030 Sanitary Waste	G	84
	D2040 Rain Water Drainage	G	84
D30 HVAC	D3010 Energy Supply	G	84
	D3040 Distribution Systems	O+	62
	D3050 Terminal & Package Units	O+	62
	D3060 Controls & Instrumentation	G	84
D40 Fire Protection	D4010 Sprinklers	G-	73
	D4020 Standpipes	G-	73
	D4030 Fire Protection Specialties	G-	73
	D4090 Other Fire Protection Systems	G-	73
D50 Electrical	D5010 Electrical Service & Distribution	G	84
	Generator	G	84
	Switchboard and Panel boards	G	84
	Conduit	G	84
	D5020 Lighting and Branch Wiring	G-	73

	D5030 Communications & Security	**G**	84
E20 Furnishings	E2010 Fixed Furnishings	**O+**	62
	E2020 Movable Furnishings	**O+**	62
G20 Site Improvements	G2010 Roadways	**G**	84
	G2020 Parking Lots	**G**	84
	G2030 Pedestrian Paving	**G**	84
	G2040 Site Development	**G**	84
	G2050 Landscaping	**G-**	73
G30 Site Mechanical Utilities	G3010 Water Supply	**G**	84
G40 Site Electrical Utilities	G4010 Electrical Distribution	**G**	84
	G4020 Site Lighting	**G-**	73
Averaged Building Component Rating		**G-**	77

Totals		
Total kBtu Usage (annual)		1,687,745.80
Site EUI		7.57
Total Cost Utilities		$ 34,234.69
Average $/kBtu		$ 0.021
% Consumption	Electric	100%
% Consumption	Natural Gas	0%
% Consumption	Other Energy 1	0%
% Consumption	Other Energy 2	0%
% Cost	Electric	100%
% Cost	Natural Gas	0%
% Cost	Other Energy 1	0%
% Cost	Other Energy 2	0%
$$ paid for Electric over Gas		$ 34,234.69
$$ paid for Electric over Gas/kBtu		$ 0.02





*No Natural Gas Service

Engineering Building

Building Overview

The Farnsworth team audited the Engineering Building for the Town of Normal. The Engineering Department only occupies half of the 12,000 SqFt brick building. The building areas and estimated-average number of people that use the facility is shown in the table below.

Space	Total Area (SF)	Visitors	Equivalent to Full Time
Office	5,000	-	10
Other	880	-	-
Total	5,880	-	10

The scope of this project contained two key assessment areas: Facility Condition Audit (FCA) and an energy audit. The Farnsworth team reviewed and analyzed asset data collected by the Town of Normal staff. On-site assessments, which were conducted with a team of engineers, verified asset data collected by the staff, assessed the facility's assets, and performed an energy audit of the facility.

Facility Condition Index (FCI= Maintenance, repair, and replacement of deficiencies of a facility divided by the current replacement value of the facility) is used to provide a benchmark to compare the relative condition of a facility or a group of facilities. To define the ratings, industry standards were used: good (under 0.05), fair (0.05 to 0.10), and poor (over 0.10).

Facility Condition Index	
Facility's Insured Value	$963,850
Work Orders (App. A)	$23,427
Facility Condition Index	Good (.024)

Along with the FCI, the Farnsworth team developed an Averaged Building Component Rating, which was attained by averaging all the building component ratings for the facility. The Averaged Rating for the Engineering Building is 60. This is based on a 100 point scale, so the ENG falls into the above average category.

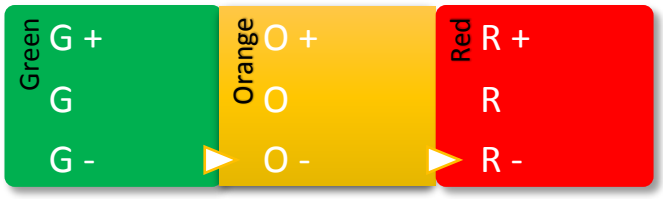
The Averaged Building Component Rating

The Farnsworth team received the Engineering Building's utility usage and entered the data into the Energy Star program and attained the performance data below.

Metric	ENG	Median Property	% Diff
E-STAR score	79	50	58%
EUI (kBtu/ft²)	49	71	31%

Facility Condition Assessment

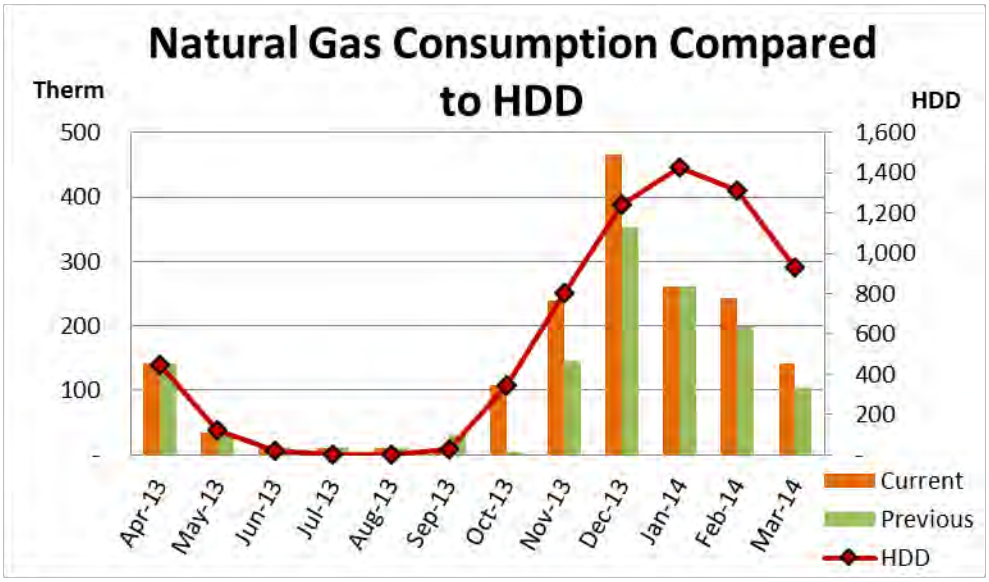
The Farnsworth team assessed the individual building components, e.g., foundations, walls, roofs, windows, doors, interior finishes, landscape (hard and soft), and MEP services (Mechanical, Electrical, and Plumbing). A direct survey of the facility's assets was conducted to verify data collected by the facility's staff and rate the building components. The direct survey method entailed a visual inspection of the asset with no intrusive diagnostic investigation. Industry standards were used to define and rate the building components; a nine point rating system was used, which employs a Green-Orange-Red primary rating assessment. The Engineering Building rates at an above average condition with an index within the O+ range. The rating of O+ was attained by taking the average of all the component ratings. If the building was assessed as one asset utilizing the same rating system, it would fall into the O+ range as well. The building has an area of concern, which has been entered into the CMMS. There is a substantial horizontal crack in the brick face at the top of the second floor windows. We feel this concern needs further investigation. See **Appendix B** for detailed breakdown of components.

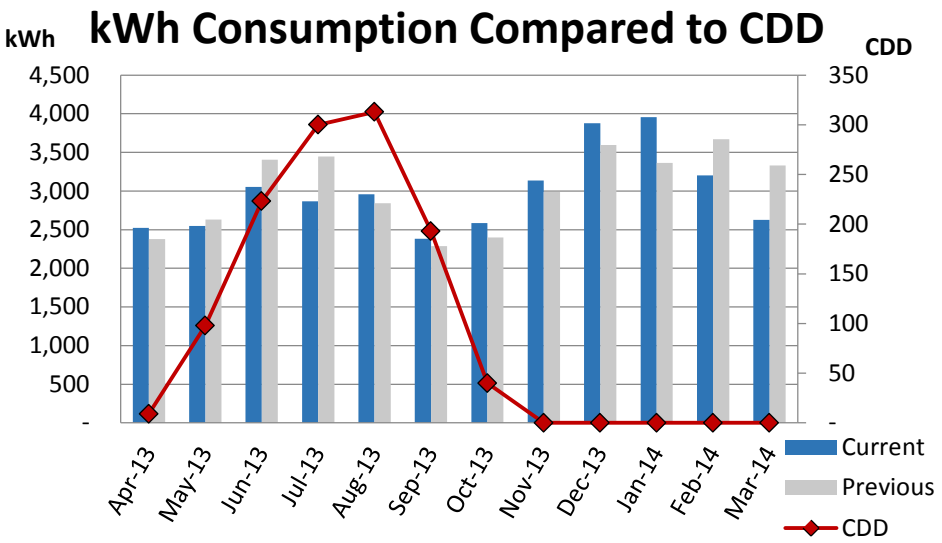


Energy Assessment

Preliminary Energy-Use Analysis

The energy assessment for the Engineering Building included a Preliminary Energy-Use Analysis (PEA). During the PEA, the utility bills were reviewed to identify any efficiency or usage modification opportunities before conducting the walk-through. This process identified utility consumption indicative of a building influenced by environmental conditions with a base line load of 2,000 kWh / month. The increase of electrical consumption in the winter months also reflects the electric heating (personal and baseboard). It is suspected that significant savings could be reaped by optimizing the HVAC control system for more effective comfort control. See **Appendix C** for further utility information.





Metric	Community Center	Median Property	% Diff
E-STAR score	79	50	58%
EUI (kBtu/ft²)	49	71	31%

Energy Utilization Index (EUI) is a reference that expresses the total energy (fossil fuel and electricity) used by a facility in a given period (month, year, etc.) in terms of Btu's/gross conditioned square feet. In comparing the Engineering Building EUI to the median property, the ENG is consuming less (31%) energy per SqFt than the median property.

Energy Star Rating is a rating system developed by the U.S. EPA. The Energy Star program has developed energy performance rating systems for several commercial and institutional building types. These ratings, on a scale of 1 to 100, provide a means for benchmarking the energy efficiency of specific buildings and industrial plants against the energy performance of similar facilities. Engineering Building was enter in to the Energy Star program as 5,880 SqFt office building with 10 main shift workers operating 50hrs/wk and 10 computers.

Site Energy Survey

A modified ASHRAE Level 1 Walk-Through Analysis was conducted and identified Energy Conservation Measures (ECM). The site survey was a non-invasive site inspection of the building and its services. The team reviewed the compiled ECMs for recommendation of implementation based on prior experiences. See table below.

Energy Improvement Opportunities					
	Description	**Class**	**Potential Savings**	**Recommended Priority**	**Available Rebate**
ENG 01	Photo cells and occupancy sensors for the remaining non-automated interior lighting.	Proj.	$50/yr.	low	X
ENG 02	Adjust and balance HVAC airflow if possible to provide more heating in deficient areas to reduce space heater usage.	O&M	-	low	
ENG 03	Maintain foyer baseboard heater thermostat setting at an acceptable level.	O&M	-	low	

See **Appendix D** for applicable incentive programs.

The lighting ECM would provide some savings and reduce the consumption of energy for the Engineering Building, but may not be financially viable due to the limited opportunities in this building. However, the

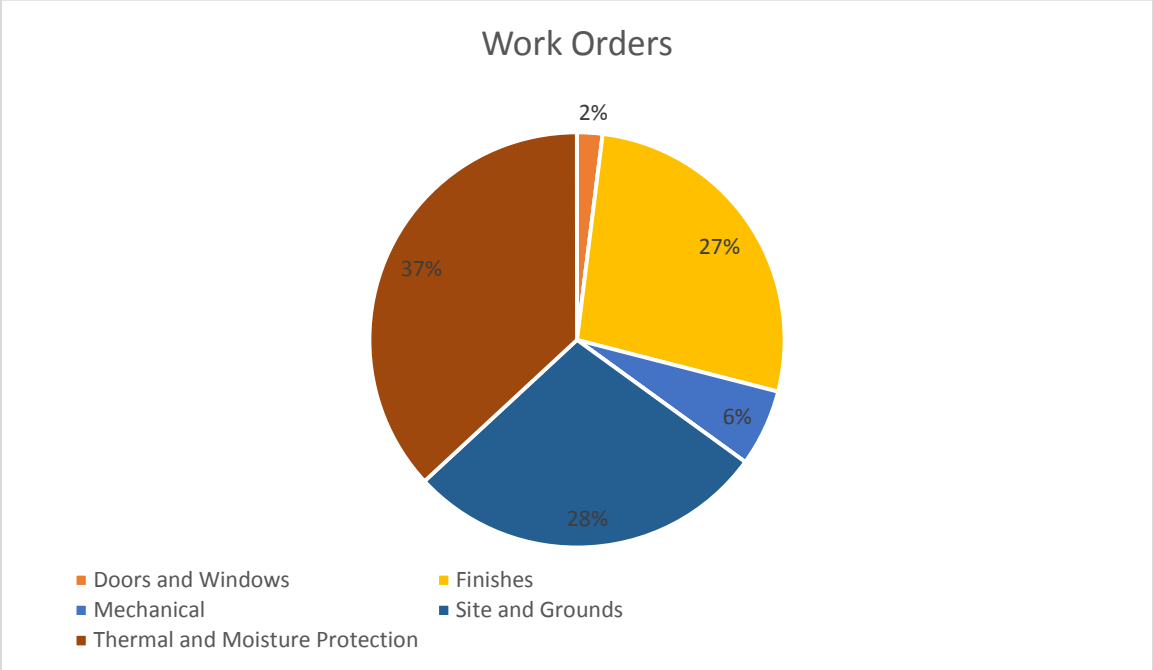
PEA noted higher power consumption during the winter months, which is due to electrical heaters, i.e., baseboard and space heaters. The baseboard heater thermostat setting should be checked once the heating season begins, and possible adjustments in the HVAC controls and airflow may eliminate the need for the space heaters.

Building Summary

The Town of Normal's Engineering Department occupies approximately one-half of a 12,000 SqFt structure. The Farnsworth team has indicated a concern with the exterior of the building. There is a substantial crack in the brick above the second floor windows extending horizontally throughout the length of the building. EUI and the Energy Star rating indicate the Engineering Building is performing above the median property. It has minimal low-cost ECMs due to the size of the building space and apparent efficiency of the systems and building.

Work Order Estimate Total	$23,427
Doors and Windows	$462
Finishes	$6,334
Mechanical	$1,402
Site and Grounds	$6,587
Thermal and Moisture Protection	$8,643

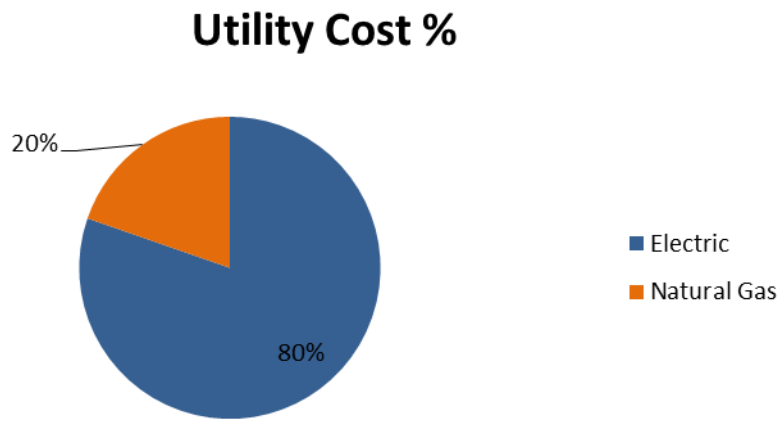
Deficiencies were noted by FM staff. Farnsworth team validated logged work orders on a random sampling basis and compiled additional work orders to be logged into the CMMS. FM staff used RS Means for estimating the work orders. Estimates were peer reviewed for accuracy, but are susceptible to a variety of factors including current economy, timing, contractor and product selection. Cost opinions were derived from field observations, assumption of reasonable scope and typical remedies. Cost opinions are not inclusive of exploratory observations, or the opinion of specialty consultants. Probable cost estimates are included as reference to quantitatively identify the financial impact a noted deficiency may represent. The information is also necessary to quantify the variable needed to calculate Facility Condition Index (FCI) ratings.

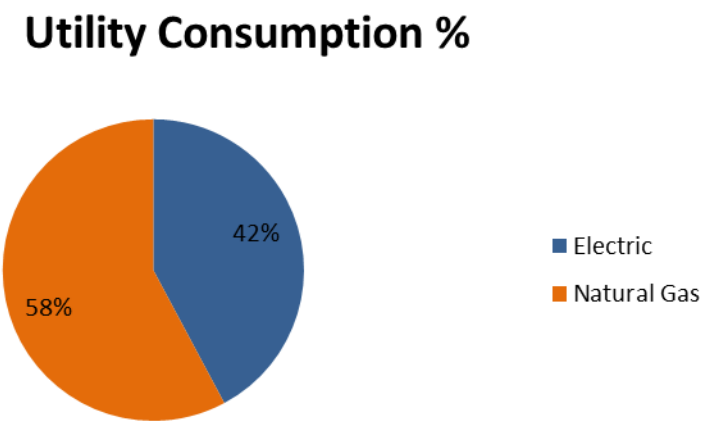


Component system	Asset component	Condition Assessment	
		Grade	Scale
A10 Foundations	A1010 Standard Foundations	G-	73
	A1020 Special Foundations	G-	73
	A1030 Slab on Grade	G-	73
B10 Superstructure	B1010 Floor Construction	G-	73
	B1020 Roof Construction	O+	62
B20 Exterior Enclosure	B2010 Exterior Walls	O-	40
	B2020 Exterior Windows	O-	40
	B2030 Exterior Doors	O	51
B30 Roofing	B3010 Roof Coverings	O	51
	B3020 Roof Openings	O	51
C10 Interior Construction	C1010 Partitions	O+	62
	C1020 Interior Doors	O-	40
	C1030 Fittings	O+	62
C20 Stairs	C2010 Stair Construction	O+	62
	C2020 Stair Finishes	O+	62
C30 Interior Finishes	C3010 Wall Finishes	O+	62
	C3020 Floor Finishes	O	51
	C3030 Ceiling Finishes	O	51
D20 Plumbing	D2010 Plumbing Fixtures	O	51
	D2020 Domestic Water Distribution	O+	62
	D2030 Sanitary Waste	O+	62
	D2040 Rain Water Drainage	O+	62
D30 HVAC	D3010 Energy Supply	O	51
	D3040 Distribution Systems	G-	73
	D3050 Terminal & Package Units		
	Condensing Units	G-	73
	D3060 Controls & Instrumentation	O+	62
	D3070 System Testing & Balancing	O+	62
	D3090 Other HVAC Systems & Equipment		
	Baseboard Heater	O+	62
D50 Electrical	D5010 Electrical Service & Distribution	O+	62
	D5020 Lighting and Branch Wiring	O+	62
	D5030 Communications & Security	O+	62
E20 Furnishings	E2010 Fixed Furnishings	O+	62
	E2020 Movable Furnishings	O+	62
G20 Site Improvements	G2010 Roadways	O	51

	G2020 Parking Lots	**O**	51
	G2030 Pedestrian Paving	**O**	51
	G2040 Site Development	**G-**	73
	G2050 Landscaping	**G-**	73
G30 Site Mechanical Utilities	G3010 Water Supply	**G-**	73
	G3020 Sanitary Sewer	**O+**	62
Averaged Building Component Rating		**O+**	60

Totals		
Total kBtu Usage (annual)		288,886.34
Site EUI		49.13
Total Cost Utilities	$	4,493.85
Average $/kBtu	$	0.016
% Consumption	Electric	42%
% Consumption	Natural Gas	58%
% Consumption	Other Energy 1	0%
% Consumption	Other Energy 2	0%
% Cost	Electric	80%
% Cost	Natural Gas	20%
% Cost	Other Energy 1	0%
% Cost	Other Energy 2	0%
$$ paid for Electric over Gas	$	2,723.85
$$ paid for Electric over Gas/kBtu	$	0.02





Public Works

Building Overview

The Farnsworth team audited the Public Works Building for the Town of Normal. The Public Works (PW) facility houses the Sewer Department, Waste and Recycling Facility, Vehicle and Equipment Maintenance, and Street Maintenance Department. The PW is single-story 53,600 SqFt building with the latest and largest portion of the building added in 2008. The building areas and estimated-average number of people that use the facility is shown in the table below.

Space	Total Area (SF)	Visitors	Equivalent to Full Time
Office	7,561	-	15
Garage	46,039	35	-
Total	53,600	35	15

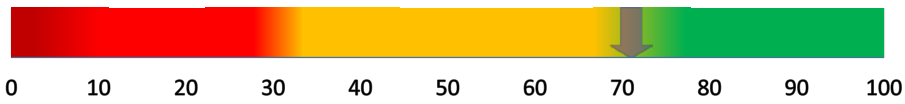
The scope of this project contained two key assessment areas: Facility Condition Audit (FCA) and an energy audit. The Farnsworth team reviewed and analyzed asset data collected by the Town of Normal staff. On-site assessments, which were conducted with a team of engineers, verified asset data collected by the staff, assessed the facility's assets, and performed an energy audit of the facility.

Facility Condition Index (FCI= Maintenance, repair, and replacement of deficiencies of a facility divided by the current replacement value of the facility) is used to provide a benchmark to compare the relative condition of a facility or a group of facilities. To define the ratings, industry standards were used: good (under 0.05), fair (0.05 to 0.10), and poor (over 0.10).

Facility Condition Index	
Facility's insured value	$4,494,969
Work Orders (App. A)	$16,394
Facility Condition Index	Good (0.004)

Along with the FCI, the Farnsworth team developed an Averaged Building Component Rating, which was attained by averaging all the building component ratings for the facility. The Averaged Rating for the Public Works Building is 71. This is based on a 100 point scale, so the Public Works Building falls into category well above average.

The Averaged Building Component Rating

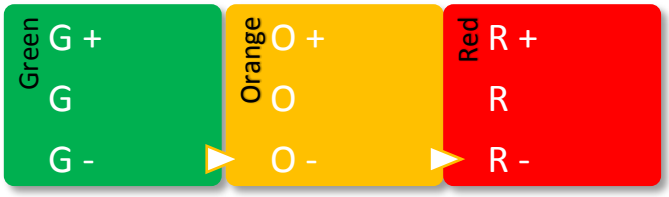


The Farnsworth team received the Public Work's Building utility usage and entered the data into the Energy Star program and attained the performance data below.

Metric	Public Works	Median Property	% Diff
E-STAR score	44	50	-12%
EUI (kBtu/ft²)	90	82	110%

Facility Condition Assessment

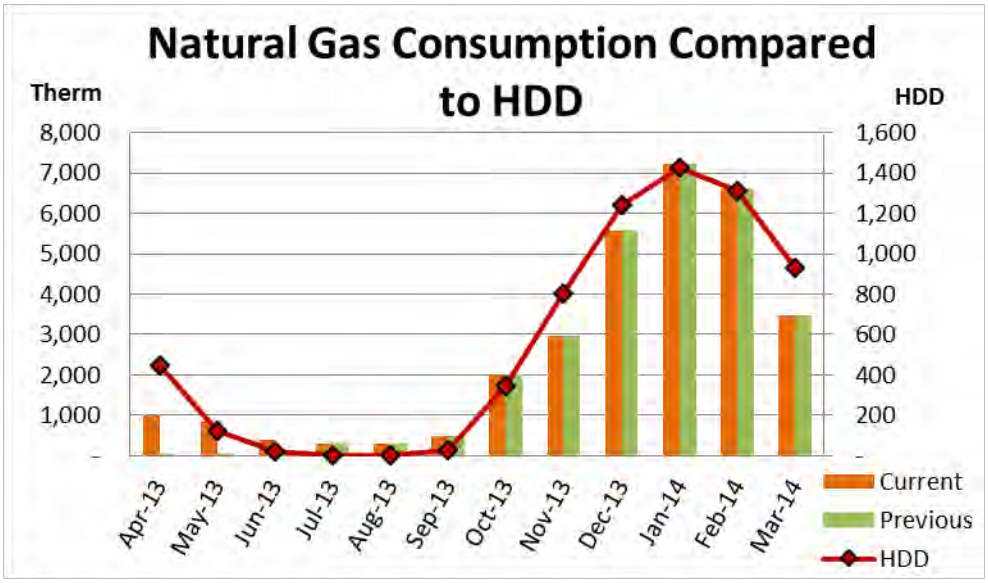
The Farnsworth team assessed the individual building components, e.g., foundations, walls, roofs, windows, doors, interior finishes, landscape (hard and soft), and MEP services (Mechanical, Electrical, and Plumbing). A direct survey of the facility's assets was conducted to verify data collected by the facility's staff and rate the building components. The direct survey method entailed a visual inspection of the asset with no intrusive diagnostic investigation. Industry standards were used to define and rate the building components; a nine point rating system was used, which employs a Green-Orange-Red primary rating assessment. The Public Works Building rates at an above average condition with an index within the G- range. The rating of G-was attained by taking the average of all the component ratings. If the building was assessed as one asset utilizing the same rating system, it would fall into the G-range as well. Areas of concern within the PW are unpatched openings in the building envelop and pipe insulation in the existing building. See **Appendix B** for detailed breakdown of components.

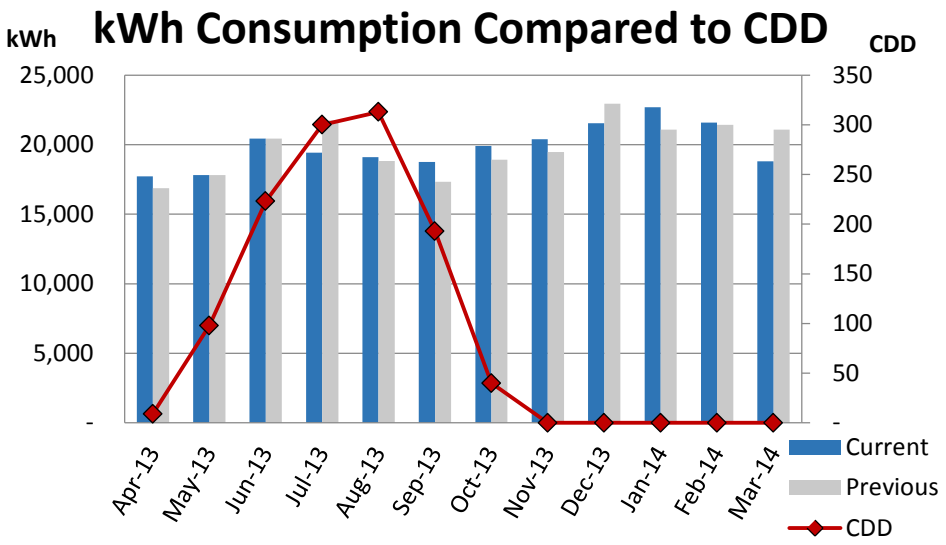


Energy Assessment

Preliminary Energy-Use Analysis

The energy assessment for the Public Works included Preliminary Energy-Use Analysis (PEA). During the PEA, the utility bills were reviewed to identify any efficiency or usage modification opportunities before conducting the walk-through. The analysis of the utility bills indicated natural gas usage is influenced by environmental conditions. The electrical consumption baseline load is approximately 16,000 kWh / month throughout the timeframe charted. It appears that the variations noted in the electrical consumption are due to operations (process loads) within the building and that the level of activity increases over the winter. It is recommended that further study of operational patterns and HVAC operation be reviewed since most months use more electricity than the peak cooling months of July and August. See **Appendix C** for further utility information.





Metric	Public Works	Median Property	% Diff
E-STAR score	44	50	-12%
EUI (kBtu/ft²)	90	82	110%

Energy Utilization Index (EUI) is a reference that expresses the total energy (fossil fuel and electricity) used by a facility in a given period (month, year, etc.) in terms of Btu's/gross conditioned square feet. In comparing the Public Work EUI to median property, the Public Works is consuming more energy per SqFt than the median property.

Energy Star Rating is a rating system developed by the U.S. EPA. The Energy Star program has developed energy performance rating systems for several commercial and institutional building types. These ratings, on a scale of 1 to 100, provide a means for benchmarking the energy efficiency of specific buildings and industrial plants against the energy performance of similar facilities. The Public Works Building was entered into the Energy Star program as a 43,552 SqFt distribution center with operating hours of 50/wk, 50 main shift workers, 100% heated space, and 30% of the space cooled.

Site Energy Survey

An ASHRAE Level 1 Walk-Through Analysis was conducted and identified Energy Conservation Measures (ECM). The site survey was a non-invasive site inspection of the building and its services. The team reviewed the compiled ECMs for recommendation of implementation based on prior experiences. See table below.

Energy Improvement Opportunities					
	Description	**Class**	**Potential Savings**	**Recommended Priority**	**Available Rebate**
PW 01	Seal all penetrations between all condition and unconditioned spaces	O&M	-	Med.	
PW 02	All sinks to have automatic faucets	Proj.	-	Low	X
PW 03	Occ. sensors in parts storage and garage areas	Proj.	$600/yr	Med.	X
PW 04	Vending machine misers	Proj.	$200/yr	Med.	

PW 05	Turning off Television	O&M	-	Med.	
PW 06	Insulation in attic	Proj.	-	Med.	
PW 07	Solar tube lighting in all work bays and Recycling Building	Proj.	$500/yr	Med.	
PW 08	Eco Waste Oil Heater	Proj.	$12,000/yr	Med.	
PW 09	Up grading Tank type water heater to tankless	Proj.	$100/yr	Med.	X
PW 10	Insulate the roof in existing building	Proj.	-	Med.	

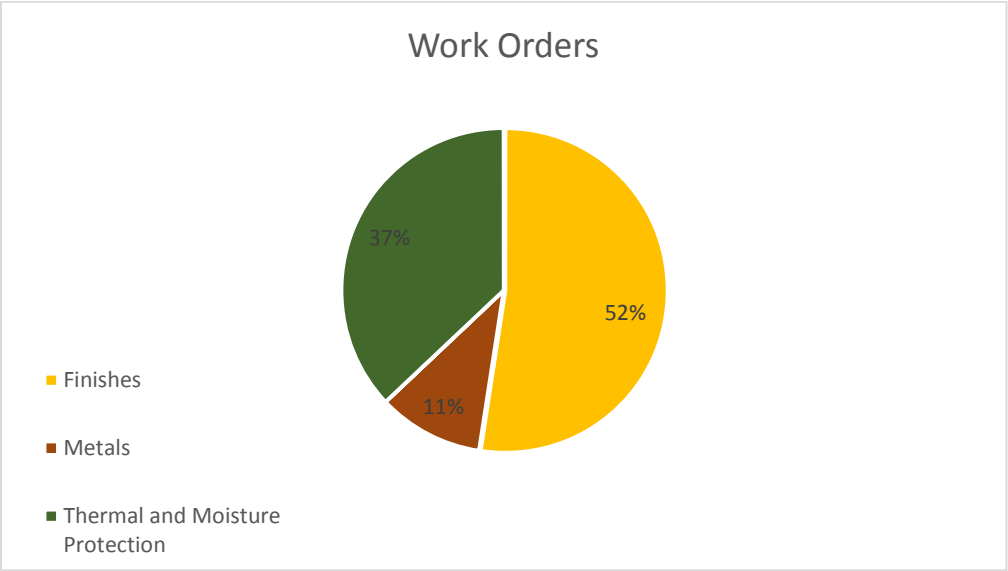
The listed ECMs represent some potential opportunities for the Town of Normal to achieve some of their goals and objectives: being good stewards of the taxpayer's money, providing value-added services to the community, maintaining the community's assets to a definable, acceptable level.

Building Summary

The Public Works is a structure that is in good overall condition. Deficiencies noted to date have been logged into the CMMS. The gas usage of the Public Works is influence by the HDD, and the electrical energy consumption is driven by the building operation with little impact from CDD or HDD. ECMs listed provide opportunities for the Town of Normal to decrease the power consumption within the Public Work's building.

Work Order Estimate Total	$16,394
Finishes	$8,597
Metals	$1,724
Thermal and Moisture Protection	$6,073

Deficiencies were noted by FM staff. Farnsworth team validated logged work orders on a random sampling basis and compiled additional work orders to be logged into the CMMS. FM staff used RS Means for estimating the work orders. Estimates were peer reviewed for accuracy, but are susceptible to a variety of factors including current economy, timing, contractor and product selection. Cost opinions were derived from field observations, assumption of reasonable scope and typical remedies. Cost opinions are not inclusive of exploratory observations, or the opinion of specialty consultants. Probable cost estimates are included as reference to quantitatively identify the financial impact a noted deficiency may represent. The information is also necessary to quantify the variable needed to calculate Facility Condition Index (FCI) ratings.

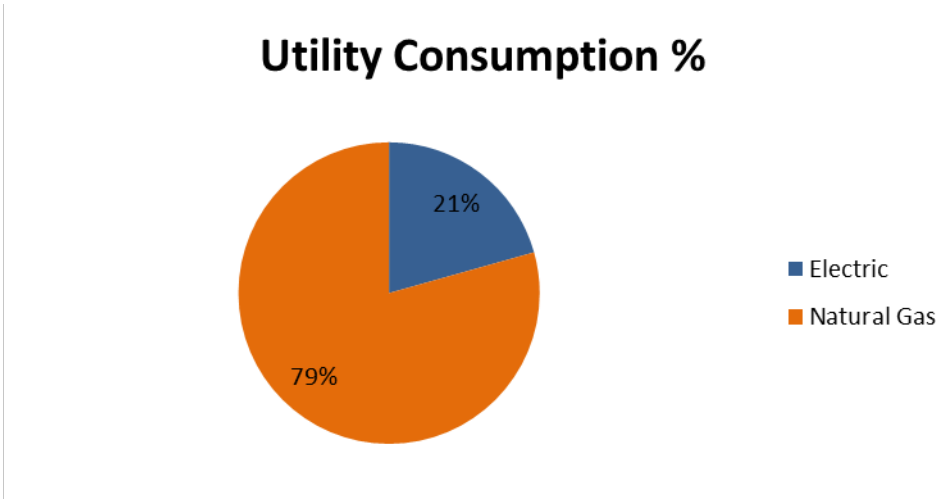


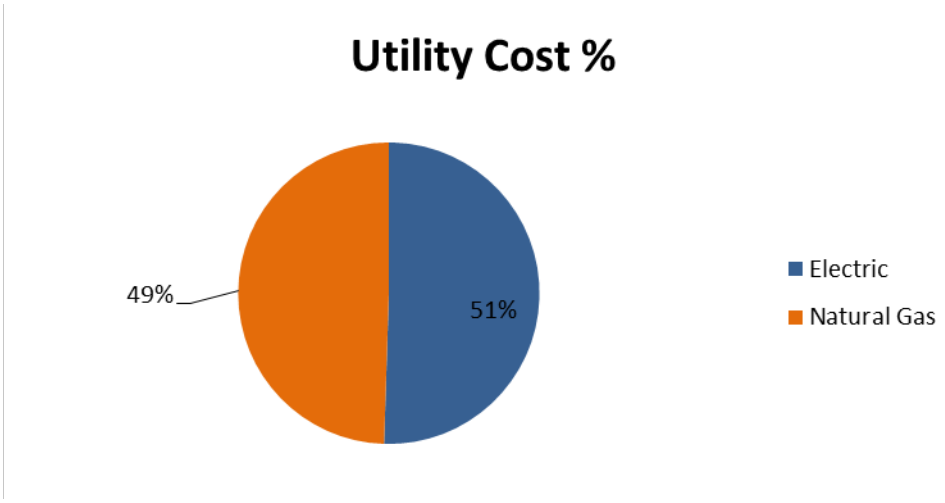
Component system	Asset Component	Condition Assessment	
		Grade	Scale
A10 Foundations	A1010 Standard Foundations	G-	73
	A1020 Special Foundations	G-	73
	A1030 Slab on Grade	G-	73
B10 Superstructure	B1010 Floor Construction	G-	73
	B1020 Roof Construction	G	84
B20 Exterior Enclosure	B2010 Exterior Walls	O+	62
	B2020 Exterior Windows	O+	62
	B2030 Exterior Doors	G-	73
B30 Roofing	B3010 Roof Coverings	O-	40
	B3020 Roof Openings	O-	40
C10 Interior Construction	C1010 Partitions	G	84
	C1020 Interior Doors	G	84
	C1030 Fittings	O+	62
C30 Interior Finishes	C3010 Wall Finishes	O+	62
	C3020 Floor Finishes	O	51
	C3030 Ceiling Finishes	O	51
D20 Plumbing	D2010 Plumbing Fixtures	O+	62
	D2020 Domestic Water Distribution	G	84
	Gas water heater GWH-1	G	84
	GWH-1-Circ pump	G	84
	Electric water heater EHW-1	G	84
	Air Compressors 2- (2008 bldg)	G-	73
	Air Compressors (Existing Maint)	O+	62
	Gas water heater (Existing Maint)	G-	73
	Electric water heater (Existing Maint)	O+	62
	Copper piping	G	84
	Piping Insulation (2008 bldg)	G	84
	Piping Insulation (Existing Maint)	R-	7
	D2030 Sanitary Waste	G	84
	D2040 Rain Water Drainage	O+	62
	D2090 Other Plumbing Systems	G	84
D30 HVAC	D3010 Energy Supply	G	84
	D3040 Distribution Systems	G	84
	RTU-1	G-	73
	AHU 001 (Furnace)	G	84
	AHU 002 (Furnace)	G	84

	AHU 001 (Condensing Unit)	**G**	84
	AHU 002 (Condensing Unit)	**G**	84
	RACU Ductless Split (Indoor)	**G**	84
	RACU Ductless Split (Condensing Unit)	**G**	84
	ERV 001	**G-**	73
	ERV 002	**G-**	73
	ERV 003	**G-**	73
	MUA-1	**G-**	73
	EF 1-3 (1)	**O+**	62
	EF 1-3 (2)	**O+**	62
	EF 1-3 (3)	**O+**	62
	Vehicle Exhaust System	**O+**	62
	Various infrared heaters (2008)	**G**	84
	UH-1 (2008)	**G**	84
	Various infrared heaters (Existing Maint)	**O+**	62
	Various Unit heaters (Existing Maint)	**O**	51
	D3060 Controls & Instrumentation (2008)	**G**	84
	D3060 Controls & Instrumentation (Existing Maint)	**O**	51
	D3070 System Testing & Balancing (2008)	**O+**	62
D40 Fire Protection	D4010 Sprinklers (2008)	**G**	84
	D4020 Standpipes (2008)	**G**	84
	D4030 Fire Protection Specialties (2008)	**G**	84
	D4090 Other Fire Protection Systems (2008)	**G**	84
D50 Electrical	D5010 Electrical Service & Distribution (2008)	**G**	84
	Switchboard and Panel boards (2008)	**G**	84
	Conduit (2008)	**G**	84
	D5020 Lighting and Branch Wiring (2008)	**G**	84
	Controls (2008)	**G**	84
	D5030 Communications & Security (2008)	**G**	84
	D5010 Electrical Service & Distribution (Existing Maint)	**O**	51
	Switchboard and Panel boards (Existing Maint)	**O**	51
	Conduit (Existing Maint)	**O**	51
	D5020 Lighting and Branch Wiring (Existing Maint)	**G**	84
	Controls (Existing Maint)	**G**	84
E20 Furnishings	E2010 Fixed Furnishings	**O-**	40
	E2020 Movable Furnishings	**O**	51
F10 Special Construction	F1040 Special Facilities	**O**	51
G20 Site Improvements	G2010 Roadways	**O+**	62
	G2020 Parking Lots	**O+**	62

	G2030 Pedestrian Paving	**O**	51
	G2040 Site Development	**G-**	73
	G2050 Landscaping	**G-**	73
G30 Site Mechanical Utilities	G3010 Water Supply	**G**	84
G40 Site Electrical Utilities	G4010 Electrical Distribution	**G**	84
	G4020 Site Lighting	**G**	84
Averaged Building Component Rating		**G-**	71

Totals		
Total kBtu Usage (annual)		3,937,596.88
Site EUI		90.41
Total Cost Utilities		$ 33,457.93
Average $/kBtu		$ 0.009
% Consumption	Electric	21%
% Consumption	Natural Gas	79%
% Consumption	Other Energy 1	0%
% Consumption	Other Energy 2	0%
% Cost	Electric	51%
% Cost	Natural Gas	49%
% Cost	Other Energy 1	0%
% Cost	Other Energy 2	0%
$$ paid for Electric over Gas		$ 337.93
$$ paid for Electric over Gas/kBtu		$ 0.02





Normal Theater

Building Overview

The Farnsworth team audited the Normal Theater for the Town of Normal. The Theater originally opened in 1937 and was built specifically for sound films. The Theater has been completely restored to its original condition. The building is still being used to show movies and available for rentals where assembly seating is required. The building areas and estimated-average number of people that use the facility is shown in the table below.

Space	Total Area (SF)	Visitors	Equivalent to Full Time
Auditorium	4,710	20-150	1
Lobby/RR/Other	2,025	-	-
Mechanical	810	-	-
Projections	240	-	1
Total	7,785	20-150	2

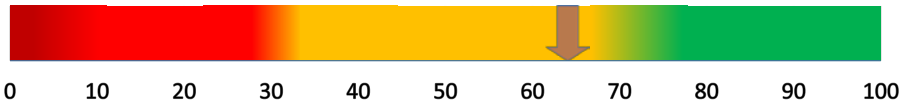
The scope of this project contained two key assessment areas: Facility Condition Audit (FCA) and an energy audit. The Farnsworth team reviewed and analyzed asset data collected by the Town of Normal staff. An on-site assessment, which were conducted with a team of engineers, verified asset data collected by the staff, assessed the facility's assets, and performed an energy audit of the facility.

Facility Condition Index (FCI= Maintenance, repair, and replacement of deficiencies of a facility divided by the current replacement value of the facility) is used to provide a benchmark to compare the relative condition of a facility or a group of facilities. To define the ratings, industry standards were used: good (under 0.05), fair (0.05 to 0.10), and poor (over 0.10).

Facility Condition Index	
Facility's Insured Value	$1,294,718
Work Orders (App. A)	$139,432
Facility Condition Index	Poor (0.11)

Along with the FCI, the Farnsworth team developed an Averaged Building Component Rating, which was attained by averaging all the building component ratings for the facility. The Averaged Rating for the Normal Theater is 64. This is based on a 100 point scale, so the Normal Theater falls into the above average range.

The Averaged Building Component Rating

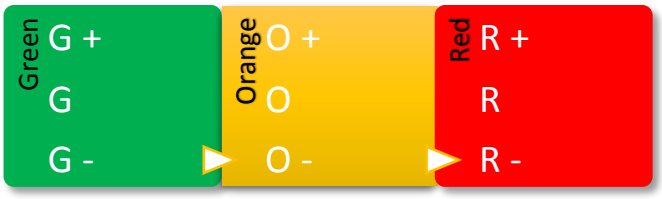


The Farnsworth team received the Normal Theater's utility usage and entered the data into the Energy Star program and attained the performance data below.

