

# Requirement Detail

by Asset Name and Category

**LINCOLN PARK**

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Deferred Maintenance

**Asset Name:** Lincoln Park - Parking  
**Asset Number:** 515a

<b>Requirement Name</b>	Vehicular Pavement: Parking Lot	
<b>Linked System</b>	Parking Lots	<b>Inspection Date</b> 08/01/2006
<b>Prime System</b>	Paving and Surfacing	<b>Finish Date</b> -
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Status</b> Open
<b>Inspector Name</b>	Inspec	<b>Actual Cost</b> 0
<b>Action Date</b>	08/01/2007	<b>Total Estimated Cost:</b> 118,000
<b>Funding Year</b>	-	<b>Funding Type</b> -
<b>Requirement Location</b>	Parking Lot	<b>Annual Energy/Ops Savings \$</b> -
<b>Savings Description</b>	-	

**REQUIREMENT DESCRIPTION**

Parking lot surface rolling/undulating subgrade problem. Low spot at SE corner of the lot where old building footings.

**PHOTOS**



Parking Lot

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**ACTION DESCRIPTION**

Reconstruct bituminous pavement and portland cement concrete curb and gutter sections. Excavation and removal of poor subgrades materials and old building footing. Need geotechnical investigation to confirm.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Deferred Maintenance

**Asset Name:** Lincoln Park - Parking  
**Asset Number:** 515a

<b>Requirement Name</b>	Vehicular Paving: NE Leased Parking Lot		
<b>Linked System</b>	Parking Lots	<b>Inspection Date</b>	08/01/2006
<b>Prime System</b>	Paving and Surfacing	<b>Finish Date</b>	-
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Inspec	<b>Actual Cost</b>	0
<b>Action Date</b>	08/01/2009	<b>Total Estimated Cost:</b>	5,900
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	NE Leased Parking Lot	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Good conditions, normal maintenance required.

**PHOTOS**

**ACTION DESCRIPTION**

Seal cracks and seal coat parking lot.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Deferred Maintenance

**Asset Name:** Lincoln Park - Parking  
**Asset Number:** 515a

<b>Requirement Name</b>	Vehicular Paving: South Leased Parking Lot		
<b>Linked System</b>	Parking Lots	<b>Inspection Date</b>	08/01/2006
<b>Prime System</b>	Paving and Surfacing	<b>Finish Date</b>	-
<b>Priority</b>	5- Recommendations/ Improvements	<b>Status</b>	Open
<b>Inspector Name</b>	Inspec	<b>Actual Cost</b>	0
<b>Action Date</b>	-	<b>Total Estimated Cost:</b>	59,000
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	South Leased Parking Lot	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Existing parking lot is gravel.

**PHOTOS**

**ACTION DESCRIPTION**

Pave existing gravel parking lot (leased).

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Deferred Maintenance

**Asset Name:** Lincoln Park - Sidewalks  
**Asset Number:** 515b

<b>Requirement Name</b>	Pedestrian Pavement: Perimeter Sidewalk		
<b>Linked System</b>	Pedestrian Paving	<b>Inspection Date</b>	08/01/2006
<b>Prime System</b>	Paving and Surfacing	<b>Finish Date</b>	-
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Inspec	<b>Actual Cost</b>	0
<b>Action Date</b>	08/01/2007	<b>Total Estimated Cost:</b>	23,600
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Perimeter Sidewalk	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Broken/unlevel sections of portland cement concrete sidewalk (if not city's).

**PHOTOS**



Sidewalk

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**ACTION DESCRIPTION**

Replace broken/unlevel sections of sidewalk.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Life Safety

**Asset Name:** Lincoln Park - Sidewalks  
**Asset Number:** 515b

<b>Requirement Name</b>	Pedestrian Paving: ADA Access at 25th Ave. Side.		
<b>Linked System</b>	Pedestrian Paving	<b>Inspection Date</b>	08/01/2006
<b>Prime System</b>	Paving and Surfacing	<b>Finish Date</b>	-
<b>Priority</b>	1- Currently Critical (Immediately)	<b>Status</b>	Open
<b>Inspector Name</b>	Inspe	<b>Actual Cost</b>	0
<b>Action Date</b>	08/01/2006	<b>Total Estimated Cost:</b>	5,900
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	ADA Access at 25th Ave. Side	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Broken/unlevel sections of portland cement concrete sidewalk and curb (if this is ADA access point).

**PHOTOS**



ADA Access

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**ACTION DESCRIPTION**

Replace broken/unlevel sections of sidewalk.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Accessibility

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Aquatic Facilities: Code Items	<b>Inspection Date</b>	10/08/2006
<b>Linked System</b>	Aquatic Facilities	<b>Finish Date</b>	-
<b>Prime System</b>	Aquatic Facilities	<b>Status</b>	Open
<b>Priority</b>	1- Currently Critical (Immediately)	<b>Actual Cost</b>	0
<b>Inspector Name</b>	USAquatics	<b>Total Estimated Cost:</b>	8,437
<b>Action Date</b>	10/08/2006	<b>Funding Type</b>	-
<b>Funding Year</b>	-	<b>Annual Energy/Ops Savings \$</b>	-
<b>Requirement Location</b>	Pool walls		
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

ADA ACCESSIBILITY

A means of access into the pool for those with disabilities must be installed.

**PHOTOS**

**ACTION DESCRIPTION**

Add an ADA compliant lift.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Accessibility

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Equipment and Furnishings: Accessibility	
<b>Linked System</b>	Equipment and Furnishings	<b>Inspection Date</b> 11/12/2006
<b>Prime System</b>	Equipment and Furnishings	<b>Finish Date</b> -
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Status</b> Open
<b>Inspector Name</b>	JQP Inc.	<b>Actual Cost</b> 0
<b>Action Date</b>	11/12/2009	<b>Total Estimated Cost:</b> 36,798
<b>Funding Year</b>	-	<b>Funding Type</b> -
<b>Requirement Location</b>	Entire Facility	<b>Annual Energy/Ops Savings \$</b> -
<b>Savings Description</b>	-	

**REQUIREMENT DESCRIPTION**

This requirement includes accessibility issues related to high public use areas of the school, including auditoriums, stadiums, gymnasiums, ticket counters, and the main office. Items include: providing wheelchair viewing positions, providing access to the stage, providing an assistive listening system and lowering counters.

It also includes accessibility issues found in Specialty Areas (science labs, cooking labs, industrial arts areas, as well as the media center/library). Items include: providing accessible work stations in kitchens, providing accessible labs and lowering eyewashes.

**PHOTOS**



Equipment and Furnishings: Accessibility

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**ACTION DESCRIPTION**

Correct accessibility issues as required.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Accessibility

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Interior Construction: Accessibility		
<b>Linked System</b>	Interior Construction	<b>Inspection Date</b>	11/12/2006
<b>Prime System</b>	Interior Construction	<b>Finish Date</b>	-
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	JQP Inc.	<b>Actual Cost</b>	0
<b>Action Date</b>	11/12/2009	<b>Total Estimated Cost:</b>	36,526
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Interior	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

This requirement includes accessibility issues encountered while you move through the school. Items include: providing elevator or ramp, adding/modifying handrails (only if the level is not served by an elevator or other accessible route), widening doors, replacing door hardware, eliminating protruding hazards and all permanent room identification signage as well as directional signage (adding signs, replacing signs and relocating signs).

**PHOTOS**



Interior Construction: Accessibility

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**ACTION DESCRIPTION**

Make necessary modifications to correct accessibility issues as needed.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Accessibility

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Plumbing: Accessibility	<b>Inspection Date</b>	11/12/2006
<b>Linked System</b>	Plumbing	<b>Finish Date</b>	-
<b>Prime System</b>	Plumbing	<b>Status</b>	Open
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Actual Cost</b>	0
<b>Inspector Name</b>	JQP Inc.	<b>Total Estimated Cost:</b>	142,033
<b>Action Date</b>	11/12/2009	<b>Funding Type</b>	-
<b>Funding Year</b>	-	<b>Annual Energy/Ops Savings \$</b>	-
<b>Requirement Location</b>	Plumbing throughout		
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

This requirement includes accessibility issues in toilet rooms, locker/shower rooms and drinking fountains. All requirements for upgrading a toilet or locker/shower room are included in this category, even if they are not plumbing (i.e. relocating stall partitions to provide 60 in. wide stall, relocating toilet paper dispenser or grab bars, etc.). Items include: replacing drinking fountains, raising/lowering toilets, installing grab bars, relocating toilet paper or towel dispensers, adding handheld shower wands, and providing 60 in. wide fully compliant toilet stalls.

Note: the actual cost to complete work in toilet rooms may be increased by a decision to do work beyond what is required for accessibility, such as re-tiling, replacing all fixtures, replacing all stall partitions, etc.