Metric	Normal Theater	Median Property	% Diff
E-STAR score	01	50	-99%
EUI (kBtu/ft²)	205	56	366%

Facility Condition Assessment

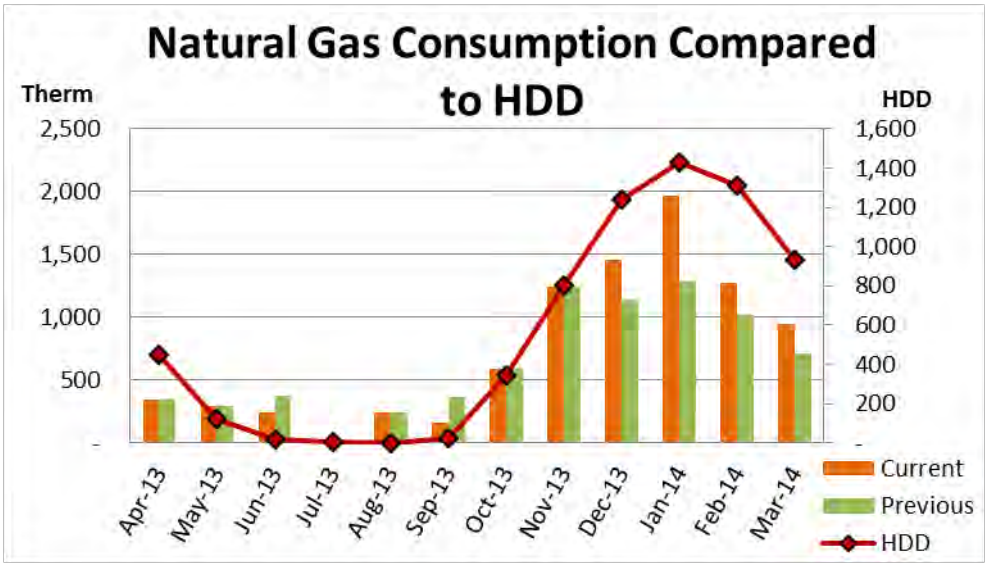
The Farnsworth team assessed the individual building components, e.g., foundations, walls, roofs, windows, doors, interior finishes, landscape (hard and soft), and MEP services (Mechanical, Electrical, and Plumbing). A direct survey of the facility's assets was conducted to verify data collected by the facility's staff and rate the building components. The direct survey method entailed a visual inspection of the asset with no intrusive diagnostic investigation. Industry standards were used to define and rate the building components; a nine point rating system was used, which employs a Green-Orange-Red primary rating assessment. The Normal Theater is in above average condition with an index within the O+ range, which is indicative to the age of the building. The rating of O+ was attained by taking the average of all the component ratings. If the building was assessed as one asset utilizing the same rating system, it would fall into the O+ range as well. The Normal Theater is in above average condition with only exterior stucco in poor condition. See **Appendix B** for detailed breakdown of components.



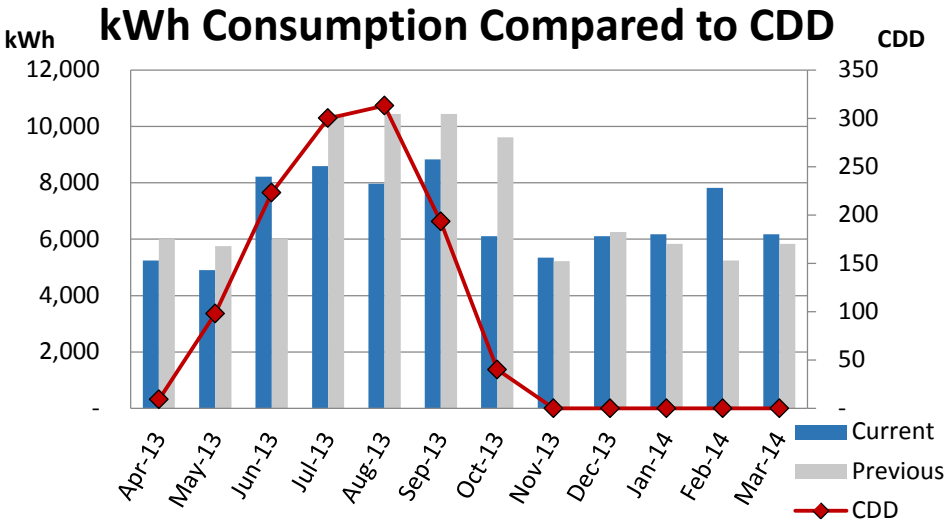
Energy Assessment

Preliminary Energy-Use Analysis

The energy assessment for the Normal Theater included a Preliminary Energy-Use Analysis (PEA). During the PEA, the utility bills were reviewed to identify any efficiency or usage modification opportunities before conducting the walk-through. This process identified natural gas usage indicative of a building influenced by environmental conditions. This can be seen in the following chart showing the rise and fall of gas usage following the rise and fall of Heating Degree Days (HDD), however there are a few anomalies to be noted. When comparing the HDD for November and March, March is significantly higher, but the gas usage is significantly lower. It is unclear why this is occurring, but could be related to occupant numbers fluctuating and overall building use during these times. Also worth noting is the gas usage in the summer time, this is believed to be for dehumidification purposes. It is believed as noted in the Energy Improvement Opportunity list that the overall gas usage can be reduced with a newer high efficiency boiler and that the summer usage could be almost eliminated with an upgraded air handling unit that could utilize a hot gas re-heat instead of bringing on the boiler. See **Appendix C** for further information.



In the following chart showing electrical consumption compared to CDD, there is a consistently high base load of approximately 5,000 kWh / month. This is believed to be due to several factors. The Theater has a built up inefficient air handling system that is uninsulated and exposed to the exterior basement walls of the building. There are a large number of lights in use while the building is open, specifically the over 400 incandescent light bulbs in the marquee. It was also noted that the theater projection computer equipment cannot be turned off, which directly affects energy use along with adding heat load to the space. Envelope considerations such as leaky doors, roof insulation, etc. are most likely contributing factors as well.



Metric	Normal Theater	Median Property	% Diff
E-STAR score	01	50	-99%
EUI (kBtu/ft²)	205	56	366%

Energy Utilization Index (EUI) is a reference that expresses the total energy (fossil fuel and electricity) used by a facility in a given period (month, year, etc.) in terms of kBtu's/gross conditioned square feet. In comparing the Normal Theater EUI to the median property, the Theater is consuming more energy per SqFt than the median property (366% greater).

Energy Star Rating is a rating system developed by the U.S. EPA. The Energy Star program has developed energy performance rating systems for several commercial and institutional building types. These ratings, on a scale of 1 to 100 with 100 being very efficient, provide a means for benchmarking the energy efficiency of specific buildings and industrial plants against the energy performance of similar facilities. The Energy Star cannot develop a rating number for this theater, so in an effort to create a benchmark, we enter the Theater in as a 5,635 SqFt retail store operating 30 hours per week with two main shift workers, one computer, and one cash register, which rated the Normal Theater a 01.

Site Energy Survey

A modified ASHRAE Level 1 Walk-Through Analysis was conducted and identified Energy Conservation Measures (ECM). The site survey was a non-invasive site inspection of the building and its services. The team reviewed the compiled ECMs for recommendation of implementation based on prior experiences. See table below.

Energy Improvement Opportunities					
	Description	**Class**	**Potential Savings**	**Recommended Priority**	**Available Rebate**
Theater 01	Installing photo cells and occupancy sensors.	Proj.	$50/yr	Med.	X
Theater 02	Bathroom Toilets flush valves to be replaced with high efficient flush valves.	Proj.	-	Low	
Theater 03	Exterior building marquee lights to be replaced with high efficient LED lights.	Proj.	$185/yr*	Med.	
Theater 04	Replace old light fixtures with retro fitted T-5 light fixtures.	Proj.	$20/yr	Med.	X
Theater 05	Replace old battery packs and Exit lights with LED fixtures.	Proj.	$100/yr	High	X
Theater 06	Update heating plant to a high efficient boiler.	Proj.	$300/yr	High	
Theater 07	Update temperature controls.	Proj.	$100/yr	High	
Theater 08	Update air handling equipment.	Proj.	$200/yr	High	
Theater 09	Evaluate thermostat placement for concession area if it affects thermostat operation.	O&M	-	Med.	
Theater 10	Close Gaps in doors	O&M	-	Med.	
Theater 11	Piping insulation throughout the building.	O&M	-	High	
Theater 12	Replace Roof with a more sustainable roof.	Proj.	-	Med.	
Theater 13	Evaluate Roof insulation	O&M	-	Med.	

* Assuming existing11 watt incandescent bulbs on for 2 hours a day 4 days a week.

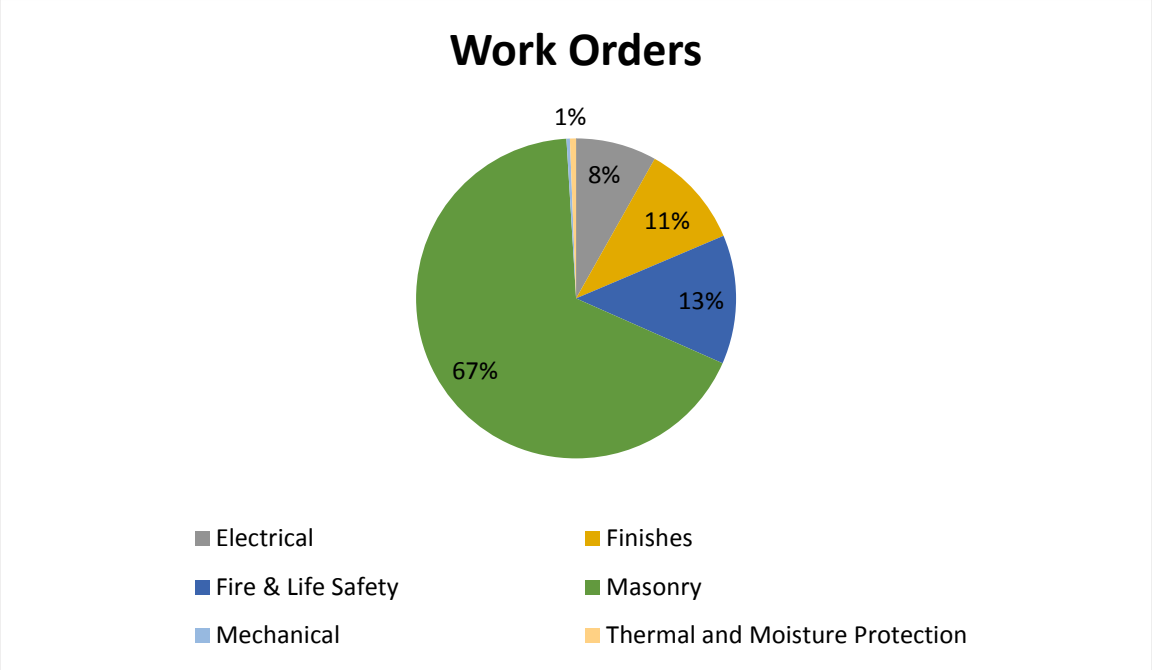
The listed ECMs represent great opportunities for the Town of Normal to achieve some of their goals and objectives: being good stewards of the taxpayer's money, providing value-added services to the community, maintaining the community's assets to a definable, acceptable level.

Building Summary

The Normal Theater is a structure that has been restored to its original condition and is presently in above average condition. The building has no components is poor condition; however, numerous components in the O- condition. Exterior stucco was previously budgeted for replacement which is primarily why the Theater received a rating of poor. Stucco repairs are considered a work in progress. The building rating is expected to improve to "Good" upon completion. The interior finishes, systems, and services are aged but serviceable; they can be addressed in an order of precedence defined by variables, e.g., alignment with the Town's goals, financial (feasibility and value added), impact building efficiency, importance on building function. Improvements can be implemented on a scheduled basis and with little or no disruption in the building usage. The services within the building represent opportunities for improvements in energy conservation and occupant comfort. The energy performance metrics indicate the Normal Theater is operating inefficiently. Some inefficiency is inherent in a restored building, but the listed ECMs would improve the building's performance.

Work Order Estimate Total	$139,432
Electrical	$11,386
Finishes	$14,548
Fire & Life Safety	$18,156
Masonry	$94,000
Mechanical	$483
Thermal and Moisture Protection	$859

Deficiencies were noted by FM staff. Farnsworth team validated logged work orders on a random sampling basis and compiled additional work orders to be logged into the CMMS. FM staff used RS Means for estimating the work orders. Estimates were peer reviewed for accuracy, but are susceptible to a variety of factors including current economy, timing, contractor and product selection. Cost opinions were derived from field observations, assumption of reasonable scope and typical remedies. Cost opinions are not inclusive of exploratory observations, or the opinion of specialty consultants. Probable cost estimates are included as reference to quantitatively identify the financial impact a noted deficiency may represent. The information is also necessary to quantify the variable needed to calculate Facility Condition Index (FCI) ratings.

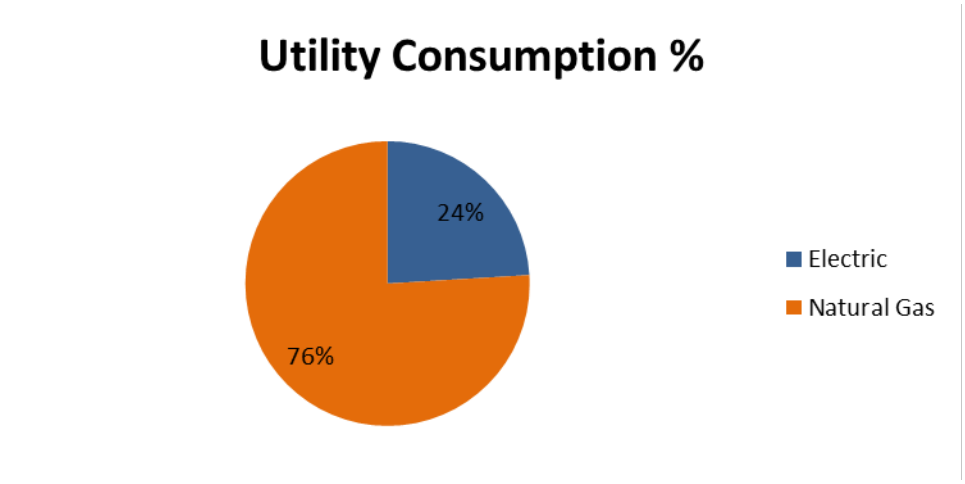


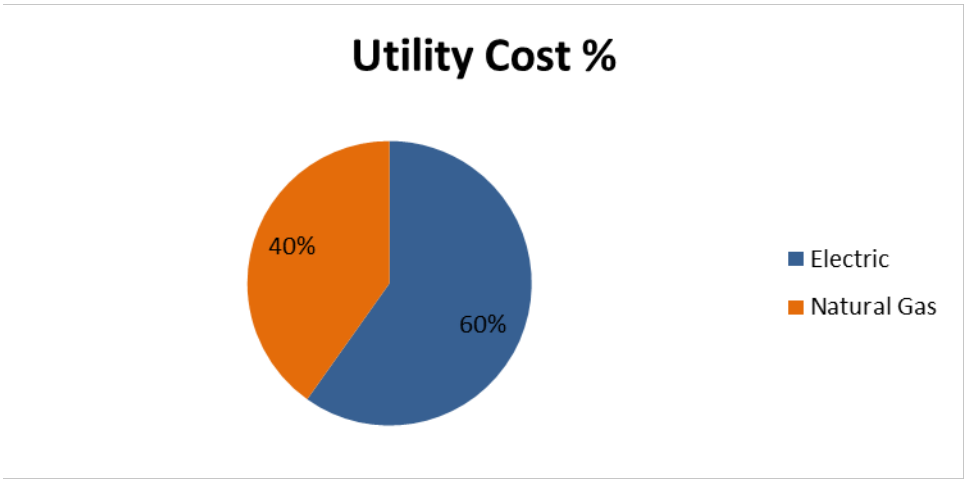
Appendix B-Component Assessment

Component system	Asset Component	Condition Assessment	
		Grade	Scale
A10 Foundations	A1010 Standard Foundations	G-	73
	A1020 Special Foundations	G-	73
B10 Superstructure	B1010 Floor Construction	G-	73
	B1020 Roof Construction	G-	73
B20 Exterior Enclosure	B2010 Exterior Walls	O	51
	B2020 Exterior Windows	O	51
	B2030 Exterior Doors	O-	40
B30 Roofing	B3010 Roof Coverings	O	51
C10 Interior Construction	C1010 Partitions	O+	62
	C1020 Interior Doors	O	51
	C1030 Fittings	O	51
C20 Stairs	C2010 Stair Construction	O+	62
	C2020 Stair Finishes	O+	62
C30 Interior Finishes	C3010 Wall Finishes	O	51
	C3020 Floor Finishes	O-	40
	C3030 Ceiling Finishes	O+	62
D20 Plumbing	D2010 Plumbing Fixtures	G	84
	D2020 Domestic Water Distribution	G	84
	Elec water heater	G	84
	Copper piping	G	84
	D2030 Sanitary Waste	G	84
	D2040 Rain Water Drainage	G	84
D30 HVAC	D3010 Energy Supply	G	84
	D3020 Heat Generating Systems	O	51
	LGB-11 Weil McLain (basement)	O	51
	D3030 Cooling Generating Systems	O+	62
	Carrier 38AH-054---500 (Roof)	O+	62
	D3040 Distribution Systems	O	51
	AHU-1	O	51
	D3050 Terminal & Package Units	O+	62
	VR1	O+	62
	VR2	O+	62
	VR3	O+	62
	UH1	O+	62
	D3060 Controls & Instrumentation	O+	62
	D3070 System Testing & Balancing	O	51
D40 Fire Protection	D4010 Sprinklers	G-	73
	D4020 Standpipes	G-	73

	D4030 Fire Protection Specialties	**O+**	62
	D4090 Other Fire Protection Systems	**G-**	73
D50 Electrical	D5010 Electrical Service & Distribution	**O+**	62
	Switchboard and Panel boards	**O+**	62
	Conduit	**G-**	73
	D5020 Lighting and Branch Wiring	**O+**	62
E20 Furnishings	E2020 Movable Furnishings	**O-**	40
G20 Site Improvements	G2010 Roadways	**O+**	62
	G2020 Parking Lots	**O+**	62
	G2030 Pedestrian Paving	**O**	51
	G2040 Site Development	**G-**	73
	G2050 Landscaping	**G-**	73
G30 Site Mechanical Utilities	G3010 Water Supply	**G-**	73
G40 Site Electrical Utilities	G4010 Electrical Distribution	**G**	84
	G4020 Site Lighting	**G-**	73
Averaged Building Component Rating		**O+**	64

Totals		
Total kBtu Usage (annual)		1,156,288.94
Site EUI		205.20
Total Cost Utilities		$ 14,479.73
Average $/kBtu		$ 0.013
% Consumption	Electric	24%
% Consumption	Natural Gas	76%
% Consumption	Other Energy 1	0%
% Consumption	Other Energy 2	0%
% Cost	Electric	60%
% Cost	Natural Gas	40%
% Cost	Other Energy 1	0%
% Cost	Other Energy 2	0%
$$ paid for Electric over Gas		$ 2,845.51
$$ paid for Electric over Gas/kBtu		$ 0.03





Uptown Station Parking Deck

Building Overview

The Farnsworth team reviewed the Uptown Station Parking Deck (USPD) for the Town of Normal. The USPD construction was completed in 2011. There are 5 levels including space allowed for future development of retail spaces. The deck areas and estimated-average number of people that use the facility is shown in the table below.

Space	Total Area (SF)	Visitors	Equivalent to Full Time
Parking	182,033	-	-
Mech/Elec	1,224	-	-
Stair	3,575	-	-
Future Retail	3,364	-	-
Total	193,196	-	-

The scope of this project contained two key assessment areas: Facility Condition Audit (FCA) and an energy audit. The Farnsworth team reviewed and analyzed asset data collected by the Town of Normal staff. On-site assessments, which were conducted with a team of engineers, verified asset data collected by the staff, assessed the facility's assets, and performed an energy audit of the facility.

Facility Condition Index (FCI= Maintenance, repair, and replacement of deficiencies of a facility divided by the current replacement value of the facility) is used to provide a benchmark to compare the relative condition of a facility or a group of facilities. To define the ratings, industry standards were used: good (under 0.05), fair (0.05 to 0.10), and poor (over 0.10).

Facility Condition Index	
Facility's Insured Value*	$8,000,000
Work Orders (App. A)	$9,665
Facility Condition Index	Good (0.001)

**Estimated value based on SqFt of similar structure.*

Along with the FCI, the Farnsworth team developed an Averaged Building Component Rating, which was attained by averaging all the building component ratings for the facility. The Averaged Rating for the USPD is 80. This is based on a 100 point scale, so the USPD falls into the good category.

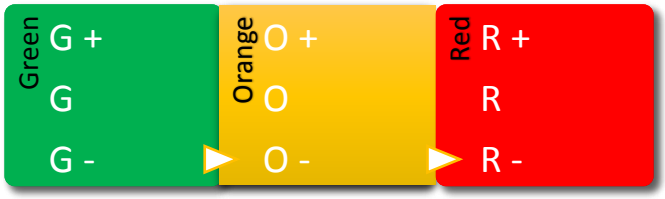
The Averaged Building Component Rating

The Farnsworth team received the USPD's utility usage and entered the data into the Energy Star program and attained the performance data below.

Metric	USPD	Median Property	% Diff
E-STAR score	N/A	N/A	N/A
EUI (kBtu/ft²)	3.25	N/A	N/A

Facility Condition Assessment

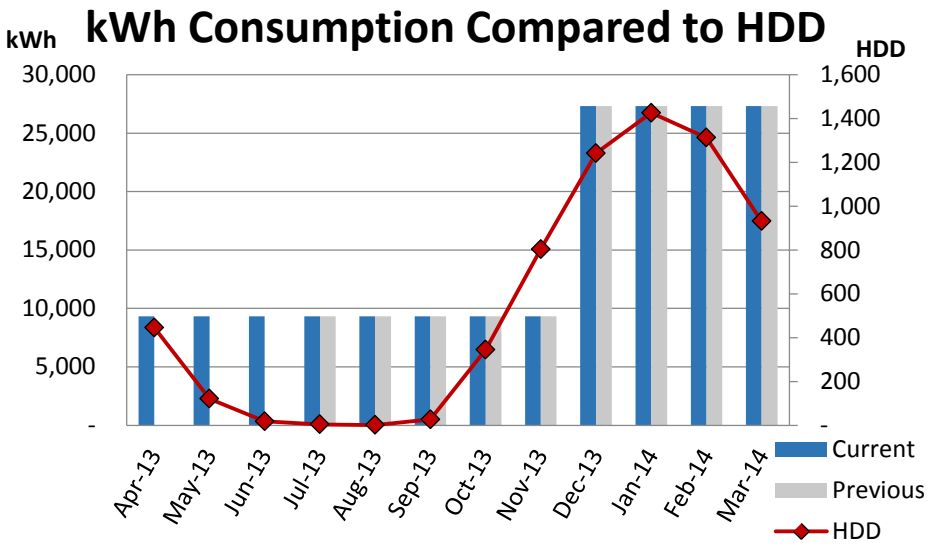
The Farnsworth team assessed the individual building components, e.g., foundations, walls, roofs, windows, doors, interior finishes, landscape (hard and soft), and MEP services (Mechanical, Electrical, and Plumbing). A direct survey of the facility's assets was conducted to verify data collected by the facility's staff and rate the building components. The direct survey method entailed a visual inspection of the asset with no intrusive diagnostic investigation. Industry standards were used to define and rate the building components; a nine point rating system was used, which employs a Green-Orange-Red primary rating assessment. The USPD rates at an above average condition with an index within the G- range. The rating of G- was attained by taking the average of all the component ratings. If the building was assessed as one asset utilizing the same rating system, it would fall into the G- range as well. The building is in good condition and all components are rated higher than above average. See **Appendix B** for detailed breakdown of components.



Energy Assessment

Preliminary Energy-Use Analysis

The energy assessment for the USPD included a Preliminary Energy-Use Analysis (PEA). During the PEA, the utility bills were reviewed to identify any efficiency or usage modification opportunities before conducting the walk-through. The analysis of the electrical billing indicated a lighting load of 9,000 kWh / month with increased load in the winter months due to electrical heating. See **Appendix C** further information. Since the parking deck is not metered separately from Uptown Station, electrical consumption was derived by the number of electrical devices and assumed hours of operation.



Metric	USPD	Median Property	% Difference
ENERGY STAR score	N/A	N/A	N/A
EUI (kBtu/ft²)	3.25	N/A	N/A

Energy Utilization Index (EUI) is a reference that expresses the total energy (fossil fuel and electricity) used by a facility in a given period (month, year, etc.) in terms of Btu's/gross conditioned square feet.

Energy Star Rating cannot be generated for a parking deck structure.

Site Survey

A modified ASHRAE Level 1 Walk-Through Analysis was conducted and identified Energy Conservation Measures (ECM). The site survey was a non-invasive site inspection of the building and its services. The team reviewed the compiled ECMs for recommendation of implementation based on prior experiences. See table below.

Energy Improvement Opportunities

	Description	Class	Potential Savings	Recommended Priority	Available Rebate
USPD 01	Daylight sensors for the remaining non-automated interior lighting in areas with windows.	Proj.	$50/yr	Med.	X
USPD 02	Investigate lumen levels throughout the deck.	Proj.	-	High	

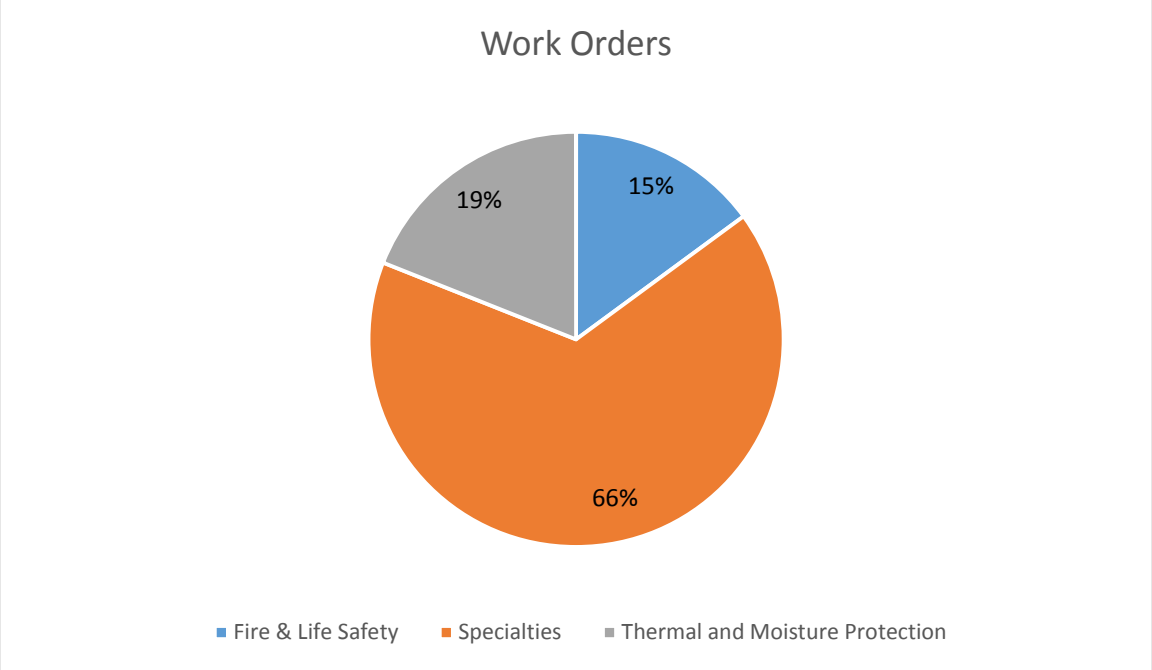
The listed ECMs represent some opportunities to reduce the energy consumption of the USPD. There are illumination requirement for parking structures and a survey of the lumen levels is recommended and may reveal addition opportunities (removal of some lights).

Building Summary

The USPD is a structure in good condition with no deficiencies noted at this time. When comparing the generated EUI with the other parking structures audited, the USPD appears to be performing substantial better than the other two parking decks. The lighting within the building represent opportunities for improvements in energy conservation.

Work Order Estimate Total	$9,665
Fire & Life Safety	$1,441
Specialties	$6,390
Thermal and Moisture Protection	$1,833

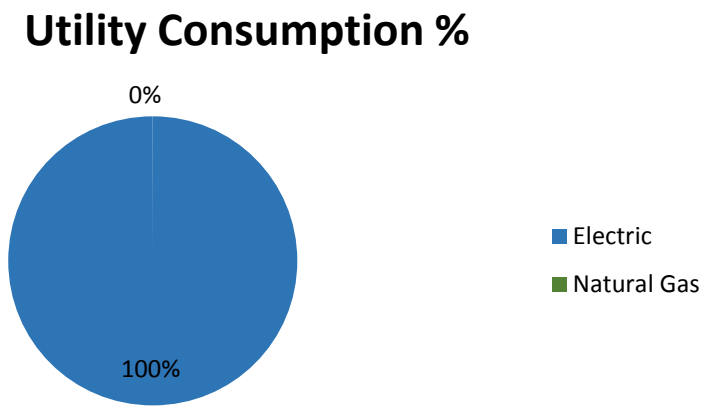
Deficiencies were noted by FM staff. Farnsworth team validated logged work orders on a random sampling basis and compiled additional work orders to be logged into the CMMS. FM staff used RS Means for estimating the work orders. Estimates were peer reviewed for accuracy, but are susceptible to a variety of factors including current economy, timing, contractor and product selection. Cost opinions were derived from field observations, assumption of reasonable scope and typical remedies. Cost opinions are not inclusive of exploratory observations, or the opinion of specialty consultants. Probable cost estimates are included as reference to quantitatively identify the financial impact a noted deficiency may represent. The information is also necessary to quantify the variable needed to calculate Facility Condition Index (FCI) ratings.



Component system	Asset component	Condition Assessment	
		Grade	Scale
A10 Foundations	A1010 Standard Foundations	G	84
	A1020 Special Foundations	G	84
	A1030 Slab on Grade	G	84
B10 Superstructure	B1010 Floor Construction	G	84
	B1020 Roof Construction	G	84
B20 Exterior Enclosure	B2010 Exterior Walls	G-	73
	B2020 Exterior Windows	G	84
	B2030 Exterior Doors	G-	73
B30 Roofing	B3010 Roof Coverings	G-	73
	B3020 Roof Openings	G-	73
C10 Interior Construction	C1010 Partitions	G-	73
	C1020 Interior Doors	G-	73
	C1030 Fittings	G-	73
C20 Stairs	C2010 Stair Construction	G-	73
	C2020 Stair Finishes	G-	73
C30 Interior Finishes	C3010 Wall Finishes	G-	73
	C3020 Floor Finishes	G-	73
	C3030 Ceiling Finishes	G-	73
D20 Plumbing	D2040 Rain Water Drainage	G	84
D30 HVAC	D3010 Energy Supply	G	84
	D3050 Terminal & Package Units	G	84
	Various Unit Heaters	G	84
	D3060 Controls & Instrumentation	G	84
D40 Fire Protection	D4010 Sprinklers	G	84
	D4020 Standpipes	G	84
	D4030 Fire Protection Specialties	G	84
	D4090 Other Fire Protection Systems	G	84
D50 Electrical	D5010 Electrical Service & Distribution	G	84
	Switchboard and Panel boards	G	84
	Conduit	G	84
	Various EV Charging Stations	G	84
	D5020 Lighting and Branch Wiring	G	84
	D5030 Communications & Security	G	84
G20 Site Improvements	G2010 Roadways	G	84
	G2020 Parking Lots	G	84

	G2030 Pedestrian Paving	**G**	84
	G2040 Site Development	**G-**	73
	G2050 Landscaping	**G-**	73
G40 Site Electrical Utilities	G4010 Electrical Distribution	**G**	84
	G4020 Site Lighting	**G**	84
Averaged Building Component Rating		**G-**	80

Totals		
Total kBtu Usage (annual)		627,221.14
Site EUI		3.25
Total Cost Utilities		$ 12,868.00
Average $/kBtu		$ 0.021
% Consumption	Electric	100%
% Consumption	Natural Gas	0%
% Consumption	Other Energy 1	0%
% Consumption	Other Energy 2	0%
% Cost	Electric	100%
% Cost	Natural Gas	0%
% Cost	Other Energy 1	0%
% Cost	Other Energy 2	0%
$$ paid for Electric over Gas		$ 12,868.00
$$ paid for Electric over Gas/kBtu		$ 0.02



*No Natural Gas Service

Est. Uptown Parking Deck Annual Electrical Consumption								
Lighting								
Fixture Control	# Fixtures	Lamps Per device	Watts per lamp	Total Watts Per Fixture	Total Watts	Hours ON per day	Hours ON per month	Monthly kWh
Switched	6	2	54	117	702	11	330	232
Switched	33	2	28	62	2046	11	330	675
Switched - Emergency pole	3	1	150	150	450	11	330	149
Switched - MH pole	2	2	250	584	1168	11	330	385
Switched - MH pole	1	3	250	876	876	11	330	289
24/7 Operation	170	2	28	62	10540	24	720	7589
							Total	9319
							Total kWh Year	111824
Electric Unit Heater								
		Qty	kWh Each	Total kWh	Hours on per Month	Total kWh per Month	# Annual Months of Operation	Total kWh HDD
EUH		10	5	50	360	18000	4	72000
			* Numbers provided are based on assumption of hours of operation					
						Total Parking Deck kWh		183824

Uptown Station

Building Overview

The Farnsworth team audited the Uptown Station Building for the Town of Normal on May 29, 2014. The building was completed in 2012 and houses the Town of Normal Municipal Offices, the Town Council Chambers, an Amtrak station, a bus terminal served by multiple providers, and a Subway® restaurant. The facility is also connected to the Uptown Station Parking Deck and has access to the Constitution Trail. The building areas and estimated-average number of people that use the facility is shown in the table below.

Space	Total Area (SF)	Visitors	Equivalent to Full Time
Lobby, bus & train waiting	10,348	75	5
Food court, ticketing & retail	5,000	100	5
Offices & meeting rooms	42,428	10	40
Totals	57,776	185	50

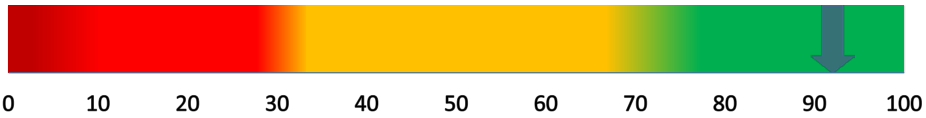
The scope of this project contained two key assessment areas: Facility Condition Audit (FCA) and an energy audit. The Farnsworth team reviewed and analyzed asset data collected by the Town of Normal staff. On-site assessments, which were conducted with a team of engineers, verified asset data collected by the staff, assessed the facility's assets, and performed an energy audit of the facility.

Facility Condition Index (FCI= Maintenance, repair, and replacement of deficiencies of a facility divided by the current replacement value of the facility) is used to provide a benchmark to compare the relative condition of a facility or a group of facilities. To define the ratings, industry standards were used: good (under 0.05), fair (0.05 to 0.10), and poor (over 0.10).

Facility Condition Index	
Facility's insured value	$28,537,635
Work Orders (App A)	$137,483
Facility Condition Index	Good (0.005)

Along with the FCI, the Farnsworth team developed an Averaged Building Component Rating, which was attained by averaging all the building component ratings for the facility. The Averaged Rating for the Uptown Station is 92. This is based on a 100 point scale, so the Uptown Station falls into the higher range, which is to be expected with the newly constructed building.

The Averaged Building Component Rating

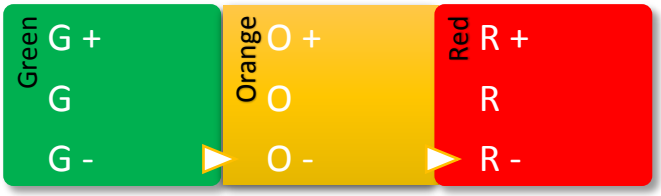


The Farnsworth team received the Uptown Station's utility usage and entered the data into the Energy Star program and attained the performance data below.

Metric	Uptown Station	Median Property	% Difference
ENERGY STAR score	11	50	-22%
EUI (kBtu/ft²)	133	81	164%

Facility Condition Assessment

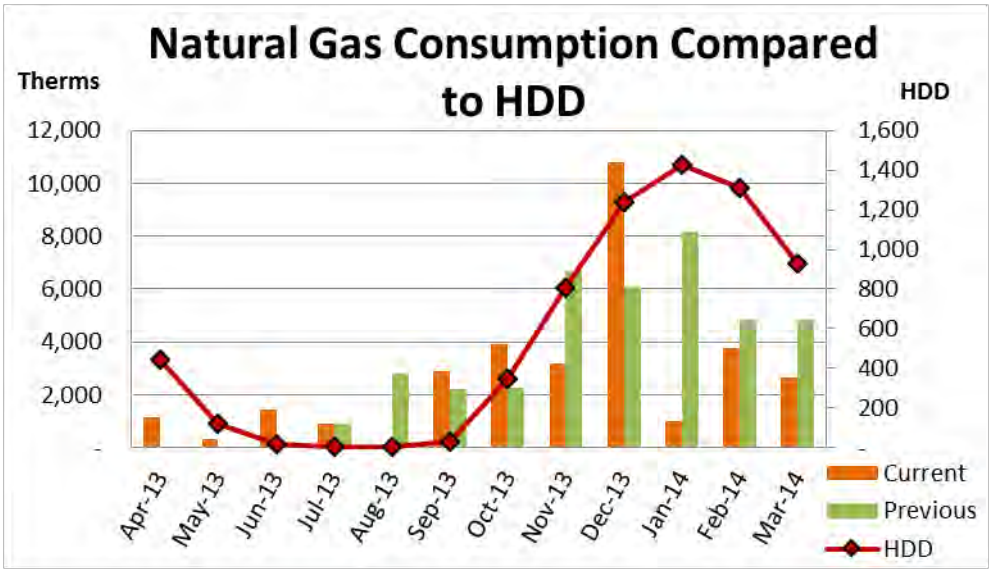
The Farnsworth team assessed the individual building components, e.g., foundations, walls, roofs, windows, doors, interior finishes, landscape (hard and soft), and MEP services (Mechanical, Electrical, and Plumbing). A direct survey of the facility's assets was conducted to verify data collected by the facility's staff and rate the building components. The direct survey method entailed a visual inspection of the asset with no intrusive diagnostic investigation. Industry standards were used to define and rate the building components; a nine point rating system was used, which employs a Green-Orange-Red primary rating assessment. The Uptown Station is in very good condition with an index within the G+ range. The rating of G+ was attained by taking the average of all the component ratings. If the building was assessed as one asset utilizing the same rating system, it would fall into the G+ range as well. See **Appendix B** for detailed breakdown of components.



Energy Assessment

Preliminary Energy-Use Analysis

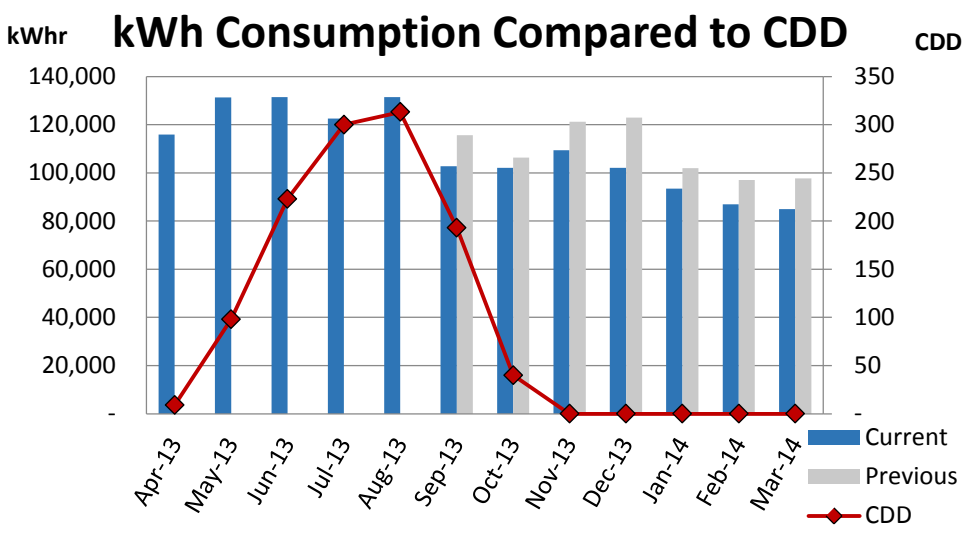
The energy assessment for Uptown Station included a Preliminary Energy-Use Analysis (PEA). During the PEA, the utility bills were reviewed to identify any efficiency or usage modification opportunities before conducting the walk-through. The following chart, showing gas consumption compared to HDD, identifies gas usage anomalies in December 2013 and January 2014. These issues appear to be with the gas utility's billing cycle. Other anomalies in usage pattern can be seen during the months of June, July, September, and October. In fact, the month of October had more gas usage than November. The Farnsworth team documented that the lead/ lag boilers were cycling at the time of the walk-through and it appears the boilers may not be set up for modulating control. It also appears that the outdoor air reset for hot water supply temperature was not functioning and we did not see evidence of a hot water system lock-out, typically above 70 or 80 degrees F. The hot water system was operating at a supply temperature of 162 degrees F, outside of the efficient condensing region of the boiler's operation. From these observations, we predict there are significant gas savings by correcting the hot water system programming.



In the following chart showing electrical consumption compared to CDD, there is a consistently high base load of approximately 90,000 kWh / month. Around 10,000 kWh of this 90,000 kWh monthly base load is from the parking deck lighting. Ten electric unit heaters in the parking deck stairwell contribute approximately 20,000 kWh monthly during the heating months (assuming 12 hours/ day run time). Additionally, lighting on the first floor has been observed to have minimal controls and therefore is a constant base load. While these factors contribute to the base load, it appears there is a significant contributing factor to the base load that has not been identified. From observations indicating the building may not enter unoccupied mode (when fans turn off), we suspect fan energy has contributed to a significant portion of this base load. Furthermore, it was also observed during the audit process the Town of Normal Facility staff was in the process of correcting this issue by adjusting the BAS programming so the building enters into satisfied unoccupied mode.

Anomalies can also be seen when comparing the months of April, May, June, and July. April and May are ideal for economizer operation (when outdoor air is used instead of mechanical cooling) and should have a significant reduction in energy over July and August, where mechanical cooling is most necessary. The usage patterns suggest that the economizer controls on the rooftop units are not operating correctly. In addition, improper energy wheel operation could actually bring heat into the building during economizer operation. Detailed investigation of HVAC trends, rooftop dead band ranges and operation, compressor cycling, energy wheel operation, and building pressurization strategies could identify significant savings.