**PHOTOS**



Equipment and Furnishings: Accessibility

**ACTION DESCRIPTION**

Upgrades as needed to meet plumbing accessibility requirements.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Accessibility

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Site Improvements: Accessibility		
<b>Linked System</b>	Site Improvements	<b>Inspection Date</b>	11/12/2006
<b>Prime System</b>	Site Improvements	<b>Finish Date</b>	-
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	JQP Inc.	<b>Actual Cost</b>	0
<b>Action Date</b>	11/12/2009	<b>Total Estimated Cost:</b>	13,398
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Exterior	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

This requirement includes accessibility issues from the moment you are on school grounds until you get to the front door. Items include: adding and identifying accessible parking and adding or modifying accessible routes (sidewalks).

**PHOTOS**



Site Improvements: Accessibility

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**ACTION DESCRIPTION**

Correct exterior accessibility issues as required.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Air and Water Quality

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	HVAC - Dehumidification Chiller and Piping Mains		
<b>Linked System</b>	Chilled Water Distribution	<b>Inspection Date</b>	06/28/2006
<b>Prime System</b>	Chilled Water Distribution	<b>Finish Date</b>	-
<b>Priority</b>	5- Recommendations/ Improvements	<b>Status</b>	Open
<b>Inspector Name</b>	Schumacher, Russ	<b>Actual Cost</b>	0
<b>Action Date</b>	-	<b>Total Estimated Cost:</b>	557,904
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	All Floors - Entire Building except Boys and Girls Club and Office Areas	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Lincoln Park Elementary School has no means of dehumidification, other than the office and boys club area. Without de-humidification capabilities, these spaces cannot meet ASHRAE 55-1992 space design conditions.

**PHOTOS**



HVAC - Dehumidification Chiller and Piping Mains

**ACTION DESCRIPTION**

Addition of an air cooled chiller, pumps, and insulated chilled water pipe distribution system. Chiller to be screened for appearance purposes.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Air and Water Quality

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	HVAC: Provide Negative Pressure in Crawlspace/Tunnels		
<b>Linked System</b>	Exhaust Ventilation Systems	<b>Inspection Date</b>	07/15/2006
<b>Prime System</b>	Exhaust Ventilation Systems	<b>Finish Date</b>	-
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Schumacher, Russ	<b>Actual Cost</b>	0
<b>Action Date</b>	07/15/2007	<b>Total Estimated Cost:</b>	59,000
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	1951 and 1959 Crawlspace/Tunnels	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

The tunnels have dirt floors and if not under negative pressure can transfer odors to the floors above due to the pipe and duct penetrations. The tunnels are also present opportunity for mold growth.

**PHOTOS**



HVAC: Provide Negative Pressure in Crawlspace/Tunnels

**ACTION DESCRIPTION**

Install exhaust fans and outdoor air intakes as required to ventilate tunnels, as well as maintain negative pressure.

Four Locations 1951 and 1959 Additions.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Air and Water Quality

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

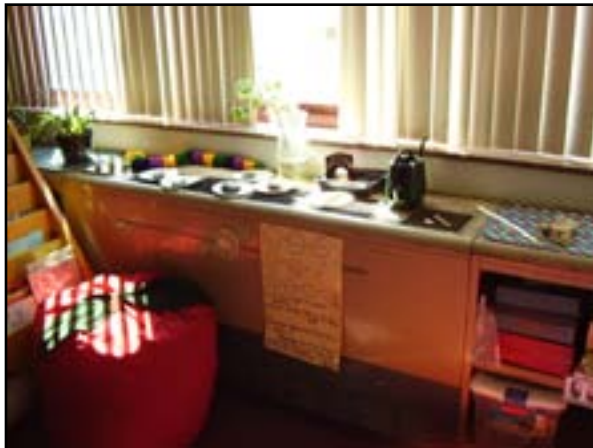
<b>Requirement Name</b>	HVAC: Replace Classroom Unit Ventilators		
<b>Linked System</b>	Air Distribution Systems	<b>Inspection Date</b>	07/12/2006
<b>Prime System</b>	Air Distribution Systems	<b>Finish Date</b>	-
<b>Priority</b>	6- Does Not Meet Current Codes/Standards	<b>Status</b>	Open
<b>Inspector Name</b>	Schumacher, Russ	<b>Actual Cost</b>	0
<b>Action Date</b>	-	<b>Total Estimated Cost:</b>	2,517,294
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	1951 Addition	<b>Annual Energy/Ops Savings \$</b>	1,144
<b>Savings Description</b>	Energy savings will be generated by using heat exchangers to recover exhaust air energy in order to pre-condition make-up air. In addition, each classroom occupancy controls will reduce ventilation rates and control the lighting to save energy when rooms are not in use. Additional energy will be consumed to provide dehumidification during the cooling months.		

**REQUIREMENT DESCRIPTION**

The thirty four (34) classroom unit ventilators are 55 years old and have exceeded the recommended useful life. In addition, these classroom unit ventilators are typically not capable of meeting current ASHRAE indoor air quality standards. As part of this upgrade, the new mechanical system will incorporated heat recovery and classroom occupancy / CO2 controls to save energy.

In addition classrooms have had walls added and some of the spaces have no means of ventilation. This does not meet 2000 International Mechanical Code.

**PHOTOS**



HVAC: Replace Classroom Unit Ventilators

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**ACTION DESCRIPTION**

Remove existing classroom unit ventilators, patch wall to match existing. Replace with modern ventilation system with energy recovery with dehumidification, duct distribution system, and variable air volume boxes with hot water reheat coils and hot water finned tube radiation on exterior walls. Upgrade the controls systems to DDC and commission the new system.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Air and Water Quality

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	HVAC: Replace Ventilation to Gyms & Locker Room and Add Dehumidification to Cafeteria		
<b>Linked System</b>	Air Distribution Systems	<b>Inspection Date</b>	07/11/2006
<b>Prime System</b>	Air Distribution Systems	<b>Finish Date</b>	-
<b>Priority</b>	5- Recommendations/ Improvements	<b>Status</b>	Open
<b>Inspector Name</b>	Schumacher, Russ	<b>Actual Cost</b>	0
<b>Action Date</b>	-	<b>Total Estimated Cost:</b>	556,842
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Gymnasium 156, Gymnasium 222, Gymnasium 326 and Cafeteria	<b>Annual Energy/Ops Savings \$</b>	4,540
<b>Savings Description</b>	Energy savings will be generated by reducing the fan cfm and OA ventilation during part load operation utilizing variable speed drives and CO2 controls as well as recovering heat from the locker room exhaust. Additional energy will be consumed during the cooling season to provide dehumidification.		

**REQUIREMENT DESCRIPTION**

The three air handling systems serving the gyms and the air handling unit serving the cafeteria has no means of dehumidification. Without dehumidification capabilities, these spaces cannot meet ASHRAE 55-1992 space design conditions. As part of the upgrade the air handling units will come with variable speed drive and CO2 controls to reduce ventilation rates during part load operation as well as a heat recovery unit for the locker rooms.

**PHOTOS**



HVAC: Replace Ventilation to Gyms and Add Dehumidification to Cafeteria

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**ACTION DESCRIPTION**

Replacement of all gym air handling units and duct systems with new air handling units with dehumidification coils. Installation of new external insulated supply duct systems. The cafeteria air handler would have a dehumidification coil  
*All Costs in USD.*

added and the externally insulated ductwork would be re-used. Upgrade Controls System. Test and Balance and Commissioning of air handling units.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Air and Water Quality

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	HVAC: Add Dehumidification 1994	<b>Inspection Date</b>	06/28/2006
<b>Linked System</b>	Cooling Generating Systems	<b>Finish Date</b>	-
<b>Prime System</b>	Cooling Generating Systems	<b>Status</b>	Open
<b>Priority</b>	5- Recommendations/ Improvements	<b>Actual Cost</b>	0
<b>Inspector Name</b>	Schumacher, Russ	<b>Total Estimated Cost:</b>	420,788
<b>Action Date</b>	-	<b>Funding Type</b>	-
<b>Funding Year</b>	-	<b>Annual Energy/Ops Savings \$</b>	-
<b>Requirement Location</b>	Second and Third Floors - 1994 Addition		
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

The multi zone air handling system serving the 1994 addition have no means of dehumidification. Without de-humidification capabilities, these spaces cannot meet ASHRAE 55-1992 space design conditions.

**PHOTOS**



HVAC: Add Dehumidification 1994

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**ACTION DESCRIPTION**

Addition of dehumidification coils to the existing unit via modification and internal closed cell AHU liner. Installation of external duct insulation, new acoustical ceiling tile, lighting removal and re-installation or new lights where required. Variable Air Volume box installation. Rezone ductwork where required. Upgrade Controls System to DDC. Test and Balance and Commissioning of entire system.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Air and Water Quality

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Plumbing: Replace Galvanized Domestic Water Piping		
<b>Linked System</b>	Domestic Water Distribution	<b>Inspection Date</b>	06/28/2006
<b>Prime System</b>	Domestic Water Distribution	<b>Finish Date</b>	-
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Schumacher, Russ	<b>Actual Cost</b>	0
<b>Action Date</b>	06/28/2007	<b>Total Estimated Cost:</b>	483,800
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Building Wide - Except for 1993/1994 Addition and 1999 Boys and Girls Club	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

The 40-117 year old domestic water distribution piping consists of galvanized piping which is connected together via lead based solder. Current flushing procedures have maintained lead levels at an acceptable level. As the piping continues to age, this may not be possible.

In addition, there is not enough plumbing recirculation piping to provide hot water consistently to the classrooms.

**PHOTOS**



Plumbing: Replace Galvanized Domestic Water Piping

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**ACTION DESCRIPTION**

Remove all galvanized domestic water distribution piping as well as faucets and fixtures containing lead solder. Install insulated copper piping and fixtures/faucets where required. Wall cutting and patching would be required.

This includes the bradley shower stations in the locker rooms.

Addition of a plumbing re-circulation line.

*All Costs in USD.*



**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Air and Water Quality

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Service Tunnels: Floor Vapor Barrier		
<b>Linked System</b>	Other Site Construction	<b>Inspection Date</b>	08/01/2006
<b>Prime System</b>	Service and Pedestrian Tunnels	<b>Finish Date</b>	-
<b>Priority</b>	5- Recommendations/ Improvements	<b>Status</b>	Open
<b>Inspector Name</b>	Inspec	<b>Actual Cost</b>	0
<b>Action Date</b>	-	<b>Total Estimated Cost:</b>	12,095
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Multiple Locations	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Exposed dirt areas contributing to air quality issues.

**PHOTOS**



Service Tunnels: Floor Vapor Barrier

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**ACTION DESCRIPTION**

Install poly vapor barrier over exposed earth areas.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Appearance

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Equipment and Furnishings: Refurbish Classroom Cabinets		
<b>Linked System</b>	Equipment and Furnishings	<b>Inspection Date</b>	08/17/2006
<b>Prime System</b>	Equipment and Furnishings	<b>Finish Date</b>	-
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Fern, Bob	<b>Actual Cost</b>	0
<b>Action Date</b>	08/17/2009	<b>Total Estimated Cost:</b>	77,361
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	All Classrooms 1951 Addition	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Original cabinets/countertops are in good structural condition, but require refinishing and top replacement.

**PHOTOS**



Equipment and Furnishings: Refurbish Classroom Cabinets

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Equipment and Furnishings: Refurbish Classroom Cabinets

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**ACTION DESCRIPTION**

Strip/refinish wood casework, replace countertop.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Appearance

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Equipment and Furnishings: Replace Workstation Tops		
<b>Linked System</b>	Equipment and Furnishings	<b>Inspection Date</b>	08/17/2006
<b>Prime System</b>	Equipment and Furnishings	<b>Finish Date</b>	-
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Fern, Bob	<b>Actual Cost</b>	0
<b>Action Date</b>	08/17/2009	<b>Total Estimated Cost:</b>	18,337
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Life Management Room #121, 1889 Building	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Existing workstation countertops are very damaged and need replacement.

**PHOTOS**



Equipment and Furnishings: Replace Workstation Tops

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**ACTION DESCRIPTION**

Disassemble workstation and remove top. Replace with new. 5 Pods ( 20 Workstations total)

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Appearance

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Floor Finishes: Refinish Gym Floor	<b>Inspection Date</b>	08/17/2006
<b>Linked System</b>	Floor Finishes	<b>Finish Date</b>	-
<b>Prime System</b>	Floor Finishes	<b>Status</b>	Open
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Actual Cost</b>	0
<b>Inspector Name</b>	Fern, Bob	<b>Total Estimated Cost:</b>	31,766
<b>Action Date</b>	08/17/2009	<b>Funding Type</b>	-
<b>Funding Year</b>	-	<b>Annual Energy/Ops Savings \$</b>	-
<b>Requirement Location</b>	Gymnasium, 1966 Addition		
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Existing floor requires restoration

**PHOTOS**



Floor Finishes: Refinish Gym Floor

-

**ACTION DESCRIPTION**

Strip, sand and refinish wood floor, repaint game markings.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Appearance

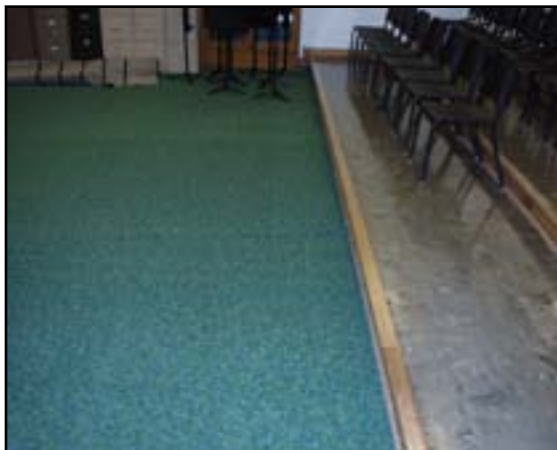
**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Floor Finishes: Replace Carpet	<b>Inspection Date</b>	08/17/2006
<b>Linked System</b>	Floor Finishes	<b>Finish Date</b>	-
<b>Prime System</b>	Floor Finishes	<b>Status</b>	Open
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Actual Cost</b>	0
<b>Inspector Name</b>	Fern, Bob	<b>Total Estimated Cost:</b>	154,108
<b>Action Date</b>	08/17/2009	<b>Funding Type</b>	-
<b>Funding Year</b>	-	<b>Annual Energy/Ops Savings \$</b>	-
<b>Requirement Location</b>	Entire Building Except 1951 Addition		
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Existing carpet throughout building is very worn and stained. Replacement required.

**PHOTOS**



Floor Finishes: Replace Carpet

-

**ACTION DESCRIPTION**

Remove existing carpet and replace with new.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Appearance

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Floor Finishes: Replace VAT with VCT		
<b>Linked System</b>	Floor Finishes	<b>Inspection Date</b>	08/17/2006
<b>Prime System</b>	Floor Finishes	<b>Finish Date</b>	-
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Fern, Bob	<b>Actual Cost</b>	0
<b>Action Date</b>	08/17/2009	<b>Total Estimated Cost:</b>	335,913
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	All Classrooms 1951 Addition	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Existing vinyl asbestos tile is worn and in poor condition.

**PHOTOS**



Floor Finishes: Replace VAT with VCT

-

**ACTION DESCRIPTION**

Remove existing VAT, prepare subfloor, install new VCT.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Appearance

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Site Improvements: General Landscaping	<b>Inspection Date</b>	10/03/2006
<b>Linked System</b>	Site Improvements	<b>Finish Date</b>	-
<b>Prime System</b>	Site Improvements	<b>Status</b>	Open
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Actual Cost</b>	0
<b>Inspector Name</b>	Northern Lights Landscaping	<b>Total Estimated Cost:</b>	9,375
<b>Action Date</b>	10/03/2007	<b>Funding Type</b>	-
<b>Funding Year</b>	-	<b>Annual Energy/Ops Savings \$</b>	-
<b>Requirement Location</b>	Property around facility		
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

There are negative slope areas around the facility bringing drainage towards the facility instead of away from the facility. There are lawn areas around the immediate building requiring restoration.

**PHOTOS**

**ACTION DESCRIPTION**

Correct negative slope around foundations by installing soil and sod. Restore lawn at stressed and/or non existing lawn areas around immediate building by installing soil and sod.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Appearance

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Wall Finishes: Repaint Interior	<b>Inspection Date</b>	08/17/2006
<b>Linked System</b>	Wall Finishes	<b>Finish Date</b>	-
<b>Prime System</b>	Wall Finishes	<b>Status</b>	Open
<b>Priority</b>	4- Mid Term Needs (6-10 Yrs)	<b>Actual Cost</b>	0
<b>Inspector Name</b>	Fern, Bob	<b>Total Estimated Cost:</b>	273,861
<b>Action Date</b>	08/17/2012	<b>Funding Type</b>	-
<b>Funding Year</b>	-	<b>Annual Energy/Ops Savings \$</b>	-
<b>Requirement Location</b>	Entire Building		
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Existing painted surfaces will require repainting.

**PHOTOS**



Wall Finishes: Repaint Interior

-

**ACTION DESCRIPTION**

Prepare surfaces and repaint.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Appearance

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Wall Finishes: Replace Wall Panels at Cafeteria		
<b>Linked System</b>	Wall Finishes	<b>Inspection Date</b>	08/17/2006
<b>Prime System</b>	Wall Finishes	<b>Finish Date</b>	-
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Fern, Bob	<b>Actual Cost</b>	0
<b>Action Date</b>	08/17/2009	<b>Total Estimated Cost:</b>	53,619
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Cafeteria 1993 addition	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Existing acoustical wall panels are stained/soiled. Replace wall panels.