The electrical usage from the utility meters both the Uptown Station and the Uptown Parking Deck together. For this analysis, the team estimated the lighting and electric heating load for the parking deck and subtracted this amount from the total utility date. See **Appendix C** for further information.



Metric	Uptown Station	Median Property	% Difference
ENERGY STAR score	11	50	-22%
EUI (kBtu/ft²)	133	81	164%

Energy Utilization Index (EUI) is a reference that expresses the total energy (fossil fuel and electricity) used by a facility in a given period (month, year, etc.) in terms of kBtu's/gross conditioned square feet. In comparing the Uptown Station's EUI to the median property, the UTS is consuming more energy per SqFt than the median property.

Energy Star Rating is a rating system developed by the U.S. EPA. The Energy Star program has developed energy performance rating systems for several commercial and institutional building types. These ratings, on a scale of 1 to 100 with 100 being very efficient, provide a means for benchmarking the energy efficiency of specific buildings and industrial plants against the energy performance of similar facilities. The Uptown Station was entered as a building containing 42,428 SqFt of office space with 50 main shift workers, 50hr/wk, and 50 computers; 5,000 SqFt of retail space with 4 main shift workers, 50hr/wk, 2 computers, 1 cash register, and 2 refrigeration units; and 10,348 SqFt of terminal/station space with 8 main shift workers, 112hr/wk, and 5 computers. The Uptown Station Energy Star rating is 11. The Uptown Station is substantially less efficient than the median property, and we believe this building warrants further investigation into its energy consumption.

Site Energy Survey

A modified ASHRAE Level 1 Walk-Through Analysis was conducted and identified Energy Conservation Measures (ECM). The site survey was a non-invasive site inspection of the building and its services. The team reviewed the compiled ECMs for recommendation of implementation based on prior experiences. See table below.

Energy Improvement Opportunities

	Description	Class	Potential savings	Recommended priority	UTL Incentive
UTS 01	Review and modify BAS programming. During the inspection, hot water supply temperature was noted at 162F, with the pump running on short cycles. OAT boiler reset appears to not be functioning.	O&M	-	High	
UTS 02	RTU compressors were short-cycling during walk-through (apprx 15 second interval). Review refrigerant charge and min start and stop delays for each compressor.	O&M	-	High	
UTS 03	BAS programming issues identified in the unoccupied mode.	O&M	-	High	
UTS 04	Adjustments and additions to the lighting controls to harvest daylight in appropriate areas.	Proj.	$500/yr	Med.	X
UTS 05	Adjustments and additions to the lighting controls to provide better occupancy control.	Proj.	$400/yr	Med.	X

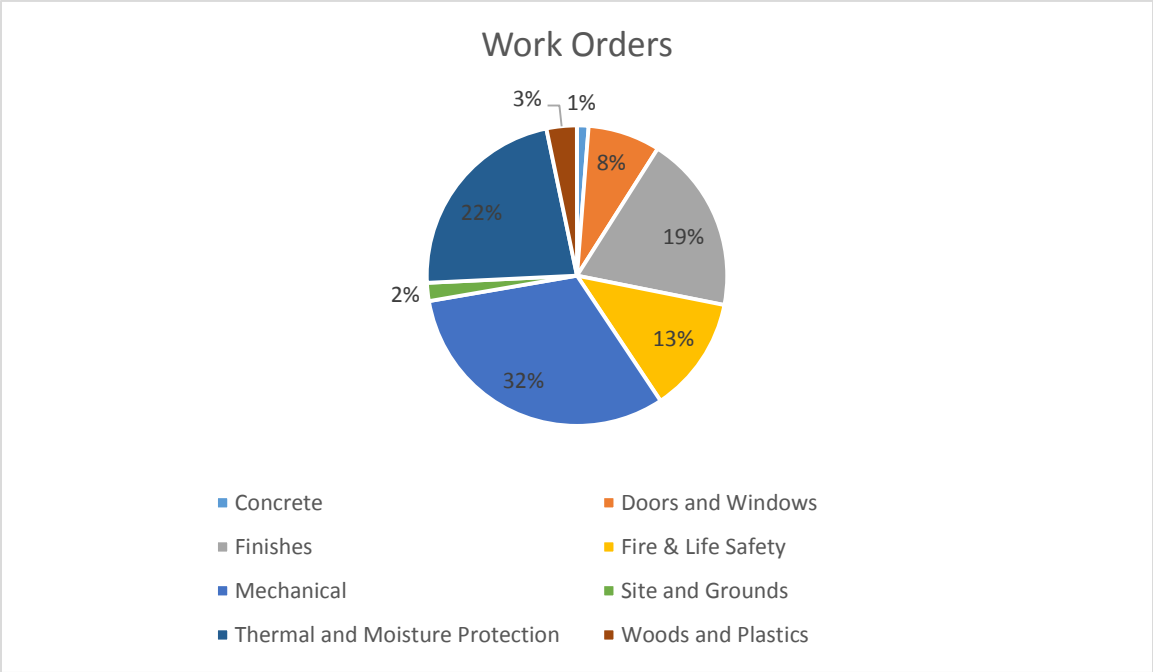
The listed ECMs represent opportunities for the Town of Normal to achieve some of their energy conservation goals and objectives.

Building Summary

The Uptown Station is a newly constructed building that scored very well in the condition assessment (G+); there were no substantial deficiencies within the building components noted during the inspection. The team observed a warranty replacement issue (carpet), typical work order and preventative maintenance issues that have been logged into the CMMS, and energy improvement opportunities. The building is fitted with efficient fixtures throughout to limit the energy usage; however, the gas and electric utility usage shows significantly higher usage than would be typical for a similar building of this size and type. There appears to be a baseline electrical load of approximately 90,000 kWh / month that cannot be fully explained. Also, the PEA suggests there is an issue within the HVAC system as there is very minimal variation in the electrical consumption. The RTU economizer mode and other HVAC programming may not be functioning as intended. Re-commissioning of the facility is highly recommended to identify and correct issues with the HVAC and lighting controls.

Work Order Estimate Total	$137,483
Concrete	$1,704
Doors and Windows	$10,685
Finishes	$26,280
Fire & Life Safety	$17,204
Mechanical	$43,500
Site and Grounds	$2,694
Thermal and Moisture Protection	$30,915
Woods and Plastics	$4,500

Deficiencies were noted by FM staff. Farnsworth team validated logged work orders on a random sampling basis and compiled additional work orders to be logged into the CMMS. FM staff used RS Means for estimating the work orders. Estimates were peer reviewed for accuracy, but are susceptible to a variety of factors including current economy, timing, contractor and product selection. Cost opinions were derived from field observations, assumption of reasonable scope and typical remedies. Cost opinions are not inclusive of exploratory observations, or the opinion of specialty consultants. Probable cost estimates are included as reference to quantitatively identify the financial impact a noted deficiency may represent. The information is also necessary to quantify the variable needed to calculate Facility Condition Index (FCI) ratings.

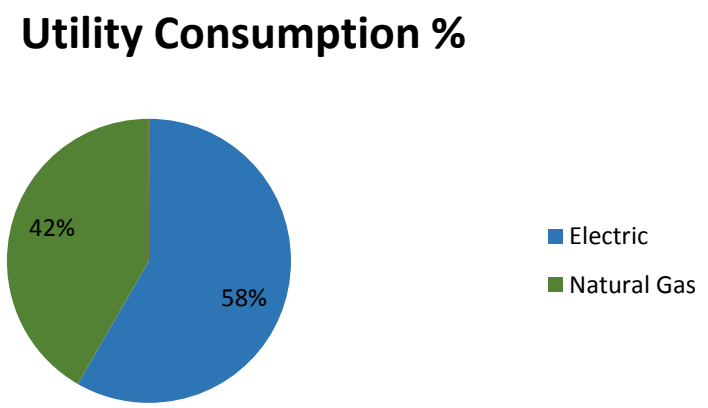


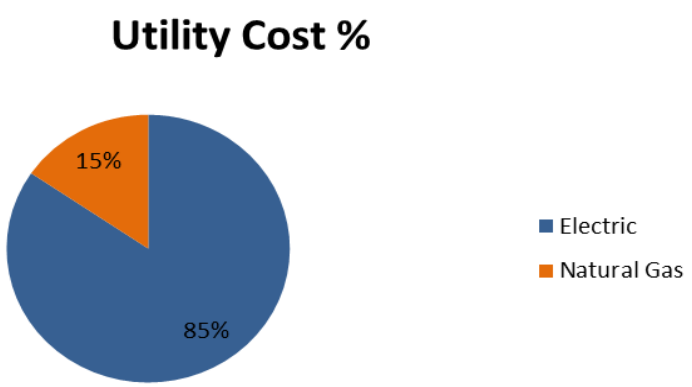
Appendix B-*Component Assessment*

Component system	Asset component	Condition Assessment	
		Grade	Scale
A10 Foundations	A1010 Standard Foundations	G+	95
	A1020 Special Foundations	G+	95
	A1030 Slab on Grade	G+	95
B10 Superstructure	B1010 Floor Construction	G+	95
	B1020 Roof Construction	G+	95
B20 Exterior Enclosure	B2010 Exterior Walls	G+	95
	B2020 Exterior Windows	G	84
	B2030 Exterior Doors	G+	95
B30 Roofing	B3010 Roof Coverings	G+	95
	B3020 Roof Openings	G+	95
C10 Interior Construction	C1010 Partitions	G+	95
	C1020 Interior Doors	G+	95
	C1030 Fittings	G+	95
C20 Stairs	C2010 Stair Construction	G+	95
	C2020 Stair Finishes	G+	95
C30 Interior Finishes	C3010 Wall Finishes	G+	95
	C3020 Floor Finishes	G+	95
	C3030 Ceiling Finishes	G	84
D10 Conveying	D1010 Elevators & Lifts	G	84
D20 Plumbing	D2010 Plumbing Fixtures	G+	95
	D2020 Domestic Water Distribution	G+	95
	WH-001	G+	95
	PUMP-001	G+	95
	Infrastructure	G+	95
	D2030 Sanitary Waste	G+	95
	D2040 Rain Water Drainage	G+	95
D30 HVAC	D3010 Energy Supply	G+	95
	D3020 Heat Generating Systems	G+	95
	Boiler-001	G+	95
	Boiler-002	G+	95
	Boiler-003	G+	95
	UH-002	G+	95
	UH-006	G+	95
	UH-008	G+	95
	D3040 Distribution Systems	G	84
	D3050 Terminal & Package Units	G+	95
	RTU-001	G	84

	RTU-002	G	84
	RTU-003	G	84
	ACR-001	G+	95
	Cabinet heaters	G+	95
	RACU-001	G+	95
	RACU-002	G+	95
	RACU-003	G+	95
	Split-Cond-001	G+	95
	D3060 Controls & Instrumentation	O+	62
	D3070 System Testing & Balancing	G-	73
	D3090 Other HVAC Systems & Equipment	G+	95
	Electric Unit Heater	G+	95
	Radiation Panel	G+	95
	Exhaust fan	G	84
D40 Fire Protection	D4010 Sprinklers	G+	95
	D4020 Standpipes	G+	95
	D4030 Fire Protection Specialties	G+	95
	D4090 Other Fire Protection Systems	G+	95
D50 Electrical	D5010 Electrical Service & Distribution	G+	95
	Switchboard and Panel boards	G	84
	conduit	G+	95
	D5020 Lighting and Branch Wiring	G+	95
	D5030 Communications & Security	G+	95
	D5090 Other Electrical Systems (LCP)	G	84
	Emergency Generator	G	84
	Lighting Control	G+	95
E10 Equipment	E1030 Vehicular Equipment	G-	73
E20 Furnishings	E2010 Fixed Furnishings	G+	95
	E2020 Movable Furnishings	G+	95
G20 Site Improvements	G2010 Roadways	G+	95
	G2020 Parking Lots	G+	95
	G2030 Pedestrian Paving	G+	95
	G2040 Site Development	G+	95
	G2050 Landscaping	G+	95
G30 Site Mechanical Utilities	G3010 Water Supply	G+	95
	G3020 Sanitary Sewer	G+	95
	G3030 Storm Sewer	G+	95
	G3060 Fuel Distribution	G+	95
G40 Site Electrical Utilities	G4010 Electrical Distribution	G+	95
	G4020 Site Lighting	G+	95
Averaged Building Component Rating		G+	92

Totals		
Total kBtu Usage (annual)		8,312,903.25
Site EUI		143.88
Total Cost Utilities		$ 117,771.93
Average $/kBtu		$ 0.015
% Consumption	Electric	61%
% Consumption	Natural Gas	39%
% Consumption	Other Energy 1	0%
% Consumption	Other Energy 2	0%
% Cost	Electric	85%
% Cost	Natural Gas	15%
% Cost	Other Energy 1	0%
% Cost	Other Energy 2	0%
$$ paid for Electric over Gas		$ 81,302.75
$$ paid for Electric over Gas/kBtu		$ 0.01





Est. Uptown Parking Deck Annual Electrical Consumption								
Lighting								
Fixture Control	# Fixtures	Lamps Per device	Watts per lamp	Total Watts Per Fixture	Total Watts	Hours ON per day	Hours ON per month	Monthly kWh
Switched	6	2	54	117	702	11	330	232
Switched	33	2	28	62	2046	11	330	675
Switched - Emergency pole	3	1	150	150	450	11	330	149
Switched - MH pole	2	2	250	584	1168	11	330	385
Switched - MH pole	1	3	250	876	876	11	330	289
24/7 Operation	170	2	28	62	10540	24	720	7589
							Total	9319
							Total kWh Year	111824
Electric Unit Heater								
		Qty	kWh Each	Total kWh	Hours on per Month	Total kWh per Month	# Annual Months of Operation	Total kWh HDD
EUH		10	5	50	360	18000	4	72000
			* Numbers provided are based on assumption of hours of operation					
						Total Parking Deck kWh		183824

Police Department

Building Overview

The Farnsworth team audited the Police Station for the Town of Normal The PD is three-story 25,140 SqFt building built in 1997. The building areas and estimated-average number of people that use the facility is shown in the table below.

Space	Total Area (SF)	Visitors	Equivalent to Full Time
Office	18,521	20	80
Storage	1,905	-	-
Other	4,714	-	-
Total	25,140	20	80

The scope of this project contained two key assessment areas: Facility Condition Audit (FCA) and an energy audit. The Farnsworth team reviewed and analyzed asset data collected by the Town of Normal staff. On-site assessments, which were conducted with a team of engineers, verified asset data collected by the staff, assessed the facility's assets, and performed an energy audit of the facility.

Facility Condition Index (FCI= Maintenance, repair, and replacement of deficiencies of a facility divided by the current replacement value of the facility) is used to provide a benchmark to compare the relative condition of a facility or a group of facilities. To define the ratings, industry standards were used: good (under 0.05), fair (0.05 to 0.10), and poor (over 0.10).

Facility Condition Index	
Facility's Insured Value	$5,797,952
Work Orders (App. A)	$175,970
Facility Condition Index	Good (0.03)

Along with the FCI, the Farnsworth team developed an Averaged Building Component Rating, which was attained by averaging all the building component ratings for the facility. The Averaged Rating for the Police Station is 62. This is based on a 100 point scale, so the Police Station falls into the above average category.

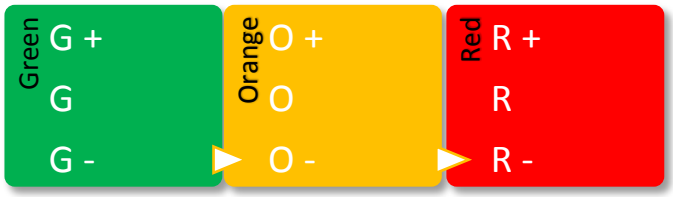
The Averaged Building Component Rating

The Farnsworth team received the Police Station's utility usage and entered the data into the Energy Star program and attained the performance data below.

Metric	Police Station	Median Property	% Diff
E-STAR score	88	50	76%
EUI (kBtu/ft²)	65	112	58%

Facility Condition Assessment

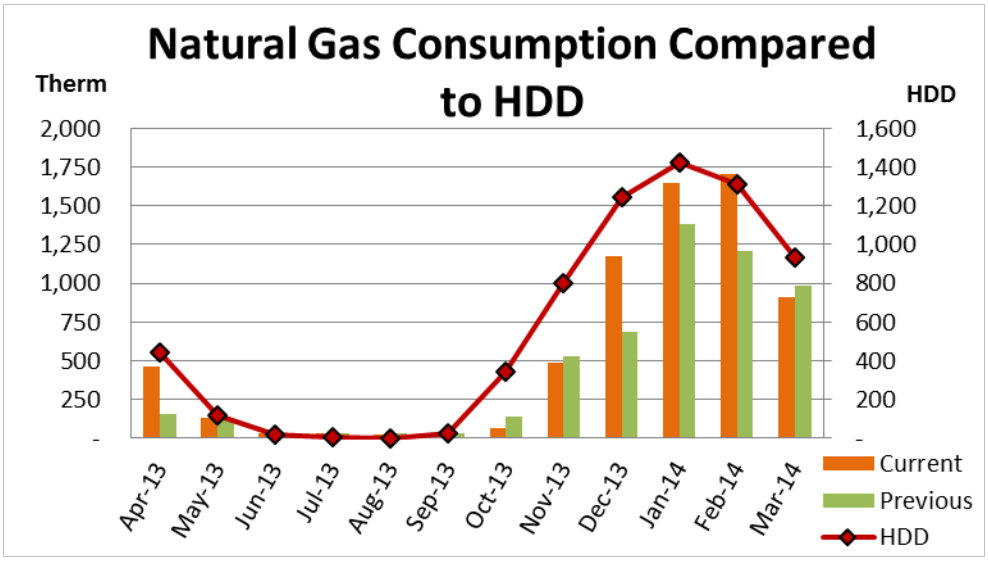
The Farnsworth team assessed the individual building components, e.g., foundations, walls, roofs, windows, doors, interior finishes, landscape (hard and soft), and MEP services (Mechanical, Electrical, and Plumbing). A direct survey of the facility's assets was conducted to verify data collected by the facility's staff and rate the building components. The direct survey method entailed a visual inspection of the asset with no intrusive diagnostic investigation. Industry standards were used to define and rate the building components; a nine point rating system was used, which employs a Green-Orange-Red primary rating assessment. The Police Station rates at an above average condition with an index within the O+ range. The rating of O+ was attained by taking the average of all the component ratings. If the building was assessed as one asset utilizing the same rating system, it would fall into the O+ range as well. The Police Station is in above average condition, however, there is water infiltration issues that have been logged into the CMMS. It was noted during the assessment there is a reoccurring leak in the roof membrane (presently sealed), water entering in the basement through an electrical conduit, and some window sealant that has degraded and appears to be leaking.
See **Appendix B** for detailed breakdown of components.

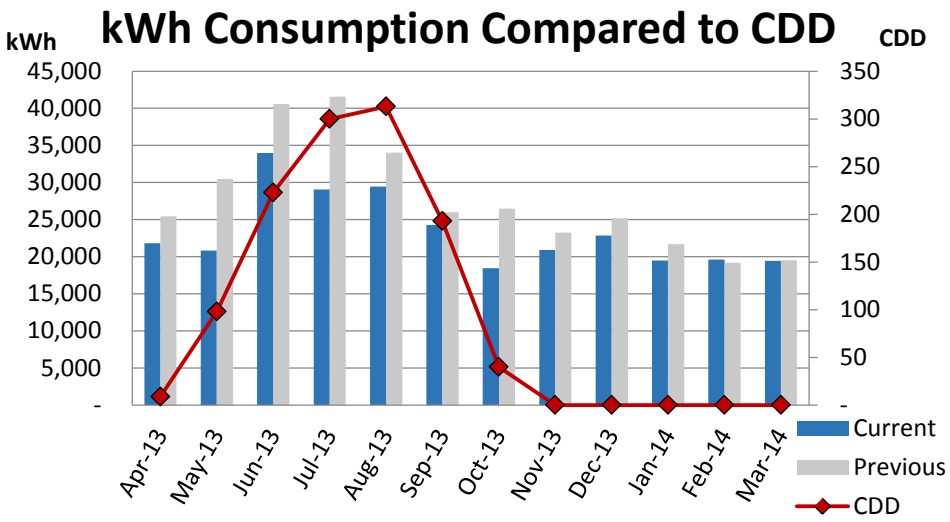


Energy Assessment

Preliminary Energy-Use Analysis

The energy assessment for the Police Station (PS) included Preliminary Energy-Use Analysis (PEA). During the PEA, the utility bills were reviewed to identify any efficiency or usage modification opportunities before conducting the walk-through. The analysis of the utility bills indicated energy consumption is influenced by environmental conditions, which is typical for a normal facility. The electrical consumption baseline load is around 17,000kWh / month. It appears there are energy saving opportunities with the HVAC system as June has higher energy usage than July or August.
See **Appendix C** for further information.





Metric	Police Station	Median Property	% Difference
ENERGY STAR score	88	50	76%
EUI (kBtu/ft²)	65	112	58%

Energy Utilization Index (EUI) is a reference that expresses the total energy (fossil fuel and electricity) used by a facility in a given period (month, year, etc.) in terms of kBtu's/gross conditioned square feet. In comparing the PS EUI to median property, the Police Station is consuming less energy per SqFt than the median property.

Energy Star Rating is a rating system developed by the U.S. EPA. The Energy Star program has developed energy performance rating systems for several commercial and institutional building types. These ratings, on a scale of 1 to 100, provide a means for benchmarking the energy efficiency of specific buildings and industrial plants against the energy performance of similar facilities. The Energy Star program cannot develop a rating number for this police station, so in an effort to create a benchmark, we entered the Police Station in as a 25,140 SqFt office building that operates 168 hours per week with 40 main shift workers and 65 operating computers. Also, the natural gas for the Police Station and City Hall Annex are franchised, so we had to divide the utility totals by the area of each building. *[Total usage for PS and CHA * (PS SqFt/PS SqFt + CHA SqFt)].*

The Energy Star rating is specific for the use of the building; however, the EUI is based on total energy usage and the size of the structure, so in comparing the above figures, the Police Station is operating at a good level of efficiency when compared to the median property.

Site Energy Survey

A modified ASHRAE Level 1 Walk-Through Analysis was conducted and identified Energy Conservation Measures (ECM). The site survey was a non-invasive site inspection of the building and its services. The team reviewed the compiled ECMs for recommendation of implementation based on prior experiences. See table below.

Energy Improvement Opportunities					
	Description	**Class**	**Potential Savings**	**Recommended Priority**	**Available Rebate**
PD 01	Photo cells and occupancy sensors for the remaining non-automated interior lighting.	Proj.	$200/yr	Med.	X
PD 02	Exterior building lighting to be replaced with high efficient fixtures.	Proj.	$200/yr	Med.	X
PD 03	Replace exit lights with new efficient LED fixtures.	Proj.	$250/yr	Med.	X
PD 04	Replace the degraded insulation on the condenser lines.	O&M	-	Med.	

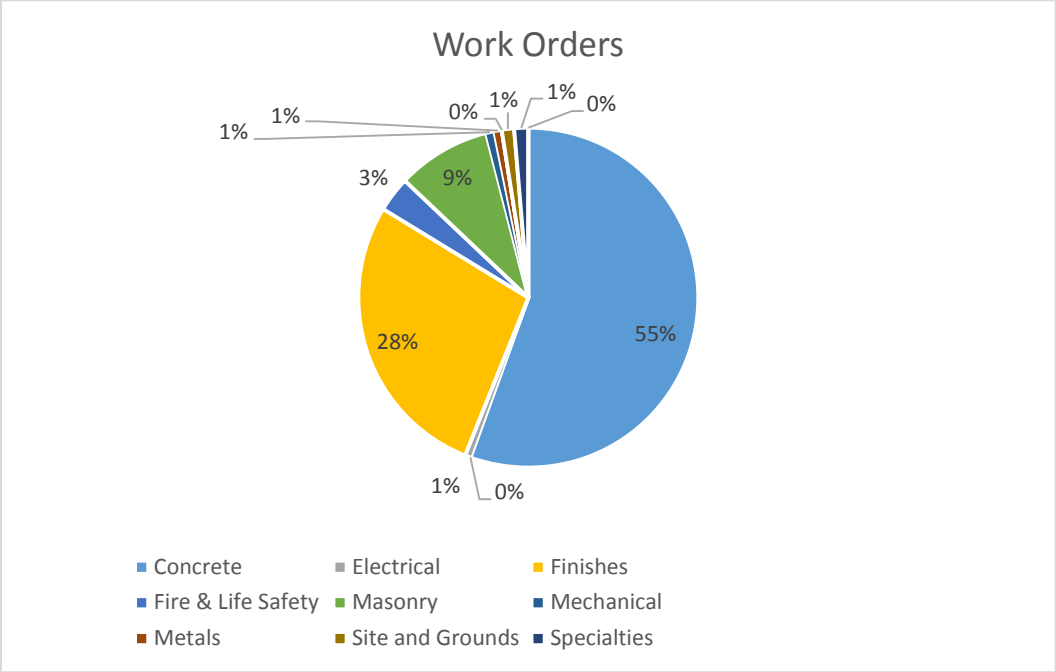
The listed ECMs represent opportunities for the Town of Normal to achieve some of their goals and objectives: being good stewards of the taxpayer's money, providing value-added services to the community, maintaining the community's assets to a definable, acceptable level.

Building Summary

The Police Department is in above average condition and appears to be well maintained due to the low FCI rating of 0.03. The EUI and Energy Star rating indicate the Police Station is operating at a level of efficiency above the median property. Additional local lighting controls along with upgrades to the exterior and exit lights being the low cost ECMs for the Police Station. The only major deficiency or concern is the water infiltration in a few areas. The roof membrane has a reoccurring leak at the gate post near the roof access; there was water entering in the basement through conduit, which feeds a landscaping up-light; and the window sealant on some of the first floor windows appeared to be leaking. All noted deficiencies have been logged into the CMMS.

Work Order Estimate Total	$175,970
Concrete	$97,717
Electrical	$947
Finishes	$48,668
Fire & Life Safety	$5,882
Masonry	$15,712
Mechanical	$1,384
Metals	$1,251
Site and Grounds	$2,054
Specialties	$2,356

Deficiencies were noted by FM staff. Farnsworth team validated logged work orders on a random sampling basis and compiled additional work orders to be logged into the CMMS. FM staff used RS Means for estimating the work orders. Estimates were peer reviewed for accuracy, but are susceptible to a variety of factors including current economy, timing, contractor and product selection. Cost opinions were derived from field observations, assumption of reasonable scope and typical remedies. Cost opinions are not inclusive of exploratory observations, or the opinion of specialty consultants. Probable cost estimates are included as reference to quantitatively identify the financial impact a noted deficiency may represent. The information is also necessary to quantify the variable needed to calculate Facility Condition Index (FCI) ratings.

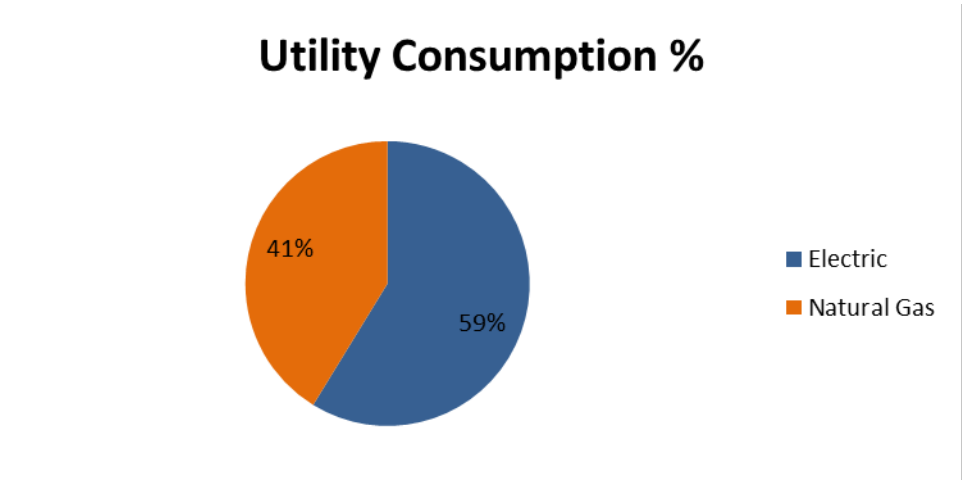


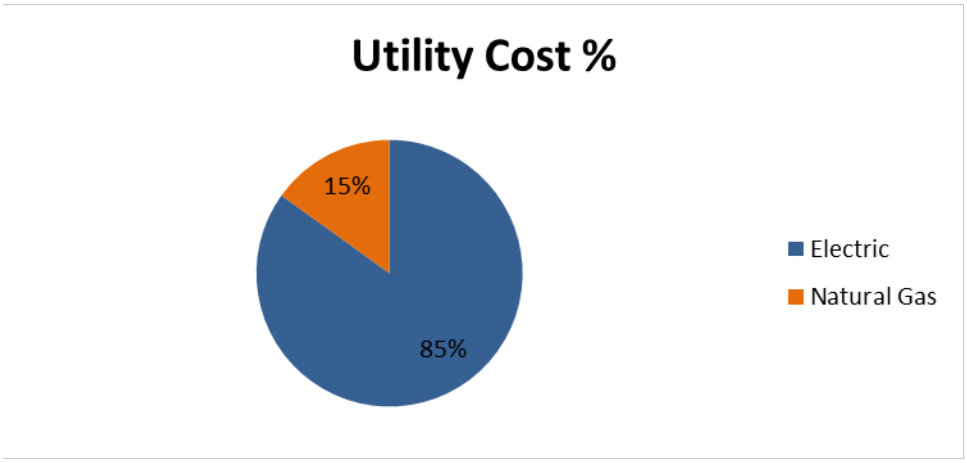
Appendix B-Component Assessment

Component system	Asset Component	Condition Assessment	
		Grade	Scale
A10 Foundations	A1010 Standard Foundations	G-	73
	A1020 Special Foundations	G-	73
	A1030 Slab on Grade	G-	73
A20 Basement Construction	A2020 Basement Walls	G-	73
B10 Superstructure	B1010 Floor Construction	G-	73
	B1020 Roof Construction	G-	73
B20 Exterior Enclosure	B2010 Exterior Walls	O+	62
	B2020 Exterior Windows	O+	62
	B2030 Exterior Doors	O+	62
B30 Roofing	B3010 Roof Coverings	O+	62
	B3020 Roof Openings	O	51
C10 Interior Construction	C1010 Partitions	O+	62
	C1020 Interior Doors	O	51
	C1030 Fittings	O	51
C20 Stairs	C2010 Stair Construction	O+	62
	C2020 Stair Finishes	O+	62
C30 Interior Finishes	C3010 Wall Finishes	O+	62
	C3020 Floor Finishes	O	51
	C3030 Ceiling Finishes	O	51
D20 Plumbing	D2010 Plumbing Fixtures	O+	62
	D2020 Domestic Water Distribution		
	WH-001 (F92753482)	O-	40
	WH-001 (3A-1990)	O+	62
	Infrastructure	O+	62
	D2030 Sanitary Waste	O+	62
	D2040 Rain Water Drainage	O+	62
D30 HVAC	D3010 Energy Supply	G-	73
	D3040 Distribution Systems		
	AHU	O+	62
	Split System-Furnace	G-	73
	D3050 Terminal & Package Units		
	RTU	O+	62
	Split system-Condenser	O+	62
	D3060 Controls & Instrumentation	O	51
	D3070 System Testing & Balancing	O-	40
	D3090 Other HVAC Systems & Equipment		
	Exhaust Fan	O+	62

D40 Fire Protection	D4010 Sprinklers	**G-**	73
	D4020 Standpipes	**G-**	73
	D4030 Fire Protection Specialties	**G-**	73
	D4090 Other Fire Protection Systems	**O+**	62
D50 Electrical	D5010 Electrical Service & Distribution		
	Switchboard and Panel boards	**G-**	73
	Conduit	**G-**	73
	D5020 Lighting and Branch Wiring	**G-**	73
	D5030 Communications & Security	**G-**	73
	D5090 Other Electrical Systems (EM Gen Set)	**O**	51
E10 Equipment	E1090 Other Equipment	**O+**	62
E20 Furnishings	E2010 Fixed Furnishings	**O+**	62
	E2020 Movable Furnishings	**O+**	62
F10 Special Construction	F1040 Special Facilities (interrogation)	**G-**	73
G20 Site Improvements	G2010 Roadways	**O-**	40
	G2020 Parking Lots	**R+**	29
	G2030 Pedestrian Paving	**O-**	40
	G2040 Site Development	**O+**	62
	G2050 Landscaping	**O+**	62
G30 Site Mechanical Utilities	G3010 Water Supply	**G-**	73
	G3020 Sanitary Sewer	**G-**	73
	G3030 Storm Sewer	**G-**	73
G40 Site Electrical Utilities	G4010 Electrical Distribution	**O+**	62
	G4020 Site Lighting	**O**	51
Averaged Building Component Rating		**O+**	62

Totals		
Total kBtu Usage (annual)		1,627,344.88
Site EUI		64.73
Total Cost Utilities		$ 23,581.84
Average $/kBtu		$ 0.015
% Consumption	Electric	59%
% Consumption	Natural Gas	41%
% Consumption	Other Energy 1	0%
% Consumption	Other Energy 2	0%
% Cost	Electric	85%
% Cost	Natural Gas	15%
% Cost	Other Energy 1	0%
% Cost	Other Energy 2	0%
$$ paid for Electric over Gas		$ 16,469.84
$$ paid for Electric over Gas/kBtu		$ 0.02





City Hall Annex

Building Overview

The Farnsworth team audited the City Hall Annex for the Town of Normal. The CHA is two-story 16,760 SqFt building built in 1976. The building areas and estimated-average number of people that use the facility is shown in the table below.

Space	Total Area (SF)	Visitors	Equivalent to Full Time
Office	6,568	20	20
Storage	6,786	-	-
Other	3,406	-	-
Total	16,760	20	20

The scope of this project contained two key assessment areas: Facility Condition Audit (FCA) and an energy assessment. The Farnsworth team reviewed and analyzed asset data collected by the Town of Normal staff. On-site assessments, which were conducted with a team of engineers, verified asset data collected by the staff, assessed the facility's assets, and performed an energy audit of the facility.

Facility Condition Index (FCI= Maintenance, repair, and replacement of deficiencies of a facility divided by the current replacement value of the facility) is used to provide a benchmark to compare the relative condition of a facility or a group of facilities. To define the ratings, industry standards were used: good (under 0.05), fair (0.05 to 0.10), and poor (over 0.10).

Facility Condition Index	
Facility's Insured Value	$3,865,302
Work Orders (App. A)	$143,372
Facility Condition Index	Good (0.04)

Along with the FCI, the Farnsworth team developed an Averaged Building Component Rating, which was obtained by averaging all the building component ratings for the facility. The Averaged Rating for the City Hall Annex is 61. This is based on a 100 point scale, so the CHA falls into the above average category.

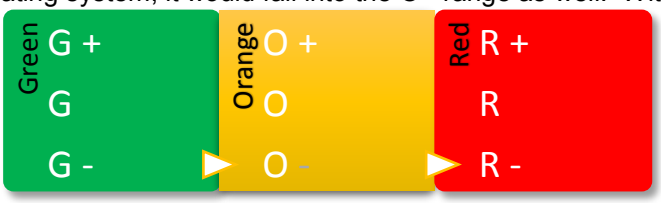
The Averaged Building Component Rating

The Farnsworth team received the City Hall Annex's utility usage and entered the data into the Energy Star program and attained the performance data below.

Metric	CHA	Median Property	% Diff
E-STAR score	70	50	40%
EUI (kBtu/ft²)	61	77	21%

Facility Condition Assessment

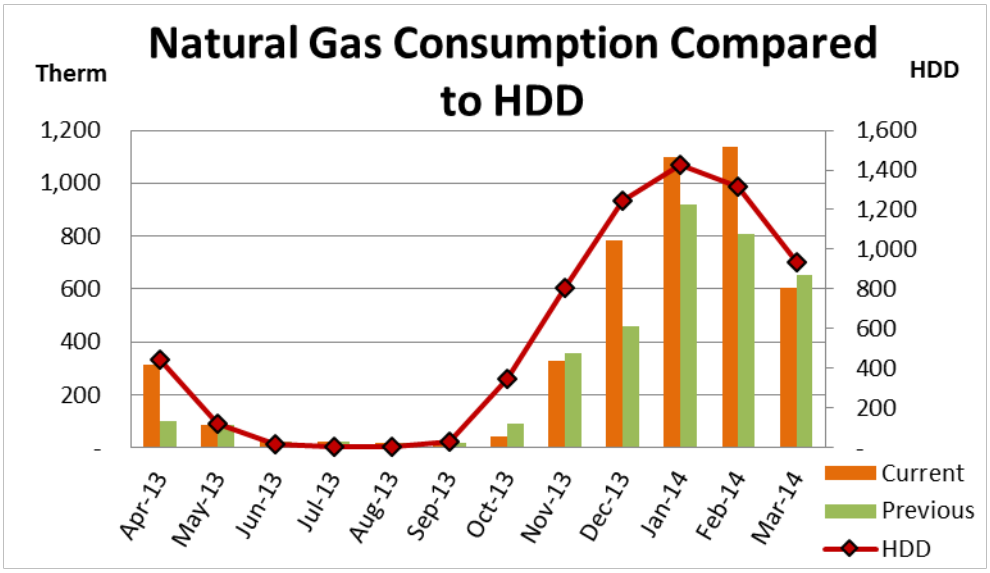
The Farnsworth team assessed the individual building components, e.g., foundations, walls, roofs, windows, doors, interior finishes, landscape (hard and soft), and MEP services (Mechanical, Electrical, and Plumbing). A direct survey of the facility's assets was conducted to verify data collected by the facility's staff and rate the building components. The direct survey method entailed a visual inspection of the asset with no intrusive diagnostic investigation. Industry standards were used to define and rate the building components; a nine point rating system was used, which employs a Green-Orange-Red primary rating assessment. The City Hall Annex rates at an above average condition with an index within the O+ range. The rating of O+ was attained by taking the average of all the component ratings. If the building was assessed as one asset utilizing the same rating system, it would fall into the O+ range as well. With some corrective action (items entered into CMMS) to key components to eliminate water intrusion, the City Hall Annex's RSL (Remaining Service Life) can be greatly increased. See **Appendix B** for detailed breakdown of components.



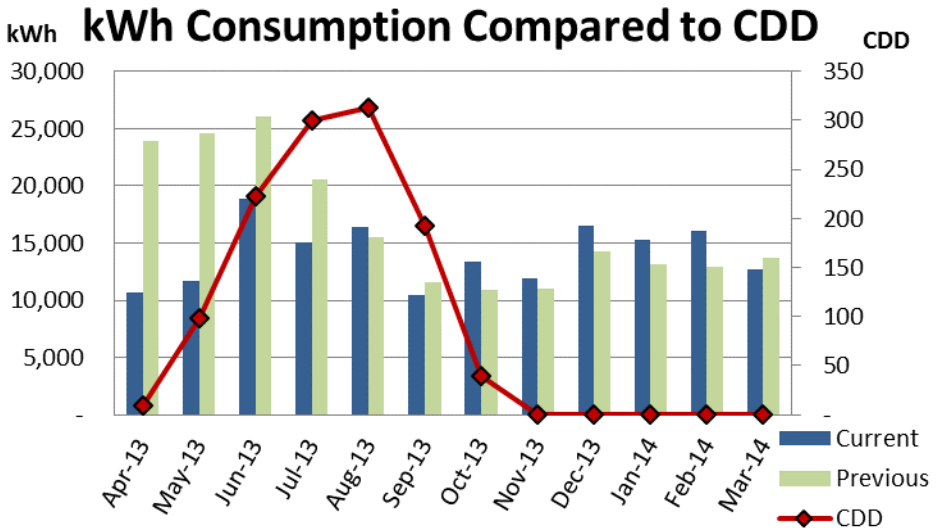
Energy Assessment

Preliminary Energy-Use Analysis

The energy assessment for the City Hall Annex included a Preliminary Energy-Use Analysis (PEA). During the PEA, the utility bills were reviewed to identify any efficiency or usage modification opportunities before conducting the walk-through. This process identified typical utility usage indicative of a building influenced by environmental conditions and the electrical consumption baseline of 10,000 kWh / month. See **Appendix C** for further utility information. A few months stand out in the gas usage chart below, April and October. Both months have similar heating demand as represented in HDDs, however, April has significantly higher usage. In addition, the HDDs for November and March should be comparable but March has significantly higher usage. These patterns could be due to differences in occupancy during these months or incorrect economizer operation or overall control of the HVAC system.



The electric consumption, shown in the chart below, indicates anomalies between seasons. Typically, the summer months of July and August have the highest electrical demand, due to mechanical cooling. The usage patterns, however, show very high electrical use in December, January, February, and March.



Metric	CHA	Median Property	% Difference
ENERGY STAR score	70	50	40%
EUI (kBtu/ft²)	61	77	21%

Energy Utilization Index (EUI) is a reference that expresses the total energy (fossil fuel and electricity) used by a facility in a given period (month, year, etc.) in terms of Btu's/gross conditioned square feet. In comparing the City Hall Annex EUI to the median property, the CHA is consuming less (21%) energy per SqFt than the median property.

Energy Star Rating is a rating system developed by the U.S. EPA. The Energy Star program has developed energy performance rating systems for several commercial and institutional building types. These ratings, on a scale of 1 to 100, provide a means for benchmarking the energy efficiency of specific buildings and industrial plants against the energy performance of similar facilities. The Energy Star program could not develop a rating for the annex. In an effort to create an Energy Star benchmark, we entered the City Hall Annex in as a 16,760 SqFt office building that operates 50 hours per week with 20 main shift workers and 35 computers. Also, the natural gas for the Police Station and City Hall Annex are franchised, so we had to divide the utility totals by the area of each building. *[Total usage for PS and CHA * (CHA SqFt/PS SqFt + CHA SqFt)].*

The Energy Star rating is specific for the use of the building; however, the EUI is based on total energy usage and the size of the structure, so in comparing the above figures, the City Hall Annex is operating at a higher level of efficiency when compared to the median property.

Site Energy Survey

A modified ASHRAE Level 1 Walk-Through Analysis was conducted and identified Energy Conservation Measures (ECM). The site survey was a non-invasive site inspection of the building and its services. The team reviewed the compiled ECMs for recommendation of implementation based on prior experiences. See table below.