**PHOTOS**



Wall Finishes: Replace Wall Panels at Cafeteria

-

**ACTION DESCRIPTION**

Remove wall panels and replace with new.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Asbestos

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Hazardous Components: Abatement	<b>Inspection Date</b>	07/01/2006
<b>Linked System</b>	Hazardous Components Abatement	<b>Finish Date</b>	-
<b>Prime System</b>	Hazardous Components Abatement	<b>Status</b>	Open
<b>Priority</b>	1- Currently Critical (Immediately)	<b>Actual Cost</b>	0
<b>Inspector Name</b>	Wormuth, Kevin	<b>Total Estimated Cost:</b>	92,638
<b>Action Date</b>	07/01/2006	<b>Funding Type</b>	-
<b>Funding Year</b>	-	<b>Annual Energy/Ops Savings \$</b>	-
<b>Requirement Location</b>	Entire Facility		
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

This facility was built when asbestos was a common component of many building materials. The majority of asbestos in this facility was part of the insulating materials. Some has been abated, but in some areas it is still present.

**PHOTOS**

**ACTION DESCRIPTION**

Abatement of asbestos containing materials throughout facility.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Beyond Rated Life

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Aquatic Facilities: Filtration System Upgrade		
<b>Linked System</b>	Aquatic Facilities	<b>Inspection Date</b>	11/05/2006
<b>Prime System</b>	Aquatic Facilities	<b>Finish Date</b>	-
<b>Priority</b>	5- Recommendations/ Improvements	<b>Status</b>	Open
<b>Inspector Name</b>	USAquatics	<b>Actual Cost</b>	0
<b>Action Date</b>	-	<b>Total Estimated Cost:</b>	54,516
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Pool Mechanical	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

The existing filtration system is a diatomaceous earth (DE) filter. The DE filter is a waste media filter since you must continuously buy DE. Depending on the bather load, the filters are backwashed weekly. DE has been found to be a carcinogen by several testing agencies. Its handling characteristics are similar to asbestos. When wetted it can be handled safely, when it is a dry dust it can be inhaled into the lungs. There has been a trend nationally away from DE filters because of operational costs and health concerns. The filter is being backwashed down the sewer. In many jurisdictions, DE is considered a hazardous waste and must be separated from the water during the backwash process with the DE material being sent to the proper disposal sites. The DE system used requires dual pumps and a governor valve. Flooding is always a possibility and two pumps require twice the power of a single pump system.

**PHOTOS**



Aquatic Facilities: Filtration System Upgrade

-

**ACTION DESCRIPTION**

Install a high rate pressure sand filter system with bacwash retention capability. Pressure sand filters are a permanent media filter, which are more efficient to operate than other types of filters. Backwashing the filters take approximately 10 minutes per filter as compared to several hours for the DE filter. When proper sizing methods are used and the correct type of filter is specified, filtration effectiveness comparable to DE can be achieved without the associated dangers. The filters are also non-metallic, so rusting will not be an issue. Since backwashing is a process of reversing flow in the filter, the only

*All Costs in USD.*

elements going to waste are pool water and organics.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Beyond Rated Life

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Electrical Distribution: Outdated Panels	<b>Inspection Date</b>	08/11/2006
<b>Linked System</b>	Electrical Service and Distribution	<b>Finish Date</b>	-
<b>Prime System</b>	Electrical Service and Distribution	<b>Status</b>	Open
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Actual Cost</b>	0
<b>Inspector Name</b>	Crotteau, Paul	<b>Total Estimated Cost:</b>	24,898
<b>Action Date</b>	08/11/2009	<b>Funding Type</b>	-
<b>Funding Year</b>	-	<b>Annual Energy/Ops Savings \$</b>	-
<b>Requirement Location</b>	Building Wide		
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Electrical panels have become outdated which make it difficult to maintain and find the correct replacement parts.

**PHOTOS**



Electrical Distribution: Insufficient Capacity  
 Electrical Distribution: Outdated Panel

**ACTION DESCRIPTION**

New panels will replace outdated panels and new feeders will be pulled where required. The new panels will be easier to find parts for and to maintain.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Beyond Rated Life

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	HVAC: Heating System Conversion - Steam to Hot Water		
<b>Linked System</b>	Steam Distribution Systems	<b>Inspection Date</b>	06/28/2006
<b>Prime System</b>	Steam Distribution Systems	<b>Finish Date</b>	-
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Schumacher, Russ	<b>Actual Cost</b>	0
<b>Action Date</b>	06/28/2009	<b>Total Estimated Cost:</b>	618,910
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	All Floors - Entire Building Except for 1999 Boys and Girls Club	<b>Annual Energy/Ops Savings \$</b>	7,347
<b>Savings Description</b>	Energy savings generated from converting from a steam system with old boilers to a how water system that includes condensing style boiler(s).		

**REQUIREMENT DESCRIPTION**

A majority of the steam system (55 - 117 years old) has exceeded the recommended useful life. Most of the steam system is a one pipe system which is difficult to control/maintain/service. A steam system requires substantially more maintenance than a modern hot water heating system due to steam traps, condensate pumps, and chemical treatment.

**PHOTOS**



HVAC: Heating System Conversion - Steam to Hot Water

**ACTION DESCRIPTION**

Install new high efficiency hot water condensing boilers and hot water piping system. Retrofit one steam boiler to hot water and utilize for interruptible fuel rates. Replace all steam terminal heating devices and coils with hot water devices and coils.

Budgeted costs of \$8,250 are avoided by converting the steam system to hot water.

This is due to the terminal steam devices requiring custom covers to be installed to eliminate the burn hazard.

*All Costs in USD.*



**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Beyond Rated Life

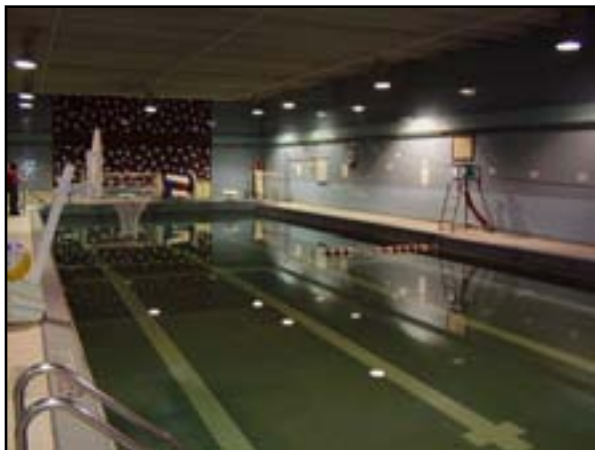
**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	HVAC: Pool Unit Replacement along with an Automatic Pool Cover		
<b>Linked System</b>	Aquatic Facilities	<b>Inspection Date</b>	07/18/2006
<b>Prime System</b>	Aquatic Facilities	<b>Finish Date</b>	-
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Schumacher, Russ	<b>Actual Cost</b>	0
<b>Action Date</b>	07/18/2007	<b>Total Estimated Cost:</b>	354,000
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	1959 Building	<b>Annual Energy/Ops Savings \$</b>	5,769
<b>Savings Description</b>	Pool cover saving heat and evaporation losses from pool. The pool area also required less ventilation when the pool is covered which results in additional savings. A sensible heat exchanger recovers heat from exhaust to preheat air during the winter. Additional energy will be consumed during the cooling season when mechanical dehumidification is required.		

**REQUIREMENT DESCRIPTION**

The existing pool air handling unit is located in the mechanical room beside the pool and is 47 years old and has exceeded the recommended useful life.

**PHOTOS**



HVAC: Pool Unit Replacement along with an Automatic Pool Cover

-

**ACTION DESCRIPTION**

Replace the pool air handling unit with a pool dehumidification unit. This will help maintain acceptable temperature and humidity.

*All Costs in USD.*



**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Beyond Rated Life

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	HVAC: Replace Ventilation All Floors 1889, 1915, and 1930 Building Classroom Areas		
<b>Linked System</b>	Air Distribution Systems	<b>Inspection Date</b>	06/28/2006
<b>Prime System</b>	Air Distribution Systems	<b>Finish Date</b>	-
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Schumacher, Russ	<b>Actual Cost</b>	0
<b>Action Date</b>	06/28/2009	<b>Total Estimated Cost:</b>	1,815,430
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	All Floors - 1889, 1915, and 1930 Building Classroom Areas	<b>Annual Energy/Ops Savings \$</b>	1,144
<b>Savings Description</b>	Energy savings will be generated by using heat exchangers to recover exhaust air energy in order to pre-condition make-up air. In addition, each classroom occupancy controls will reduce ventilation rates and control the lighting to save energy when rooms are not in use. Additional energy will be consumed to provide dehumidification during the cooling months.		

**REQUIREMENT DESCRIPTION**

The 76 - 117 year old ventilation systems have exceeded the recommended useful life expectancy and currently poorly distributes ventilation air. As part of this upgrade, the new mechanical system will incorporated heat recovery and classroom occupancy / CO2 controls to save energy.