Energy Improvement Opportunities					
	Description	**Class**	**Potential Savings**	**Recommended Priority**	**Available Rebates**
CHA 01	Photo cells and occupancy sensors for the remaining non-automated interior lighting.	Proj.	$100/yr	Med.	X
CHA 02	Exterior building light fixtures to be replaced with high efficient fixtures.	Proj.	$125/yr	Med.	X
CHA 03	Replace old battery packs and exit lights with LED fixtures.	Proj.	$100/yr	Med.	X
CHA 04	Replace the degraded insulation on the condenser lines.	O&M	-	Med.	

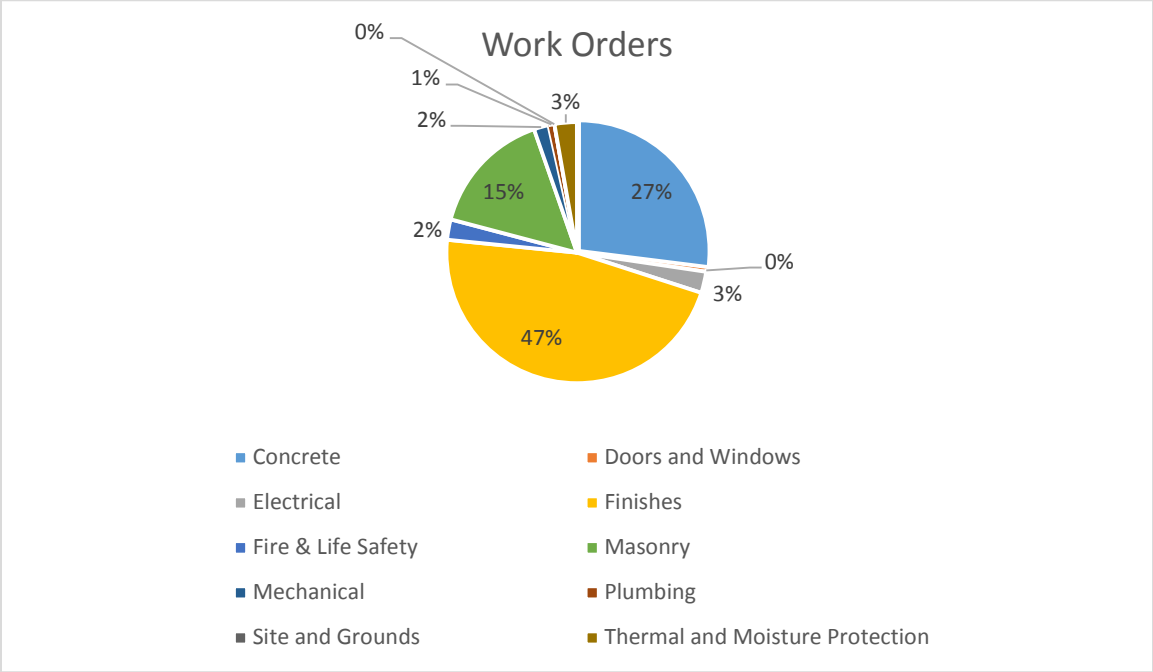
The listed ECMs represent great opportunities for the Town of Normal to achieve some of their goals and objectives: being good stewards of the taxpayer's money, providing value-added services to the community, maintaining the community's assets to a definable, acceptable level.

Building Summary

The City Hall Annex is a structure that is in above average condition (O+), and the present FCI represents a structure that has been maintained well. The energy consumption figures (EUI and Energy Star) indicate the City Hall Annex is operating at a level of efficiency above the median property with the low cost EMC being local lighting control improvements, upgrades to exterior and exit lighting. However, there are some areas of concern in regards to moisture control/intrusion, which have been logged into the CMMS (Computerized Maintenance Management System). The referred concerns do not appear to be costly to remediate but would have a substantial impact on the Remaining Service Life (RSL) of the building.

Work Order Estimate Total	$143,372
Concrete	$38,689
Doors and Windows	$515
Electrical	$3,763
Finishes	$66,825
Fire & Life Safety	$3,618
Masonry	$22,314
Mechanical	$2,609
Plumbing	$1,063
Thermal and Moisture Protection	$3,975

Deficiencies were noted by FM staff. Farnsworth team validated logged work orders on a random sampling basis and compiled additional work orders to be logged into the CMMS. FM staff used RS Means for estimating the work orders. Estimates were peer reviewed for accuracy, but are susceptible to a variety of factors including current economy, timing, contractor and product selection. Cost opinions were derived from field observations, assumption of reasonable scope and typical remedies. Cost opinions are not inclusive of exploratory observations, or the opinion of specialty consultants. Probable cost estimates are included as reference to quantitatively identify the financial impact a noted deficiency may represent. The information is also necessary to quantify the variable needed to calculate Facility Condition Index (FCI) ratings.

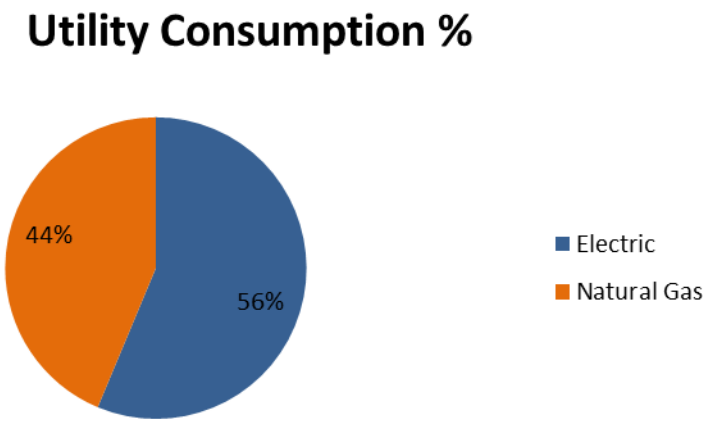


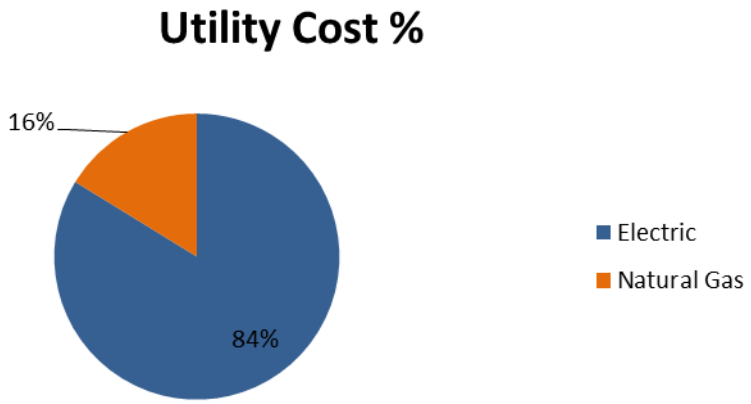
Appendix B-Component Assessment

Component system	Asset Component	Condition Assessment	
		Grade	Scale
A10 Foundations	A1010 Standard Foundations	G-	73
	A1020 Special Foundations	G-	73
	A1030 Slab on Grade	G-	73
A20 Basement Construction	A2020 Basement Walls	O	51
B10 Superstructure	B1010 Floor Construction	G-	73
	B1020 Roof Construction	G-	73
B20 Exterior Enclosure	B2010 Exterior Walls	O+	62
	B2020 Exterior Windows	O+	62
	B2030 Exterior Doors	O+	62
B30 Roofing	B3010 Roof Coverings	O	51
	B3020 Roof Openings	O	51
C10 Interior Construction	C1010 Partitions	O+	62
	C1020 Interior Doors	O	51
	C1030 Fittings	O	51
C20 Stairs	C2010 Stair Construction	O+	62
	C2020 Stair Finishes	O+	62
C30 Interior Finishes	C3010 Wall Finishes	O+	62
	C3020 Floor Finishes	O-	40
	C3030 Ceiling Finishes	O	51
D10 Conveying	D1010 Elevators & Lifts	R+	29
D20 Plumbing	D2010 Plumbing Fixtures	O+	62
	D2020 Domestic Water Distribution		
	WH-001	G-	73
	Infrastructure	O+	62
	D2030 Sanitary Waste	O+	62
	D2040 Rain Water Drainage	O+	62
D30 HVAC	D3010 Energy Supply	G-	73
	D3040 Distribution Systems		
	AHU	O+	62
	Split System-Furnace	G-	73
	D3050 Terminal & Package Units		
	RTU	O+	62
	Split system-Condenser	O+	62
	D3060 Controls & Instrumentation	O	51
	D3070 System Testing & Balancing	O-	40
D50 Electrical	D5010 Electrical Service & Distribution		
	Switchboard and Panel boards	G-	73

	Conduit	**G-**	73
	D5020 Lighting and Branch Wiring	**G-**	73
	D5030 Communications & Security	**O+**	62
	D5090 Other Electrical Systems (EM Gen Set)	**O**	51
E20 Furnishings	E2010 Fixed Furnishings	**O+**	62
	E2020 Movable Furnishings	**O+**	62
G20 Site Improvements	G2010 Roadways	**O-**	40
	G2020 Parking Lots	**O**	51
	G2030 Pedestrian Paving	**O**	51
	G2040 Site Development	**O+**	62
	G2050 Landscaping	**O+**	62
G30 Site Mechanical Utilities	G3010 Water Supply	**G-**	73
	G3020 Sanitary Sewer	**G-**	73
	G3030 Storm Sewer	**G-**	73
G40 Site Electrical Utilities	G4010 Electrical Distribution	**O+**	62
	G4020 Site Lighting	**O**	51
Averaged Building Component Rating		**O+**	61

Totals		
Total kBtu Usage (annual)		1,023,948.76
Site EUI		61.09
Total Cost Utilities		$ 12,219.53
Average $/kBtu		$ 0.012
% Consumption	Electric	56%
% Consumption	Natural Gas	44%
% Consumption	Other Energy 1	0%
% Consumption	Other Energy 2	0%
% Cost	Electric	100%
% Cost	Natural Gas	0%
% Cost	Other Energy 1	0%
% Cost	Other Energy 2	0%
$$ paid for Electric over Gas		$ 12,219.53
$$ paid for Electric over Gas/kBtu		$ 0.02





2014 - Deficiency Report

Work Order ID	Location	Status	Request Description	Class
2912	All Facilities	Open Extended	Convert access controlled doors throughout facilities to coordinate and maintain consistent biometric devices.	Doors and Windows
2679	Children's Discovery Museum	Open Extended	Replace laminate window sills at CDM with solid surface. Approx. 1.5" x 6" x 10'	Doors and Windows
2748	Children's Discovery Museum	Open Extended	Update and integrate lighting control system so we can modify programming in-house.	Electrical
2680	Children's Discovery Museum	Open Extended	Install day light controls for track lighting at climbing atrium in CDM.	Electrical
2685	Children's Discovery Museum	Open Extended	Replace all power outlets in corridors, exhibit areas, and other easily accessible areas with new safety style outlets to protect from accidental shock. Approx. 150 locations	Electrical
2673	Children's Discovery Museum	Open Extended	Prep and paint east side service doors and frames at CDM. Approx. 150 sf.	Finishes
2681	Children's Discovery Museum	Open Extended	Patch, prep and paint wall and ceiling damage at west end of CDM store. Approx. 400 sf.	Finishes
2690	Children's Discovery Museum	Open Extended	Mitigate source of moisture and patch and paint wall at bottom interior corners of overhead door on east side of CDM. Approx. 10 sf.	Finishes
2713	Children's Discovery Museum	Open Extended	Prep and paint CDM 2nd floor balcony rail. Railing is showing signs of corrosion. Approx. 100 lf x 3' high.	Finishes
2714	Children's Discovery Museum	Open Extended	Prep and paint cylindrical column detail on exterior of CDM. Finish is degraded. Approx. 500 lf of 8" diameter casing.	Finishes
2716	Children's Discovery Museum	Open Extended	Prep and paint PVC pipe repair to match existing pipe color. Approx. 100 lf of 3" PVC.	Finishes
2723	Children's Discovery Museum	Open Extended	Prep and paint solar array structure. Structural steel showing signs of corrosion. Approx. 300 sf of 6" x 9" I beam.	Finishes
2726	Children's Discovery Museum	Open Extended	Prep and paint gas piping serving CDM roof top units. Existing paint finish is aged and showing signs of deterioration. Approx. 125 lf of 1.5" pipe	Finishes
2666	Children's Discovery Museum	Open Extended	Clean balcony limestone on west elevation of CDM balcony. Approx. 750 sf.	Masonry
2668	Children's Discovery Museum	Open Extended	Tuck-point granite veneer joints at CDM. Approx. 100 sf.	Masonry
2675	Children's Discovery Museum	Open Extended	Replace split face brick at door on east side of CDM. Approx. 3 units.	Masonry
2676	Children's Discovery Museum	Open Extended	Replace stone sill and coping mortar head joints with polyurethane sealant. Approx. 300 lf.	Masonry
2965	Children's Discovery Museum	Open Extended	Sawdust noted in return and supply in basement. Recommend cleaning duct work. Investigate installation of dust collection system.	Mechanical
2717	Children's Discovery Museum	Open Extended	Install 1" x 1" edge protection on wall at top of base on East wall of grain exhibit area. Approx. 30 lf.	Metals
2667	Children's Discovery Museum	Open Extended	CDM fence is showing signs of corrosion. Prep and paint. Approx. 200 lf x 4' tall.	Site and Grounds
2689	Children's Discovery Museum	Open Extended	Install fence or other barrier with lockable access to maintain 3 foot clear space in front of electrical panels as required by code. This is a area of constant concern. Approx. 30 lf. x 6' tall with 1 gate.	Site and Grounds
2696	Children's Discovery Museum	Open Extended	Install fence in front of electrical panels at CDM basement open work area to maintain 3' clear space in front of exhaust fan controls as required. Approx. 15 lf x 6' high open on both ends.	Site and Grounds
2671	Children's Discovery Museum	Open Extended	Remove and replace canvas on CDM canopies. They are showing signs of deterioration. Approx. 15 canvas canopies 6' x 6' / 6 of the units are above 15' high on rear of building.	Specialties
2677	Children's Discovery Museum	Open Extended	Replace tarnished address numbers above main entrance. "101" in 6" cast aluminum.	Specialties
2672	Children's Discovery Museum	Open Extended	Replace damages downspout elbows at east side of CDM. 3 locations, 4" x 5" rectangular aluminum.	Thermal and Moisture Protection
2715	Children's Discovery Museum	Open Extended	Remove and replace joint sealants at metal panels on exterior of CDM. Approx. 500 lf. Work will require a boom lift.	Thermal and Moisture Protection

2014 - Deficiency Report

2484	City Hall Annex	Open Extended	Replace concrete entrance area and circle drive at CHA. Drive is crumbling and is in poor condition. Approx. 10,000 Sq.ft. > 6" thick and 150 ft. of 6" curb.	Concrete
2461	City Hall Annex	Open Extended	Prep and paint roof access doors and frames. Replace weather strip at roof access points. Approx. 50 Sq.ft. and 30 L.F. of weather strip.	Doors and Windows
2465	City Hall Annex	Open Extended	Replace existing exterior outlets with GFCI type on roof. Approx. 6 locations	Electrical
2470	City Hall Annex	Open Extended	Replace remaining can lights with new fixtures to match recently installed LED type. Approx. 30 locations.	Electrical
2456	City Hall Annex	Open Extended	Add flooring to storage / break room in Parks Admin area. 10' x 20' currently bare concrete.	Finishes
2459	City Hall Annex	Open Extended	Prep and paint interior metal doors and frames at halls and restrooms in Parks and Rec office. 4 doors = 400 Sq.ft.	Finishes
2463	City Hall Annex	Open Extended	Prep and paint roof top gas piping. Approximately 100 L.F. of 1.5" pipe.	Finishes
2466	City Hall Annex	Open Extended	Prep, patch and paint parapet walls at CHA roof as needed. Approx. 3000 Sq. Ft.	Finishes
2469	City Hall Annex	Open Extended	Prep and paint/cold galvanize roof curb caps at CHA. Approximately 350 Sq.ft.	Finishes
2471	City Hall Annex	Open Extended	Replace carpet in loft, stairway and landings at North entrance to CHA. Approx. 1500 Sq.ft.	Finishes
2472	City Hall Annex	Open Extended	Replace carpet throughout Inspections. Approx. 7500 Sq.ft.	Finishes
2460	City Hall Annex	Open Extended	Replace one existing exit light with LED type in CHA loft conference room.	Fire & Life Safety
2464	City Hall Annex	Open Extended	Secure and restore finish on RTU-6 electrical service disconnects. Replace access covers on condensing unit. Inspect all units for similar conditions, correct condition as needed.	Fire & Life Safety
2473	City Hall Annex	Open Extended	Replace exit lights with LED style confirm connection to generator and rework as necessary. Approx. 10 units	Fire & Life Safety
2479	City Hall Annex	Open Extended	Spot clean and seal exterior masonry at CHA. Approx. 5000 Sq. Ft.	Masonry
2480	City Hall Annex	Open Extended	Tuck-point various areas of CHA. Approx. 400 sf.	Masonry
2932	City Hall Annex	Open Extended	Evidence of moisture infiltration on walls below grade. (File storage room)	Masonry
2455	City Hall Annex	Open Extended	Replace thermostats at all HVAC units with BACnet capable devices for energy management control. Coordinate quantity with equipment list.	Mechanical
2929	City Hall Annex	Open Extended	Gas piping is not support properly in various locations.	Mechanical
2930	City Hall Annex	Open Extended	PVC vent piping exits the building under RTU outside air inlet. It is piped up only 4' above the unit and the PVC is not glued together; pipe is loose in the elbow fitting.	Mechanical
2462	City Hall Annex	Open Extended	Replace 6 roof drain covers and remove all debris from roof.	Plumbing
2467	City Hall Annex	Open Extended	Replace metal coping at CHA parapet walls. Approx. 200 L.F.	Thermal and Moisture Protection
2468	City Hall Annex	Open Extended	Replace pipe boot at mechanical piping penetration near RTU-6 on CHA roof. One 3" pipe penetration through sheet metal capped roof curb.	Thermal and Moisture Protection
2927	City Hall Annex	Open Extended	Metal downspout pan is resting directly on the roofing membrane. It should have a mat under it.	Thermal and Moisture Protection
2928	City Hall Annex	Open Extended	Roof drainage appears to be insufficient as ponding water is noted at the time of inspection. Water in question could be from condensate drainage, which can be controlled by piping condensate to drainage points.	Thermal and Moisture Protection
2931	City Hall Annex	Open Extended	Roof membrane is not adhered to the substrate completely. Also noted several substantial wrinkles in the membrane. This item may require further investigation.	Thermal and Moisture Protection
2791	Community Activity Center	Open Extended	North exit discharge door leading out of theater does not have a level threshold on exterior side.	Concrete

2014 - Deficiency Report

1369	Community Activity Center	Open Extended	Emergency exit stairs in poor condition. Pathway labeled as exit. Stairs crumbling and supported by temporary methods. No sidewalk exists from stair landing to adjacent sidewalk path.	Concrete
1370	Community Activity Center	Open Extended	Sidewalk settled at East entrance creating step. Remove and replace.	Concrete
1371	Community Activity Center	Open Extended	Sidewalks deteriorated. Remove and replace as needed. Incorporate steps/stoops and ADA compliant landings at accessible entrances.	Concrete
1339	Community Activity Center	Open Extended	Crack at exterior basement access stair wall. Monitor for change. If condition worsens remove and replace damaged area with reinforced concrete.	Concrete
1355	Community Activity Center	Work In Progress	Foundation penetrations not sealed. Clean, prep, and seal in various locations.	Concrete
2804	Community Activity Center	Open Extended	Accessible lift is inoperable.	Conveying Systems
1421	Community Activity Center	Complete	Boiler Room has old parts, abandon water heater, and trash scattered throughout. Perform and maintain appropriate housekeeping practices. REMOVE ANY AND ALL ITEMS THAT ARE ABANDONED OR NOT BOILER?CHILLER RELATED	Custodial Services
2781	Community Activity Center	Open Extended	Doors in series shall have a minimum of 4’ plus the width of the door between them, typically 7’ between said walls is required when 3’-0” doors are being used.	Doors and Windows
2784	Community Activity Center	Open Extended	Wired glass is currently located in areas where safety glazing is required, (glazing located within 24” of door swings and viewing lights in doors that are wider than 3”). Wired glass is not a safety glazing.	Doors and Windows
2786	Community Activity Center	Open Extended	Required clear space for door leading back into main hallway from daycare hall is not being provided. Currently 10” is being provided where 18” is required.	Doors and Windows
2796	Community Activity Center	Open Extended	Lever type door knobs should be provided through-out.	Doors and Windows
2803	Community Activity Center	Open Extended	Two doors are required out of the aerobics room. All required exits shall be A.D.A. compliant. The space is currently being served by three exits however only one is compliant providing lift is operable.	Doors and Windows
2805	Community Activity Center	Open Extended	The manually operated foot and head bolt door locks are not allowed on the doors serving the main meeting / recreation room.	Doors and Windows
1420	Community Activity Center	Open Extended	Double doors adjacent to main lobby area are identified as exit doors. Door hardware does not support that function. Investigate hardware options and replace as needed.	Doors and Windows
1357	Community Activity Center	Open Extended	Broken glass at the Aerobic/Workout Room. Re-glaze window.	Doors and Windows
1358	Community Activity Center	Open Extended	Doors and closers out of adjustment and missing hardware throughout building. Re-key building, adjust closers, replace missing and broken hardware.	Doors and Windows
1365	Community Activity Center	Open Extended	Exterior doors and frames corroded and damaged. Typical at all locations.	Doors and Windows
1366	Community Activity Center	Open Extended	Interior wood doors show signs of age. Finish worn typical of all and doors damaged in various locations. Metal frames need paint but are in otherwise fair condition.	Doors and Windows
1353	Community Activity Center	Open Extended	Caulking at doors and windows is deteriorated in many locations.Remove existing caulking and install backer-rod and new sealant.	Doors and Windows
1335	Community Activity Center	Open Extended	West side North facing door and frame in poor condition. Frame rusted on interior.	Doors and Windows
1337	Community Activity Center	Open Extended	Replace garage door and operator. Door damaged, mechanically worn, and weathered.	Doors and Windows
1338	Community Activity Center	Open Extended	Prep and paint all exterior slab doors and frames. Adjust hardware.	Doors and Windows
1415	Community Activity Center	Complete	3-way light switch malfunctioning. Replace and re-lamp fixtures as needed at time of service.	Electrical
1416	Community Activity Center	Complete	Discovered Hot Water Pump #2 in the "OFF" position. Verify lead/lag status and functionality.	Electrical

2014 - Deficiency Report

1419	Community Activity Center	Complete	Install emergency boiler shut off near exits of Boiler Room.	Electrical
2808	Community Activity Center	Complete	The round spray sink located in west wing has receptacles located within 6' of it that are not GFCI protected.	Electrical
2809	Community Activity Center	Complete	All the receptacles located within the Parks and Rec. garage should be GFCI protected.	Electrical
2810	Community Activity Center	Complete	Remove all items currently blocking access to electrical panels.	Electrical
2811	Community Activity Center	Open Extended	Accurate electrical panel schedules should be provided within all panels.	Electrical
2812	Community Activity Center	Open Extended	Install red blank covers for fire alarm boxes that are currently without said covers.	Electrical
2813	Community Activity Center	Open Extended	Install blank cover for junction box located on ceiling in boiler room.	Electrical
2814	Community Activity Center	Open Extended	Electrical panel located in the east wing janitor's closet is missing its interior cover.	Electrical
2792	Community Activity Center	Open Extended	Extension cords in theater storage rooms should be removed and replaces with a more permanent wiring method.	Electrical
2807	Community Activity Center	Open Extended	Women's restroom located at east end corridor has open electrical box, fixture with bare socket, fixture with no globe or bulb installed.	Electrical
1346	Community Activity Center	Open Extended	Conduits loose at Skylights. Repair conduit connectors, box connectors, and install adequate anchors. No GFCI in multiple locations. Replace existing receptacles with GFCI in required locations. Abandon conduit at garage. Verify circuit, remove wiring to source, and demo conduit. Missing junction box covers and devices at multiple locations.Replace and/or install proper cover and device.	Electrical
1347	Community Activity Center	Open Extended	Electrical distribution panel missing safety covers and parts are obsolete. Provide replacement or update panel boards.	Electrical
2802	Community Activity Center	Open Extended	Ceiling height at landing serving south doors leading from aerobics room is only 6'-8". 7'-6" is the minimum ceiling height now required.	Finishes
1360	Community Activity Center	Open Extended	Floor tile cracked and missing in several locations. Subsurface control joints radiating through flooring material. Tile suspect ACM.	Finishes
1361	Community Activity Center	Open Extended	Ceramic floor tile and mortar cracked and displaced in multiple locations. Including main entrance threshold.	Finishes
1362	Community Activity Center	Open Extended	VCT flooring adhesive failing. Tile edges curling. Transition bar at stage loose.	Finishes
1363	Community Activity Center	Open Extended	VCT flooring damaged in several locations. Tile seem to be damaged from impact.	Finishes
1364	Community Activity Center	Open Extended	Various 2x2 ceiling tile mismatched, stained and curled throughout facility. Grid support structure sagging or otherwise in need or repairs in various locations.	Finishes
1367	Community Activity Center	Open Extended	Wall repairs and paint needed in several locations throughout building.	Finishes
1368	Community Activity Center	Open Extended	Cove molding adhesive failing causing material to pull away from wall and flooring.	Finishes
1372	Community Activity Center	Open Extended	Wall and floor tile in need of patching and repair in several locations typical in all restrooms.	Finishes
1342	Community Activity Center	Open Extended	Interior walls and ceiling tile show signs of moisture damage in several locations. Identify and eliminate source of moisture. Tuck-point, replace tiles, patch, and paint damaged areas as needed.	Finishes
1344	Community Activity Center	Open Extended	Bare steel at skylight structural members. Prep and paint.	Finishes
1345	Community Activity Center	Open Extended	Flooring deteriorated and displaced in multiple rooms.Sample for asbestos content. Repair substructure, replace flooring.	Finishes
1352	Community Activity Center	Work In Progress	Dated and worn counter-tops in the East restrooms. Non-ADA compliant entrance. Replace counter-tops, fixtures, and dispensers.	Finishes

2014 - Deficiency Report

2925	Community Activity Center	Open Extended	Fire-stop is incomplete on fire-rated assemblies. (Boiler room, stairs, floor)	Fire & Life Safety
2780	Community Activity Center	Open Extended	Code compliant landings at all exterior doors. Required exit discharge doors shall have level landings that lead away from the building or exterior areas of refuge. Some landings currently have a step down to the sidewalk grades.	Fire & Life Safety
2782	Community Activity Center	Open Extended	A.D.A. restroom signage shall be located on wall adjacent to the latching side of doors. Signage shall be located 60" a.f.f. to center of sign. Sign shall be located 9" to center from latching side jamb of door frame when possible.	Fire & Life Safety
2783	Community Activity Center	Open Extended	Mirrors located above restroom lavatories shall be no higher than 40" a.f.f. to mirror bottom. Only one compliant mirror per restroom would be required.	Fire & Life Safety
2785	Community Activity Center	Open Extended	Women's lavatory is 34.5" a.f.f., 34" maximum is code.	Fire & Life Safety
2787	Community Activity Center	Open Extended	Drinking fountain in west hall way is currently 38" a.f.f. to spout. 36" maximum is allowed for a spout height for those confined to a wheel chair. A spout height between 38" and 43" is required for those people who have problems bending over. Both heights would need to be provided by today's standards.	Fire & Life Safety
2788	Community Activity Center	Open Extended	Restrooms at east hallway are not A.D.A. compliant.	Fire & Life Safety
2789	Community Activity Center	Open Extended	The photo-luminescent exit sign currently located in the theater is not allowed in such areas. There is not enough ambient light constantly being provided within said room to energize the fixture.	Fire & Life Safety
2790	Community Activity Center	Open Extended	No A.D.A. viewing spaces are being provided in theater.	Fire & Life Safety
2794	Community Activity Center	Open Extended	Theater restroom non A.D.A. compliant.	Fire & Life Safety
2799	Community Activity Center	Open Extended	Exit signs should be provided over both discharge doors serving mechanical room located in basement.	Fire & Life Safety
2800	Community Activity Center	Open Extended	Neither exit serving the basement lead directly outside. Only 50% of required exits are allowed to discharge within the building envelope providing all other requirements allowing same are being provided for.	Fire & Life Safety
2801	Community Activity Center	Open Extended	East end corridor vestibule doors have raised landing.	Fire & Life Safety
1414	Community Activity Center	Complete	Verify control air compressor system inspection requirements as set by the State Fire Marshalls Office. Tank currently not registered	General Requirements
1336	Community Activity Center	Complete	Exterior masonry partition on North side of building has been damaged by moisture introduced from downspout. Repair masonry and rework gutters and downspouts.	Masonry
1354	Community Activity Center	Work In Progress	Monument foundation and masonry deteriorated. Repair foundation and tuck-point monument.	Masonry
1412	Community Activity Center	Complete	Appears that a pressure relief valve needs to be installed on the control air compressor system before the regulators to protect control air pressure at the tank.	Mechanical
1413	Community Activity Center	Complete	Service control air compressor. Compressor is showing indications of blow back. Compressor need to be refurbished.	Mechanical
1423	Community Activity Center	Complete	At time of inspection all rooftop exhaust fans were found in a non-working state. Replace belts and perform PM's as necessary. EF_3 is missing motor and belt, complete service work.	Mechanical
2815	Community Activity Center	Open Extended	Provide mechanical ventilation in the Parks and Rec. garage. Fan should be sized at .75 cfm per sq. Ft.	Mechanical
2816	Community Activity Center	Open Extended	The HVAC system serving the garage should be completely independent from the other building areas.	Mechanical
2817	Community Activity Center	Open Extended	The upper combustion air opening is inoperable. One opening would be allowed if the one opening is large enough and located within 12" of the ceiling.	Mechanical

2014 - Deficiency Report

2793	Community Activity Center	Open Extended	Some type of dust collection system should be utilized in wood shop located east of theater.	Mechanical
1356	Community Activity Center	Open Extended	Pipe insulation deteriorated at chiller. Replace deteriorated insulation.	Mechanical
1349	Community Activity Center	Open Extended	Abandon piping in boiler room has damaged insulation that is suspect ACM. Sample insulation for as potential ACM. Remove insulation and demo pipe to source.	Mechanical
1350	Community Activity Center	Open Extended	Return line valve leaking in boiler room at air handler. HVAC piping temp sensor corroded. Remove, replace and insulate as needed.	Mechanical
1351	Community Activity Center	Open Extended	Damaged Unit Ventilator cabinets. Blowers and dampers not functional on several units. Repair or replace as necessary.	Mechanical
3201	Community Activity Center	Work In Progress	check out unit AC/heat in Jennifer's office (directors), says unit is not running.	Mechanical
2795	Community Activity Center	Open Extended	Handrails at stairs do not provide the proper extensions at top and bottom of stair runs.	Metals
2797	Community Activity Center	Open Extended	No vertical access to basement. If less than 1000 sq. ft. vertical access is not required.	Metals
2798	Community Activity Center	Open Extended	Handrail at back east side basement stairs not compliant.	Metals
1417	Community Activity Center	Complete	3/4" Boiler make-up water RPZ/Check needs to be inspected. Rebuild or replace as needed.	Plumbing
2818	Community Activity Center	Open Extended	There are plumbing lines that are located in the theater dressing rooms and garage that have been cut but not capped.	Plumbing
2819	Community Activity Center	Open Extended	Code requires that the Reduced Pressure Backflow Preventer (RPZ) protecting the water service be tested and that said test report be located on the RPZ or in close proximity to same. The RPZ for the water source serving what is assumed to be the garden does not have a test report. Backflow devices shall be installed no higher than 5' a.f.f. or a permanent platform shall be provided.	Plumbing
2820	Community Activity Center	Open Extended	Install unions on the hot and cold water lines at new water heater installed in basement. The relief discharge piping for the new water heater shall be extended to within 6" of the floor or to an approved drain. A vacuum relief valve is required on all water heaters where the water supply enter the bottom of the tank.	Plumbing
1348	Community Activity Center	Open Extended	Galvanized domestic water piping is in poor condition in various areas. Piping has temporary patches in multiple locations. Domestic water piping systems should be systematically replaced over a period of time.	Plumbing
1424	Community Activity Center	Complete	West drinking fountain drains slowly and compressor is not functional. Resolve drain issue and investigate replacing fountain.	Plumbing
1422	Community Activity Center	Complete	Water main in garage has been reworked to accommodate new service. Abandon line remains and tie in valve from cross over connection has open ended pipe that could cause potential damage if valve fails. Cap open ended pipe at cross over valve. Utilize press fit method to avoid service shut down. Similar situation in the Heartland Theater restroom. Please cap all open services that are remain connected to water service to avoid potential damages.	Plumbing
1341	Community Activity Center	Open Extended	Water being introduced at perimeter of building foundation. Install downspout extensions and repair landscaping.	Site and Grounds

2014 - Deficiency Report

1333	Community Activity Center	Open Extended	Older roof areas on CAC are beginning to get brittle. Seam separation and punctures present in multiple locations.	Thermal and Moisture Protection
1334	Community Activity Center	Open Extended	Coping and soffits need repair and paint. Typical at all locations.	Thermal and Moisture Protection
1144	Community Activity Center	Work In Progress	Replace built-up roof at CAC. Document project construction details and progress of Union Roofing in actions and journal notes.	Thermal and Moisture Protection
2778	Engineering	Open Extended	Various wood doors are damaged at bottom and finish worn. Replace as needed. Approx. 4 locations 3' x 7'	Doors and Windows
2777	Engineering	Open Extended	Sheet-metal intakes and exhaust hoods on Engineering roof showing signs of corrosion. Replace or prep and paint to extend life. Approx. 25 sf.	Finishes
2518	Engineering	Open Extended	Prep and paint masonry lintels and gas piping (two locations east and west). Approx. 250 Sq.ft. of lintel, 300 l.f. of 1" gas line.	Finishes
2530	Engineering	Open Extended	Prep and paint metal coping at perimeter of roof on face of walls. Coping is approx. 1' x 400' and 25' off of the ground.	Finishes
2525	Engineering	Open Extended	Replace refrigerant line insulation at all condensing units on west side of building. Approx. 125 l.f. of 3/4" pipe x 1/2" thick rubberized insulation.	Mechanical
2516	Engineering	Open Extended	Repair deteriorated asphalt parking lot surface. Approx. 1500 Sq.ft.	Site and Grounds
2517	Engineering	Open Extended	Remove and replace deteriorated sealants at exterior walls and tuck-point and spot clean masonry as needed. Approx. 1000 l.f. of sealant, 250 l.f. of tuck-pointing	Thermal and Moisture Protection
2933	Engineering	Open Extended	Exterior vent flashing is not seal properly.	Thermal and Moisture Protection
2731	Normal Theater	Open Extended	Replace and/or relamp existing incandescent lamps and T-12 fixtures and install occupancy sensors in various areas of theater. Approx. 30 fixtures.	Electrical
2732	Normal Theater	Open Extended	Update house lights with energy efficient fixture and control system. Approx. 25 fixtures	Electrical
2734	Normal Theater	Open Extended	Replace electrical outlets with child proof type and/or GFCI as necessary. Approx. 25 locations.	Electrical
2727	Normal Theater	Open Extended	Prep and paint NE exit door, frame, and fascia board at theater. Approx. 75 sf.	Finishes
2728	Normal Theater	Open Extended	Prep and paint west side gas service at theater. service is showing signs of corrosion. Approx. 4 lf of 1" pipe and 1 regulator.	Finishes
2729	Normal Theater	Open Extended	Prep and paint various areas of painted floor under theater seating. Some areas are worn significantly. Approx. 1200 sf. Prep and paint handrails as needed. Approx. 100 lf of 2" pipe	Finishes
2738	Normal Theater	Open Extended	Prep and paint various painted floors and steps at theater. Painted floors are showing signs of wear. Approx. 750 sf.	Finishes
2739	Normal Theater	Open Extended	Patch, prep and paint east hall. Finishes damaged and deteriorated. Approx. 1200 sf.	Finishes
2730	Normal Theater	Open Extended	Curtain on stage was flame proofed in 1995. Send curtain in for repairs or replace as needed. Approx. 20' x 30' with two wings.	Fire & Life Safety
1147	Normal Theater	Work In Progress	Stucco Removal and Replacement	Masonry
2964	Normal Theater	Open Extended	The roof top condensing unit pipe insulation is weather damaged. Recommend replacing and installing a weather preventative coating or covering.	Mechanical
2736	Normal Theater	Open Extended	Pipe insulation missing in various heating pipe locations. Install as needed. Approx. 25 lf of 2" pipe with 15 fittings.	Mechanical
3026	Normal Theater	Pending	7/18/14 1 of 5 belts ordered came in picked up at Rogers supply when I went there to buy coil cleaner I had ordered 5 belts on 7/14/14 only 4 had come in this was a straggler and created its own bill for $3.23.	Mechanical
2740	Normal Theater	Open Extended	Replace/install weather strip on all exterior doors. Approx. 175 lf	Thermal and Moisture Protection
2757	Parking Deck (College)	Open Extended	Repair dialer box on intercom (HPI)	Electrical

2014 - Deficiency Report

2759	Parking Deck (College)	Open Extended	Prep and paint all hollow metal doors and frames on exterior and high abuse areas.	Finishes
2761	Parking Deck (College)	Open Extended	Patch, prep and paint wall as needed.	Finishes
2763	Parking Deck (College)	Open Extended	Install roof ladder cages in all locations.	Metals
2756	Parking Deck (College)	Open Extended	Parking deck rate sign and misc. entrance signs need to be replaced on College Ave. Deck.	Specialties
2760	Parking Deck (College)	Open Extended	Parking spaces and directional arrows need to be repainted throughout deck.	Specialties
2758	Parking Deck (College)	Open Extended	Perform joint maintenance and repair cracks as needed.	Thermal and Moisture Protection
2765	Parking Deck (Marriott)	Open Extended	Repair transition patch from deck to door threshold at door to SW stair tower at top level of Marriott Deck.	Concrete
2766	Parking Deck (Marriott)	Open Extended	Marriott deck lightening protection system is in disrepair, needs several antenna remounted and connections checks for continuity.	Electrical
2767	Parking Deck (Marriott)	Open Extended	Signage missing in various spots throughout the Marriott parking deck. Replace with signs to match existing style.	Specialties
2769	Parking Deck (Marriott)	Open Extended	Top level of Marriott deck needs to be re-striped.	Specialties
2770	Parking Deck (Marriott)	Open Extended	Replace joint sealant and repair cracks as needed in Marriott deck.	Thermal and Moisture Protection
2776	Parking Deck (Uptown Station)	Open Extended	Fire caulk all stair tower penetrations as needed in Uptown Station Parking Deck. Approx. 6 locations	Fire & Life Safety
2774	Parking Deck (Uptown Station)	Open Extended	Continue efforts to discourage pigeons from roosting in Uptown Station deck.	Specialties
2773	Parking Deck (Uptown Station)	Open Extended	Repair joint leaks and hairline cracks as needed on top level of deck.	Thermal and Moisture Protection
2486	Police Department	Open Extended	Replace/repair deteriorated sidewalk section at PD main entrance. Approx. 50 Sq.ft. 4" thick.	Concrete
2488	Police Department	Open Extended	Repair/Replace PD parking lot. Parking lot is deteriorated and in poor condition. Approx. 150' x 150' x > 6" thick. Curb in fair condition.	Concrete
2568	Police Department	Open Extended	Evaluate and relocate or install GFCI mechanism for hand driers in all PD restrooms due to proximity to sink.	Electrical
2485	Police Department	Open Extended	Prep and paint misc. surfaces at PD main entrance. Soffit/Fire bell/ Under face of coping at roof/ etc. Approx. 100 Sq.ft.	Finishes
2487	Police Department	Open Extended	Prep and paint all exterior hand railing at PD. 7 sections approx. 100 L.F. of double tube handrail.	Finishes
2491	Police Department	Open Extended	Prep and paint emergency generator cabinet and tank at PD. Generator is in plain sight and is becoming visually deteriorated. Approx. 150 Sq.ft.	Finishes
2494	Police Department	Open Extended	Prep and paint PD gas service piping at west side of building. Approx. 8 L.F. Replace stepping stones with washout block or new concrete.	Finishes
2541	Police Department	Open Extended	Prep and paint gas piping and roof curb caps at PD roof. Approx. 225 l.f. of 1.5" gas line and 150 Sq.ft. of curb cap.	Finishes
2543	Police Department	Open Extended	Patch, prep and paint parapet walls as needed. Approx. 1000 Sq.ft.	Finishes
2547	Police Department	Open Extended	Patch drywall, prep and paint roof access door and frame. Install weather-strip. Approx. 10' for corner bead and 10 Sq.ft. of drywall reveal to patch at door. Approx. 50 Sq.ft. of prep and paint area including drywall, door, and frame. Approx. 12' of weather-strip.	Finishes
2548	Police Department	Open Extended	CMU wall finish damaged at exterior wall corner above metal stairs. Investigate and repair source of moisture, patch, prep, and paint damaged area. Approx. 50 Sq.ft.	Finishes
2549	Police Department	Open Extended	Patch and paint CMU walls as needed. Approx. 1200 Sq.ft.	Finishes
2550	Police Department	Open Extended	Replace worn rubberized resilient flooring at stair landings and treads. Approx. 500 Sq.ft. at landings. Approx. 50 treads and 50 risers. Approx. 150 l.f of 4" base.	Finishes
2557	Police Department	Open Extended	Patch, prep and paint doors, frames, ceiling and walls at NW PD entrance lobby on ground floor. Approx. 1100 Sq.ft.	Finishes

2014 - Deficiency Report

2559	Police Department	Open Extended	Prep and paint floors, doors, and frames with high performance coating. Approx. 650 Sq.ft.	Finishes
2561	Police Department	Open Extended	Replace carpet in weight room. Consider resilient flooring product to replace existing carpet. Approx. 1000 Sq.ft.	Finishes
2564	Police Department	Open Extended	Patch, prep and paint all surfaces in stairwell from main PD lobby to basement. Install visual block at glass block and paint to match adjacent surfaces. Approx. 1600 Sq.ft.	Finishes
2565	Police Department	Open Extended	Replace carpet in main lobby stairway to basement. Approx. 350 Sq.ft. and 125 l.f. of base.	Finishes
2569	Police Department	Open Extended	Replace rubberized floor tile in South entrance stair landings. Approx. 100 Sq.ft.	Finishes
2576	Police Department	Open Extended	Patch, prep and paint hallway on second floor leading to conference rooms. Approx. 1200 Sq.ft.	Finishes
2943	Police Department	Open Extended	Elevator room penetrations should be fire stopped.	Fire & Life Safety
2562	Police Department	Open Extended	Replace existing exit lights with LED type. Approx. 30 units	Fire & Life Safety
3193	Police Department	Complete	repair fire alarm at PD trouble alarm Battery issue	Fire & Life Safety
2496	Police Department	Open Extended	Spot clean and seal masonry at PD. Approx. 5000 Sq.ft.	Masonry
2545	Police Department	Open Extended	Replace refrigerant line insulation at CU-5 and CU-6 roof top mounted condensing units. Approx. 50 l.f. 3/4" pipe x 1/2" thick rubberized insulation.	Mechanical
2558	Police Department	Open Extended	Install vandal proof auxiliary heater in DUI booking area.	Mechanical
2490	Police Department	Open Extended	Add railing to wall at PD South entrance stoop. Clean up and apply finish product to raw face of stoop facing East. Approx. 5 L.F. of railing.	Metals
2497	Police Department	Open Extended	Replace dumpster fence at PD. Approx. 50 L.F. 6 feet high.	Site and Grounds
2492	Police Department	Open Extended	Replace signage and posts at PD staff parking on west side of building. Approx. 30 locations.	Specialties
2947	Police Department	Open Extended	During the inspection, there was a water leak in the main electrical room. The cause could be poorly sealed exterior up light. Issue will require further investigation.	Thermal and Moisture Protection
2967	Public Works	Open Extended	Gas pipe to RTU 1 is rusting. Recommend rust preventive paint to protect gas pipe.	Finishes
2823	Public Works	Open Extended	Prep and paint sheet metal cap at north elevation of old public works building. Approx. 100 sf 15' off of the ground.	Finishes
2824	Public Works	Open Extended	Prep and paint areas on door and building on east elevation that are bubbling and failing. Approx. 50 sf.	Finishes
2829	Public Works	Open Extended	Prep and paint hallway door frames at private offices. Frames showing signs of wear.	Finishes
2966	Public Works	Open Extended	Condensing units pipe insulation is weather damaged. Recommend replacing and installing a weather preventative coating or covering.	Mechanical
2968	Public Works	Open Extended	Any infrared heater using a flex exhaust duct. Recommend replacing with a hard duct.	Mechanical
2827	Public Works	Open Extended	Evaluate flashing and repair as needed including all duct penetrations at north elevation of PW. Leaks have caused damage in interior office space. Patch and repair damage to interior surfaces upon completion of flashing repairs. Approx. 100 sf of patch and 200 lf of flashing.	Metals
2969	Public Works	Open Extended	Missing exterior sheathing. Recommend installing exterior sheathing	Thermal and Moisture Protection
2821	Public Works	Open Extended	Gutters leak and are causing algae buildup on first course of block. Repair Gutters and clean CMU. Approx. 3 locations and 20 sf. of spot cleaning. Gutters are not functioning properly seems gutter apron is not aligned properly with gutters. Water and ice melt falls between building and gutters. Approx. 500 lf.	Thermal and Moisture Protection
2310	Uptown Station	Complete	Backflow/RPZ inspection due 4/14. Coordinate inspection and/or posting of current documentation.	Administration
2309	Uptown Station	Complete	Fire pump inspection/certificate expires 7/14. Coordinate inspection.	Administration
2303	Uptown Station	Work In Progress	Boiler Inspection/Certificates expire 8/14. Coordinate re-inspection	Administration

2014 - Deficiency Report

2306	Uptown Station	Open Extended	Remove and reset masonry inlaid tiles at pedestrian crossings in sidewalks. Tiles have settled and need to be raised to be flush with adjacent sidewalk. 7 locations around Uptown Station. Approximately 100 square feet to reset and 150 lineal feet of sealant.	Concrete
2315	Uptown Station	Complete	Install shelving units and organize mechanical room on first floor of MMTC near restroom. Materials should not be stored on transformers or in front of panel boards.	Custodial Services
2308	Uptown Station	Work In Progress	Clean out Fire Pump room and apply sealer to floors. Room should be maintained as such.	Custodial Services
2317	Uptown Station	Complete	Adjust closers at Uptown Station Parking Deck leading into the building. Doors slam and some of the arms are rubbing the head jamb.	Doors and Windows
2937	Uptown Station	Open Extended	Door to the top level of the parking deck does not seal properly. Possible adjust issue and threshold appears to be damaged.	Doors and Windows
2338	Uptown Station	Open Extended	Replace/Repair doors on 4th floor of Uptown Station leading to balcony. Door leak during storms and cause carpet tiles to fail and increase potential for subsurface deterioration due to water damage caused by ongoing weather related issues. Two doors 8'x10' double door side and transom lite and 4'x10' side and transom lite.	Doors and Windows
2318	Uptown Station	Complete	Relamp and secure light fixture covers in all stair towers at Uptown Station and Parking Deck. Several fixtures are missing covers or showing signs of tampering.	Electrical
2938	Uptown Station	Open Extended	Telecom rack (407) appears to be missing the proper grounding.	Electrical
2301	Uptown Station	Work In Progress	Replace indicator lights on CP-3 and CP-2. Both indicator lights on starter cabinets are out so there is no visual indicator of circulation pump status.	Electrical
2320	Uptown Station	Work In Progress	Investigate operational parameters of lighting controls as an ECO.	Electrical
2970	Uptown Station	Open Extended	Door lintels are not painted on all levels. Recommend paining to prevent corrosion and rust.	Finishes
2313	Uptown Station	Open Extended	Apply high performance non-slip scrubbable coating near benches and high traffic areas of exterior waiting areas around Uptown Station (Bus Staging, Platform, Benches). Approximately 1500 square feet	Finishes
2314	Uptown Station	Open Extended	Install solid surface or other durable materials to walls under widow sills to minimize damage and reduce maintenance and repairs to walls. 1/2" think material x approximately 500 square feet.	Finishes
2341	Uptown Station	Open Extended	Apply high performance coating or other flooring material to the service door landing leading to the 5th level of the Parking Deck. Approx. 50 square feet	Finishes
2322	Uptown Station	Open Extended	Prep and Repaint various locations where walls are showing signs of wear and tear. Approximately 5000 square feet throughout Uptown Station	Finishes
2311	Uptown Station	Complete	Replace/Repair emergency lighting wall packs. Several non-functional in Boiler Room and Fire Pump Room. Test and repair all EM lighting wall packs and repair or replace as needed.	Fire & Life Safety
2939	Uptown Station	Open Extended	Fire stopping is incomplete in telecom rooms.	Fire & Life Safety
2324	Uptown Station	Open Extended	Add fire panel annunciator at City Hall reception desk.	Fire & Life Safety

2014 - Deficiency Report

2328	Uptown Station	Work In Progress	Make Uptown Station Parking Deck dry sprinkler system modifications as recommended by Automatic Fire Sprinkler. Riser mounted maintenance compressors do not refill system in code required time. Adding compressor with adequate capacity to refill the system within the code required 30 minutes was recommended. System also has inherent characteristics of collecting excess moisture and has not been through a winter without a freeze failure despite unreasonable frequency of maintenance. No suggestions have been made to remedy that specific issue.	Fire & Life Safety
2319	Uptown Station	Complete	Investigate and revise operational parameters of EUH's in parking deck stair towers as an ECO.	Mechanical
3024	Uptown Station	Complete	Needed coil cleaner to complete PM for RTU 3 also needed for other units throughout our facilities went to Rogers and purchased coil cleaner and evaporator cleaner	Mechanical
2325	Uptown Station	Open Extended	Install HVAC emergency kill switch for use in hazardous material release. Emergency kill button would bypass all controls and be a hard wire fail safe shut down for rapid shutdown of outdoor intake systems.	Mechanical
2326	Uptown Station	Open Extended	Investigate feasibility of adding humidification to RTU-3 and/or the Council Chambers and Executive Board Room. Millwork showing signs of significant movement. Humidity level suggested as primary contributing factor by KJWW Engineering.	Mechanical
2302	Uptown Station	Complete	Replace damaged water service pressure gauges in Boiler Room for 1st Floor and 1st Floor Retail.	Plumbing
2312	Uptown Station	Open Extended	Install security fence around generator to prevent or reduce the risk of vandalism. Recent system failures due to vandalism may be reduced if security fence is installed around gen-set. Approximately 50 lineal feet x 10 feet tall with (2) 4 foot gates.	Site and Grounds
2851	Uptown Station	Open Extended	Investigate feasibility and installation of protective enclosures at all outdoor pay stations in the Uptown Station Deck. Approx. 3 locations.	Thermal and Moisture Protection
2935	Uptown Station	Open Extended	Flashing on conduit penetrations need to be resealed.	Thermal and Moisture Protection
2304	Uptown Station	Open Extended	Replace train platform canopy downspouts with open air type to prevent freezing in winter (2013).	Thermal and Moisture Protection
2316	Uptown Station	Open Extended	Remove and reinstall improved flashing/counter-flashing system where deck meets building. Add gutter system above doors to handle storm water leakage. Approximately 400 lineal feet of flashing and 100 lineal feet of gutter system.	Thermal and Moisture Protection
2321	Uptown Station	Open Extended	Modify under sink access/cover panels. Rework single panel into multiple panels so maintenance of sink fixtures can be done by a single technician safely. Panels should be cut in half at a minimum and edge banded with like material to provide finish system. Current material is 3/4" p.lam on 3 sides. 2' of edge banding would be needed on each panel end of 4' total per restroom if single panel was cut into two. Approximately 80 feet of panel total	Woods and Plastics
2323	Uptown Station	Open Extended	Fabricate and install support legs for wide shelving in base cabinets in various locations. Existing materials are 3/4" p.lam base cabinets and shelves. Approximately 12 pieces 3/4" x 1.5' x 3' with finishes on 6 sides	Woods and Plastics

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CDM-MECH-PVEF-005 SMOKE EVACUATION SYSTEM Childrens Discovery Museum SEF-2	420 SUBH 42-SUBH 177S779056-00/0008602 COOK Roof	5/18/2004		7.5HP 460V 60HZ 1725RPM
CDM-MECH-PVEF-008 SMOKE EVACUATION SYSTEM Childrens Discovery Museum SEF-5	420 SUBH 177S779056-00/0008605 COOK Roof	5/18/2004		7.5HP/ 460V/60HZ 1725RPM
CDM-MECH-PVEF-009 SMOKE EVACUATION SYSTEM Childrens Discovery Museum SEF-6	420 SUBH 177S779056-00/0008606 COOK Roof	5/18/2004		7.5HP/ 460V/60HZ 1725RPM
CDM-MECH-PVEF-003A EXHAUST FAN Childrens Discovery Museum EF-3A	80ACE-80C3B 177S779056-00/0005401 COOK Roof	5/18/2004 ROOF		115V 1725 RPM .0250 HP Phase 1 60 Hz 10.5" belt
CDM-MECH-PVEF-002 EXHAUST FAN Childrens Discovery Museum EF-3B	70 ACE-70C2B 177S779056-00/0008056 COOK Roof	5/18/2004		1941RPM 115V
CDM-MECH-RTU-000 ROOF TOP UNIT Childrens Discovery Museum RTU-0	53863 200406-AMGH08372 AAON Other	5/18/2004 ROOF		460V/60HZ/3PHASE
CDM-MECH-RTU-005 ROOFTOP UNIT Childrens Discovery Museum RTU-1	53867 200406-AMGH08396 AAON Other	5/18/2004 ROOF		460V/60HZ/3PHASE
CDM-MECH-RTU-006 ROOFTOP UNIT Childrens Discovery Museum RTU - 2	53865 200407-AMGR08397 AAON Other	5/18/2004 ROOF		460V/60HZ/3PHASE
CDM-MECH-RTU-007A ROOFTOP UNIT Childrens Discovery Museum RTU-3A	53867 200407-AMGR08398 AAON Other	5/18/2004 ROOF		460V/60HZ/3PHASE

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CDM-MECH-RTU-007B ROOFTOP UNIT Childrens Discovery Museum RTU-3B	53867 200405/AMGE08391 AAON Other	5/18/2004 ROOF		460V/60HZ/3PHASE
CDM-FINISH-CARPET-001 Carpet Childrens Discovery Museum	Various	1/1/2004		Budgeted for replacement in 2019
CDM-TMP-ROOF-EPDM-001 Roof System Childrens Discovery Museum	Roof	7/1/2005	1/1/2019 1617	Approximately 10,000 square feet of white roofing.
TEC-FLMN-BURN-003 1500 RPM Buffer Childrens Discovery Museum	Mustang 1500 591500B 38583802 NSS Basement			115V 14.9 A AC 60 Hz
TEC-EXT-SPOT-004 Bravo Spot Extractor Childrens Discovery Museum	237-BH BHA 862-1035 Basement			
TEC-VAC-WDRY-001 Dirt Devil 3.5hp, 8 gal Childrens Discovery Museum	Dirt Devil Basement			
TEC-VAC-HKMN-002 Hoky Childrens Discovery Museum	PR3000 Hoky Basement	3/1/2014		
TEC-VAC-BKPK-001 Turtle Vac Childrens Discovery Museum	400TV (Turtle Vac) BHD 86282222 Basement			Used rarely
TEC-EXT-CRPT-003 Super Nova Childrens Discovery Museum	1200PSN KID8655310 Basement			Wand Attachment Model #1204AC Serial #AHB8624409

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
TEC-FLMN-AUSC-007 Speed Scrub 1701 Plus Childrens Discovery Museum	608336 608336-10018924 Basement			24 V DC 40 amp 960 w Batteries replaced 11/8/07 Charger: model #18360 serial #04-01 120 V, 5 A, 60 Hz
TEC-VAC-CDLS-008 Quick Ups Childrens Discovery Museum	96 Type DZ-1 1030000244 3rd Floor			poor batteries 6V DC
TEC-VAC-CDLS-009 Quick Ups Childrens Discovery Museum	96 Type JZ 1206003192 2nd Floor			poor batteries 6 V DC
TEC-VAC-CDLS-010 Quick Ups Childrens Discovery Museum	96 Type D 0813-002579 2nd Floor			poor batteries 6 V DC
TEC-VAC-BKPK-002 Super Quarter Vac Childrens Discovery Museum	SQV100 76-024184 Basement			120 V 9.9 A 60 Hz
TEC-PRSW-RTRY-002 Power Sweeper Childrens Discovery Museum	TK464E 8000152238 Eagle Power Products Group Basement			360 W 12 V 20 A
TEC-VAC-UPR-014 Sebo Upright (white) Childrens Discovery Museum	Auto X4 X-4089769 Basement			120 V 12 A 60 Hz
TEC-VAC-LGAR-002 Large Vac (black) Childrens Discovery Museum	Pacer 30 313102A-45P32330 Basement			115 V 14.9 A 60 Hz

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CDM-MECH-PVEF-003B Exhaust Fan Childrens Discovery Museum EF-3B	70 ACE 70 C2B 177S779056-0007101 COOK Roof			0.167 HP Volts 115 Phase 1 Hz 60 RPM 1725 10.5" Belt
CDM-MECH-PVEF-004 Power vent fans to exhaust smoke Childrens Discovery Museum SEF-1	420 SUBH 42-SUBH 177S779056-00/0008601 COOK Roof			Smoke Exhaust Fan 7.5 HP Volts 460 Phase 3 RPM 1725 60 Hz
CDM-MECH-PVEF-006 Smoke exhaust fan Childrens Discovery Museum SEF-3	420 SUBH 42-SUBH 177S779056-00/0008603 COOK Roof			Smoke exhaust fan 7.5 HP Volts 460 Phase 3 RPM 1725
CDM-MECH-PVEF-007 Smoke exhaust fan Childrens Discovery Museum SEF-4	420 SUBH 42-SUBH 177S779056-00/0008604 COOK Roof			Smoke exhaust fan 7.5 HP Volts 460 Phase 3 RPM 1725
CDM-MECH-RTU-001 Package Heat/Cool Childrens Discovery Museum RTU-001	53864 200407-AMGR08396 AAON Roof			460 Volts 100 Amps 3 Phase Refrig R22 Filters X9 Filter size 25x20x4 Blower Info: 15 HP Cat# EM2513T Spec# 39KU57W916 Volts 230/460 Amps 35.4/17.7 RPM 1765 Frame 254T Hz 60 Belt Size BX73

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CDM-MECH-RTU-002 Package Heat/Cool Childrens Discovery Museum RTU-002	53864 200409-AMGR08396 AAON Roof			460 Volts 100 Amps 3 Phase Refrig R22 Filters x9 Filter Size 25x20x4 Blower Info: 15 HP Cat# EM2513T Spec# 39KU57W916 Volts 230/460 Amps 35.4/17.7 RPM 1765 Frame 254T Hz 60 Belt Size BX73
CDM-MECH-RTU-003A Package Heat/Cool Childrens Discovery Museum RTU-3A	RM-020-3-0-AA02-379-GEDFEBBFHBBCKHCA 200407-AMGP08398 AAON Roof		7/1/2009 -1854	20 Tons Cooling 480,000 BTU Ref. R-22 Filters x9 Filter size 25x20x4 Blower Info: Model# BUC 215TTDBA4026AN (H) Frame 215T Phase 3 10 HP Volts 208/230/460 Hz 60 Amps 26.4 RPM 1760 Belt BX71 Heat Exchanger under warranty until 2029
CDM-MECH-RTU-003B Package Heat/Cool Childrens Discovery Museum RTU-3B	RM-005-3-0-AAD1-339:GEBCEDBBBEBBCCHCA 200405-AMGE08391 AAON Roof		7/1/2009 -1854	5 tons cooling 180,000 BTU REF. R-22 Filters x5 Filter size 20x16x4 Blower Info: Part# 7-850274-02-03 Frame S182T Volts 230/460 HP3 Hz 60 Amps 8.6/4.3 Belt Bx48 Heat Exchanger Warranty until 2029

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CDM-MECH-RTU-004 Package Heat/Cool Childrens Discovery Museum RTU-0	RM-008-3-0AA2-349: GFCDFQBBCFBBLKHCAO 200406-AMGH08372 AAON Roof		7/1/2009 -1854	8 tons cooling 270,000 BTU REF. R-22 Filters x8 Filter size 20x16x4 Blower Info: Part# 7-850119-01-OJ Phase 3 Volts 230/460 HP 5 Amps 13.6/6.8 Belt Bx62 Heat Exchanger Warranty until 2029
CDM-ELEC-TRF-003 3 Phase Transformer AA Dry Childrens Discovery Museum TF-003	9T23Q9874 General Electric 2nd Floor	Janitor's Room		70 OKVA 3 Phase Primary 400 Volts (L-L) Secondary 200 Volts (L-L) 120 Volts (L-N) Class AA Dry type transformer
CDM-ELEC-TRF-004 3 Phase Transformer AA Dry Childrens Discovery Museum TF-004	9T23Q9874 1475A385GBG005 General Electric 3rd Floor	Janitor's Room		3 Phase 75 O KVA Primary 400 Volts (L-L) Secondary 200 Volts (L-L) 120 Volts (L-N) Class AA Dry Type Transformer
CDM-ELEC-MC-WHDB-003 Disconnect Box for Water Heater 3 Childrens Discovery Museum WHDB-003	10 General Electric 2nd Floor	Janitor's Room		3 Phase Disconnect Box Volts 600 VAL Volts 250 VDC 30 Amp GE Heavy Duty Box
CDM-ELEC-MC-WHDB-004 Disconnect Box for Water Heater 4 Childrens Discovery Museum WHDB-004	General Electric 3rd Floor	Janitor's Room		3 Phase Disconnect Box Volts 600 VAC Volts 250 VDC 30 Amp GE Heavy Duty Box
CDM-MECH-LCB-003 Lighting Control Box Childrens Discovery Museum LCB-003	NexLight 2nd Floor	Janitor's Room		

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CDM-MECH-LCB-004 Lighting Control Box Childrens Discovery Museum LCB-004	NexLight 3rd Floor	Janitor's Room		
CDM-PLUMB-HWCP-003 Hot Water Circulation Pump Childrens Discovery Museum HWCP-003	007-SF5 Taco 2nd Floor	Janitor's Room		HP 1/25 Amp 76 Hz 60 Volts 115 RPM 3250
CDM-PLUMB-HWCP-004 Hot Water Circulation Pump Childrens Discovery Museum HWCP-004	008-BF6 Taco 3rd Floor	Janitor's Room		HP 1/25 Amps 84 Hz 60 Volts 115 RPM 3250 125 PSI Max
CDM-PLUMB-WH-003 40 Gallon Commercial Storage Tank Water Heater Childrens Discovery Museum WH-003	DEN 40 110 1023M002288 A.O. Smith 2nd Floor	Janitor's Room		40 Gallon Commercial Water Heater 208 Volts Phase 1/3
CDM-PLUMB-WH-004 40 Gallon Commercial Storage Tank Water Heater Childrens Discovery Museum WH-004	DEN 40 110 1112M001607 A.O. Smith 3rd Floor	Janitor's Room		40 Gallon Commercial Water Heater Volts 208
CDM-ELEC-PB-001 A Series Panel/Breaker Box with Main Childrens Discovery Museum	CAT#AQF3422ABX AXTIS5B7 General Electric 3rd Floor	Janitor's Room		Amps 225 208/120 Volts 3 Phase 4 Wire with main breaker Class CTL Panelboard
CDM-ELEC-PB-002 A Series Panel/Breaker Box with Main Childrens Discovery Museum PB-002	AEF3422BTX AXTIE3B7 General Electric 2nd Floor	Janitor's Room		225 Amps 480y/277 Volts 3 Phase 4 Wire with main breaker for Transformer
CDM-ELEC-PB-003 A Series Panel/Breaker Box with Main Childrens Discovery Museum PB PC 001	CAT AQF3422ABX AXTIS5B7 General Electric 2nd Floor	Janitor's Room		225 Amps 208y/120 Volts 3 Phase 4 Wire with main breaker

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CDM-ELEC-PB-004 A Series Panel/Breaker Box with Main Childrens Discovery Museum PB PC 002	AQF3422ABX AXT1B7 General Electric 2nd Floor	Janitor's Room		225 Amps 208y/120 Volts 3 Phase 4 Wire with main breaker
CDM-ELEC-PB-005 A Series Panel/Breaker Box with Main Childrens Discovery Museum PB PD2	CAT#AQF3422ABX AXT1B7 General Electric 3rd Floor	Janitor's Room		Amps 225 208/120 Volts 3 Phase 4 Wire with Main Breaker Class CTL Panelboard
CDM-ELEC-PB-006 A Series Panel/Breaker Box with Main Childrens Discovery Museum PB-P3	CAT AEF3422BBX AXTIE3B7 General Electric 3rd Floor	Janitor's Room		225 Amps 480y/277 Volts 3 Phase 4 Wire with Main Breaker to Transformer
CDM-PLUMB-HWCP-002 Hot Water Circulation Pump Childrens Discovery Museum HWCP-002	007-SF5 Taco 1st Floor	Janitor's Room		HP 1/25 Amp 76 Hz 60 Volts 115 RPM 3250
CDM-PLUMB-PS-WBPT-001 170 Gal Pressure Tank for Water Boost System Childrens Discovery Museum WBPT-001	27-900-1700 SyncroFlow Basement	Mechanical Room		Water pressure holding tank for the water boost system
CDM-ELEC-SPD-001 Surge Protector for Main Disconnect Childrens Discovery Museum Surge Protector-001	THE277Y200WMN1 General Electric Basement	Mechanical Room		480/277 Volts 3 Phase
CDM-ELEC-SB-001 Main Disconnect for most of CDM Childrens Discovery Museum MSB-001	General Electric Basement	Mechanical Room		Supply Amps 800 Section Amps 800 Neutral Amps 800 3 Phase 4 Wire 480/277 Volts
CDM-FLS-FAD-001 Head unit for Fire Alarm & Detection Childrens Discovery Museum Fire Alarm Detection-001	AFP200 F.E Moran, Inc. Basement	Mechanical Room		

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CDM-ELEC-PTS-001 Automatic Transfer Switch to Transfer Load Childrens Discovery Museum Transfer Switch 001	7000 Series 265629 FP ASCO Basement	Mechanical Room		260 Amps 3 Phase 480 Volts Power Transfer Switch
CDM-ELEC-PTS-002 Automatic Transfer Switch to Transfer Load Childrens Discovery Museum Transfer Switch 002	7000 Series ASCO Basement	Mechanical Room		
CDM-MECH-CI-SEPCB-001 Sewage Ejector Pump Control Box Childrens Discovery Museum SECB-001	W-8131-CL-AD Stahlin Enclosures Basement	Mechanical Room		Volts 115 Phase 1 Hz 60 Type 4x Enclosure Max Panel Amps 61.0 Max Motor Amps 30.0
CDM-PLUMB-BP-001 Booster Pumps to increase water pressure to upper floors Childrens Discovery Museum BP-001	55B-5 240487-1 SyncroFlow Basement	Mechanical Room		
CDM-PLUMB-BP-002 Booster Pumps to increase water pressure to upper floors Childrens Discovery Museum BP-002	55B-5 240487-2 SyncroFlow Basement	Mechanical Room		
CDM-ELEC-MC-SEPDB-001 Disconnect Box for Sewage Ejector Pump Childrens Discovery Museum SEPDB-001	General Electric Basement	Mechanical Room		
CDM-ELEC-MC-WHDB-001 Disconnect Box for Water Heater Childrens Discovery Museum WHDB-001	General Electric Basement	Mechanical Room		
CDM-ELEC-MC-WHDB-002 Disconnect Switch for Water Heater Childrens Discovery Museum WHDB-002	General Electric 1st Floor	Janitor's Room		

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CDM-PLUMB-SUMP-001 Sump Pump #1 & #2 for Sewage Pit Childrens Discovery Museum Sewage Ejector Pump-001	Basement	Mechanical Room		No info on Pumps. They were under water too far to see Data plate
CDM-PLUMB-SUMP-002 Sump Pump #1 & #2 for Sewage Pit Childrens Discovery Museum Sewage Ejector Pump-002	Basement	Mechanical Room		No info on Pumps. They were under water too far to see Data plate.
CDM-ELEC-PB-007 A Series Panel/Breaker Box with Main Childrens Discovery Museum Panel-P1	CAT AEF3422BTX AXTIE3B7 General Electric 1st Floor	Garage Area		225 Amps 480/277 Volts 3 Phase 4 Wire Main Breaker Main to Transformer TB
CDM-ELEC-PB-008 A Series Panel/Breaker Box with Main Childrens Discovery Museum Panel -PB1	CAT AQF3422ATX AXT155B7 General Electric 1st Floor	Garage Area		225 Amps 208/120 Volts 3 Phase 4 Wire Main Breaker
CDM-ELEC-PB-009 A Series Panel/Breaker Box with Main Childrens Discovery Museum Panel -PB2	CAT AQF3422MBX AXT1B7 General Electric 1st Floor	Garage Area		225 Amps 208/120 Volts 3 Phase 4 Wire Main Breaker
CDM-ELEC-PB-010 A Series Panel/Breaker Box with Main Childrens Discovery Museum Panel-E	CAT AEF3422BBX AXS5B7 General Electric 1st Floor	Garage Area		225 Amps 480/277 Volts 3 Phase 4 Wire Main Breaker A Series Panelboard Main to Transformer TE
CDM-ELEC-PB-011 A Series Panel/Breaker Box Childrens Discovery Museum Panel-EE	CAT AQF3361ABX AXB7 General Electric 1st Floor	Garage Area		125 Amps 208/120 Volts 3 Phase 4 Wire Main Breaker A Series Panelboard
CDM-ELEC-PB-012 A Series Panel/Breaker Box with Main Childrens Discovery Museum Panel-PA	ALF3422ABX AXT1S5B7 General Electric Basement	Mechanical Room		225 Amps 208/120 Volts 3 Phase 4 Wire Main Breaker Box

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CDM-ELEC-PB-013 A Series Panel/Breaker Box with Main Childrens Discovery Museum Panel P	AEF3422BBX AXTIE3S5B7 General Electric Basement	Mechanical Room		225 Amps 480/277 Volts 3 Phase 4 Wire Main Breaker for Transformer TA
CDM-PLUMB-WH-001 80 Gallon Commercial Water Tank Childrens Discovery Museum WH-001	DEN 80 110 MD040014650 A.O. Smith Basement	Mechanical Room		80 Gal Commercial Water Heater 208 Volts 1/3 Pase
CDM-PLUMB-WH-002 40 Gallon Commercial Storage Tank Water Heater Childrens Discovery Museum WH-002	DEN 40 110 MD040014968 A.O. Smith 1st Floor	Janitor's Room		208 Volts 1/3 Phase 40 Gal Commercial
CDM-ELEC-TRF-001 Step Up/Down Transformer Childrens Discovery Museum Transformer-TE	CAT 9T23Q9872 General Electric 1st Floor	Garage Area		30.0 KVA 3 Phase Primary 400 (L-L) Secondary 200 (L-L) Neutral 120 (L-N)
CDM-ELEC-TRF-002 Step Up/Down Transformer Childrens Discovery Museum Transformer-TB	CAT 9T23Q9874 General Electric 1st Floor	Garage Area		75.0 KVA 3 Phase P=400 (L-L) S=200 (L-L) N=120 (L-N)
CDM-MECH-LCB-002 Lighting Control Box Childrens Discovery Museum LCB-002	NexLight 1st Floor	Garage Area		
CDM-MECH-CI-FNTN-001 Fountain Controls Uptown Square Childrens Discovery Museum FC-001	Exterior	Rear of building of CDM		
CDM-ELEC-EPS-001 Emergency Generator System Childrens Discovery Museum EMPS-001	250 SERIES Kohler Exterior	Rear of building of CDM		
CDM-AD-DRINK-001 Drinking Fountain Childrens Discovery Museum DF-001	EZFSTL81A 030516391 ELKAY 1st Floor	Next to bathrooms		Volts 115 Single Phase Ref Type 134A 4.10 oz Part No. EZSTL8LCC

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CDM-AD-DRINK-002 Drinking Fountain Childrens Discovery Museum DF-002	030516391 ELKAY 1st Floor	Next to bathrooms		Volts 115 Single Phase Ref Type 134A 4.10 oz Part No. EZSTL8LCC
CDM-AD-DRINK-003 Drinking Fountain Childrens Discovery Museum DF-003	EZFSTL81A 040427848 ELKAY 2nd Floor	Next to bathrooms		Volts 115 Single Phase Ref Type 134A 4.10 oz Part No. EZSTL8LCC
CDM-AD-DRINK-004 Drinking Fountain Childrens Discovery Museum DF-004	EZFSTL81A 040427848 ELKAY 2nd Floor	Next to bathrooms		Volts 115 Single Phase Ref Type 134A 4.10 oz Part No. EZSTL8LCC
CDM-AD-DRINK-005 Drinking Fountain Childrens Discovery Museum DF-005	EZFSTL81A 040427977 ELKAY 3rd Floor	Next to bathrooms		Volts 115 Single Phase Ref Type 134A 4.10 oz Part No. EZSTL8LCC
CDM-AD-DRINK-006 Drinking Fountain Childrens Discovery Museum DF-006	EZFSTL81A 040427977 ELKAY 3rd Floor	Next to bathrooms		Volts 115 Single Phase Ref Type 134A 4.10 oz Part No. EZSTL8LCC
CHA-AD-DRINK-001 Drinking Fountain City Hall Annex DF-001	EZWSRNF1 120510260 ELKAY 1st Floor			120 Volts Amps 1.0 Ref. 134A
CHA-AD-DRINK-002 Drinking Fountain City Hall Annex DF-002	ESRA-8 5133566 ELKAY Basement			115 Volts Comp amps 4.7 Amps 1.0 Ref. Type R-12 6.50 oz
CHA-AD-ICE-001 Direct Water Fed Ice Maker City Hall Annex ICEM-001	QY0214A 310132043 Manitowac Basement	Mechanical Room		Ref. Type R-404A Charge 13 oz Single Phase 115 Volts 6.5 Amps Design High Side Pressure 500 psig Low side pressure 250 psig MFG. date 10/10

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CHA-PLUMB-HWCP-001 Hot Water Circulation Pump City Hall Annex HWCP-001	Bell & Gossett Basement	Mechanical Room		Cannot read data plate due to positioning of the pump along the wall
CHA-FLS-FAD-001 Fire Alarm & Detector Head Unit City Hall Annex FAD-001	CP-400 Cerberus Pyrotronics Basement	Mechanical Room		
CHA-ELEC-SB-001 Main Switchboard Breaker Panel City Hall Annex MSB-001	General Electric Basement	Mechanical Room		120/208 Volts 600 amp Main Disconnect Panel
CHA-ELEC-PTS-001 Emergency Power Supply Switch City Hall Annex TS-001	LTEU60-3/15455E 0275925623 Onan Basement	Cummins Mid-State Power Mechanical Room		Power Transfer Switch 120/240 Volts Single Phase 60 Amps Motor Locked Rotor Amps 360
CHA-ELEC-PB-001 Panelboard/Breaker Box City Hall Annex PB-001	General Electric Basement	Mechanical Room		
TEC-EXT-CRPT-005 Pony 20 SCA Large Area Extractor (Black) City Hall Annex	Pony 20 SCA 494902B 01007786 Basement	Storage Room		115 V 60 Hz 14.5 amps
CHA-MECH-SPLT-COND-005 Split System Heat/Cool City Hall Annex 001	HS6-813V-3L 6476EOD691 TRANE Exterior	Outside enclosed area east side of building		Dual Condenser Ref. R-22 Equipment Assessment needs minimal repair/attention
CHA-MECH-SPLT-COND-002 Split System Heat/Cool City Hall Annex 002	TTA042C300AD M3135LCBF YORK Exterior	Outside enclosed area east side of building		3-1/2 Tons of Cooling Ref. R-22 Equipment Assessment is in good condition

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CHA-MECH-SPLT-COND-003 Split System Heat/Cool City Hall Annex 003	YCJF60541S1A WOL9286007 YORK Exterior	Pro Air Outside enclosed area east side of building		A-Coil 5-1/2 Ton Condenser 5 Tons Cooling Ref. R-410A Equipment Assessment is in good condition
CHA-MECH-SPLT-COND-004 Split System Heat/Cool City Hall Annex 004	YCJF42S41S1A W1B0622013 YORK Roof	Pro Air		3-1/2 Tons Cooling Ref. R-410A
CHA-MECH-RTU-006 Combo Heat/Cool City Hall Annex RTU 001	YCD090C3HOBE P48101333D Roof			166,000 BTU 7-1/2 Tons Cooling Standard Eff. 3 Filters 16x25x1 Ref. R-22 Equipment Assessment is in good condition
CHA-MECH-RTU-007 Combo Heat/Cool City Hall Annex RTU 002	GCS16-060-N 5698J05610 Roof			96,000 BTU 5 Tons of Cooling 1 Filter 20x25x2 Ref. R-22 Equipment Assessment is in good condition
CHA-MECH-SPLT-FURN-001 of 002 Split System Heat/Cool City Hall Annex 001 of 002	TUE100A948KO M092L1M1Gi TRANE Basement	Mechanical Room		90,000 BTU 1 Filter Filter size 20x25x1 Equipment Assessment needs minimal repair
CHA-MECH-SPLT-FURN-002 of 002 Split System Heat/Cool City Hall Annex 002 of 002	TUE100A948K1 M455MCJ1G TRANE Basement	Mechanical Room		75,000 BTU 1 Filter Filter Size 20x25x1
CHA-MECH-SPLT-FURN-002 Split System Heat/Cool City Hall Annex 002	PACE-LD16N080A ECFM084004 YORK 1st Floor	Main Floor--Greg's Office		80,000 BTU 1 Filter 20x25x1 Ref. R-22
CHA-MECH-SPLT-FURN-003 Split System Heat/Cool City Hall Annex Furnace 003	TM9V120D20MP11A WOG9023033 YORK Basement	Pro Air Mechanical Room		BTU 115,000 1 Media Filter Filter Size 20x25x5

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CHA-MECH-SPLT-FURN-004 Split System Heat/Cool City Hall Annex 004	TM9X080C16MP11A WIE0862543 YORK 1st Floor	Pro Air Main Floor--Copy Room		Estimated Replacement Date 2035 75,000 BTU 1 Filter Filter Size 16x25x1 A-Coil 4 Ton
CHA-MECH-SPLT-COND-001 Condenser only City Hall Annex Condenser 001	2A783036A1000AA 8375XYR3F American Standard Roof			Condenser only for computer room. No heat. 3 tons cooling. Ref. R-22 Equipment Assessment needs minimal repair.
TEC-VAC-CDLS-005 Eureka Cordless Quick Up City Hall Annex	96 0601-010659 2nd Floor			P&R Dept 6V DC
TEC-VAC-CDLS-006 Hoky Contico Power 3000 City Hall Annex	Power 3000 2nd Floor			Located in P&R
TEC-VAC-HKMN-001 Hoky PR 3000 Hand Push Vac City Hall Annex	PR3000 1st Floor			Located in Inspections Dept
CHA-TMP-ROOF-001 Roof System City Hall Annex		7/1/2003		
CHA-ELEC-EPS-001 Emergency Power Generator City Hall Annex	12.0DJC-3R/15786AA 0275928662 Onan Other	1/1/1986 East Exterior Side		ATS: ONAN MODEL # LTEU60-3/15455E SERIEL #0275925623
CHA-FINISH-CARPET-001 1st FLOOR CARPET City Hall Annex	Glimmer 59329 Color - Gleam 27585 Shaw 1st Floor	TARTER/TSI MAIN OFFICE AND LOBBY		Color - Gleam 27585 Lifetime Limited Warranty

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CHA-FINISH-CARPET-000 Basement City Hall Annex	Basement	7/1/2005 Inspections		Traffic suggests replacement every 10 years
CHA-CVS-LIFT-001 Lift/Elevator City Hall Annex	Various	1/1/1986 Parks and Recreation Lobby		Due for replacement 2013
TEC-VAC-UPR-006 Sebo (white) Automatic X4 City Hall Annex	x4 X4089768 1st Floor			Located in Inspections Dept 12 amps marked #1 120 V 60 Hz
TEC-VAC-UPR-007 (white) Sebo Automatic X1 City Hall Annex	x1 R10019039 2nd Floor			Located in P&R Dept
CHA-AD-IM-001 Ice Maker City Hall Annex NO TAG ON FIELD	QY0214A 310132043 General Electric Other	7/1/2010 N/A N/A		60Hz 115V 1Phase
CHA-PLUMB-WH-001 Water Heater City Hall Annex WH-001	EC52930 GK02-1023400-930 General Electric Basement	7/1/2007 N/A Mechanical Room		220-240V 50 Gallon Cap. 50/60HZ
CHA-MECH-AHU-001 Furnance Unit City Hall Annex NO TAG ON FIELD	YCJF60S41S1A NWOL9286007 YORK	7/1/2009 Gregg's Office		Filter Size : 25" * 25" * 5" Compressor Unit M/N :- YCJF60S41S1A S/N:- WOL9286007 5LBS 9OZ R-410A 5Ton Thermostat at Robertshaw by Bld Insp .desk NE wall

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CHA-MECH-AHU-002 Furnance Unit City Hall Annex NO TAG ON FIELD	YCJF42S41S1A W1B0622013 YORK Other	7/1/2009 South Hall by elevator		Furnace Unit Additional Information:- FILTER SIZE :- 16 * 25 * 1 DD Fan Thermo Located at Robertshaw intern Office off South Hall by elevator Compressor Unit. M/N:- YCJF42S41S1A S/N:- W1B0622013 3.5 Ton R-410A 4LBS 4OZ
CHA-MECH-AHU-011 Furnance Unit City Hall Annex NO TAG ON FIELD	HS6-813V-3L 5475E00691 TRANE Other	7/1/2009 NE Hall		Furnace Unit Additional Information: Filter Size :- 20 * 25 * 1 Direct Drive Fan Thermo situated at NE Hall Compressor Unit Information Tag name :- CU 11 M/N:- HS6-813V-3L S/N:- 5475E00691 3.5TON HCFC-22 6LBS 3OZ
CHA-MECH-RTU-001 ROOFTOP UNIT City Hall Annex RTU 1	PGB060G1H L9632 90063 TRANE Roof	7/1/2003 Hardesty Heating and Ventilating		150,000BTU 5TON R-22
CHA-MECH-RTU-002 ROOFTOP UNIT City Hall Annex RTU 2	YCD090C3H0BE P48101392D Lennox Roof	7/1/2003		Thermostat Location:-White rogers by CID Door 205,000 BTU R22 10.6OZ 7.5 Ton
CHA-MECH-RTU-003 ROOFTOP UNIT` City Hall Annex RTU 3	GCS16-090-200-1Y 5698G06844 TRANE Roof	7/1/2003		Thermostat Location: Reception area 4 Filters : - 16 * 20 * 2 Fan Belt :- 4L 480 7 200,000 BTU 5ton
CHA-MECH-RTU-004 ROOFTOP UNIT City Hall Annex RTU 4	GCS16-060-120-1Y 5698H05454 Lennox Roof	7/1/2003		1Filter (Size) :- 20 * 25 * 2 Direct Drive 120,000 BTU Thermostat Location :- CID NW 5TON R-22 7LBS

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CHA-MECH-RTU-005 ROOFTOP UNIT City Hall Annex RTU 5	N/A N/A TRANE Other	7/1/2003 Hardesty Heating and Ventilating ROOF		Filter Size :- 16*24*1 Belt Size:- 4L460 5Ton Thermostat Location :- NE HALL
CAC-PLUMB-WH-001 Water Heater Community Activity Center	DRE 80 100 1306M001012 A.O. Smith Basement	8/28/2013 Bacon Plumbing	10/28/2016 822	80 Gallon 208v 3PH Electric Water Heater
CAC-MECH-BOIL-001 Boiler Community Activity Center B101960	LGB-17 Weil-McLain Basement	8/17/1997 Boiler Room (206)		2 Stage Hot Water Heating Boiler Natural gas Input= 2,080,000BTU/HR Min. Input= 1,040,000 BTU/HR CSA Gross Output= 1,684,800 BTU/HR Min. Relief Pressure= 1,685 lbs./HR Control Voltage=120v 100,000 Budgeted for 2023 as CAC S5
CAC-TMP-ROOF-001 Roof System Community Activity Center	Roof	7/14/2014 Union Roofing Social Room Roof	7/14/2029 5464	High Roof with Skylights White EPDM Replaced Build Up Roof System 4800 Square Feet
TEC-EXT-SPOT-002 Bravo Spot Extractor Community Activity Center	237BH			
TEC-FLMN-LSS-004 Scrubber, Low Speed, Electric Community Activity Center	SC6001 1027012651 Sanitaire			.5 HP 9A 120V 60Hz
TEC-FLMN-BURN-004 Hi-speed Burnisher, Electric Community Activity Center	B-1500-P 04-0014 Koblenz			1500 RPM 120V 60Hz 1.5 HP 15A

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
TEC-FLMN-AUSC-008 Auto Scrubber Community Activity Center	PAS-17-BA 1813B000535 Powr-Flite			Battery Charger with this equipment ALLTECH Electronics 24-Volt charger #EC24 Serial #3140257 Purchase 2013 DC-20A AC-120V AL-7.4A Spec #1644-24PF
TEC-EXT-SPOT-005 Bravo Community Activity Center	237BH BHB8624434			115V 60 Hz 7.6 A
TEC-FLMN-LSS-005 Lo-Speed Buffer (400 RPM) Community Activity Center	FM-17-SS Material #9007330 900733-10525074			120 V 60 Hz 12 A 1440 W
TEC-VAC-UPR-010 Automatic x4 Community Activity Center	P4027927			120 V 60 Hz 12 A
CAC-PLUMB-WH-002 Water Heater Community Activity Center	ECT-52-200 D07A077916 A.O. Smith 1st Floor	8/17/1997 West Custodial Closet 129		208V, 1PH 3500W 50GAL Electric Water Heater 150PSI PRV
CAC-PLUMB-SUMP-002 Duplex Sump Pit Community Activity Center	S7SJM-208/E SWE204956 Metropolitan Industries Inc. Basement	6/1/1971 SW Storage Room		Duplex Sump Pit with central motor controller. CAC-ELEC-MCSP-002 Pump assemblies share the same serial number.
CAC-ELEC-MC-SUMP-002 Duplex Sump Pit Community Activity Center	71-3866 Metropolitan Industries Inc. Basement	6/1/1971 SW Storage Room		208V 2.4A 3PH 3/4HP Duplex Sump Pit CAC-ELEC-SP-002 Pump assemblies share the same serial number.