**PHOTOS**



HVAC: Replace Ventilation All Floors 1889, 1915, and 1930 Building Classroom Areas

**ACTION DESCRIPTION**

Replacement of the Existing Ventilation System with a Modern Ventilation System consisting of Air Handling Units with Energy Recovery, Duct Distribution System, and Variable Air Volume Boxes with Hot Water Reheat Coils and Hot Water  
*All Costs in USD.*

Finned Tube Radiation.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Beyond Rated Life

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Lighting Equipment: Occupancy Sensors		
<b>Linked System</b>	Lighting Equipment	<b>Inspection Date</b>	09/19/2006
<b>Prime System</b>	Lighting Equipment	<b>Finish Date</b>	-
<b>Priority</b>	4- Mid Term Needs (6-10 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Ruud, Mark	<b>Actual Cost</b>	0
<b>Action Date</b>	09/19/2012	<b>Total Estimated Cost:</b>	19,995
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement</b>	Classrooms	<b>Annual Energy/Ops</b>	-
<b>Location</b>		<b>Savings \$</b>	
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

The existing classroom occupancy sensors are single technology sensors and will need replacement in the mid term future. Dual technology sensors offer improved performance.

**PHOTOS**

**ACTION DESCRIPTION**

Remove and replace existing classroom occupancy sensors with dual technology occupancy sensors.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Beyond Rated Life

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Other Equipment - Walk-In Cooler Condenser		
<b>Linked System</b>	Equipment and Furnishings	<b>Inspection Date</b>	09/14/2006
<b>Prime System</b>	Equipment and Furnishings	<b>Finish Date</b>	-
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Stout Mechanical	<b>Actual Cost</b>	0
<b>Action Date</b>	09/14/2009	<b>Total Estimated Cost:</b>	9,735
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Kitchen	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Condensing unit is old and has water valve that runs constantly. Unit appears to short cycle. It is unclear which refrigerant is in unit.

**PHOTOS**



Other Equipment - Walk-In Cooler Condenser

-

**ACTION DESCRIPTION**

Replace condensing unit with water cooled unit or replace with an air cooled unit and move to location 12' away.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Beyond Rated Life

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Plumbing: Replace Underground Sanitary Sewer Lines		
<b>Linked System</b>	Plumbing	<b>Inspection Date</b>	11/29/2006
<b>Prime System</b>	Plumbing	<b>Finish Date</b>	-
<b>Priority</b>	5- Recommendations/ Improvements	<b>Status</b>	Open
<b>Inspector Name</b>	Schumacher, Russ	<b>Actual Cost</b>	0
<b>Action Date</b>	-	<b>Total Estimated Cost:</b>	224,200
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	All Building Areas 35 Years or Older	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Underground sanitary sewer lines require replacement due to tree roots, pipe degradation, and pipe damage due to ground shifting over time.

**PHOTOS**

**ACTION DESCRIPTION**

Replace the underground sanitary sewer lines with new.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Beyond Rated Life

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Roof System: Replace Roof	<b>Inspection Date</b>	08/01/2006
<b>Linked System</b>	Roofing	<b>Finish Date</b>	-
<b>Prime System</b>	Roofing	<b>Status</b>	Open
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Actual Cost</b>	0
<b>Inspector Name</b>	Inspec	<b>Total Estimated Cost:</b>	5,976
<b>Action Date</b>	08/01/2007	<b>Funding Type</b>	-
<b>Funding Year</b>	-	<b>Annual Energy/Ops Savings \$</b>	9
<b>Requirement Location</b>	1951 Elementary Addition		
<b>Savings Description</b>	Energy savings generated from improved roof insulation.		

**REQUIREMENT DESCRIPTION**

Roof system is beyond rated life and is in poor condition. Includes roof Areas 9 and 11.

**PHOTOS**



Roof System: Replace Roof

-

**ACTION DESCRIPTION**

Replace the lower built-up roofs in this area. Sequence roof-level wall restoration with reroofing.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Beyond Rated Life

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Roof System: Replace Roof	<b>Inspection Date</b>	08/01/2006
<b>Linked System</b>	Roofing	<b>Finish Date</b>	-
<b>Prime System</b>	Roofing	<b>Status</b>	Open
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Actual Cost</b>	0
<b>Inspector Name</b>	Inspec	<b>Total Estimated Cost:</b>	133,571
<b>Action Date</b>	08/01/2009	<b>Funding Type</b>	-
<b>Funding Year</b>	-	<b>Annual Energy/Ops Savings \$</b>	205
<b>Requirement Location</b>	1951 Elementary Addition		
<b>Savings Description</b>	Energy savings generated from improved roof insulation.		

**REQUIREMENT DESCRIPTION**

Roof system beyond rated life. Suspected wet insulation. Includes roof Areas 7B and 7C.

**PHOTOS**



Roof System: Replace Roof

**ACTION DESCRIPTION**

Replace the EPDM roof in this area (partial). Sequence roof-level wall restoration with reroofing.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Beyond Rated Life

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Roof System: Replace Roof	<b>Inspection Date</b>	08/01/2006
<b>Linked System</b>	Roofing	<b>Finish Date</b>	-
<b>Prime System</b>	Roofing	<b>Status</b>	Open
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Actual Cost</b>	0
<b>Inspector Name</b>	Inspec	<b>Total Estimated Cost:</b>	27,187
<b>Action Date</b>	08/01/2007	<b>Funding Type</b>	-
<b>Funding Year</b>	-	<b>Annual Energy/Ops Savings \$</b>	68
<b>Requirement Location</b>	1959 Pool Addition		
<b>Savings Description</b>	Energy savings generated from improved roof insulation.		

**REQUIREMENT DESCRIPTION**

Roof system beyond rated service life and in poor condition. Includes roof Areas 19 and 18 (low area).

**PHOTOS**



Roof System: Replace Roof

-

**ACTION DESCRIPTION**

Replace the EPDM roof in this area (partial).

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Beyond Rated Life

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Site Furnishings: Playground Upgrade / Replacement		
<b>Linked System</b>	Site Furnishings	<b>Inspection Date</b>	10/03/2006
<b>Prime System</b>	Site Furnishings	<b>Finish Date</b>	-
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Earl F. Anderson	<b>Actual Cost</b>	0
<b>Action Date</b>	10/03/2007	<b>Total Estimated Cost:</b>	96,878
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Facility Grounds	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Playground equipment was built in 1988 and 1994. Some of the equipment does have an ADA ramp, but still does not meet ADA requirements. Newer equipment meets ADA.

**PHOTOS**



Site Furnishings: Playground Upgrade / Replacement

-

**ACTION DESCRIPTION**

Replace existing playground with new equipment to meet needs of enrollment. Replace surface material with district standard and replace edging as needed.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Building Code

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Elevators and Lifts: Elevator Repair	<b>Inspection Date</b>	08/28/2006
<b>Linked System</b>	Elevators and Lifts	<b>Finish Date</b>	-
<b>Prime System</b>	Elevators and Lifts	<b>Status</b>	Open
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Actual Cost</b>	0
<b>Inspector Name</b>	Schindler Elevator Corp.	<b>Total Estimated Cost:</b>	68,405
<b>Action Date</b>	08/28/2007	<b>Funding Type</b>	-
<b>Funding Year</b>	-	<b>Annual Energy/Ops Savings \$</b>	-
<b>Requirement Location</b>	1993/1994 Addition		
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Work required falls into three categories: Code Compliance A17.3, Life Safety Issues and Product Upgrades.

**PHOTOS**

**ACTION DESCRIPTION**

Upgrade elevators for code compliance, life safety issues and product upgrades.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Building Code

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	HVAC: Replace Kitchen Grease Exhaust Hood		
<b>Linked System</b>	Exhaust Ventilation Systems	<b>Inspection Date</b>	07/12/2006
<b>Prime System</b>	Exhaust Ventilation Systems	<b>Finish Date</b>	-
<b>Priority</b>	6- Does Not Meet Current Codes/Standards	<b>Status</b>	Open
<b>Inspector Name</b>	Schumacher, Russ	<b>Actual Cost</b>	0
<b>Action Date</b>	-	<b>Total Estimated Cost:</b>	23,010
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Kitchen - 1993 Addition	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

The existing grease exhaust hood has been written up as a non compliant hood by the Code Inspector. This hood needs to be replaced with a code compliant grease exhaust hood and fan.

**PHOTOS**



HVAC: Replace Kitchen Grease Exhaust Hood

-

**ACTION DESCRIPTION**

Replace the existing grease exhaust hood and fan and grease duct with 2000 International Mechanical Code compliant kitchen grease hood exhaust system.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Building Code

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Superstructure: Reconstruct Ramp at 1889 Building		
<b>Linked System</b>	Superstructure	<b>Inspection Date</b>	08/17/2006
<b>Prime System</b>	Superstructure	<b>Finish Date</b>	-
<b>Priority</b>	5- Recommendations/ Improvements	<b>Status</b>	Open
<b>Inspector Name</b>	Fern, Bob	<b>Actual Cost</b>	0
<b>Action Date</b>	-	<b>Total Estimated Cost:</b>	13,491
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Southeast stairway 1889 building	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Existing ramp is of poor construction and condition ramp should be reconstructed with decrease in slope.