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CAC-FLS-FAD-001 Fire Alarm and Detection System Community Activity Center	Series 1000 Safetech 1st Floor	8/17/1997 F.E. Moran East Entrance		Detection and Notification System
CAC-AD-DRINK-002 Drinking Fountain Community Activity Center EWC-2	P8AM-E100 9741572483 EBCO - Oasis 1st Floor	8/17/1997 Main Corridor West (121)		115v 4.6A 1/4HP
CAC-AD-DRINK-001 Drinking Fountain Community Activity Center EWC-1	P8AM-E100 9741572482 EBCO - Oasis 1st Floor	8/17/1997 Main Corridor East (121)		115v 4.6A 1/4HP
CAC-AD-DRINK-003 Drinking Fountain Community Activity Center	WM14A 724026 Halsey Taylor 1st Floor	6/1/1971 West Corridor (133)		115V 5.5A 1/5HP
CAC-DW-ADA-001 Automatic Door Operator Community Activity Center	C1690-R Horton Automatics 1st Floor	6/1/2007 Tee Jay Central Main Entrance Door		120v Low Energy Operator
CAC-DW-ADA-002 Automatic Door Operator Community Activity Center	C1690-R Horton Automatics 1st Floor	6/1/2007 Tee Jay Central Main Entrance Inner Vestibule Door		120v Low Energy Operator
CAC-DW-ADA-003 Automatic Door Operator Community Activity Center	C1690.000R Horton Automatics 1st Floor	6/1/2009 Tee Jay Central Mens Restroom West (123)		120v Low Energy Operator
CAC-DW-ADA-004 Automatic Door Operator Community Activity Center	C1690.000R Horton Automatics 1st Floor	6/1/2009 Tee Jay Central Womens Restroom West (124)		120v Low Energy Operator
CAC-ELEC-PB-001 Main Panelboard Community Activity Center Main Panel	AM-912649 Kinney 1st Floor	6/1/1971 West Custodial Closet 129		120-208v 800A 3PH

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CAC-ELEC-PB-002 Panelboard Community Activity Center LPB-Right	AM-912641 Kinney Basement	6/1/1971 Boiler Room (206)		120-208v 400A 3PH
CAC-ELEC-PB-003 Panelboard Community Activity Center LPB-Left	AM-912641 Kinney Basement	6/1/1971 Boiler Room (206)		120-208v 400A 3PH
CAC-ELEC-PB-004 Panelboard Community Activity Center Panel BLL	AF-555 General Electric Basement	8/17/1997 Boiler Room (206)		120-208v 400A 3PH
CAC-ELEC-PB-009 Panelboard Community Activity Center	Kinney 1st Floor	6/1/1971 Heartland Theater Shop (144)		120-208v 225A 3PH
CAC-ELEC-PB-006 Panelboard Community Activity Center Exit Panel	AM-912640 Kinney 1st Floor	6/1/1971 West Custodial Closet (129)		120-208v 50A 3PH Serves fire alarm and exit lights
CAC-ELEC-PB-007 Panelboard Community Activity Center	AM-912623 Kinney 1st Floor	6/1/1971 West Custodial Closet (129)		120-208v 225A 3PH
CAC-ELEC-MC-WH-001 Disconnect Switch Community Activity Center	JN-422 ITE Basement	8/17/1997 Basement Open Storage		208v 30A 3PH Serves CAC-PLUMB-WH-001 Electric Water Heater
CAC-ELEC-CS-001 Central Time and Bell Controller Community Activity Center Implulse Generator	FG-50002 D75076 Simplex Grinnell 1st Floor	6/1/1971 8/17/1997 West Custodial Closet (129)		Central clock system no longer in use. Still tied into power source.

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CAC-MECH-HTU-038 Heat Exchanger (Chiller) Community Activity Center NB20011	10HB402-003-01 4897X18864 Carrier Basement	8/17/1997 Boiler Room (206)		Chilled water heat exchanger coil
CAC-MECH-CI-CAD-001 Control Air Dryer Community Activity Center NB59927	7713 A1589 Quincey Basement	6/1/1971 Boiler Room (206)		115V 3A 1/6HP
CAC-PLUMB-RPZ-001 RPZ - Boiler Make-up Water Community Activity Center	FRP-II 111283 Hersey Basement	8/17/1997 Boiler Room (206)		3/4" Boiler Make-up Water RPZ 140Degree Max 150psi
CAC-PLUMB-SUMP-001 Sump Pump Community Activity Center	 Zoeller Basement	8/17/1997 Boiler Room (206)		110v Cord/Receptacle connection Float Switch
CAC-MECH-HVAC-001 Chilled Water Circulating Pump Community Activity Center Pump #1	2.5BB-9.125-BF 2093477 Bell & Gossett Basement	8/17/1997 Boiler Room (206)		Series 1510 208v 20.9A 3PH 7.5HP 1800RPM 277GPM 74FT
CAC-MECH-HVAC-002 Chilled Water Circulating Pump Community Activity Center Pump #2	2.5BB-9.125-BF 2093478 Bell & Gossett Basement	8/17/1997 Boiler Room (206)		Series 1510 208v 20.9A 3PH 7.5HP 1800RPM 277GPM 74FT
CAC-ELEC-MC-CWP-001 Chilled Water Pump Control Cabinet Community Activity Center Chill Water Pump #1	CR-307 General Electric Basement	8/17/1997 Boiler Room (206)		Disconnect and starter cabinet 208v 30A 3PH CAC-MECH-CWP-001 Chilled Water Pump

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CAC-ELEC-MC-CWP-002 Chilled Water Pump Control Cabinet Community Activity Center Chill Water Pump #2	CR-307 General Electric Basement	8/17/1997 Boiler Room (206)		Disconnect and starter cabinet 208v 30A 3PH CAC-MECH-CWP-002 Chilled Water Pump
CAC-MECH-AHU-003 Hot/Chilled Water AHU Community Activity Center AHU-3	5197F15523 Carrier Basement	8/17/1997 Boiler Room (206)		208V 3PH 5HP 5700CFM Belt - Bx50 Filters: (6) 16x25x2, (2) 16x20x2 Merv 8
CAC-MECH-AHU-004 Hot/Chilled Water AHU Community Activity Center AHU-4	5197F155492 Carrier Basement	8/17/1997 Boiler Room (206)		208V 3PH 2HP 3580CFM Belt - Ax38 Filters: (6) 16x25x2 Merv 8
CAC-ELEC-MC-AHU-003 Disconnect and Starter Cabinet Community Activity Center	10-30A General Electric Basement	8/17/1997 Boiler Room (206)		Catalog # TH4321 208v 30A 3PH CAC-MECH-AHU-003
CAC-ELEC-MC-AHU-004 Disconnect and Starter Cabinet Community Activity Center	10-30A General Electric Basement	8/17/1997 Boiler Room (206)		Catalog # TH4321 208v 30A 3PH CAC-MECH-AHU-003
CAC-MECH-AC-001 Control Air Compressor Community Activity Center	108QCB1 6107898 Quincey Basement	6/1/2005 3/3/2014 Boiler Room (206)		208V 2.8A 3PH 3/4HP Filter: 110377E075 Tank: Delta Built in 1971 30 Gallon # KK5926

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CAC-ELEC-MC-AC-001 Air Compressor Disconnect and Starter Cabinet Community Activity Center	2 General Electric Basement	6/1/1971 Boiler Room (206)		208v 30A 3PH CAC-MECH-AC-001 Control Air Compressor
CAC-PLUMB-HWCP-003 Hot Water Circulating Pump Community Activity Center Pump #3	CBC-8.25-BF 2093484 Bell & Gossett Basement	8/17/1997 Boiler Room (206)		Series 1510 208v 14.2A 9PH 1800RPM 193GPM 53FT
CAC-PLUMB-HWCP-004 Hot Water Circulating Pump Community Activity Center Pump #4	CBC-8.25-BF 2093483 Bell & Gossett Basement	8/17/1997 Boiler Room (206)		Series 1510 208v 14.2A 9PH 1800RPM 193GPM 53FT
CAC-ELEC-MC-HWCP-003 Hot Water Circulating Pump Disconnect and Starter Cabinet Community Activity Center HWP #3	CR307 General Electric Basement	8/17/1997 Boiler Room (206)		Disconnect and Starter Cabinet 208v 30A 3PH CAC-MECH-HWCP-003
CAC-ELEC-MC-HWCP-004 Hot Water Circulating Pump Disconnect and Starter Cabinet Community Activity Center HWP#4	CR307 General Electric Basement	8/17/1997 Boiler Room (206)		Disconnect and Starter Cabinet 208v 30A 3PH CAC-MECH-HWCP-004
CAC-MECH-RACU-001 Stand Alone Room A/C Unit Community Activity Center	APC-3240C P1BTC00112 Samsung 1st Floor	6/1/2007 Aerobics Room North (117)		208V 16A 3250W 30,000 BTU/HR SEER 10 Compressor/Coil: Serial # P1BTC00005 General Electric Service Disconnect Custom Filter

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CAC-MECH-RACU-002 Stand Alone Room A/C Unit Community Activity Center	APC-3240C P1BTC00102 Samsung 1st Floor	6/1/2007 Aerobics Room South (117)		208V 16A 3250W 30,000 BTU/HR SEER 10 Compressor/Coil: Serial # P1BTC00001 General Electric Service Disconnect Custom Filter
CAC-ELEC-SDS-001 Service Disconnect Community Activity Center	General Electric 1st Floor	6/1/2007 Aerobics Room North (117)		208v 30A Located under exterior balcony CAC-MECH-RACU-001
CAC-ELEC-SDS-002 Service Disconnect Community Activity Center	General Electric 1st Floor	6/1/2007 Aerobics Room South (117)		208v 30A Located under exterior balcony CAC-ELEC-RACU-002
CAC-CVS-LIFT-001 Chair Lift Community Activity Center	Porch Lift 55723 Porch Lift 1st Floor	8/17/1997 Aerobics Room North (117)		750 lbs. Capacity
CAC-MECH-CHILLER-001 2 Stage DX Fluid Chiller Community Activity Center	30GTP070-510 5197F15257 Carrier Exterior	8/17/1997 East of Theater Garage (146)		2 Stage 70 Ton DX Chiller: 208v 147A 3Ph Fan Motors: (4) 208v, 6.6A, 3PH (2) 208v, 5.5A, 3PH Control Power 115v, 30A, 1PH
CAC-ELEC-SDS-003 Service Disconnect Community Activity Center	DH326FRK Eaton/Cutler-Hammer Exterior	8/17/1997 East of Theater Garage (146)		208v 600A 3PH CAC-MECH-CHILLER-001

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CAC-TMP-ROOF-002 EPDM Roofing Community Activity Center	07407FRJAB 045EPDMMFR Carlisle Roof	7/1/2001 Heartland Theater		5,800 Square Feet Black EPDM
CAC-TMP-ROOF-003 EPDM Roofing Community Activity Center	08417FR1F0 060EPFR Carlisle Roof	8/1/1996 Perimeter Roofs on CAC (6)		13,600 Square Feet Black EPDM
CAC-ELEC-PB-008 Theater Dimmer Panelboard Community Activity Center	QOC30US Square D 1st Floor	6/1/2000 Heartland Theater SW (155)		120-208v 100A 3PH
CAC-ELEC-PB-010 Panelboard Community Activity Center LP3-Left	Kinney 1st Floor	6/1/1971 Heartland Theater Shop (144)		120-208v 225A 3PH
CAC-ELEC-PB-011 Panelboard Community Activity Center LP3-Right	Kinney 1st Floor	6/1/1971 Heartland Theater Shop (144)		120-208v 225A 3PH
CAC-MECH-AHU-001 Hot/Chilled Water AHU Community Activity Center Heartland Theater Heat Fan	HAH-40 71092553 D/B 1st Floor	6/1/1971 Heartland Theater Shop (144)		Hot and Chilled Water AHU 208v 5.0A 3PH 1.5HP Smith Lifetime Air Filter - Clean with water
CAC-MECH-AHU-002 Hot/Chilled Water AHU Community Activity Center East Shop Heat Fan	HAH-40 D/B 1st Floor	6/1/1971 Heartland Theater Shop (144)		Hot and Chilled Water AHU - Serves Garage 208v 5.0A 3PH 1.5HP Smith Lifetime Air Filter - Clean with water

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CAC-ELEC-MC-AHU-002 Disconnect and Starter Cabinet Community Activity Center East Shop Heat Fan	200 Line General Electric 1st Floor	6/1/1971 Heartland Theater Shop (144)		Hot and Chilled Water AHU - Serves Garage 208v 5.0A 3PH 1.5HP CAC-MECH-AHU-002
CAC-ELEC-MC-AHU-001 Disconnect and Starter Cabinet Community Activity Center East Shop Heat Fan	200 Line General Electric 1st Floor	6/1/1971 Heartland Theater Shop (144)		Hot and Chilled Water AHU - Theater 208v 5.0A 3PH 1.5HP CAC-MECH-AHU-001
CAC-DW-OGD-001 Overhead Garage Door Community Activity Center	1st Floor	6/1/1971 Theater Garage (146)		10'Hx12'W 5 Panel Uninsulated Steel Door Operator: Liftmaster ATS-211-R 1/2HP 120v 5.5A 300 in.lbs./sec.
CAC-FLS-FS-001 Sprinkler System (Wet) Community Activity Center	Pipco Various	8/17/1997 Basement and 1st Floor		Wet Sprinkler System / No Fire Pump
CAC-MECH-PVEF-001 Exhaust Fan Community Activity Center EF-1	VFBK08X4A1NA20SPC1 246651-001 Carnes Roof	8/17/1997 Adjacent to Theater		115V 3.5A 1/4HP BELT: 4L-190
CAC-MECH-PVEF-002 Exhaust Fan Community Activity Center EF-2.4	240651-003 Carnes Roof	8/17/1997 West Roof North Unit		115V 3.5A 1/4HP BELT: 4L-190
CAC-MECH-PVEF-003 Exhaust Fan Community Activity Center EF-1.3	240651-001 Carnes Roof	8/17/1997 West Roof South Unit		115V 3.5A 1/6HP BELT: 4L-190

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CAC-MECH-PVEF-004 Exhaust Fan Community Activity Center	240651-003 Carnes Roof	8/17/1997 SE Roof North Unit		115V 3.5A 1/6HP BELT: 4L-190
CAC-MECH-PVEF-005 Exhaust Fan Community Activity Center EF-5	240651-002 Carnes Roof	8/17/1997 SE Roof South Unit		115V 3.5A 1/6HP BELT: 4L-190
CAC-DW-SKYLT-001 Motorized Skylight Community Activity Center				8 Identical Units
CAC-MECH-HTU-001 Cabinet Unit Heater - Fan Powered Community Activity Center FC-1	YORK 1st Floor	6/1/1971 South Entry (101)		
CAC-MECH-HTU-002 Cabinet Unit Heater - Fan Powered Community Activity Center FC-2	YORK 1st Floor	6/1/1971 South Entry (101)		
CAC-MECH-HTU-003 Cabinet Unit Heater - Fan Powered Community Activity Center FC-3	YORK 1st Floor	6/1/1971 Hall (102)		
CAC-MECH-HTU-004 Cabinet Unit Heater - Fan Powered Community Activity Center FC-4	YORK 1st Floor	6/1/1971 Room 102		
CAC-MECH-HTU-005 Cabinet Unit Heater - Fan Powered Community Activity Center FC-5	YORK 1st Floor	6/1/1971 Room 104		

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CAC-MECH-HTU-006 Cabinet Unit Heater - Fan Powered Community Activity Center FC-6	YORK 1st Floor	6/1/1971 Room 105		
CAC-MECH-HTU-007 Cabinet Unit Heater - Fan Powered Community Activity Center FC-7	YORK 1st Floor	6/1/1971 Room 110		
CAC-MECH-HTU-008 Cabinet Unit Heater - Fan Powered Community Activity Center FC-8	YORK 1st Floor	6/1/1971 Room 112		
CAC-MECH-HTU-009 Cabinet Unit Heater - Fan Powered Community Activity Center FC-9	YORK 1st Floor	6/1/1971 Room 112		
CAC-MECH-HTU-010 Cabinet Unit Heater - Fan Powered Community Activity Center FC-10	YORK 1st Floor	6/1/1971 Room 113		
CAC-MECH-HTU-011 Cabinet Unit Heater - Fan Powered Community Activity Center FC-11	YORK 1st Floor	6/1/1971 Room 115		
CAC-MECH-HTU-012 Cabinet Unit Heater - Fan Powered Community Activity Center FC-12	YORK 1st Floor	6/1/1971 Room 117		
CAC-MECH-HTU-013 Cabinet Unit Heater - Fan Powered Community Activity Center FC-13	YORK 1st Floor	6/1/1971 Room 117		

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CAC-MECH-HTU-014 Cabinet Unit Heater - Fan Powered Community Activity Center FC-14	YORK 1st Floor	6/1/1971 Room 117		
CAC-MECH-HTU-015 Cabinet Unit Heater - Fan Powered Community Activity Center FC-15	YORK 1st Floor	6/1/1971 Room 117		
CAC-MECH-HTU-016 Cabinet Unit Heater - Fan Powered Community Activity Center FC-16	YORK 1st Floor	6/1/1971 Room 118		
CAC-MECH-HTU-017 Cabinet Unit Heater - Fan Powered Community Activity Center FC-17	YORK 1st Floor	6/1/1971 Room 118		
CAC-MECH-HTU-018 Cabinet Unit Heater - Fan Powered Community Activity Center FC-18	YORK 1st Floor	6/1/1971 Room 125		
CAC-MECH-HTU-019 Cabinet Unit Heater - Fan Powered Community Activity Center FC-19	YORK 1st Floor	6/1/1971 Room 125		
CAC-MECH-HTU-020 Cabinet Unit Heater - Fan Powered Community Activity Center FC-20	YORK 1st Floor	6/1/1971 Room 126		
CAC-MECH-HTU-021 Cabinet Unit Heater - Fan Powered Community Activity Center FC-21	YORK 1st Floor	6/1/1971 Room 126		

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CAC-MECH-HTU-022 Cabinet Unit Heater - Fan Powered Community Activity Center FC-22	YORK 1st Floor	6/1/1971 Room 126A		
CAC-MECH-HTU-023 Cabinet Unit Heater - Fan Powered Community Activity Center FC-23	YORK 1st Floor	6/1/1971 Room 127		
CAC-MECH-HTU-024 Cabinet Unit Heater - Fan Powered Community Activity Center FC-24	YORK 1st Floor	6/1/1971 Room 130		
CAC-MECH-HTU-025 Cabinet Unit Heater - Fan Powered Community Activity Center FC-25	YORK 1st Floor	6/1/1971 Room 130		
CAC-MECH-HTU-026 Cabinet Unit Heater - Fan Powered Community Activity Center FC-26	YORK 1st Floor	6/1/1971 Room 133		
CAC-MECH-HTU-027 Cabinet Unit Heater - Fan Powered Community Activity Center FC-27	YORK 1st Floor	6/1/1971 Room 137		
CAC-MECH-HTU-028 Cabinet Unit Heater - Fan Powered Community Activity Center FC-28	YORK 1st Floor	6/1/1971 Room 137		
CAC-MECH-HTU-029 Cabinet Unit Heater - Fan Powered Community Activity Center FC-29	YORK 1st Floor	6/1/1971 Room 138		

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
CAC-MECH-HTU-030 Cabinet Unit Heater - Fan Powered Community Activity Center FC-30	YORK 1st Floor	6/1/1971 Room 138		
CAC-MECH-HTU-031 Cabinet Unit Heater - Fan Powered Community Activity Center FC-31	YORK 1st Floor	6/1/1971 Room 150		
CAC-MECH-HTU-032 Cabinet Unit Heater - Fan Powered Community Activity Center FC-32	YORK 1st Floor	6/1/1971 Room 154		
CAC-MECH-HTU-033 Cabinet Unit Heater - Fan Powered Community Activity Center FC-33	YORK 1st Floor	6/1/1971 Room 154		
CAC-MECH-HTU-034 Cabinet Unit Heater - Fan Powered Community Activity Center FC-34	YORK 1st Floor	6/1/1971 Room 122		
CAC-MECH-HTU-035 Cabinet Unit Heater - Fan Powered Community Activity Center FC-35	YORK 1st Floor	6/1/1971 Room 143		
CAC-MECH-HTU-036 Cabinet Unit Heater - Fan Powered Community Activity Center FC-36	YORK 1st Floor	6/1/1971 Room 143		
CAC-MECH-HTU-037 Cabinet Unit Heater - Fan Powered Community Activity Center FC-37	YORK 1st Floor	6/1/1971 Room 143		

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
ENG-MECH-EBH-001 Electric Heat Element-Perimeter Heat, Individual Controls Engineering EBB-001	1st Floor	Lobby		Equipment Assessment needs minimal repair
TEC-VAC-CDLS-007 Eureka Quick-up ZNI Engineering	96 Type JZ 1241005487 2nd Floor			6V DC
TEC-VAC-UPR-008 Sebo Automatic X4 (blue) Engineering	P4027932 1st Floor			120 V 60 Hz 12.0 amps
ENG-MECH-SPLT-COND-003 Split System Heat/Cool Engineering 003	TTB036C100A1 P38ILB7BF TRANE Exterior	Outside behind building		Equipment Assessment needs minimal repair/attention
ENG-MECH-SPLT-FURN-003 Split System Heat/Cool Engineering 003	TUE080A936K2 P5125SOU1G TRANE 2nd Floor	Mechanical Room		80,000 BTU 3 Ton A-Coil
ENG-MECH-SPLT-COND-004 Split System Heat/Cool Engineering 004	TTB036C100A1 P381K14BF TRANE Exterior	Outside rear of building		1 Filter Filter size 14x25x1 Ref. R-22 3-1/2 tons of cooling Equipment Assessment needs minimal repair/attention
ENG-MECH-SPLT-FURN-004 Split System Heat/Cool Engineering 004	TUE0B0A936K2 P5 TRANE 2nd Floor	Mechanical Room		80,000 BTU 3 Ton A-Coil Equipment assessment needs minimal repair/attention
ENG-MECH-SPLT-FURN-001 Split System Heat/Cool Engineering 001	GCVC950714CXAA 1101630733 Goodman 1st Floor	Mechanical Room	3/16/2016 596	65,000 BTU 95% Eff Rate 3 Ton A-Coil 1 filter Filter size 16x25x1 Equipment Assessment in good condition

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
ENG-MECH-SPLT-COND-001 Split System Heat/Cool Engineering 001	SSX160301AA 1102736157 Goodman Exterior	Outside behind building	3/1/2016 581	2-1/2 Tons of Cooling Ref. R-22 Equipment Assessment is in good condition
ENG-MECH-SPLT-COND-002 Split System Heat/Cool Engineering 002	SSX160301AA 1102736157 Goodman 1st Floor	Mechanical Room	3/1/2016 581	2-1/2 Tons of Cooling
ENG-MECH-SPLT-FURN-002 Split System Heat/Cool Engineering 002	GCVC950714CXAA 1101630733 Goodman 1st Floor	Mechanical Room	3/1/2016 581	Estimated Replacement Date March 2032 65,000 BTU 95% Eff. Rate A-Coil 3 Ton 1 Filter Filter Size 16x25x1 Equipment Assessment is in good condition
ENG-MECH-EBH-002 Electric Heat Element-Perimeter Heat, Individual Controls Engineering EBB-002	1st Floor	Lobby		Equipment Assessment needs minimal repair
ENG-MECH-EBH-003 Electric Heat Element-Perimeter Heat, Individual Controls Engineering EBB-003	2nd Floor	Lobby		Equipment Assessment needs minimal repair
ENG-MECH-EBH-004 Electric Heat Element-Perimeter Heat, Individual Controls Engineering EBB-004	2nd Floor	Lobby		Equipment Assessment needs minimal repair
ENG-ELEC-PB-001 Panel Breaker Box Engineering PB-001	Square D 1st Floor	Mechanical Room		

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
ENG-ELEC-PB-002 Panel Breaker Box Engineering PB-002	Square D 1st Floor	Mechanical Room		
ENG-ELEC-PB-003 Panel Breaker Box Engineering PB-003	Square D 2nd Floor	Mechanical Room		
ENG-ELEC-PB-004 Panel Breaker Box Engineering PB-004	Square D 2nd Floor	Mechanical Room		
ENG-AD-REFRIG-001 Refrigerator for staff Engineering REFRIG-001	Friedrich 1st Floor	Kitchen		
NT-MECH-PVEF-002 Power Vent/Exhaust Fan Disconnect Box Normal Theater EF-002	GB-80-4 94HB1439 Greenheck Roof			115 Volts Phase 1 HP 1/4 RPM 1725
NT-MECH-PVEF-003 Power Vent/Exhaust Fan Disconnect Box Normal Theater EF-003	GB-120-4 94H11993 Greenheck Roof			115 Volts Phase 1 HP 1/4 RPM 1725
NT-PLUMB-HWCP-001 Hot Water Circulation Pump #1 for Boiler Normal Theater CP-001	P63DAB-3039 Baldor-Reliance Basement			Model #VL2007
NT-PLUMB-HWCP-002 Hot Water Circulation Pump #2 for Boiler Normal Theater CP PA-002	KV2007AE2HCB862M Baldor-Reliance Basement			HP 1-1/2 RPM 1750 60 GPM Motor Info 1.5 HP 230/460 Volts 4.4/2.2 Amps RPM 1755

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
NT-MECH-BOIL-001 Gas Fired Boiler Normal Theater B-001	LGB-11 2 Series Weil-McLain Basement			Series No. 2 130,000 BTU 120 Volts Hot water supply is boiler
NT-MECH-RTU-001 Condenser & Circulates Hot Water for Heat Normal Theater RTU-001	38AH-054---500 1794F94086 Carrier Roof			Compressors 208/230 Volts x 2 Ref. R-22 3 Phase Controls all Heat & Cool are Retro-Fit nonthing original
NT-MECH-PVEF-001 Power Vent/Exhaust Fan Disconnect Box Normal Theater EF-001	GB081-1M-95-73 11282518712 Greenheck Basement			115 Volts Phase 1 HP 1/4
NT-ELEC-SDS-001 Main Disconnect Box Normal Theater MSB-001	Square D Basement			
NT-ELEC-SDS-002 Disconnect Swith for Water Heater Normal Theater WHDB-001	General Electric Basement			
NT-ELEC-SDS-003 Main Light Control Disconnect Box Normal Theater MCDB-001	Square D Other	Projection Room		
NT-ELEC-SDS-004 Disconnect Box for Circulation Pump #1 Normal Theater DBCP-001	Square D Basement			
NT-ELEC-SDS-005 Disconnect Box for Circulation Pump #2 Normal Theater DBCP-002	Square D Basement			

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
NT-FLS-FAD-001 Main Fire Alarm & Detection Controls Normal Theater FAC-001	Basement			
NT-ELEC-PB-001 Panel Breaker Box Normal Theater A-001	Square D Other	Projection Room		208/120 Volts 3 Phase
NT-ELEC-PB-002 Panel Breaker Box Normal Theater D-001	Square D Other	Projection Room		208/120 Volts 3 Phase
NT-ELEC-PB-003 Panel Breaker Box for Sound Panel Normal Theater SP-001	Square D Other	Projection Room		208/120 Volts 3 Phase
NT-ELEC-PB-004 Panel Breakers for Marquee and Main Normal Theater M-001	Square D Other	Projection Room		480/277 Volts 3 Phase
NT-ELEC-PB-005 Panel Breaker Box Normal Theater MC-002	Square D Other	Projection Room		208/120 Volts 3 Phase
NT-ELEC-PB-006 Panel Breaker Box Normal Theater B-001	Square D 1st Floor	Off of Lobby, Coat Closet		208/120 Volts 3 Phase
NT-ELEC-PB-007 Panel Breaker Box Normal Theater C-001	Square D 1st Floor	Off of Lobby, Coat Closet		208/120 Volts 3 Phase
NT-AD-ICE-001 Ice Maker Normal Theater IM-001	JY0324A 960960200 Manitowac Basement			Ref R404A Volts 115 Amps 11.3 Phase 1

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
NT-AD-DRINK-001 Drinking Fountain Normal Theater DF-001	HAC-8F-Q 940641406 Halsey Taylor 1st Floor	Lobby		Ref. 134A Volts 115 Phase 1 Amps 4.5
NT-AD-DRINK-002 Drinking Fountain Normal Theater DF-002	HAC-8F-Q 940641406 Halsey Taylor 1st Floor	Lobby		Ref 134A Volts 115 Phase 1 Amps 4.5
NT-AD-DRINK-003 Drinking Fountain Normal Theater DF-003	1st Floor			
NT-MECH-CI-001 Heat and Cool Controls Normal Theater HCC-001	Basement	G & B Mechanical		
NT-TMP-ROOF-001 Roof System Normal Theater	Roof	7/1/2002	7/1/2017 1068	Approx 6000 square feet including shingled lower roof area to east of main roof.
NT-MECH-AHU-001 Normal Theater		7/1/2009		
TEC-VAC-CDLS-001 Digital Slim Normal Theater	DC59 FW0-US-EMB2838A Dyson			Condition = 5
NT-PLUMB-WH-001 30 Gallon Commercial Water Heater Normal Theater WH-001	ECT 30 200 1329A005970 A.O. Smith Basement	8/28/2013 Bacon Plumbing	10/28/2016 822	30 Gallon 208v Electric Water Heater Phase 1
TEC-VAC-UPR-002 Sebo Automatic X4 (blue) Normal Theater	x4 P4027924			120 V 60 Hz 12.0 amps

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
DKC-ELEC-EPS-001 Emergency Power Generator Parking Deck (College)	C6.6 CAT00C66VNG000646 Caterpillar 1st Floor	1/1/2008 Interior Room		125KW ATS: EMCP MODEL #3.2
DKC-ELEC-PB-001 Panel Breaker Box Parking Deck (College) PB-001	NC44SHR Square D 1st Floor	 Electrical Room		480/277 Panel Box with Main Principal
DKC-ELEC-PB-002 Panel Breaker Box Parking Deck (College) PB-002	MHC65SHR Square D 1st Floor	 Electrical Room		208/120 Volts Panel Box with Main
DKC-ELEC-PB-003 Panel Breaker Box Parking Deck (College) PB-003	MHC35FHR Square D 1st Floor	 Electrical Room		208/120 Volts Panel Box with Main
DKC-ELEC-PB-004 Panel Breaker Box Parking Deck (College) PB-004	NC56SHR Square D 1st Floor	 Electrical Room		480/277 Volts Panel Box with Main Principal
DKC-ELEC-PB-005 Panel Breaker Box Parking Deck (College) PB-005	MHC50SHR Square D 1st Floor	 Electrical Room		208/120 Volts Panel Box with Main
DKC-ELEC-SB-001 Main Breaker Box for all Utilities Parking Deck (College) MSB-001	12234765910010001 Square D 1st Floor	 Electrical Room		408/277 Volts 400 Amp Service
DKC-ELEC-PTS-001 Power Transfer Switch Parking Deck (College) PTS-001	7000 Series ASCO 1st Floor	 Asco Services Electrical Room		
DKC-ELEC-TRF-001 3 Phase Transformer Parking Deck (College) TF-001	34749-17212-099 Square D 1st Floor	 Electrical Room		

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
DKC-ELEC-CCTV-001 CCTV Monitor Parking Deck (College) CCTV-001	1st Floor	Electrical Room		Monitor Only
DKC-FLS-FS-001 Fire Suppression System & Pump Parking Deck (College) FS-001	1st Floor	Room next to Generator Room		
DKC-ELEC-EPS-002 Generator (back up) Parking Deck (College) EPS-001	D125-6 00C66VN6D00646 Caterpillar 1st Floor	Caterpillar Next to Electrical Room		
DKC-ELEC-LIGHT-001 Lighting Control Box Parking Deck (College) Light Control-001	Watts Office			
DKC-ELEC-LIGHT-002 Lighting Control Box Parking Deck (College) Light-002	Watts Office	Watts		
DKC-ELEC-EVCS2-001 EV Charger Type 2 Parking Deck (College) EVCS2-001	SDCU030711 135792738 Eaton/Cutler-Hammer 1st Floor	Eaton North Wall		208/240 Volts Phase 1 3 Wire Style SAR3BX000000
DKC-ELEC-EVCS2-002 EV Charger Type 2 Parking Deck (College) EVCS2-002	SDCU030711 135792737 Eaton/Cutler-Hammer 1st Floor	Eaton North Wall		208/240 Volts Phase 1 3 Wire Style SAR3BX000000
DKC-ELEC-EVCS2-003 EV Charger Type 2 Parking Deck (College) EVCS2-003	SDCU030711 135792739 Eaton/Cutler-Hammer 1st Floor	Eaton North Wall		208/240 Volts Phase 1 3 Wire Style SAR3BX000000
DKC-ELEC-SDS-001 Disconnect Box for Hot Water Parking Deck (College) DB-001	Square D Office			

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
DKC-MECH-AHU-001 Package Heat/Cool Parking Deck (College) AHU-001	PTH093G35AXXXAB 1306019949 Amana Office			
DKC-MECH-FAN-001 Centrifugal Fan (to Exhaust) Parking Deck (College) FAN-001	1st Floor	Mechanical Room		Large Exhaust Fans Cannot read data plate
DKC-MECH-FAN-002 Centrifugal Fan Parking Deck (College) FAN-002	1st Floor	Mechanical Room		Large Exhaust Fans Cannot read data plate
DKC-MECH-PVEF-001 Power Vent for CO2 Parking Deck (College) PVEF-001	COOK 1st Floor	Mechanical Room		
DKC-MECH-AC-001 Air Compressor for Check Valve Wet, Dry Parking Deck (College) AC-001	HVC-56B17D5572DP (Motor) General Electric 1st Floor	Room next to Generator Room		Compressor Model #L1300300A Serial #L1300-09130187 3 HP 208/230 VAC Phase 1 Max Pressure 50 psi Motor RPM 1725 3 HP
DKM-MECH-HTU-001 Small Heat Unit Blower Fan (Hanging Reznor) Parking Deck (Marriott) HTU-001	UHEC-032AACA TRANE 1st Floor	Elevator/Machine Room #1		Volts 208
DKM-MECH-HTU-002 Reznor Hanging Heat Unit Parking Deck (Marriott) HTU-002	UHEC-032AACA TRANE 1st Floor	Machine Room #2		208 Volts
DKM-MECH-TAB-001 Stand Alone Air Conditioner (No heat) Parking Deck (Marriott) TAB-001	Friedrich 1st Floor	NE Corner on Wall		

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
DKM-MECH-TAB-002 Stand Alone Air Conditioner Parking Deck (Marriott) TAB-002	Friedrich 1st Floor	NE Corner on Wall		Unit currently is NOT working. Someone has hit the frame with a vehicle and bent the line set.
DKM-ELEC-EVCS2-001 EV Charger Type 2 Parking Deck (Marriott) EVCS2-001	SCDU030711 135793588 Eaton/Cutler-Hammer 1st Floor	NE Corner on Wall		30 Amp 208/240 VAC 1 Phase 3 Wire Style SBR3BX000000 Charges 12-16 hours
DKM-ELEC-EVCS2-002 EV Charger Type 2 Parking Deck (Marriott) EVCS2-002	SDCU030711 135793589 Eaton/Cutler-Hammer 1st Floor	NE Corner		30 Amp 208/240 VAC 1 Phase 3 Wire Charges in 12-16 hours Style SBR3BX000000
DKM-MECH-CI-MSP-001 Main Security Panel Controls & Monitor Parking Deck (Marriott) MSP-001	Siemens 1st Floor	Machine Room #2		
DKM-ELEC-TRF-001 Power Transformer Parking Deck (Marriott) PTF-001	V48M28T30EE V30E001 Eaton/Cutler-Hammer 1st Floor	Machine Room #2		
DKM-ELEC-TRF-002 Power Transformer Parking Deck (Marriott) PTF-002	Eaton/Cutler-Hammer 1st Floor	Machine Room #2		
DKM-ELEC-TRF-003 Power Transformer Parking Deck (Marriott) PTF-003	Square D 1st Floor	Machine Room #2		
DKM-MECH-SPLT-COND-001 Split System Condenser Cooling Only Parking Deck (Marriott) SPLTCOND-003	Friedrich 1st Floor	Machine Room #3 West end on wall		

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
DKM-ELEC-PB-001 Panel Breaker Box and Main Parking Deck (Marriott) PB-001	Square D 1st Floor	Machine Room #3		480/277 Volts
DKM-ELEC-PB-002 Panelboard and Main Parking Deck (Marriott) PB-002	Square D 1st Floor	Machine Room #3		480/277 Volts Panelboard and Main
DKM-ELEC-PB-003 Panelboard and Main Parking Deck (Marriott) PB-003	Square D 1st Floor	Machine Room #3		480/277 Volts Panelboard and Main
DKM-ELEC-TRF-004 Power Transformer Parking Deck (Marriott) PTF-004	Eaton/Cutler-Hammer 1st Floor	Machine Room #3		
DKM-CVS-ELEV-001 Elevator Parking Deck (Marriott) Elevator-001	TAC 20 Thyssenkrupp Elevator 1st Floor	Elevator/Machine Room		Machine Room #1
DKM-CVS-ELEV-002 Elevator Parking Deck (Marriott) Elevator-002	TAC 20 Thyssenkrupp Elevator 1st Floor	Elevator/Machine Room		Machine Room #1
DKM-ELEC-PB-004 Panel Breaker Box Parking Deck (Marriott) PB-004	Square D 1st Floor	Machine Room #2		208/120 Volts Panel Breaker Box Machine Room #2
DKM-ELEC-PB-005 Panel Breaker Box Parking Deck (Marriott) PB-005	Square D 1st Floor	Machine Room #2		208/120 Volts
DKM-ELEC-SB-001 Main Breaker Switch Board Parking Deck (Marriott) MSB-001	Square D 1st Floor	Machine Room #2		408/277 Volts 3 Phase 4 Wire

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
DKM-ELEC-SB-002 Main Switchboard Parking Deck (Marriott) MSB-002	Square D 1st Floor	Machine Room #2		480/277 Volts
DKM-ELEC-SB-003 Main Switchboard Parking Deck (Marriott) MSB-003	Square D 1st Floor	Machine Room #2		480/277 Volts
DKM-ELEC-EPS-001 Emergency Power Generator Parking Deck (Marriott) EPS-001	060-6 CAT00C44TGLD00144 Caterpillar 1st Floor	1/1/2009 Caterpillar Exterior		125KW ATS: CAT MODEL #E00300030400N10C SERIEL #473002-009RE
DKUS-FLS-FAD-001 Control Pump for Main Fire Detection Parking Deck (Uptown Station) MFPC-001	LL-0291 Firetrol 1st Floor	Main Fire Pump Room		
DKUS-FLS-FAD-002 Main Fire & Detection Unit Parking Deck (Uptown Station) MFAD-001	4100 ES Simplex Grinnell 1st Floor	Boiler Room		
DKUS-FLS-FAD-003 Main Fire & Detection Control Board for Pump Parking Deck (Uptown Station) MFADCB-001	ATC300 Eaton/Cutler-Hammer 1st Floor	Main Fire Pump Room		
DKUS-ELEC-EVCS3-001 EV Charger Type 3 Parking Deck (Uptown Station) EVCS3-001	G.O.# SDCU111711 135797412 Eaton/Cutler-Hammer 2nd Floor	7/14/2012	7/13/2013 -381	Style #CDR2DX000000 IN 150 Amp 208 VAC 3 Phase 3 Wire OUT 125 Amp 400 VDC 3 Phase 3 Wire Max Ambient Temp 105 Deg. Charges in 45 min to 1 hr

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
DKUS-ELEC-EPS-001 Emergency Power Generator Parking Deck (Uptown Station) EPS-001	C9 Caterpillar 1st Floor	4/26/2012 Bus Terminal Area	4/26/2014 -94	250eKW, 313kVA 277/480 VOLT, 3Phase . 60Hz, 1800rpm
DKUS-ELEC-EVCS2-001 EV Charger Type 2 Parking Deck (Uptown Station) EVCS2-001	SDCU111711 135797105 Eaton/Cutler-Hammer 2nd Floor	7/14/2012 East Wall	7/13/2013 -381	IN 30 Amp 208/240 VAC 3 Phase 3 Wire OUT is same Charges in 12-16 hours Style #SBR3BX000000
DKUS-ELEC-EVCS2-002 EV Charger Type 2 Parking Deck (Uptown Station) EVCS2-002	SCDU111711 135797107 Eaton/Cutler-Hammer 2nd Floor	7/14/2012 East Wall	7/13/2013 -381	IN 30 Amp 208/240 VAC 3 Phase 3 Wire OUT is same Charges in 12-16 hours Style SBR3BX000000
DKUS-ELEC-EVCS2-003 EV Charger Type 2 Parking Deck (Uptown Station) EVCS2-003	SDCU111711 135797106 Eaton/Cutler-Hammer 2nd Floor	7/14/2012 East Wall	7/13/2013 -381	IN 30 Amp 208/240 VAC 3 Phase 3 Wire OUT is same Charges in 12-16 hours Style SBR3BX000000
DKUS-ELEC-EVCS2-004 EV Charger Type 2 Parking Deck (Uptown Station) EVCS2-004	SDCU111711 135797109 Eaton/Cutler-Hammer 2nd Floor	7/14/2012 East Wall	7/13/2013 -381	IN 30 Amp 208/240 VAC 3 Phase 3 Wire OUT is same Charges in 12-16 hours Style SBR3BX000000
DKUS-ELEC-EVCS2-005 EV Charger Type 2 Parking Deck (Uptown Station) EVCS2-005	SCDU111711 135797113 Eaton/Cutler-Hammer 2nd Floor	7/14/2012 East Wall	7/13/2013 -381	IN 30 Amp 208/240 VAC 3 Phase 3 Wire OUT is same Charges in 12-16 hours Style SBR3BX000000

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
DKUS-ELEC-SB-001 Main Disconnect Box Parking Deck (Uptown Station) TMSB-001	HC4250WP Square D 3rd Floor			480/277 VAC Main Breaker Box for Super Chargers 1 & 2
DKUS-ELEC-EVCS-TES-001A Tesla EV Charge Station Parking Deck (Uptown Station) EV-001A	3rd Floor	Tesla		No data info on individual Tesla charging stations
DKUS-ELEC-EVCS-TES-001B Tesla EV Charge Station Parking Deck (Uptown Station) EV-001B	Tesla 3rd Floor	Tesla		No data info on individual Tesla charging stations
DKUS-ELEC-EVCS-TES-002A Tesla EV Charge Station Parking Deck (Uptown Station) EV-002A	3rd Floor			No data info on individual Tesla charging stations.
DKUS-ELEC-EVCS-TES-002B Tesla EV Charge Station Parking Deck (Uptown Station) EV-002B	3rd Floor			No data info on individual Tesla charging stations.
DKUS-ELEC-EVCS-TES-001SUPER Tesla EV Super Charge Station Parking Deck (Uptown Station) EVSC-001	1020473-00-A T13D0000038 3rd Floor			In Voltage 200-480 VAC L-L In Current 280A@200-240 VAC 160A@480 VAC Phases 3Ph+Gnd@200-240VAC 3Ph+N+Gnd@480 VAC Output Voltage 50-410 VDC Output Current 210 Amps Max Continuous SuperCharger 120

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
DKUS-ELEC-EVCS-TES-002SUPER Tesla EV Super Charge Station Parking Deck (Uptown Station) EVSC-001	1020473-00-A T13D0000036 3rd Floor			In Voltage 200-480 VAC L-L In Current 280A@200-240 VAC 160A@480 VAC Phases 3Ph+Gnd@200-240VAC 3Ph+N+Gnd@480 VAC Output Voltage 50-410 VDC Output Current 210 Amps Max Continuous SuperCharger 120
PD-FLS-FAD-001 Main Fire Alarm System Police Department FAS-001	Simplex Grinnell Basement			Siemens Control Board Volts 120 Input 2 Amp Hz 60 24 Vac 3 Amp out
PD-ELEC-PTS-001 Main transfer switch Police Department TS-001	OTCU 125C B920448539 Onan Basement			Volts 120/208 Hz 60 Phase 3 Wire 4
PD-ELEC-SB-001 Switchboard Panel AVI–Disconnect switches Police Department SB-001	General Electric Basement	Electric/IT Room		Job# 5960643D01 Section Amps 800 Neutral Amps 800 3 Phase Volts 208/120 Hz 60 Sections 1 of 3 480 volts to SUC Disconnect Serial No A545895 Cat# QA-0833 DWG# M-49499
PD-ELEC-PB-001 Squared Breaker Panelboard Police Department PB-001	Cat# AQF3422MBX General Electric Basement	North wall of maintenance room		225 Amps Max Volts 120/208 3 Phase 4 Wire Class CTL A Series Panelboard
PD-ELEC-PB-002 Electrical Breaker Box A Series Board Police Department PB-002	AF49SN General Electric Basement	Electric/IT Room		Max Amps = 225 Volts = 208/120 3 Phase 4 Wire

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
PD-ELEC-PB-003 Electrical Breaker Box A Series Board Police Department PB-003	AF43SN General Electric Basement	Electric/IT Room		Max Amps = 125 Volts = 208/120 3 Phase 4 Wire
PD-PLUMB-SUMP-001 Sump Pit Pump Police Department MCSP-001	Basement	Maintenance Room		Volts = 115 NP 1/4
PD-ELEC-SDS-001 Disconnect and Start Panel AVI Police Department DSP-002	C472939 General Electric Basement	Electric/IT Room		Volts = 208y/120 Hz 60 4 Wire 800 Supply Amps
PD-ELEC-SDS-002 Disconnect and Start Panel AVI Police Department DSP-003	C472940 General Electric Basement	Electric/IT Room		Volts = 208y/120 Hz 60 4 Wire 800 Supply Amps
PD-PLUMB-WH-001 100 Gallon Self Clean Water Heater Police Department Water Heater-001	SBF100199NET7F F92753482 State Industries Inc Basement	Mechanical Room		115 Volts 12 Amps 100 Gallon
PD-PLUMB-HWCP-001 Booster/Circulation Pump Hot Water Police Department Circulation Pump-001	118844 (E30) Bell & Gossett Basement	Mechanical Room		Booster/Circulation Pump attached to water heater 1/3 HP

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
PD-MECH-PVEF-001 Exhaust Fan Police Department EF-001	4HX80A Greenheck Roof	East side of Roof		Motor = Marathon Electric (fan & blower) Model# CVF48517D2054LP Single Phase Type SS Thermal Protected Rotation CCW-OPE 95106910 Hz 60 HP 1/4 RPM - 1725 Volt 115 FLA 5.0 SF 1.35 SFA 5.5 Code P Belt size 4L180 10.5" belt
PD-MECH-PVEF-002 Exhaust Fan Police Department EFF-002	GB-90-4X-OD 92G06573 Greenheck Roof	Middle of roof		Motor Manuf. (GE) Motor Model# 5KH39QNA010 (AC Motor) Serial# OGJ HP 1/4 Hz 60 Volts 115 PH 1 RPM 1725 Code P A 5.0 SF 1.35 SFA 5.5 FR 48 Belt Size 4L180 10.5"
PD-MECH-PVEF-003 Exhaust Fan Police Department	GB-80-4-X 01A14288 Greenheck Roof	West Side Roof		Motor Manuf. Marathon Electric (fan & blower) Model#7QL48517D1281AP Single Phase Type SS Thermal Protected Rotation-CCW-OPE 95106910 Hz 60 HP 1/4 RPM 1725 Volt 115 FLA 5.0 SF 1.35 SFA 5.5 Code N Belt Size 3L 180/M18 or H18

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
PD-MECH-PVEF-004 Exhaust Fan Police Department EF-004	GB-80-4-X 01A14290 Greenheck Roof	West Side Roof		Motor Manuf. Marathon Electric (fan & blower) Model#7QL48517D1 281AP Single Phase Type SS Thermal Protected Rotation-CCW-OPE 95106910 Hz 60 HP 1/4 RPM 1725 Volt 115 FLA 5.0 SF 1.35 SFA 5.5 Code N Belt Size 3L 180 M18 H18
PD-MECH-PVEF-005 Exhaust Fan Police Department EF-005	GB-80-4-X 01A14289 Greenheck Roof	West Side Roof		Motor Manuf Marathon Electric (fan & blower) Model#7QL48S17D1 281AP Single Phase Type SS Thermal Protected Rotation-CCW-OPE- 95106910 Hz 60 HP 1/4 RPM 1725 Volt 115 FLA 5.0 SF 1.35 SFA 5.5 Code N Belt size 3L 180 M18 H18
PD-FLS-FS-SPKLR-001 Zone Domestic Water Fed Sprinkler System--Mechanically Activated Police Department Fire Sprinkler System 001	Automatic Fire Sprinkler, LLC Basement	Automatic Fire Sprinkler, LLC Mechanical Room		
PD-FLS-FS-CV-001 OF 002 Shut Off Control Valve Mechanical/Manual Police Department	OSY2 AVK Basement	Automatic Fire Sprinkler, LLC Mechanical Room		

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
PD-FLS-FS-CV-002 OF 002 Shut Off Control Valve Mechanical/Manual Police Department	OSY2 AVK Basement	Automatic Fire Sprinkler, LLC Mechanical Room		
PD-PLUMB-RPZ-001 RPZ Backflow Prevention Assembly Police Department BPA 001	(575) Size 4 Z19792 Wilkins Basement	Automatic Fire Sprinkler, LLC Maintenance Room		
PD-MECH-RTU-013 Roof Top Unit Package Heat/Cool Police Department RTU-013	YCD036C3L0AA G161431950 TRANE Roof	7/22/1992	7/22/1993 -7677	Filters x 3 Filter Size 20x25x1 65,000 BTU In 80,000 BTU Out 3 Tons Cooling Thermostat location: Chief's office Equipment Assessment needs minimal repair
PD-MECH-RTU-014 Roof Top Unit Package Heat/Cool Police Department RTU-014	YCD036C3LOAA G161431970 TRANE Roof	7/22/1992	7/22/1993 -7677	Filters x 2 Filter Size 20x25x1 65,000 BTU In 80,000 BTU Out 3 Tons Cooling Equipment Assessment needs minimal repair
PD-MECH-RTU-015 Package Heat/Cool Police Department RTU-015	YCD075C3LOAA G161433560 TRANE Roof	7/22/1992	7/22/1993 -7677	Filters x 2 Filter size 16x25x1 120,000 BTU In 96,000 BTU Out 6-1/2 Tons Cooling Belt driven 4L 470
PD-MECH-RTU-016 Package Heat/Cool Police Department RTU-016	D1NA036N07225C (S) NNJM156733 YORK Roof	7/22/1992	7/22/1993 -7677	Filters x 2 Washable 90,000 BTU 3 Tons Cooling Direct Drive Thermostat located: PD Library
PD-MECH-RTU-017 Package Heat/Cool Police Department RTU-017	D2NA060N11025C (S) NHJM115137 YORK Roof	8/15/2011	8/15/2012 -713	Filters x 2 Washable 135,000 BTU 5 Tons Cooling 5 Lbs 13 Oz R-22 2 Filters 10x11x1

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
PD-MECH-SPLT-COND-001 Split System Heat/Cool Police Department CU-005	TTA060A300BO F09208886 TRANE Roof			5 Tons Cooling 5-1/2 Ton A-Coil
PD-MECH-SPLT-COND-002 Split System Heat/Cool Police Department CU-006	TTA048A300A0 E14236411 TRANE Roof			4 Tons Cooling 4-1/2 Ton A-Coil
PD-MECH-SPLT-COND-003 Split System Heat/Cool Police Department CU-7	SSX160361BA 1101607284 Goodman Exterior	 SW Corner of Building		Recently purchased 3 tons Cooling 3-1/2 Ton A-Coil
PD-MECH-SPLT-FURN-001 Split System Heat/Cool Police Department Furnace-5	TUD120B960A0 F33550110 TRANE Basement	 Mechanical Room		120,000 BTU In Filter x 1 Filter Size 20x25x1
PD-MECH-SPLT-FURN-002 Split System Heat/Cool Police Department Furnace-6	TUD100B948AO F30545307 TRANE Basement	 Mechanical Room		100,000 BTU In Filter x 1 Filter Size 16x25x1
PD-MECH-SPLT-FURN-003 Split System Heat/Cool Police Department Furnace-7	GMVC950704CXAB 1101512923 Goodman Basement	 Mechanical Room		70,000 BTU/HR Filter x 1 Filter Size 20x25x1
PD-AD-LAUN-001 Washer/Dryer Stack Unit Combo Police Department Washer/Dryer Stack Unit-001	GTUP270EM4WW DA010232C General Electric Basement	7/14/2013 Mechanical Room		120/208 Volts 60 Hz 30 Amp Fuse
PD-ELEC-EPS-001 Emergency Power Generator Police Department	300 A GIL 09003076D4 Onan Other	1/1/1992 Exterior		ATS: ONAN MODEL # OTCU-125 C 29H SERIEL #B920448539
PD-TMP-ROOF-001 Roof System Police Department		7/1/2012		

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
PD-FINISH-CARPET-001 1st FLOOR CARPET Police Department	Glimmer 59329 Color - Gleam 27585 Shaw 1st Floor	Cushing Commercial Carpet MAIN FLOOR		Color - Gleam 27585 Lifetime Limited Warranty
PD-FINISH-CARPET-002 2nd FLOOR CARPET Police Department	2nd Floor	7/1/2005 Cushing Commercial Carpet		Traffic suggests replacement every 10 years
PD-FINISH-CARPET-000 Basement Police Department	Basement	7/1/2005		Traffic suggests replacement every 10 years
PD-MECH-AHU-005 Furnance Unit Police Department NO TAG ON FIELD	TUD100B948A0 F30545307 TRANE Roof	7/22/1992 Hardesty Heating and Ventilating ROOF	7/22/1993 -7677	Compressor Info : Model no:- TTA060A300B0 Serial no:- F09208386 60Hz Furnace additional info :- Filter Size :20*25*1 60Hz, 115v, (100,000)BTU Thermostat Location : Exercise Room Direct Drive .
PD-MECH-AHU-006 Furnance Unit Police Department NO TAG ON FIELD	TUD100B948A0 F30545307 TRANE Roof	7/22/1992 Hardesty Heating and Ventilating ROOF	7/22/1993 -7677	Furnace additional info: Direct Drive Filter Size: 16*25*1 Thermostat Location: Men's Locker room (100,000)BTU , 115V, 60Hz Compressor Info:- M/N -:TTA048A300A0 S/N-:.E14236411 60Hz.
PD-MECH-PVEF-006 Exhaust Fan Police Department EF 6	5KH39QNA010 OGJ General Electric Other	7/14/1992 ROOF	7/22/1993 -7677	60Hz.....1HP 115V..... 1725rpm

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
PD-MECH-PVEF-010 Exhaust Fan Police Department EF10	5KH39QNA010 N/A General Electric Other	7/14/1992 ROOF	7/14/1993 -7685	60Hz..... 1725rpm 115V.....1HP
PD-MECH-AHU-007 Furnance Unit Police Department NO TAG ON FIELD	GMVC950704CXAB 1101512923 Goodman Roof	7/14/1992	7/14/1993 -7685	Compressor Info:- M/N:- SSX160361BA S/N:- 1101607284 R-410A 10oz 3Ton Furnace additional info:- Filter size:- 20*25*1 Note: Filter hole was cut,so the filter is an over sized filter.
PD-MECH-PVEF-009 Exhaust Fan Police Department NO TAG ON FIELD	7QL48517D1281A N/A Marathon Electric Other	7/14/1992 N/A ROOF	7/14/1993 -7685	AMB= 40Degree Celsius 115V 60HZ 1HP
PD-MECH-PVEF-011 Exhaust Fan Police Department NO TAG ON FIELD	7QL48517D1281A N/A Marathon Electric Other	7/14/1992 N/A ROOF	7/22/1993 -7677	115V 60HZ 1HP
PD-PLUMB-WH-002 Water Heater Police Department NO TAG ON FIELD	SBF100:199WE17F 3A-1990 State Industries Inc Other	7/14/1992 STORAGE ROOM	7/14/1993 -7685	INPUT :- (199,900) BTU
TEC-VAC-UPR-004 SEBO (Blue) Automatic X5 Police Department	x5 Z5020443 1st Floor			12 Volts 60 Hz 12.0 amps find on 1st floor
TEC-VAC-UPR-005 Sebo (white) Automatic X1 Police Department	x1 R10018987 Basement			12 volts 60 Hz 6.8 amps
TEC-VAC-CDLS-003 Eureka Cordless Quick-Up Vac Police Department	96 Type D 0813-002527 6V 1st Floor			

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
TEC-VAC-CDLS-004 Hoover Link Cordless Stick Police Department	BH50010W HV18.0 18V 16J13BIP09A Hoover 1st Floor			Has a charger= Hoover BH 5005 120V Rev B
PD-MECH-RTU-005 Package Heat/Cool Police Department RTU-005	GCS16-060-120-1Y 5698H5454 Lennox Roof	East Corner Roof of Annex		5 Tons Cooling Filter Size 20x25x2 3 Filters Equipment Assessment is in good condition
PD-MECH-RTU-006 Package Heat/Cool Police Department RTU-006	PG8060G1HB L963290063 Comfortmaker Roof	West Corner of Roof of Annex		5 Tons of Cooling Filter Size 20x25x2 3 Filters Equipment Assessment is in good condition
PD-MECH-RTU-007 Package Heat/Cool Police Department RTU 007	YCD060C3L0AA G111433050 TRANE Roof	7/22/1992 Hardesty Heating and Ventilation	7/22/1993 -7677	5 Tons of Cooling Filter size 20x25x1 # of Filters = 2 Ref. R-22 90,000 BTU IN 75,000 BTU OUT
PD-MECH-RTU-008 Package Heat/Cool Police Department RTU 008	YCD060C3L0AA G111433070 TRANE Roof	7/22/1992	7/22/1993 -7677	5 Tons of Cooling Filter Size 20x25x1 90,000 BTU IN 75,000 BTU OUT Ref. R-22
PD-MECH-RTU-009 Package Heat/Cool Police Department RTU 009	YCD048C3L0AA G161432220 TRANE Roof	7/22/1992	7/22/1993 -7677	5 Tons of Cooling Filter Size 20x25x1 #of Filters = 2 90,000 BTU IN 75,000 BTU OUT Ref. R-22
PD-MECH-RTU-010 Package Heat/Cool Police Department RTU 010	YCD075C3L0AA G14142394D TRANE Roof	7/22/1992	7/22/1993 -7677	6-1/2 Tons of Cooling Filter Size 16x25x1 # of Filters 3 Ref. R-22 120,000 BTU IN 96,000 BTU OUT
PD-MECH-RTU-011 Package Heat/Cool Police Department RTU 011	YCD036C3LOAA G161432010 TRANE Roof	7/22/1992	7/22/1993 -7677	3 Tons of Cooling Filter size 20x25x1# of Filters = 2 Ref. R-22 80,000 BTU IN 65,000 BTU OUT

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
PD-MECH-RTU-012 Package Heat/Cool Police Department RTU 012	YCD048C3L0AA G161432290 TRANE Roof	7/22/1992	7/22/1993 -7677	3 Tons of Cooling Filter Size 20x25x1 # of Filters = 2 Ref. R-22 80,000 BTU IN 65,000 BTU OUT
TEC-FLMN-BURN-002 Buffer 1500 RPM Thoro Matic Public Works	P66sr221 26May04ak Imperial Electric			115 V 15 amps 50-60 Hz
TEC-FLMN-AUSC-001 Speed Scrub 1701 Plus (green) Public Works	P563G825 12JUL05AK			There is a charger that goes with this machine. Serial #260504497 Date Code: 26051711 24 VCD 33 amps
TEC-FLMN-AUSC-002 Ganson CT 70 (big grey) Public Works	CIT 70Bt70 8000110562 Ganson			3/25/08 when built Needs to be worked on. Does not vac up water w 1260 AMD 52.5 24 V
PW-MECH-ERV-003 ENERGY RECOVERY VENTILATOR Public Works ERV-003	HE1X1N 1080953C Renewaire Other	10/16/2008 Meister Heat & Cool Inc upper level mechanical area		208/230V 2 motors @0.75HP 15 amp fuse Coil 24 volts Coil Power Requirement In rush Current :- 56VA Sealed Current :- 7VA
PW-MECH-ERV-002 ENERGY RECOVERY VENTILATOR Public Works ERV-002	HE2X1N 108 0952C Renewaire Other	10/16/2008 Meister Heat & Cool Inc Upper Level Mechanical Area		VOLTAGE :- 208-230V 2.0HP SO # :- 017601
PW-MECH-ERV-001 ENERGY RECOVERY VENTILATOR Public Works ERV-001	Renewaire Other	10/16/2008 Meister Heat & Cool Inc Upper Level Mechanical Area		120V / 60Hz /1Phase Unit is considerably smaller than ERV #2 & #3. There is no model # or Serial # to capture.

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
PW-PLUMB-WH-001 50 Gal Water Heater (Gas) Public Works WH-001	PGC350-199-3NV 0824T400496 Polaris Other	10/16/2008 N/A Room with Attic Access Ladder		50 U.S Gallon (Capacity) 185 F :- Outlet Temp
PW-MECH-AHU-001 Furnance Unit Public Works NO TAG ON FIELD	4TXCC060BC3HCAA 8335H7G5G TRANE Other	10/16/2008 Meister Heating & A/C Upper Level Mechanical Area		Compressor Unit Information PW-HVAC-CU 001 Model Number:- 4TTA3060A3000AA Serial Number:- 84328LL2F Manufacturer:-Trane Date Placed:- 10/16/2008 Location:-N/E OUTSIDE OF BUILDING 60HZ/3HP/ (200-230V)
PW-MECH-AHU-002 Furnance Unit Public Works NO TAG ON FIELD	4TXCC060BC3HCAA 8335JBE5G TRANE Other	10/16/2008 Meister Heating & A/C Upper Level Mechanical Area		Compressor Unit Information PW-HVAC-CU 002 Model Number:- 4TTA3060A3000AA Serial Number:- 8402RWD2F Manufacturer:-Trane Supplier:-Meister Heating & A/C Date Placed :- 10/16/2008 Location Situated :- N/E OUTSIDE OF BUILDING 60Hz /3HP /(200-230V)
PW-MECH-RTU-002 Package Heat/Cool Public Works RTU-002	YSC092E3RM-AOED0000001A0 8391600164L TRANE Exterior	10/16/2008 N/A N/E OUTSIDE OF BUILDING		ELECTRICAL RATING 208-230V / 60Hz / 3HP
PW-MECH-RACU-001 Room A/C Unit Public Works NO TAG ON FIELD	CL 1271 0043581 Sanyo Other	10/16/2008 N/A N/E OUTSIDE OF BUILDING		SERVES THE COMPUTER ROOM
TEC-VAC-UPR-001 Upright Vac - Blue Public Works	X4 P4027968			120V 6 Hz 12 amps

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
PW-MECH-AC-001 Air Compressor Public Works AC-001	CASRSA23, HR10-12 C062639 Champion Other	 New Garage		10 HP Motor 230 Volts RPM 1765 Frame 215T
PW-MECH-AC-002 Air Compressor Public Works AC-002	CASRSA23, HR 10-12 D062640 Champion Other	 New Garage		10 HP Motor 230 Volts RPM 1765 Frame 215T
PW-ELEC-EVCS2-001 EV Charger Type 2 Public Works EVCS-001	SDCU030711 135793587 Eaton/Cutler-Hammer Exterior	10/16/2010 Eaton Public Parking Area		EVCS Type 2 Charge System Style SBC3BX000000 INPUT RATING OUTPUT RATING 30AMP 208/240V 60Hz
PW-PLUMB-HWCP-001 Pump to Circulate Hot Water Public Works HWCP-001	007-BF5 Taco Other	 Room with Attic Access Ladder		HP 1/25 .76 Amp RPM 3250 Volts 115
PW-MECH-SPLT-COND-001 Split System Heat/Cool Public Works SPLT COND-001	4TTA3048A3000AA 8402RWDF2F TRANE Exterior	 Meister Heat & Cool Inc Outside next to break table		
PW-MECH-SPLT-COND-002 Split System Heat/Cool Public Works SPLT COND-002	4TTA3060A3000AA 84328LL2F TRANE Exterior	 Meister Heat & Cool Inc Outside next to break table		5 Tons Cooling
PW-MECH-SPLT-COND-003 Split System Condenser Cooling Only--Cools IT Room Public Works SPLT COND-003	KS1271 01315 81 Sanyo Exterior			Appears to be 1 ton of cooling Split System AC only Cools IT Room
PW-MECH-SPLT-FURN-001 Split System Heat/Cool Public Works SPLT FURN-001	TUX1C080A9601AB 8072TLB7G TRANE Other	 Meister Heat & Cool Inc Attic		

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
PW-MECH-SPLT-FURN-002 Split System Heat/Cool Public Works SPLT FURN-002	TUX1C080A9601AB 8071TRW7G TRANE Other	Meister Heat & Cool Inc Attic		
PW-ELEC-PB-001 Panel Breaker Box Type 1 Enclosure Public Works PB-001	NC38S LLCD0828NC38S-25 Square D Other	Garage Area		Panel Breaker Box 208/120 Volts 3 Phase 4 Wire
PW-ELEC-PB-002 Panel Breaker Box Public Works PB-002	NC38S LLCD08028NC38S-25 Square D Other	Garage Area		208/120 Volts 3 Phase 4 Wire
PW-ELEC-PB-003 Panel Breaker Box Public Works PB-003	NC38S LLCD0828NC38S-25 Square D Other	Room with Attic Access Ladder		208/120 Volts 3 Phase 4 Wire
PW-ELEC-PB-004 Panel Breaker Box Public Works PB-004	NC38S LLCD0828NC38S-25 Square D Other	Garage Area		208/120 Volts 3 Phase 4 Wire
PW-ELEC-SB-001 Main Disconnect Panel Public Works MSB-001	HCM73TSD LLCD0906HCM73TSDM Square D Other	Garage Area		Main Switchboard/Disconnect Panel for all other panels and RTU
PW-MECH-RTU-001 Package Heat/Cool Public Works RTU-001	YSC092E3RMAOEDIAO 839100164L TRANE Exterior	South wall next to Break Area		7.5 Tons Cooling 150,000 BU 208/230 Volts REF R-22
PW-MECH-HTU-001 Hanging Heater Unit Public Works HH-001	Reznor Office	Old Garage		Name: Marathon Electric Motor Model #IM4VBA11T162D RPM 1100 1/4 HP 115 Volts Gas Application

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
PW-MECH-HTU-002 Hanging Heater Unit Public Works HH-002	Reznor Office	Old Garage		Name: Marathon Electric Motor Model #IM4VBA11T162D RPM 1100 1/4 HP 115 Volts Gas Application No data info to gather. These units are old however told they work well.
PW-MECH-HTU-003 Hanging Heater Unit Public Works HH-003	Reznor Office	Old Garage		Name: Marathon Electric Motor Model #IM4VBA11T162D RPM 1100 1/4 HP 115 Volts Gas Application No data info to gather. These units are old however told they work well.
PW-MECH-HTU-004 Hanging Heater Unit Public Works HH-004	Reznor Office	Old Garage		Name: Marathon Electric Motor Model #IM4VBA11T162D RPM 1100 1/4 HP 115 Volts Gas Application No data info to gather. These units are old however told they work well.
PW-MECH-HTU-005 Hanging Heater Unit Public Works HH-005	Reznor Office	Old Garage		Name: Marathon Electric Motor Model #IM4VBA11T162D RPM 1100 1/4 HP 115 Volts Gas Application No data info to gather. These units are old however told they work well.

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
PW-MECH-HTU-006 Hanging Heater Unit Public Works HH-006	Reznor Office	Old Garage		Name: Marathon Electric Motor Model #IM4VBA11T162D RPM 1100 1/4 HP 115 Volts Gas Application No data info to gather. These units are old however told they work well.
PW-MECH-HTU-007 Hanging Heater Unit Public Works HH-007	Reznor Office	Old Garage		Name: Marathon Electric Motor Model #IM4VBA11T162D RPM 1100 1/4 HP 115 Volts Gas Application No data info to gather. These units are old however told they work well.
PW-MECH-PVEF-001 Power Vent/Exhaust Fan Public Works EF-001	180 SP 10D 177SC31336-00/0002701 COOK Other	Compressor Room New Garage		HP 0.333 115 Volts Phase 1 RPM 1050
PW-MECH-IH-001 Large Horizontal Industrial Heater Public Works IH-001	RAM#30 Rupp Air Systems Other	Meister Heat & Cool Inc New Garage		Large Horizontal Industrial Heater only. No cooling. Never really used hence the longevity. 25 HP Motor Volts 208 3 Phase 2,211,840 BTU Gas
PW-MECH-PVEF-002 Exhaust Fan Public Works EF-002	Other	Old Garage		Fans are old No data info 115 Volts 1/4 HP Motor
PW-MECH-PVEF-003 Exhaust Fan Public Works EF-003	Other	Old Garage		Fans are old No data info 115 Volts 1/4 HP Motor

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
PW-MECH-PVEF-004 Exhaust Fan Public Works EF-004	Other	Old Garage		Fans are old No data info 115 Volts 1/4 HP Motor
PW-MECH-PVEF-005 Exhaust Fan Public Works EF-005	Other	Old Garage		Fans are old No data info 115 Volts 1/4 HP Motor
PW-MECH-IRH-001 Unit heater with radiant tube heat Public Works RTH-001	DES3-20-75N Re-Verber-Ray Other	Old Garage		75,000 BTU Radiant Tube Heater The cost of $600 is heat unit only, not tube.
PW-MECH-IRH-002 Unit heater with radiant tube heat Public Works RTH-002	DES3-20-75N Re-Verber-Ray Other	Old Garage		75,000 BTU Radiant Tube Heater The cost of $600 is heat unit only, not tube.
PW-MECH-IRH-003 Unit heater with radiant tube heat Public Works RTH-003	DES3-20-75N Re-Verber-Ray Other	Old Garage		75,000 BTU Radiant Tube Heater The cost of $600 is heat unit only, not tube.
PW-MECH-IRH-004 Unit heater with radiant tube heat Public Works RTH-004	DES3-20-75N Re-Verber-Ray Other	Old Garage		75,000 BTU Radiant Tube Heater The cost of $600 is heat unit only, not tube.
PW-MECH-IRH-005 Unit heater with radiant tube heat Public Works RTH-005	DES3-20-75N Re-Verber-Ray Other	Old Garage		75,000 BTU Radiant Tube Heater The cost of $600 is heat unit only, not tube.
PW-MECH-IRH-006 Unit heater with radiant tube heat Public Works RTH-006	DES3-20-75N Re-Verber-Ray Other	Old Garage		75,000 BTU Radiant Tube Heater The cost of $600 is heat unit only, not tube.
PW-MECH-IRH-007 Unit heater with radiant tube heat Public Works RTH-007	DES3-20-75N Re-Verber-Ray Other	Old Garage		75,000 BTU Radiant Tube Heater The cost of $600 is heat unit only, not tube.

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
PW-MECH-IRH-008 Unit heater with radiant tube heat Public Works RTH-008	DES3-20-75N Re-Verber-Ray Other	Old Garage		75,000 BTU Radiant Tube Heater The cost of $600 is heat unit only, not tube.
PW-MECH-IRH-009 Unit heater with radiant tube heat Public Works RTH-009	DES3-20-75N Re-Verber-Ray Other	Old Garage		75,000 BTU Radiant Tube Heater The cost of $600 is heat unit only, not tube.
PW-MECH-IRH-010 Unit heater with radiant tube heat Public Works RTH-010	DES3-20-75N Re-Verber-Ray Other	Old Garage		75,000 BTU Radiant Tube Heater The cost of $600 is heat unit only, not tube.
PW-AD-DRINK-001 Drinking Fountain Public Works DF-001	EZFSTL81C 080729726 ELKAY Hallway/Corridor	Main Hallway		115 Volts 5.0 Amps Ref 134A 4.10 oz
PW-AD-DRINK-002 Drinking Fountain Public Works DF-002	EZFSTL81C 080729727 ELKAY Hallway/Corridor	Main Hallway		115 Volts 5.0 Amps Ref 134A 4.10 oz
PW-AD-DRINK-003 Drinking Fountain Public Works DF-003	EZFSTL81C 080729728 ELKAY Other	New Garage		115 Volts 5.0 Amps Ref 134A 4.10 oz
PW-FLS-FAD-001 Main Fire Alarm Head Unit Public Works FAD-001	Fire Shield Hallway/Corridor	Employee Entrance		
PW-MECH-HTU-008 Hanging Heater Unit Public Works HH-008	Reznor Other	Old Garage		115 Volts HP 1/4 RPM 1,100
PW-MECH-HTU-009 Hanging Heater Unit Public Works HH-009	Reznor 1st Floor	Parts Dept		115 Volts HP 1/4 Fairly new unit

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
PW-AD-REFRIG-001 Refrigerator Public Works REF-001	TBX21JABRRWW DZ537391 General Electric 1st Floor	Break Room		115 Volts 7.0 Amps REF R134A 4.75 oz
PW-AD-REFRIG-002 Refrigerator Public Works REF-002	GTS22QBPARWW HF301058 General Electric 1st Floor	Break Room		115 Volts 11.6 Amps REF R134A 4.5 oz
US-PLUMB-BPUMP-001 Duplex Booster Pump System Uptown Station 3471786376A	Intellipump II Job# 34717 Metropolitan Industries Inc. 1st Floor	7/14/2012 G.A. Rich and Sons Boiler Room	7/13/2013 -381	480V 3 HP
US-MECH-PVEF-001 Direct Drive Exhaust Fan Uptown Station EF-1	DCRD 120 BAL F11-000000046138 Twin City Other	7/14/2012 Mid Illinois Mechanial Roof	7/13/2013 -381	115V 8A 1/2 HP Replacement Parts: www.tcf.com (888) 444-4823
US-MECH-PVEF-002 Direct Drive Exhaust Fan Uptown Station EF-2	DCRD 180 BAL F11-000000046139 Twin City Other	7/14/2012 Mid Illinois Mechanial Roof	7/13/2013 -381	115V 9.7A 1 HP Replacement Parts: www.tcf.com (888) 444-4823
US-MECH-PVEF-003 Direct Drive Exhaust Fan Uptown Station EF-3	DCRD 130 BAL F11-000000046140 Twin City Other	7/14/2012 Mid Illinois Mechanial Roof	7/13/2013 -381	115V 7.9A 1/2 HP Replacement Parts: www.tcf.com (888) 444-4823
US-MECH-PVEF-004 Belt Drive Exhaust Fan Uptown Station EF-4	DCRD 130 BAL F11-000000046074 Twin City 1st Floor	7/14/2012 Mid Illinois Mechanial Bus Staging Area - High Mount	7/13/2013 -381	Replacement Parts: www.tcf.com (888) 444-4823
US-MECH-PVEF-005 Belt Drive Exhaust Fan Uptown Station EF-5	DCRD 130 BAL F11-000000046210 Twin City 1st Floor	7/14/2012 Mid Illinois Mechanial Boiler Room	7/13/2013 -381	Belt - 4L260 Replacement Parts: www.tcf.com (888) 444-4823

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
US-MECH-BOIL-001 Primary Heating Boiler Uptown Station BLR-1	N-1500-MFD FY10-11 35293 Harsco 1st Floor	7/14/2012 G.A. Rich and Sons Boiler Room	7/13/2013 -381	1,275,000 BTU/HR MAX OUTPUT 208/230V 12A STATE REGISTRATION # BIO9139
US-MECH-BOIL-002 Heating Boiler Uptown Station BLR-2	N-1500-MFD FY10-11 35277 Harsco 1st Floor	7/14/2012 G.A. Rich and Sons Boiler Room	7/13/2013 -381	1,250,000 BTU/HR MAX OUTPUT 208/230V 12A STATE REGISTRATION # BIO9140
US-MECH-BOIL-003 Heating Boiler Uptown Station BLR-3	N-1000-MFD FY10-11 35148 Harsco 1st Floor	7/14/2012 G.A. Rich and Sons Boiler Room	7/13/2013 -381	850,000 BTU/HR MAX OUTPUT 208/230V 12A STATE REGISTRATION # BIO9141
US-PLUMB-RPZ-001 Domestic Water Main RPZ Uptown Station	375-A X18144 Zurn Wilkins 1st Floor	4/12/2012 G.A. Rich and Sons Boiler Room	4/11/2013 -474	Serves 4" water line.
US-PLUMB-RPZ-002 Boiler Make-up Water RPZ Uptown Station	975 XL 3509008 Zurn Wilkins 1st Floor	4/12/2012 G.A. Rich and Sons Boiler Room	7/13/2013 -381 990.0000 Units	
US-PLUMB-HWCP-001 Heating Water Supply Pump Uptown Station HWP-1	344A-BF 11-2092764-1 Aurora 1st Floor	7/14/2012 G.A. Rich and Sons Boiler Room	7/13/2013 -381	230 GPM Size - 2.5x3x9
US-PLUMB-HWCP-002 Heating Water Supply Pump Uptown Station HWP-1	344A-BF 11-2092764-2 Aurora 1st Floor	7/14/2012 G.A. Rich and Sons Boiler Room		230 GPM Size - 2.5x3x9
US-PLUMB-HWCP-003 Heating Water Return Circ. Pump Uptown Station CP-1	6D C128225-01 D11 Bell & Gossett 1st Floor	7/14/2012 G.A. Rich and Sons Boiler Room	7/13/2013 -381	85 GPM 1.5HP 1800 RPM Motor Part # - 903574

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
US-PLUMB-HWCP-004 Heating Water Return Circ. Pump Uptown Station CP-2	6D C128225-02 D11 Bell & Gossett 1st Floor	7/14/2012 G.A. Rich and Sons Boiler Room	7/13/2013 -381	85 GPM 1.5HP 1800 RPM Motor Part # - 903574
US-PLUMB-HWCP-005 Heating Water Return Circ. Pump Uptown Station CP-2	6D C128226-01 D11 Bell & Gossett 1st Floor	7/14/2012 G.A. Rich and Sons Boiler Room	7/13/2013 -381	55 GPM 1HP 1800 RPM
US-MECH-HTU-UH-006 Hydronic Unit Heater Uptown Station UH-6	RH047H015AC 111021010 Rittling/Hydro Air Components Inc. 1st Floor	7/14/2012 Mid Illinois Mechanial Boiler Room North Unit	7/13/2014 -16	1/15 HP 115 V .72 A
US-MECH-HTU-UH-008 Hydronic Unit Heater Uptown Station UH-6	RH047H015AC 110920027 Rittling/Hydro Air Components Inc. 1st Floor	7/14/2012 Mid Illinois Mechanial Boiler Room South Unit	7/13/2014 -16	1/15 HP 115 V .72 A
US-MECH-RTU-001 RTU Serving Transportation Center Uptown Station RTU-1	FWB604/DJE100/O DK 6026 RTU-1 Engineered Air Other	7/14/2012 Mid Illinois Mechanial Roof North Unit	7/13/2013 -381	BELTS: Supply Fan - (3) 5V-1060 Return Fan - (3) B-86 Exhaust Fan - (1) A-54 FILTERS: (460 FPM / MERV 13<) (8) 25x20x2 (16) 20x20x2 520,000 BTU R-407C Refrigerant
US-MECH-RTU-002 RTU Serving 2nd and 3rd Floors Uptown Station RTU-2	FWB755/DJE100/O DK 6026 RTU-2 Engineered Air Other	7/14/2012 Mid Illinois Mechanial Roof South Unit	7/13/2013 -381	BELTS: Supply Fan - (3) B-128 Return Fan - (3) B-100 Exhaust Fan - (1) B-74 FILTERS: (390 FPM / MERV 13<) (8) 20x16x2 (28) 20x20x2 600,000 BTU R-407c Refrigerant

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
US-MECH-RTU-003 RTU Serving 4th Floor Uptown Station RTU-3	FWB604/DJE100/O DK 6026 RTU-3 Engineered Air Other	7/14/2012 Mid Illinois Mechanial Roof Center Unit	7/13/2013 -381	BELTS: Supply Fan - (3) B-104 Return Fan - (3) B-90 Exhaust Fan - (1) B-60 FILTERS: (420FPM / MERV 13<) (8) 25x20x2 (16) 20x20x2 520,000 BTU R-407C Refrigerant
US-PLUMB-HWCP-006 Domestic Hot Water Circ Pump Uptown Station CP-4	009-SF5 N/A Taco 1st Floor	7/14/2012 G.A. Rich and Sons Mechanical Room (MMTC)	7/13/2013 -381	115 V 1.4 A 1/8 HP 3250 RPM
US-MECH-HTU-UH-002 Hydronic Unit Heater Uptown Station UH-2	 Rittling/Hydro Air Components Inc. 1st Floor	7/14/2012 Mid Illinois Mechanial Fire Pump Mechanical Room	7/13/2014 -16	1/15 HP 115 V .72 A
US-MECH-PVEF-006 Direct Drive Exhaust Fan Uptown Station EF-6	WPD-E-14E4-24 F11-000000046211 Twin City 1st Floor	7/14/2012 Mid Illinois Mechanial Fire Pump Mechanical Room	7/13/2013 -381	Replacement Parts: www.tcf.com (888) 444-4823
US-PLUMB-RPZ-003 8' Sprinkler System Main Uptown Station RPZ-3	909 08136 Watts 1st Floor	4/12/2012 G.A. Rich and Sons Fire Pump Mechanical Room	 Units	
US-PLUMB-RPZ-004 3/4' Sprinkler Main RPZ Bypass Line Uptown Station RPZ-4	909QT 608547 Watts 1st Floor	3/6/2012 G.A. Rich and Sons Fire Pump Mechanical Room	 9999.7300 Units	
US-PLUMB-WH-001 Water Heater Uptown Station WH-1	BTH 250A 100 1142M000799 A.O. Smith 1st Floor	7/14/2012 Mechanical Room (MMTC)	7/13/2013 -381	Natural Gas Unit State Reg. # - B109142

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
US-MECH-HTU-EUH-001B ELECTRIC UNIT HEATER Uptown Station EUH-1B	P3P5105CA1N N/A TPI CORPORATION Stairway	7/14/2012 STAIR C LEVEL 1	7/13/2013 -381	VOLT=480V 5.0KW AMP=61.8 THERMOSTAT=A61 76 MOUNTING BRACKET=A5105
US-MECH-HTU-EUH-001D ELECTRIC UNIT HEATER Uptown Station EUH-1D	P3P5105CA1N N/A TPI CORPORATION Stairway	7/14/2012 STAIR C LEVEL 2	7/13/2013 -381	480V 5.0KW PHASE=3 61.8AMP
US-MECH-HTU-EUH-001F ELECTRIC UNIT HEATER Uptown Station EUH-1F	P3P5105CA1N N/A TPI CORPORATION Stairway	7/14/2012 STAIR C LEVEL 3	7/13/2013 -381	480V 5.0KW PHASE=3 61.8AMP
US-MECH-HTU-EUH-001H ELECTRIC UNIT HEATER Uptown Station EUH-1H	P3P5105CA1N N/A TPI CORPORATION Stairway	7/14/2012 STAIR C LEVEL 4	7/13/2013 -381	480V 5.0KW 61.8 AMP PHASE = 3
US-MECH-HTU-EUH-001J ELECTRIC UNIT HEATER Uptown Station EUH-1J	P3P5105CA1N N/A TPI CORPORATION Stairway	7/14/2012 STAIR C LEVEL 5	7/13/2013 -381	480V 5.0KW 61.8 AMP PHASE = 3
US-MECH-HTU-EUH-001A ELECTRIC UNIT HEATER Uptown Station EUH-1A	P3P5105CA1N N / A TPI CORPORATION Stairway	7/14/2012 STAIR D LEVEL 1	7/13/2013 -381	480V 5.0KW 61.8 AMP PHASE = 3
US-MECH-HTU-EUH-001C ELECTRIC UNIT HEATER Uptown Station EUH-1C	P3P5105CA1N N / A TPI CORPORATION Stairway	7/14/2012 STAIR D LEVEL 2	7/13/2013 -381	480V 5.0KW 61.8 AMP PHASE = 3
US-MECH-HTU-EUH-001E ELECTRIC UNIT HEATER Uptown Station EUH-1E	P3P5105CA1N N/A TPI CORPORATION Stairway	7/14/2012 STAIR D LEVEL 3	7/13/2013 -381	480V 5.0KW 61.8 AMP PHASE = 3
US-MECH-HTU-EUH-001G ELECTRIC UNIT HEATER Uptown Station EUH-1G	P3P5105CA1N N/A TPI CORPORATION Stairway	7/14/2012 STAIR D LEVEL 4	7/13/2013 -381	480V 5.0KW 61.8 AMP PHASE = 3