**PHOTOS**



Superstructure: Reconstruct Ramp at 1889 Building

-

**ACTION DESCRIPTION**

Remove existing wood ramp and reconstruct, include new hand and guard rails.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Capacity

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Electrical Distribution: Insufficient Capacity		
<b>Linked System</b>	Electrical Service and Distribution	<b>Inspection Date</b>	08/11/2006
<b>Prime System</b>	Electrical Service and Distribution	<b>Finish Date</b>	-
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Crotteau, Paul	<b>Actual Cost</b>	0
<b>Action Date</b>	08/11/2009	<b>Total Estimated Cost:</b>	17,582
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Building Wide	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Existing Branch Panels are lacking capacity for additional circuits. Panels must be added to accommodate circuits needed for additional receptacles in classrooms.

**PHOTOS**



Electrical Distribution: Insufficient Capacity  
 Electrical Distribution: Outdated Panel

**ACTION DESCRIPTION**

Provide two new 200 amp feeders and panels to help carry the extra load of additional receptacles throughout the building.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Capacity

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Wiring Devices: Insufficient Receptacles		
<b>Linked System</b>	Branch Wiring Devices	<b>Inspection Date</b>	08/11/2006
<b>Prime System</b>	Branch Wiring Devices	<b>Finish Date</b>	-
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Crotteau, Paul	<b>Actual Cost</b>	0
<b>Action Date</b>	08/11/2009	<b>Total Estimated Cost:</b>	150,096
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Building Wide	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

In general, classrooms have an insufficient number of receptacles. Computers and other electronics are plugged into power strips due to the lack of receptacles. This limits future addition of electronic devices and presents a fire hazard.

**PHOTOS**



Wiring Devices: Insufficient Receptacles

-

**ACTION DESCRIPTION**

Provide additional 20 amp receptacles in each classroom and associated branch wiring. Upgrade will first require additional branch panel boards.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Deferred Maintenance

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Aquatic Facilities: Deferred Maintenance Items		
<b>Linked System</b>	Aquatic Facilities	<b>Inspection Date</b>	11/05/2006
<b>Prime System</b>	Aquatic Facilities	<b>Finish Date</b>	-
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	USAquatics	<b>Actual Cost</b>	0
<b>Action Date</b>	11/05/2007	<b>Total Estimated Cost:</b>	95,273
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement</b>	Pool	<b>Annual Energy/Ops</b>	-
<b>Location</b>		<b>Savings \$</b>	
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

**MAIN DRAINS CORRODED**

The main drains are cast iron and over time the piping either corrodes or scales shut. Long term maintenance should include replacement of the main drains.

**GUTTER DROP-OUTS SCALED SHUT**

Similar to the cast iron main drains, the cast iron gutter drop-outs either corrode or scale shut. Long term maintenance should include replacement of the drop outs.

**INLETS SCALED; PRESSURE UN-EVEN**

Like the main drains and gutter drop outs, the inlets are cast iron / galvanized pipe and either corrode or scale shut. Long term maintenance should include replacement of the inlets.

The inlet grates (by Josam) are no longer made and the grates cannot be replaced. The inlets fittings should be replaced with a different model to facilitate easier repair and replacement in the future. Inlets are required to be adjustable

**TILE GROUT**

The pool tile must be re-grouted in order to preclude the delaminating of the tile from the pool shell.

**POOL PIPING AND VALVES (iron bodied)**

A lot of the piping and valves are still the original cast iron which has a lot of scale build-up and corrosion present. Repiping would include the necessary valves, flowmeter and thermometer.

**CLOGGED SANITARY WASTE**

Years of diatomaceous earth (DE) going down the drain clog the drain. DE deposits turn hard and accumulate in the waste lines. The piping should be inspected.

**PHOTOS**



Aquatic Facilities: Deferred Maintenance Items

-

**ACTION DESCRIPTION**

Replace main drain grates and related piping. Replace gutter drop-outs and connect to existing piping. Complete inlet pipe loop. Replace inlet fittings with adjustable eyeball fittings. Re-grout pool. Replace pool piping and valves. Repiping would include the necessary valves, flowmeter and thermometer. Ream-out waste piping.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Deferred Maintenance

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Ceiling Finishes: Replace Ceiling in Pool Corridor		
<b>Linked System</b>	Ceiling Finishes	<b>Inspection Date</b>	08/17/2006
<b>Prime System</b>	Ceiling Finishes	<b>Finish Date</b>	-
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Fern, Bob	<b>Actual Cost</b>	0
<b>Action Date</b>	08/17/2007	<b>Total Estimated Cost:</b>	48,497
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Second Floor pool Corridor, 1959 Addition	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Existing ceiling is water damaged and falling off substructure. Replace.

**PHOTOS**



Ceiling Finishes: Replace Ceiling in Pool Corridor

-

**ACTION DESCRIPTION**

Remove loose tile, install new suspended acoustic board ceiling with buckheads.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Deferred Maintenance

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Equipment and Furnishings: Refurbish Casework		
<b>Linked System</b>	Equipment and Furnishings	<b>Inspection Date</b>	08/17/2006
<b>Prime System</b>	Equipment and Furnishings	<b>Finish Date</b>	-
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Fern, Bob	<b>Actual Cost</b>	0
<b>Action Date</b>	08/17/2007	<b>Total Estimated Cost:</b>	11,800
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Workroom #140, 1889 Building, Music Storage Room, Store Addition	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Existing cabinets are old and are damaged. Repair and refinish.

**PHOTOS**



Equipment and Furnishings: Refurbish Casework

-



Equipment and Furnishings: Refurbish Casework

-

**ACTION DESCRIPTION**

Repair damaged sections and refinish.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Deferred Maintenance

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Equipment and Furnishings: Replace Damaged Student Lockers		
<b>Linked System</b>	Equipment and Furnishings	<b>Inspection Date</b>	08/17/2006
<b>Prime System</b>	Equipment and Furnishings	<b>Finish Date</b>	-
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Fern, Bob	<b>Actual Cost</b>	0
<b>Action Date</b>	08/17/2007	<b>Total Estimated Cost:</b>	8,121
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Corridors 1930 and portion of 1959 addition	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Portions of existing lockers are damaged/bent. Replace.

**PHOTOS**



Equipment and Furnishings: Replace Damaged Student Lockers  
 -

**ACTION DESCRIPTION**

Remove existing damaged lockers and replace with new construct protection at ends of rows. Approximately 20 Lockers.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Deferred Maintenance

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Exterior Walls: Wall Restoration		
<b>Linked System</b>	Exterior Walls	<b>Inspection Date</b>	08/01/2006
<b>Prime System</b>	Exterior Walls	<b>Finish Date</b>	-
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Inspec	<b>Actual Cost</b>	0
<b>Action Date</b>	08/01/2009	<b>Total Estimated Cost:</b>	289,100
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Entire Building	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Deteriorated roof-level and grade-level walls and chimney for the entire building.

**PHOTOS**



Exterior Walls: Wall Restoration

-

**ACTION DESCRIPTION**

Tuck pointing, spot brick replacement, joint sealant replacement, painting, stucco repairs, and misc. items.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Deferred Maintenance

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Exterior Windows: Replace Window Screens		
<b>Linked System</b>	Exterior Windows	<b>Inspection Date</b>	08/17/2006
<b>Prime System</b>	Exterior Windows	<b>Finish Date</b>	-
<b>Priority</b>	4- Mid Term Needs (6-10 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Fern, Bob	<b>Actual Cost</b>	0
<b>Action Date</b>	08/17/2012	<b>Total Estimated Cost:</b>	19,647
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Various Locations	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Replace window screens.

**PHOTOS**



Exterior Windows: Replace Window Screens

-

**ACTION DESCRIPTION**

Replace window screens.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Deferred Maintenance

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Fittings: Replace Toilet Partitions	<b>Inspection Date</b>	08/17/2006
<b>Linked System</b>	Fittings	<b>Finish Date</b>	-
<b>Prime System</b>	Fittings	<b>Status</b>	Open
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Actual Cost</b>	0
<b>Inspector Name</b>	Fern, Bob	<b>Total Estimated Cost:</b>	21,653
<b>Action Date</b>	08/17/2007	<b>Funding Type</b>	-
<b>Funding Year</b>	-	<b>Annual Energy/Ops Savings \$</b>	-
<b>Requirement Location</b>	All Toilet Rooms 1993/94 Addition		
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Existing partitions are damaged and inoperable.

**PHOTOS**



Fittings: Replace Toilet Partitions

-

**ACTION DESCRIPTION**

Remove existing partitions and replace with new plastic partitions. 23 Stalls

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Deferred Maintenance

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Floor Finishes: Replace Floors At Small Gyms		
<b>Linked System</b>	Floor Finishes	<b>Inspection Date</b>	08/17/2006
<b>Prime System</b>	Floor Finishes	<b>Finish Date</b>	-
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Fern, Bob	<b>Actual Cost</b>	0
<b>Action Date</b>	08/17/2009	<b>Total Estimated Cost:</b>	74,380
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Gym #222, Gym 326, 1889 Building	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Existing flooring is worn and requires replacement.