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
US-MECH-HTU-EUH-001I ELECTRIC UNIT HEATER Uptown Station EUH-1I	P3P5105CA1N N/A TPI CORPORATION Stairway	7/14/2012 STAIR D LEVEL 5	7/13/2013 -381	480V 5.0KW 61.8 AMP PHASE = 3
US-MECH-HTU-CAB-002A CABINET HEATER Uptown Station NO TAG ON FIELD	11817023152A 0307016599 Rittling/Hydro Air Components Inc. Stairway	7/14/2012 Mid Illinois Mechanial STAIR B LEVEL 1	7/13/2013 -381	SUPPLY VOLTAGE : 120/60/1 MOTOR VOLTAGE : 120/60/1 1/25Hp
US-MECH-HTU-CAB-002B CABINET HEATER Uptown Station NO TAG ON FIELD	11817023152A 0307016602 Rittling/Hydro Air Components Inc. Stairway	7/14/2012 Mid Illinois Mechanial STAIR A LEVEL 1	7/13/2013 -381	SUPPLY VOLTAGE : 120/60/1 MOTOR VOLTAGE : 120/60/1 1/25Hp
US-MECH-HTU-CAB-002C CABINET HEATER Uptown Station NO TAG ON FIELD	11817023152A 0307016603 Rittling/Hydro Air Components Inc. Stairway	7/14/2012 Mid Illinois Mechanial STAIR B LEVEL 2	7/13/2013 -381	SUPPLY VOLTAGE : 120/60/1 MOTOR VOLTAGE : 120/60/1 1/25Hp
US-MECH-HTU-CAB-002D CABINET HEATER Uptown Station NO TAG ON FIELD	11817023152A 037016600 Rittling/Hydro Air Components Inc. Stairway	7/14/2012 Mid Illinois Mechanial STAIR B LEVEL 3	7/13/2013 -381	SUPPLY VOLTAGE : 120/60/1 MOTOR VOLTAGE : 120/60/1 1/25Hp
US-MECH-HTU-CAB-002E CABINET HEATER Uptown Station NO TAG ON FIELD	11817023152A 0307016601 Rittling/Hydro Air Components Inc. Stairway	7/14/2012 Mid Illinois Mechanial STAIR B LEVEL 4	7/13/2013 -381	SUPPLY VOLTAGE : 120/60/1 MOTOR VOLTAGE : 120/60/1 1/25Hp
US-MECH-HTU-CAB-003A CABINET HEATER Uptown Station NO TAG ON FIELD	11817019295A 0307015130 Rittling/Hydro Air Components Inc. Stairway	7/14/2012 Mid Illinois Mechanial STAIR A LEVEL 2	7/13/2013 -381	SUPPLY VOLTAGE : 120/60/1 MOTOR VOLTAGE : 120/60/1 1/15Hp
US-MECH-HTU-CAB-003B CABINET HEATER Uptown Station NO TAG ON FIELD	11817019295A 0307015129 Rittling/Hydro Air Components Inc. Stairway	7/14/2012 Mid Illinois Mechanial STAIR A LEVEL 3	7/13/2013 -381	SUPPLY VOLTAGE : 120/60/1 MOTOR VOLTAGE : 120/60/1 1/15Hp
US-MECH-HTU-CAB-003C CABINET HEATER Uptown Station NO TAG ON FIELD	11817019295A 0307015128 Rittling/Hydro Air Components Inc. Stairway	7/14/2012 Mid Illinois Mechanial STAIR A LEVEL 4	7/13/2013 -381	SUPPLY VOLTAGE : 120/60/1 MOTOR VOLTAGE : 120/60/1 1/15Hp

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
US-MECH-HTU-RAD-001A RADIATION PANEL Uptown Station NO TAG ON FIELD	PR2F4 Rittling/Hydro Air Components Inc. Other	7/14/2012 RUNTAL GROUND FLOOR WAITING AREA	7/13/2017 1080	AVERAGE WATER TEMP =165F 15'-6"
US-MECH-HTU-RAD-002A RADIATION PANEL Uptown Station NO TAG ON FIELD	PR2F4 Rittling/Hydro Air Components Inc. Other	7/14/2012 Mid Illinois Mechanial GROUND FLOOR WAITING AREA	7/13/2017 1080	AVERAGE WATER TEMP =165F 8'6"
US-MECH-HTU-RAD-002B RADIATION PANEL Uptown Station NO TAG ON FIELD	PR2F4 Rittling/Hydro Air Components Inc. Other	7/14/2012 Mid Illinois Mechanial GROUND FLOOR WAITING AREA	7/13/2017 1080	AVERAGE WATER TEMP =165F 8'6"
US-MECH-HTU-RAD-003A RADIATION PANEL Uptown Station NO TAG ON FIELD	Rittling/Hydro Air Components Inc. Other	7/14/2012 Mid Illinois Mechanial GROUND FLOOR WAITING AREA	7/13/2017 1080	AVERAGE WATER TEMP =165F 5'3"
US-MECH-HTU-RAD-003B RADIATION PANEL Uptown Station NO TAG ON FIELD	PR2F4 Rittling/Hydro Air Components Inc. Other	7/14/2012 Mid Illinois Mechanial GROUND FLOOR WAITING AREA	7/13/2017 1080	AVERAGE WATER TEMP =165F 5'3"
US-MECH-HTU-RAD-003C RADIATION PANEL Uptown Station NO TAG ON FIELD	PR2F4 Rittling/Hydro Air Components Inc. Other	7/14/2012 Mid Illinois Mechanial GROUND FLOOR WAITING AREA	7/13/2017 1080	AVERAGE WATER TEMP =165F 5'3"
US-MECH-HTU-RAD-003D RADIATION PANEL Uptown Station NO TAG ON FIELD	PR2F4 Rittling/Hydro Air Components Inc. Other	7/14/2012 Mid Illinois Mechanial GROUND FLOOR WAITING AREA	7/13/2017 1080	AVERAGE WATER TEMP =165F 5'3"
US-MECH-HTU-RAD-003E RADIATION PANEL Uptown Station NO TAG ON FIELD	PR2F4 Rittling/Hydro Air Components Inc. Other	7/14/2012 Mid Illinois Mechanial GROUND FLOOR WAITING AREA	7/13/2017 1080	AVERAGE WATER TEMP =165F 5'3"

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
US-MECH-HTU-RAD-003F RADIATION PANEL Uptown Station NO TAG ON FIELD	PR2F4 Rittling/Hydro Air Components Inc. Other	7/14/2012 Mid Illinois Mechanial GROUND FLOOR WAITING AREA	7/13/2017 1080	AVERAGE WATER TEMP =165F 5'3"
US-MECH-HTU-ACR-001 AIR CURTAIN (STAINLESS STEEL AIR CURTAIN) Uptown Station ACR 1	TSD-2-96HW N/A POWERED AIR 1st Floor	7/14/2012 Mid Illinois Mechanial	7/13/2013 -381	VOLTAGE = 480/3/60 MOTOR= 2@ 3HP TEMP =180F
US-MECH-HTU-CAB-001A CABINET HEATER Uptown Station CAB-1A	11817028111A 0307017453 Rittling/Hydro Air Components Inc. 1st Floor	7/14/2012 Mid Illinois Mechanial	7/13/2013 -381	DATE OF MANUFACTURE = 05/08/2012
US-MECH-HTU-CAB-001B CABINET HEATER Uptown Station NO TAG ON FIELD	11817028111A 0307017455 Rittling/Hydro Air Components Inc. 1st Floor	7/14/2012 Mid Illinois Mechanial	7/13/2013 -381	
US-MECH-HTU-CAB-001C CABINET HEATER Uptown Station NO TAG ON FIELD	11817028111A 0307017453 Rittling/Hydro Air Components Inc. 1st Floor	7/14/2012 Mid Illinois Mechanial	7/13/2013 -381	
US-MECH-HTU-CAB-001D CABINET HEATER Uptown Station NO TAG ON FIELD	11817028111A 0307017455 Rittling/Hydro Air Components Inc. 1st Floor	7/14/2012 Mid Illinois Mechanial	7/13/2013 -381	
US-MECH-HTU-CAB-001E CABINET HEATERS Uptown Station NO TAG ON FIELD	11817028111A 0307017453 Rittling/Hydro Air Components Inc. 1st Floor	7/14/2012 Mid Illinois Mechanial Lobby Area	7/13/2013 -381	
US-DW-AED-001 AUTOMATIC ENTRANCE DOOR Uptown Station NO TAG ON FIELD	99E00100B09V01 BNC1056370 BESAM ASSA/ABLOY 1st Floor	7/14/2012 DOOR CONTROLS INC 105-A	7/13/2014 -16	12VDC 100%ED
US-DW-ADA-001A AUTOMATIC DOOR (ADA) Uptown Station NO TAG ON FIELD	939D BNC1011976 BESAM ASSA/ABLOY 1st Floor	7/14/2012 DOOR CONTROLS INC 105-A	7/13/2014 -16	120 V.A.C 60HZ 75W

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
US-DW-ADA-001B AUTOMATIC DOOR (ADA) Uptown Station NO TAG ON FIELD	939D BNC1011975 BESAM ASSA/ABLOY 1st Floor	7/14/2012 DOOR CONTROLS INC 105-A	7/13/2014 -16	120 V.A.C 60HZ 75W
US-DW-ADA-002A AUTOMATIC DOOR (ADA) Uptown Station NO TAG ON FIELD	939D BNC1061077 BESAM ASSA/ABLOY 1st Floor	7/14/2012 DOOR CONTROLS INC 101-A	7/13/2014 -16	120 V.A.C 60HZ 75W
US-DW-ADA-002B AUTOMATIC DOOR (ADA) Uptown Station NO TAG ON FIELD	939D BNC1061081 BESAM ASSA/ABLOY 1st Floor	7/14/2012 DOOR CONTROLS INC 101-A	7/13/2014 -16	120 V.A.C 60HZ 75W
US-DW-ADA-003A AUTOMATIC DOOR (ADA) Uptown Station NO TAG ON FIELD	939D BNC1061593 BESAM ASSA/ABLOY 1st Floor	7/14/2012 DOOR CONTROLS INC 114-A	7/13/2014 -16	120 V.A.C 60HZ 75W
US-DW-ADA-003B AUTOMATIC DOOR (ADA) Uptown Station NO TAG ON FIELD	939D BNC1061592 BESAM ASSA/ABLOY 1st Floor	7/14/2012 DOOR CONTROLS INC 114-A	7/13/2014 -16	120 V.A.C 60HZ 75W
US-AD-DRINK-001 ADA Barrier Free Cooler Uptown Station NO TAG ON FIELD	EZSTL8LC 101224584 ELKAY Hallway/Corridor	7/14/2012 CARNEY AND COMPANY INC RESTROOM	7/14/2013 -380	Motor Compressor: Hermetically sealed, reciprocating type, 115VAC, 60Hz single phase.
US-AD-DRINK-002 ADA Barrier Free Cooler Uptown Station NO TAG ON FIELD	EZSTL8LC 100614210 ELKAY 2nd Floor	7/14/2012 CARNEY AND COMPANY INC RESTROOM CORRIDOR	7/14/2013 -380	Motor Compressor: Hermetically sealed, reciprocating type, 115VAC, 60Hz single phase.
US-AD-DRINK-003 ADA Barrier Free Cooler Uptown Station NO TAG ON FIELD	EZSTL8LC 100617928 ELKAY 3rd Floor	7/14/2012 CARNEY AND COMPANY INC RESTROOM CORRIDOR	7/14/2012 -745	Motor Compressor: Hermetically sealed, reciprocating type, 115VAC, 60Hz single phase.
US-AD-DRINK-004 ADA Barrier Free Cooler Uptown Station NO TAG ON FIELD	EZSTL8LC 100617928 ELKAY 4th Floor	7/14/2012 CARNEY AND COMPANY INC RESTROOM CORRIDOR	7/14/2013 -380	Motor Compressor: Hermetically sealed, reciprocating type, 115VAC, 60Hz single phase.

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
US-AD-REFRIG-001 REFRIGERATOR Uptown Station NO TAG ON FIELD	WRT351SFYB00 VS21846829 WHIRPOOL 1st Floor	7/14/2012 Shermans ARMTRACK TICKETING BREAK ROOM	7/14/2013 -380	6.5Amp / 60Hz / 115V TYPE : 21MTFA MAN DATE : 04-2012
US-AD-CM-001 COFFEE MAKER Uptown Station NO TAG ON FIELD	VLPF, BLK VLPF028234 BUNN-O-MATIC CORPORATION 2nd Floor	7/14/2012 BREAK ROOM	7/14/2013 -380	120V / 60Hz / 1HP 13.3A
US-AD-IM-001 ICE MAKER MACHINE Uptown Station NO TAG ON FIELD	G115NDXXB K2200124 WHIRPOOL 2nd Floor	7/14/2012 Shermans BREAK ROOM	7/14/2013 -380	60Hz / 1Phase / 115V
US-AD-REFRIG-002 REFRIGERATOR Uptown Station NO TAG ON FIELD	WRT351SFYB00 VS21846845 WHIRPOOL 2nd Floor	7/14/2012 Shermans BREAK ROOM	7/14/2013 -380	TYPE : 21MTFA 60HZ / 1Phase / 115V MAN DATE : 04-2012
US-AD-DW-001 DISHWASHER MACHINE Uptown Station NO TAG ON FIELD	GLDT690TBB-00 ST801205C General Electric 2nd Floor	7/14/2012 Shermans BREAK ROOM	7/14/2013 -380	120VAC / 60Hz 6.7A
US-AD-MWO-001 Microwave Oven Uptown Station NO TAG ON FIELD	JES1460DSIBB GZ200150 General Electric 2nd Floor	7/14/2012 Shermans BREAK ROOM	7/14/2013 -380	1.5KW / 120VAC / 60Hz Man Date : 04/2012 P/No : ME238940855
US-AD-REFRIG-003 REFRIGERATOR Uptown Station NO TAG ON FIELD	WRT351SFYB00 VS21776016 WHIRPOOL 3rd Floor	7/14/2012 Shermans BREAK ROOM	7/14/2013 -380	60HZ / 1Phase / 115V MAN DATE : 04/12 TYPE: 21MTFA
US-AD-MWO-003 Microwave Oven Uptown Station NO TAG ON FIELD	JES1460DSIBB ZV 201244 General Electric 3rd Floor	7/14/2012 Shermans BREAK ROOM	7/14/2013 -380	1.5KW / 120V / 60Hz
US-AD-MWO-002 Microwave Oven Uptown Station NO TAG ON FIELD	JES1460DSIBB HZ 200019 General Electric 3rd Floor	7/14/2012 Shermans BREAK ROOM	7/14/2013 -380	1.5KW / 120V / 60Hz

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
US-AD-IM-002 ICE MAKER MACHINE Uptown Station NO TAG ON FIELD	G115NDXXB K22200122 Watts 3rd Floor	7/14/2012 Shermans BREAK ROOM	7/14/2013 -380	60HZ / 1PHASE / 115V
US-AD-DW-002 DISHWASHER MACHINE Uptown Station NO TAG ON FIELD	GLDT690TBB-00 ST 801142C General Electric 3rd Floor	7/14/2012 Shermans BREAK ROOM	7/14/2013 -380	120Vac / 60HZ MOTOR : 1.3A HEATER: 5.4 A
US-AD-DW-003 DISHWASHER MACHINE Uptown Station NO TAG ON FIELD	GLDT690TBB-00 ST801184C General Electric 4th Floor	7/14/2012 Shermans BREAK ROOM	7/13/2013 -381	Motor:-1.3A Heater:- 5.4A Total Current:-6.7A 120Vac / 6-Hz
US-AD-CM-003 COFFEE MAKER Uptown Station NO TAG ON FIELD	VLPF, BLK VLPF028166 BUNN-O-MATIC CORPORATION 4th Floor	7/14/2012 BREAK ROOM		120V /13.3A /1600W 2 Wire + GND 60Hz /1HP
US-AD-CM-002 COFFEE MAKER Uptown Station NO TAG ON FIELD	VLPF, BLK VLPF028216 BUNN-O-MATIC CORPORATION 3rd Floor	7/14/2012 BREAK ROOM	7/13/2013 -381	120V / 13.3A /1600W 60HZ/ 1HP
US-AD-MWO-004 Microwave Oven Uptown Station NO TAG ON FIELD	JES1460DSIBB 2V201210L General Electric 4th Floor	7/14/2012 Shermans BREAK ROOM (Upper Shelf)	7/13/2013 -381	1.5KW /120VAC/60 HZ
US-AD-MWO-005 Microwave Oven Uptown Station NO TAG ON FIELD	JES1460DSIBB GZ 201007 General Electric 4th Floor	7/14/2012 Shermans BREAK ROOM	7/13/2013 -381	1.5KW /120VAC /60 HZ
US-AD-IM-003 ICE MAKER MACHINE Uptown Station NO TAG ON FIELD	G115NDXXB K22207916 WHIRPOOL 4th Floor	7/14/2012 Shermans BREAK ROOM	7/13/2013 -381	60HZ /1PHASE /115 V
US-AD-REFRIG-004 REFRIGERATOR Uptown Station NO TAG ON FIELD	WRT351SFYB00 VS21846826 WHIRPOOL 4th Floor	7/14/2012 Shermans BREAK ROOM	7/13/2013 -381	6-0HZ/ 1Phase / 115V

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
US-MECH-RACU-001 Room A/C Unit Uptown Station NO TAG ON FIELD	MMD96E7AHSLO Y11JB13690 Liebert Other	7/14/2012 Serves the I.T Room		CRU-1 Additional Information 460 V / 3HZ Evaporator M/N :- mm*96 CRCU - 001 Infromation Model Number:- 40275-990-02 Manufacturer:- Emerson Location :- Roof 600V /30A
US-MECH-RACU-002 Room A/C Unit Uptown Station NO TAG ON FIELD	N/A C12J864319 Emerson Office	7/14/2012 Clerk Vault		CRU -002 Additional Information PART NUMBER:- 163769G5 AMBIENT:- 32-104F ELECTRICAL:- 24V CRCU 002 Information Location :-3rd Floor Deck Model Number:- PFH014A-PL7 Serial Number:- Y11JG12423 Manufacturer:- Emerson VOLTAGE :- (208-230) Maximum Fuse or Current Breaker :-15
US-MECH-RACU-003 Room A/C Unit Uptown Station NO TAG ON FIELD	N/A C125864324 Emerson 3rd Floor	7/14/2012 4th Floor Lobby		CRU Additional informTION ENCLOSURE =TYPE 1/IP20 PART NUMBER :- 163769G5 CRCU 003 Information Model Number:- PFHO14A-PL2 Serial Number:- Y11JG12430LOcation:- Roof VOLTAGE:- 208-230V
US-FINISH-CARPET-001 1st Floor Waiting Areas Uptown Station	Shaw 1st Floor	7/14/2012 Carpet Weavers MMTC Waiting Areas		Limited Lifetime Warranty Approx. 3,300 Sq. Ft.

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
US-FINISH-CARPET-002 City Hall Uptown Station	Milliken 2nd Floor	7/14/2012 Carpet Weavers City Hall		Limited Lifetime Warranty Approx. 9,500 sq.ft.
US-FINISH-CARPET-003 City Hall Uptown Station	Milliken 3rd Floor	7/14/2012 Carpet Weavers Finance and Meeting Rooms		Limited Lifetime Warranty Approx. 12,000 sq.ft.
US-FINISH-CARPET-004 City Hall Uptown Station	Milliken 4th Floor	7/14/2012 Carpet Weavers Council Chambers and Meeting Rooms		Limited Lifetime Warranty Approx. 10,000 sq.ft.
US-TMP-ROOF-001 EPDM and Vegatative Roof Uptown Station	FIRESTONE Roof	7/14/2012 Kreiling Roofing Roof		Approx, 20,000 square feet including stair tower roofs.
US-DW-ADA-004 AUTOMATIC DOOR (ADA) Uptown Station	4100LE HD Single Swing N/A Horton Automatics 1st Floor	9/25/2013 Tee Jay Central 108-A	9/25/2014 58	120 V.A.C Low Voltage Hard Wired Activation Buttons
US-DW-ADA-005 AUTOMATIC DOOR (ADA) Uptown Station	4100LE HD Single Swing N/A Horton Automatics 2nd Floor	9/25/2013 Tee Jay Central 200-A	9/25/2014 58	120 V.A.C Low Voltage Hard Wired Activation Buttons
US-DW-ADA-006 AUTOMATIC DOOR (ADA) Uptown Station	4100LE HD Single Swing N/A Horton Automatics 3rd Floor	9/25/2013 Tee Jay Central 300-A	9/25/2014 58	120 V.A.C Low Voltage Hard Wired Activation Buttons
US-DW-ADA-007 AUTOMATIC DOOR (ADA) Uptown Station	4100LE HD Single Swing N/A Horton Automatics 4th Floor	9/25/2013 Tee Jay Central 400-A	9/25/2014 58	120 V.A.C Low Voltage Hard Wired Activation Buttons
US-DW-ADA-008 AUTOMATIC DOOR (ADA) Uptown Station	4100LE HD Single Swing N/A Horton Automatics Other	9/25/2013 Tee Jay Central 500-A	9/25/2014 58	120 V.A.C Low Voltage Hard Wired Activation Buttons

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
TEC-VAC-UPR-003 Riccar Uptown Station	VIBC.2 0512010151 Riccar 1st Floor			
TEC-VAC-CDLS-002 Cordless spot vacuum Uptown Station	96 1206003160 Eureka 1st Floor			
TEC-FLMN-AUSC-005 Speed Scrub Uptown Station	SS17-20 900306-80010810			self-propelled
TEC-FLMN-AUSC-006 Speed Scrub Uptown Station	SS17-20 90036-80010810			
TEC-FLMN-LSS-003 Edging Scrubber Uptown Station	ME-6 69016 Pacific			
TEC-VAC-CDLS-012 Quick Ups Uptown Station	96 Type JZ 1206003223 3rd Floor	Break Room		
TEC-BLWR-LEAF-001 Tri-Vac Uptown Station	WG500 201311067034 WORX 4th Floor			120 V 60 Hz 12 A 210 MPH 350 cfm
TEC-VAC-BKPK-003 Super Quarter Vac Uptown Station	SQV100 76-024178 ProTeam 4th Floor			120 V 9.9 A 60 Hz
TEC-VAC-UPR-011 Vibrance Commercial Uptown Station	VIBC.2 0512010145 2nd Floor			12A 120V 60 Hz

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
TEC-VAC-UPR-012 Vibrance Commercial Uptown Station	VIBC. 2 0512010153 3rd Floor			12A 120V 60Hz
TEC-VAC-UPR-013 Uptown Station	VIBC. 2 0512010150 4th Floor			12A 120V 60Hz
TEM-EQUIP-MANLIFT-002 Single Person Uptown Station	AWP-25S AWP05-34864 Genie 3rd Floor			
TEC-VAC-CDLS-011 Eureka Cordless Quick-Up Vac Uptown Station	96 Type JZ 1206003130 3rd Floor			
TEC-VAC-CDLS-013 Eureka Cordless Quick-Up Vac Uptown Station	96 Type JZ 1206003100 2nd Floor			
TEC-VAC-LGAR-003 Large Vac (black) Uptown Station	Pacer 30 26919312 4th Floor			
TEC-BLWR-CPFN-001 High Velocity Air Movers Uptown Station	Miller			
TEC-PRWR-GAS-001 Power Washer-gas powered Uptown Station	020514 1019713906 Honda			
TEC-PRSW-RTRY-001 Outside Sweeper Uptown Station	sweepertera28B 113808102 Tera Sweeper			

Current Equipment Inventory - July 2014

Item Number Description Location Tag Number	Model Number Serial Number Manufacturer Area Description	Date Placed in Service Removed from Service Supplier Area Number	Warranty Date Days until Expiration Last Reading Reading Measureme	Notes
TEC-SPEQ-PWWC-001 Window Washer Water-Fed Pole Uptown Station	051812E336 Water Fed			Hose Reel=Cox Reels Model 112-3-150-KXXX Serial 00218973
TEC-FLMN-BURN-001 High Speed Burnisher Uptown Station	BR-1600-NDC 900734-10541202 Tennant/Nobles 1st Floor			
TEC-EXT-CRPT-001 Small Area Uptown Station	CLPDU 10080480003510 Clipper Duo 1st Floor			
TEC-EXT-CRPT-002 Large area extractor Uptown Station	CMD20 10086050001045 Commodore			Forward only operation Wand attachment
TEC-EXT-CRPT-004 Large area extractor Uptown Station	CMD20 10086050001045			
TEC-EXT-SPOT-001 Spot Extractor Uptown Station	BRAVO 237B DPA8757234			
US-MECH-SPLT-COND-001 Split System Heat/Cool Uptown Station 001	PFH014A-PL7 Y11JG12423 Liebert 3rd Floor	3rd Level Parking Ramp East Corner		1 Ton of Cooling Ref. 407-C 208/230 Volts 1 compressor/scroll RLA 7 1 Condenser Fan FLA 1.4 Single Phase 1/5 HP

Preventive Maintenance Template List

Template Books	PM Schedule Template Name	Status	Classification/Description
Town of Normal - Facilities Management	Garbage Disposal Maintenace (M)	PM Template	- Appliances and Devices
Town of Normal - Facilities Management	Microwave Maintenance (W)	PM Template	- Appliances and Devices
Town of Normal - Facilities Management	Ice Maker Maintenance (Q)	PM Template	- Appliances and Devices
Town of Normal - Facilities Management	Refrigerator Maintenance (Q)	PM Template	- Appliances and Devices
Town of Normal - Facilities Management	Dishwasher Maintenance (M)	PM Template	- Appliances and Devices
Town of Normal - Facilities Management	Coffee Machine Maintenance (W)	PM Template	- Appliances and Devices
Town of Normal - Facilities Management	Parking Deck Maintenance (D)	PM Template	- Concrete
Town of Normal - Facilities Management	Parking Deck Maintenance (W)	PM Template	- Concrete
Town of Normal - Facilities Management	Parking Deck Maintenance (M)	PM Template	- Concrete
Town of Normal - Facilities Management	Parking Deck Maintenance (Q)	PM Template	- Concrete
Town of Normal - Facilities Management	Parking Deck Maintenance (SA)	PM Template	- Concrete
Town of Normal - Facilities Management	Parking Deck Maintenance (A)	PM Template	- Concrete
Town of Normal - Facilities Management	Door and Hardware Maintenance (Q)	PM Template	- Doors and Windows
Town of Normal - Facilities Management	Overhead Coiling Door Maintenance (Q)	PM Template	- Doors and Windows
Town of Normal - Facilities Management	Automatic Entrance Door Maintenance (Q)	PM Template	- Doors and Windows
Town of Normal - Facilities Management	Power Assisted Door Inspection (ADA) (D)	PM Template	- Doors and Windows
Town of Normal - Facilities Management	Interior Lighting Maintenance (M)	PM Template	- Electrical
Town of Normal - Facilities Management	Level 3 Quick Charger Maintenance (M)	PM Template	- Electrical
Town of Normal - Facilities Management	Level 3 Quick Charger Maintenance (D)	PM Template	- Electrical
Town of Normal - Facilities Management	Transfer Switch Maintenance (M)	PM Template	- Electrical
Town of Normal - Facilities Management	Transfer Switch Maintenance (A)	PM Template	- Electrical
Town of Normal - Facilities Management	Emergency Generator Maintenance (A)	PM Template	- Electrical
Town of Normal - Facilities Management	Emergency Generator Maintenance (W)	PM Template	- Electrical
Town of Normal - Facilities Management	Time and Clock System Maintenance (A)	PM Template	- Electrical
Town of Normal - Facilities Management	Lighting Control Maintenance (SA)	PM Template	- Electrical
Town of Normal - Facilities Management	Deadfront Distribution Switchboard (A)	PM Template	- Electrical
Town of Normal - Facilities Management	Distribution Panel Maintenance (A)	PM Template	- Electrical
Town of Normal - Facilities Management	VFD Maintenance (M)	PM Template	- Electrical
Town of Normal - Facilities Management	Transformer Maintenance (A)	PM Template	- Electrical
Town of Normal - Facilities Management	Cable in Manholes Maintenance (A)	PM Template	- Electrical
Town of Normal - Facilities Management	Ariel Cable Maintenance (A)	PM Template	- Electrical
Town of Normal - Facilities Management	Cable and Raceway Maintenance (A)	PM Template	- Electrical
Town of Normal - Facilities Management	Motor Controls Maintenance (Q)	PM Template	- Electrical
Town of Normal - Facilities Management	Electronic Equipment Maintenance (A)	PM Template	- Electrical
Town of Normal - Facilities Management	Receptacle Maintenance (M)	PM Template	- Electrical

Preventive Maintenance Template List

Template Books	PM Schedule Template Name	Status	Classification/Description
Town of Normal - Facilities Management	General Use Switch Maintenance (M)	PM Template	- Electrical
Town of Normal - Facilities Management	GFCI Receptacle Maintenance (M)	PM Template	- Electrical
Town of Normal - Facilities Management	Exterior Lighting Maintenance (M)	PM Template	- Electrical
Town of Normal - Facilities Management	Ceramic Tile Floor Maintenance (D)	PM Template	- Finishes
Town of Normal - Facilities Management	Ceramic Tile Floor Maintenance (SA)	PM Template	- Finishes
Town of Normal - Facilities Management	Terrazzo Floor Maintenance (D)	PM Template	- Finishes
Town of Normal - Facilities Management	Terrazzo Floor Maintenance (A)	PM Template	- Finishes
Town of Normal - Facilities Management	Vinyl Tile Floor Maintenance (D)	PM Template	- Finishes
Town of Normal - Facilities Management	Vinyl Tile Maintenance (M)	PM Template	- Finishes
Town of Normal - Facilities Management	Vinyl Tile Maintenance (A)	PM Template	- Finishes
Town of Normal - Facilities Management	Cork Rubber Flooring Maintenance (D)	PM Template	- Finishes
Town of Normal - Facilities Management	Cork Rubber Flooring Maintenance (Q)	PM Template	- Finishes
Town of Normal - Facilities Management	Cork Rubber Flooring Maintenance (A)	PM Template	- Finishes
Town of Normal - Facilities Management	Carpet Maintenance (D)	PM Template	- Finishes
Town of Normal - Facilities Management	Carpet Maintenance (Q)	PM Template	- Finishes
Town of Normal - Facilities Management	Carpet Maintenance (A)	PM Template	- Finishes
Town of Normal - Facilities Management	Limestone Maintenance (Q)	PM Template	- Finishes
Town of Normal - Facilities Management	AED Readiness Inspection (M)	PM Template	- Fire & Life Safety
Town of Normal - Facilities Management	Sprinkler System Test and Inspect (A)	PM Template	- Fire & Life Safety
Town of Normal - Facilities Management	Fire Pump Test and Inspect (A)	PM Template	- Fire & Life Safety
Town of Normal - Facilities Management	Chemical Suppression System Inspect (SA)	PM Template	- Fire & Life Safety
Town of Normal - Facilities Management	Chemical Suppression System Inspect (A)	PM Template	- Fire & Life Safety
Town of Normal - Facilities Management	Fire Extingusiher Maintenance (A)	Master Task List	- Fire & Life Safety
Town of Normal - Facilities Management	Fire Alarm Test and Inspect (A)	PM Template	- Fire & Life Safety
Town of Normal - Facilities Management	Boiler Inspection (A)	PM Template	- Fire & Life Safety
Town of Normal - Facilities Management	Elevator Full Load Inspection (5 Year)	PM Template	- Fire & Life Safety
Town of Normal - Facilities Management	Exit Sign Maintenance (M)	PM Template	- Fire & Life Safety
Town of Normal - Facilities Management	Emergency Lighting Maintenance (Q)	PM Template	- Fire & Life Safety
Town of Normal - Facilities Management	Fire Pump Test Run (W)	PM Template	- Fire & Life Safety
Town of Normal - Facilities Management	Low Point Drain Maintenance (M)	PM Template	- Fire & Life Safety
Town of Normal - Facilities Management	Fire Door Maintenance (Q)	PM Template	- Fire & Life Safety
Town of Normal - Facilities Management	Rolling Fire Door Maintenance (A)	PM Template	- Fire & Life Safety
Town of Normal - Facilities Management	Elevator Inspection (A)	PM Template	- Fire & Life Safety
Town of Normal - Facilities Management	Air Compressor Inspection (A)	PM Template	- Fire & Life Safety
Town of Normal - Facilities Management	Automatic Entrance Door Inspection (A)	PM Template	- Fire & Life Safety

Preventive Maintenance Template List

Template Books	PM Schedule Template Name	Status	Classification/Description
Town of Normal - Facilities Management	Fire Extinguisher Maintenance (M)	PM Template	- Fire & Life Safety
Town of Normal - Facilities Management	Low Point Drain Maintenance (W)	Master Task List	- Fire & Life Safety
Town of Normal - Facilities Management	Fixed Seating Maintenance (W)	PM Template	- Furnishings
Town of Normal - Facilities Management	Building Safety Inspection (SA)	PM Template	- General Requirements
Town of Normal - Facilities Management	Room Readiness Checklist	Master Task List	- General Requirements
Town of Normal - Facilities Management	Boiler Maintenance (D)	PM Template	- Mechanical
Town of Normal - Facilities Management	Boiler Maintenance (W)	PM Template	- Mechanical
Town of Normal - Facilities Management	Boiler Maintenance (M)	PM Template	- Mechanical
Town of Normal - Facilities Management	Boiler Maintenance (A)	PM Template	- Mechanical
Town of Normal - Facilities Management	Chiller Maintenance (D)	PM Template	- Mechanical
Town of Normal - Facilities Management	Chiller Maintenance (W)	PM Template	- Mechanical
Town of Normal - Facilities Management	Chiller Maintenance (SA)	PM Template	- Mechanical
Town of Normal - Facilities Management	Chiller Maintenance (A)	PM Template	- Mechanical
Town of Normal - Facilities Management	Steam Trap Maintenance (>250psig) (D)	PM Template	- Mechanical
Town of Normal - Facilities Management	Steam Trap Maintenance (30-250 psig) (W)	PM Template	- Mechanical
Town of Normal - Facilities Management	Steam Trap Maintenance (Low Press) (A)	PM Template	- Mechanical
Town of Normal - Facilities Management	Building Automation Controls (D)	PM Template	- Mechanical
Town of Normal - Facilities Management	Building Automation Controls (W)	PM Template	- Mechanical
Town of Normal - Facilities Management	Building Automation Controls (SA)	PM Template	- Mechanical
Town of Normal - Facilities Management	Building Automation Controls (A)	PM Template	- Mechanical
Town of Normal - Facilities Management	Air Handler Maintenance (D)	PM Template	- Mechanical
Town of Normal - Facilities Management	Air Handler Maintenance (W)	PM Template	- Mechanical
Town of Normal - Facilities Management	Air Handler Maintenance (M)	Master Task List	- Mechanical
Town of Normal - Facilities Management	Air Handler Maintenance (A)	PM Template	- Mechanical
Town of Normal - Facilities Management	Rooftop Unit Maintenance (D)	PM Template	- Mechanical
Town of Normal - Facilities Management	Rooftop Unit Maintenance (W)	PM Template	- Mechanical
Town of Normal - Facilities Management	Rooftop Unit Maintenance (M)	Master Task List	- Mechanical
Town of Normal - Facilities Management	Rooftop Unit Maintenance (A)	PM Template	- Mechanical
Town of Normal - Facilities Management	HVAC Pump Maintenance (D)	PM Template	- Mechanical
Town of Normal - Facilities Management	HVAC Pump Maintenance (M)	PM Template	- Mechanical
Town of Normal - Facilities Management	HVAC Pump Maintenance (A)	PM Template	- Mechanical
Town of Normal - Facilities Management	Exhauster Fan Maintenance (D)	PM Template	- Mechanical
Town of Normal - Facilities Management	Exhauster Fan Maintenance (M)	PM Template	- Mechanical
Town of Normal - Facilities Management	Exhauster Fan Maintenance (A)	PM Template	- Mechanical
Town of Normal - Facilities Management	Air Compressor Maintenance (D)	PM Template	- Mechanical

Preventive Maintenance Template List

Template Books	PM Schedule Template Name	Status	Classification/Description
Town of Normal - Facilities Management	Air Compressor Maintenance (W)	PM Template	- Mechanical
Town of Normal - Facilities Management	Air Compressor Maintenance (M)	PM Template	- Mechanical
Town of Normal - Facilities Management	Air Compressor Maintenance (A)	PM Template	- Mechanical
Town of Normal - Facilities Management	Strainer Maintenance (SA)	PM Template	- Mechanical
Town of Normal - Facilities Management	Room A/C Maintenance (Q)	PM Template	- Mechanical
Town of Normal - Facilities Management	Room A/C Maintenance (A)	PM Template	- Mechanical
Town of Normal - Facilities Management	Hydronic Radiator Maintenance (Q)	PM Template	- Mechanical
Town of Normal - Facilities Management	Electric Radiator Maintenance (A)	PM Template	- Mechanical
Town of Normal - Facilities Management	Electric Unit Heater Maintenance (SA)	PM Template	- Mechanical
Town of Normal - Facilities Management	Hydronic Unit Heater Maintenance (SA)	PM Template	- Mechanical
Town of Normal - Facilities Management	Air Curtain Maintenance (SA)	PM Template	- Mechanical
Town of Normal - Facilities Management	Hydronic TAB Maintenance (A)	PM Template	- Mechanical
Town of Normal - Facilities Management	Electric TAB Maintenance (A)	PM Template	- Mechanical
Town of Normal - Facilities Management	Pressure Booster Pump Maintnenace (M)	PM Template	- Plumbing
Town of Normal - Facilities Management	Sump Pump Maintenance (M)	PM Template	- Plumbing
Town of Normal - Facilities Management	Circulating Pump Maintenance (M)	PM Template	- Plumbing
Town of Normal - Facilities Management	Gate Valve Maintenance (SA)	PM Template	- Plumbing
Town of Normal - Facilities Management	Plug Valve Maintenance (SA)	PM Template	- Plumbing
Town of Normal - Facilities Management	Mixing Valve Maintenance (A)	PM Template	- Plumbing
Town of Normal - Facilities Management	Beverage Machine Backflow Preventer (A)	PM Template	- Plumbing
Town of Normal - Facilities Management	Butterfly Valve Maintenance (SA)	PM Template	- Plumbing
Town of Normal - Facilities Management	Ball Valve Maintenance (SA)	PM Template	- Plumbing
Town of Normal - Facilities Management	Globe Valve Maintenance (SA)	PM Template	- Plumbing
Town of Normal - Facilities Management	Solenoid Valve Maintenance (M)	PM Template	- Plumbing
Town of Normal - Facilities Management	Solenoid Valve Maintenance (A)	PM Template	- Plumbing
Town of Normal - Facilities Management	Pressure Reducing Valve Maintenance (A)	PM Template	- Plumbing
Town of Normal - Facilities Management	T&P Relief Valve Maintenance (M)	PM Template	- Plumbing
Town of Normal - Facilities Management	T&P Relief Valve Maintenance (A)	PM Template	- Plumbing
Town of Normal - Facilities Management	Drinking Fountain Maintenance (Q)	PM Template	- Plumbing
Town of Normal - Facilities Management	Automatic Faucet Maintenance (Q)	PM Template	- Plumbing
Town of Normal - Facilities Management	Automatic Faucet Maintenance (A)	PM Template	- Plumbing
Town of Normal - Facilities Management	Shower Fixture Maintenance (M)	PM Template	- Plumbing
Town of Normal - Facilities Management	Shower Fixture Maintenance (A)	PM Template	- Plumbing
Town of Normal - Facilities Management	Automatic Flush Valve Maintenance (Q)	PM Template	- Plumbing
Town of Normal - Facilities Management	Automatic Flush Valve Maintenance (A)	PM Template	- Plumbing

Preventive Maintenance Template List

Template Books	PM Schedule Template Name	Status	Classification/Description
Town of Normal - Facilities Management	Manual Faucet Maintenance (Q)	PM Template	- Plumbing
Town of Normal - Facilities Management	Manual Flush Valve Maintenance (Q)	PM Template	- Plumbing
Town of Normal - Facilities Management	Toilet Tank Maintenance (SA)	PM Template	- Plumbing
Town of Normal - Facilities Management	Water Heater Maintenance (A)	PM Template	- Plumbing
Town of Normal - Facilities Management	Water Heater Maintenance (M)	PM Template	- Plumbing
Town of Normal - Facilities Management	Solar Array Maintenance (A)	PM Template	- Specialties
Town of Normal - Facilities Management	Locker Maintenance (Q)	PM Template	- Specialties
Town of Normal - Facilities Management	Awning and Canopy Maintenance (A)	PM Template	- Specialties
Town of Normal - Facilities Management	Projection Screen Maintenance (M)	PM Template	- Specialties
Town of Normal - Facilities Management	EIFS (Dryvit) Maintenance (A)	PM Template	- Thermal and Moisture Protection
Town of Normal - Facilities Management	Architectural Exterior Aluminum (A)	PM Template	- Thermal and Moisture Protection
Town of Normal - Facilities Management	Roofing System Inspection (SA)	PM Template	- Thermal and Moisture Protection
Town of Normal - Facilities Management	Roofing System Maintenance (M)	PM Template	- Thermal and Moisture Protection
Town of Normal - Facilities Management	Vegatative Roof Maintenance (Spring)	PM Template	- Thermal and Moisture Protection
Town of Normal - Facilities Management	Vegatative Roof Maintenance (Summer)	PM Template	- Thermal and Moisture Protection
Town of Normal - Facilities Management	Vegatative Roof Maintenance (Fall)	PM Template	- Thermal and Moisture Protection
Town of Normal - Facilities Management	Vegatative Roof Maintenance (Winter)	PM Template	- Thermal and Moisture Protection
Town of Normal - Facilities Management	Power Tool Maintenance (Q)	PM Template	- Tools and Equipment - Maintenance
Town of Normal - Facilities Management	Architectural Resin Panels (Q)	Master Task List	- Woods and Plastics