**PHOTOS**



Floor Finishes: Replace Floors At Small Gyms

-

**ACTION DESCRIPTION**

Remove existing VCT and VAT, prepare subfloor, install new shet vinyl with game markings.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Deferred Maintenance

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	HVAC: Ductwork Cleaning	<b>Inspection Date</b>	11/29/2006
<b>Linked System</b>	Air Distribution Systems	<b>Finish Date</b>	-
<b>Prime System</b>	Air Distribution Systems	<b>Status</b>	Open
<b>Priority</b>	4- Mid Term Needs (6-10 Yrs)	<b>Actual Cost</b>	0
<b>Inspector Name</b>	Schumacher, Russ	<b>Total Estimated Cost:</b>	47,200
<b>Action Date</b>	11/29/2012	<b>Funding Type</b>	-
<b>Funding Year</b>	-	<b>Annual Energy/Ops Savings \$</b>	-
<b>Requirement Location</b>	Building Wide		
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Clean the duct systems that are not replaced by the indoor air quality upgrade.

**PHOTOS**

**ACTION DESCRIPTION**

Clean ductwork that is not replaced due to indoor air quality upgrades.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Deferred Maintenance

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Interior Doors: Replace Classroom Corridor Doors		
<b>Linked System</b>	Interior Doors	<b>Inspection Date</b>	08/17/2006
<b>Prime System</b>	Interior Doors	<b>Finish Date</b>	-
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Fern, Bob	<b>Actual Cost</b>	0
<b>Action Date</b>	08/17/2009	<b>Total Estimated Cost:</b>	74,694
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	All Corridor Doors 1951 Addition	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Existing corridor doors are original and very worn. All door knobs are not compliant with ADA.

**PHOTOS**



Interior Doors: Replace Classroom Corridor Doors

-

**ACTION DESCRIPTION**

Remove existing doors and replace with new wood doors, lever handle hardware.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Deferred Maintenance

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Plumbing: Replace Lavatory Wash Fountains		
<b>Linked System</b>	Plumbing Fixtures	<b>Inspection Date</b>	07/11/2006
<b>Prime System</b>	Plumbing Fixtures	<b>Finish Date</b>	-
<b>Priority</b>	6- Does Not Meet Current Codes/Standards	<b>Status</b>	Open
<b>Inspector Name</b>	Schumacher, Russ	<b>Actual Cost</b>	0
<b>Action Date</b>	-	<b>Total Estimated Cost:</b>	35,400
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Building Wide	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

The four lavatory wash fountains are in need of constant maintenance and most leak water. These wash fountains have exceeded the recommended useful life.

**PHOTOS**



Plumbing: Replace Lavatory Wash Fountains

**ACTION DESCRIPTION**

Replace four wash fountains with new wash fountains with infrared mixing stations.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Deferred Maintenance

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Roof System: Replace Roof	<b>Inspection Date</b>	08/01/2006
<b>Linked System</b>	Roofing	<b>Finish Date</b>	-
<b>Prime System</b>	Roofing	<b>Status</b>	Open
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Actual Cost</b>	0
<b>Inspector Name</b>	Inspec	<b>Total Estimated Cost:</b>	73,731
<b>Action Date</b>	08/01/2007	<b>Funding Type</b>	-
<b>Funding Year</b>	-	<b>Annual Energy/Ops Savings \$</b>	113
<b>Requirement Location</b>	1930 Industrial Arts Addition		
<b>Savings Description</b>	Energy savings generated from improved roof insulation.		

**REQUIREMENT DESCRIPTION**

Roof system beyond rated life and in poor condition. Includes roof Area 14.

**PHOTOS**



Roof System: Replace Roof

-

**ACTION DESCRIPTION**

Replace the EPDM roof in this area.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Deferred Maintenance

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Roof System: Replace Roof	<b>Inspection Date</b>	08/01/2006
<b>Linked System</b>	Roofing	<b>Finish Date</b>	-
<b>Prime System</b>	Roofing	<b>Status</b>	Open
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Actual Cost</b>	0
<b>Inspector Name</b>	Inspec	<b>Total Estimated Cost:</b>	32,469
<b>Action Date</b>	08/01/2007	<b>Funding Type</b>	-
<b>Funding Year</b>	-	<b>Annual Energy/Ops Savings \$</b>	50
<b>Requirement Location</b>	Store		
<b>Savings Description</b>	Energy savings generated from improved roof insulation.		

**REQUIREMENT DESCRIPTION**

Roof system beyond rated life and in poor condition. Includes roof Area 17.

**PHOTOS**



Roof System: Replace Roof

**ACTION DESCRIPTION**

Replace the EPDM roof in this area.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Deferred Maintenance

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Roof System: Replace Roof	<b>Inspection Date</b>	08/01/2006
<b>Linked System</b>	Roofing	<b>Finish Date</b>	-
<b>Prime System</b>	Roofing	<b>Status</b>	Open
<b>Priority</b>	1- Currently Critical (Immediately)	<b>Actual Cost</b>	0
<b>Inspector Name</b>	Inspec	<b>Total Estimated Cost:</b>	79,579
<b>Action Date</b>	08/01/2006	<b>Funding Type</b>	-
<b>Funding Year</b>	-	<b>Annual Energy/Ops Savings \$</b>	85
<b>Requirement Location</b>	1959 Pool Addition		
<b>Savings Description</b>	Energy savings generated from improved roof insulation.		

**REQUIREMENT DESCRIPTION**

Roof system beyond rated service life and in very poor condition (open flashing and seams). Includes roof Area 16.

**PHOTOS**

**ACTION DESCRIPTION**

Replace the EPDM roof in this area. Sequence roof-level wall restoration with reroofing.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Deferred Maintenance

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Substructure: Repair Leaking/Damaged Wall		
<b>Linked System</b>	Substructure	<b>Inspection Date</b>	08/17/2006
<b>Prime System</b>	Substructure	<b>Finish Date</b>	-
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Fern, Bob	<b>Actual Cost</b>	0
<b>Action Date</b>	08/17/2007	<b>Total Estimated Cost:</b>	52,392
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	North Wall Boiler Room 1915 Addition	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Existing north wall leaks with deterioration of wall occurring.

**PHOTOS**



Substructure: Repair Leaking/Damaged Wall

-

**ACTION DESCRIPTION**

Investigate means to control water infiltration, repair wall.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Energy and Operational Efficiency

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Aquatic Facilities: Operational Upgrades		
<b>Linked System</b>	Aquatic Facilities	<b>Inspection Date</b>	11/05/2006
<b>Prime System</b>	Aquatic Facilities	<b>Finish Date</b>	-
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	USAquatics	<b>Actual Cost</b>	0
<b>Action Date</b>	11/05/2007	<b>Total Estimated Cost:</b>	29,335
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Pool	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

## REQUIREMENT DESCRIPTION

### STRAINER AND PUMP

The pump strainers were just replaced with dual 4" strainers on a parallel pipe installation. If and when they are replaced, we recommend the installation of a single larger strainer to reduce pressure loss and cleaning requirements.

### pH ADJUSTMENT

The Duluth school pools are unique in their chemical feed needs. Limited adjustment is required for pH control. This is unusual in that the use of gas chlorine (pH = 1) drives the pool water pH lower, generally requiring the use of caustic soda or soda ash to maintain the required pH. Due to this limited adjustment, the pool pH is maintained manually. Despite the limited adjustment necessary, it is still necessary. The installation of automatic pH adjustment chemicals will reduce the potential for peak and valley pH changes which can reduce the chlorine effectiveness.

### UPGRADE CHEMICAL CONTROLLER

The chemical controller should include a memory with down load and modem capabilities. These features give the ability to store the history of the pool chemistry to protect the owner in case of liability issues. It allows trouble shooting and is controllable from remote locations via the modem for management of the facility or assistance from outside parties who can download the pools data.

### SURGE TANK

The below grade surge tank allows for the possibility for flooding.

## PHOTOS



Aquatic Facilities: Operational Upgrades

-

### **ACTION DESCRIPTION**

#### **PUMP STRAINER**

Replace pump and strainer.

#### **Ph FEED EQUIPMENT**

Add pH feed equipment.

#### **CHEMICAL CONTROLLER**

Install an updated automatic chemical controller.

#### **SURGE TANK**

Seal the top of the surge tank and vent accordingly

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Energy and Operational Efficiency

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Aquatic Facilities: Pool Cover and HVAC Improvement		
<b>Linked System</b>	Aquatic Facilities	<b>Inspection Date</b>	09/08/2006
<b>Prime System</b>	Aquatic Facilities	<b>Finish Date</b>	-
<b>Priority</b>	5- Recommendations/ Improvements	<b>Status</b>	Open
<b>Inspector Name</b>	Ruud, Mark	<b>Actual Cost</b>	0
<b>Action Date</b>	-	<b>Total Estimated Cost:</b>	280,840
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Pool Area	<b>Annual Energy/Ops Savings \$</b>	5,805
<b>Savings Description</b>	Pool cover saving heat and evaporation losses from pool. The pool area also required less ventilation when the pool is covered which results in additional savings. A sensible heat exchanger recovers heat from exhaust to preheat air during the winter.		

**REQUIREMENT DESCRIPTION**

Install an automatic pool cover to save energy when the pool is not occupied during the nights or parts of weekends.  
 Replace pool unit with a new unit that recovers exhaust heat and VFD controls to reduce ventilation rates based on space humidity and temperature levels when the pool is covered.

**PHOTOS**

**ACTION DESCRIPTION**

-

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Energy and Operational Efficiency

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Aquatic Facilities: Pool Pump VFD		
<b>Linked System</b>	Aquatic Facilities	<b>Inspection Date</b>	09/11/2006
<b>Prime System</b>	Aquatic Facilities	<b>Finish Date</b>	-
<b>Priority</b>	1- Currently Critical (Immediately)	<b>Status</b>	Open
<b>Inspector Name</b>	Ruud, Mark	<b>Actual Cost</b>	0
<b>Action Date</b>	09/11/2006	<b>Total Estimated Cost:</b>	2,360
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Pool Mechanical	<b>Annual Energy/Ops Savings \$</b>	77
<b>Savings Description</b>	Pool pump saving from VFD controls to reduce flow during low filter head conditions or elimination of balancing valves.		

**REQUIREMENT DESCRIPTION**

Install VFD on pool pump and control to maintain constant flow.

**PHOTOS**

**ACTION DESCRIPTION**

-

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Energy and Operational Efficiency

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Controls: VendingMiser Vending Machine Controls		
<b>Linked System</b>	Controls and Instrumentation	<b>Inspection Date</b>	10/04/2006
<b>Prime System</b>	Controls and Instrumentation	<b>Finish Date</b>	-
<b>Priority</b>	1- Currently Critical (Immediately)	<b>Status</b>	Open
<b>Inspector Name</b>	Ruud, Mark	<b>Actual Cost</b>	0
<b>Action Date</b>	10/04/2006	<b>Total Estimated Cost:</b>	2,478
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Vending Machines	<b>Annual Energy/Ops Savings \$</b>	272
<b>Savings Description</b>	VendingMiser controls cycle power to the vending machine during unoccupied times to save energy.		

**REQUIREMENT DESCRIPTION**

Install VendingMiser controls on vending machines.

**PHOTOS**

**ACTION DESCRIPTION**

-

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Energy and Operational Efficiency

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	HVAC: Remote Condenser Heat Removal		
<b>Linked System</b>	Exhaust Ventilation Systems	<b>Inspection Date</b>	07/12/2006
<b>Prime System</b>	Exhaust Ventilation Systems	<b>Finish Date</b>	-
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Schumacher, Russ	<b>Actual Cost</b>	0
<b>Action Date</b>	07/12/2007	<b>Total Estimated Cost:</b>	4,484
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Kitchen - 1993 Addition	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

The cooler and freezer condensers are located in the adjoining loading dock already. This overheats the space in the summer and requires more exhaust.

**PHOTOS**



HVAC: Remote Condenser Heat Removal

-

**ACTION DESCRIPTION**

Add an roof exhaust fan above the condensers for summer operation.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Energy and Operational Efficiency

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	HVAC: Steam System Steam Trap Upgrades		
<b>Linked System</b>	Steam Distribution Systems	<b>Inspection Date</b>	09/07/2006
<b>Prime System</b>	Steam Distribution Systems	<b>Finish Date</b>	-
<b>Priority</b>	1- Currently Critical (Immediately)	<b>Status</b>	Open
<b>Inspector Name</b>	Ruud, Mark	<b>Actual Cost</b>	0
<b>Action Date</b>	09/07/2006	<b>Total Estimated Cost:</b>	24,863
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Facility Wide	<b>Annual Energy/Ops Savings \$</b>	2,305
<b>Savings Description</b>	Heating savings attributed to leaking steam traps that result in the overheating of tunnel areas or steam venting in condensate receiver tanks.		

**REQUIREMENT DESCRIPTION**

- 1) Complete survey all steam traps system wide to locate failed traps.
- 2) Replace or repair of failed traps depending on trap age, condition, and availability of replacement part kits.

**PHOTOS**

**ACTION DESCRIPTION**

-

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Energy and Operational Efficiency

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Kitchen: Replace Electric Booster Heater with a Gas Unit		
<b>Linked System</b>	Hot Water Distribution	<b>Inspection Date</b>	10/04/2006
<b>Prime System</b>	Hot Water Distribution	<b>Finish Date</b>	-
<b>Priority</b>	1- Currently Critical (Immediately)	<b>Status</b>	Open
<b>Inspector Name</b>	Ruud, Mark	<b>Actual Cost</b>	0
<b>Action Date</b>	10/04/2006	<b>Total Estimated Cost:</b>	21,240
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Kitchen Dishwasher	<b>Annual Energy/Ops Savings \$</b>	3,343
<b>Savings Description</b>	Energy saving generated by reducing electric demand costs by switching from electric to gas heat.		

**REQUIREMENT DESCRIPTION**

Replace the electric booster heater that feeds the dishwasher with a gas fired unit.

**PHOTOS**

**ACTION DESCRIPTION**

-

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Energy and Operational Efficiency

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Lighting: Lighting Retrofit	<b>Inspection Date</b>	09/20/2006
<b>Linked System</b>	Lighting Equipment	<b>Finish Date</b>	-
<b>Prime System</b>	Lighting Equipment	<b>Status</b>	Open
<b>Priority</b>	1- Currently Critical (Immediately)	<b>Actual Cost</b>	0
<b>Inspector Name</b>	Ruud, Mark	<b>Total Estimated Cost:</b>	105,320
<b>Action Date</b>	09/20/2006	<b>Funding Type</b>	-
<b>Funding Year</b>	-	<b>Annual Energy/Ops Savings \$</b>	7,766
<b>Requirement Location</b>	Entire Facility		
<b>Savings Description</b>	Energy savings generated through more efficient lighting technology.		

**REQUIREMENT DESCRIPTION**

Lighting project consists of the following:

- 1) Retrofit/Replace 34w T12 fixtures with 25w T8 lighting
- 2) Relamp 32w T8 lamps with 25w T8 lamps
- 3) Replace HID lighting with T8 lighting fixtures
- 4) Replace Incand. lighting with Fluorescent
- 5) Upgrade exit signs with LED technology
- 6) Gym Occupancy Sensors

**PHOTOS**

**ACTION DESCRIPTION**

-

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Energy and Operational Efficiency

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Plumbing: Add Domestic Water Heat Exchanger		
<b>Linked System</b>	Plumbing	<b>Inspection Date</b>	07/11/2006
<b>Prime System</b>	Plumbing	<b>Finish Date</b>	-
<b>Priority</b>	5- Recommendations/ Improvements	<b>Status</b>	Open
<b>Inspector Name</b>	Schumacher, Russ	<b>Actual Cost</b>	0
<b>Action Date</b>	-	<b>Total Estimated Cost:</b>	35,046
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Boiler Room - 1928 Addition	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Provide a domestic hot water heat exchanger for domestic hot water. This will allow for an interruptible natural gas rate.

**PHOTOS**



Plumbing: Add Domestic Water Heat Exchanger

-

**ACTION DESCRIPTION**

Provide a new domestic hot water heat exchanger and all required piping and controls.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Energy and Operational Efficiency

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Plumbing: Water Conservation Upgrades		
<b>Linked System</b>	Plumbing Fixtures	<b>Inspection Date</b>	09/21/2006
<b>Prime System</b>	Plumbing Fixtures	<b>Finish Date</b>	-
<b>Priority</b>	1- Currently Critical (Immediately)	<b>Status</b>	Open
<b>Inspector Name</b>	Ruud, Mark	<b>Actual Cost</b>	0
<b>Action Date</b>	09/21/2006	<b>Total Estimated Cost:</b>	35,844
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Entire Facility	<b>Annual Energy/Ops Savings \$</b>	1,953
<b>Savings Description</b>	Reduce water and sewer usage using new low flow devices.		

**REQUIREMENT DESCRIPTION**

Replace / Retrofit standard flow flush valves and faucets with low flow devices.

**PHOTOS**

**ACTION DESCRIPTION**

-

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Life Safety

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Elevators and Lifts: Elevator Repair	<b>Inspection Date</b>	08/28/2006
<b>Linked System</b>	Elevators and Lifts	<b>Finish Date</b>	-
<b>Prime System</b>	Elevators and Lifts	<b>Status</b>	Open
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Actual Cost</b>	0
<b>Inspector Name</b>	Schindler Elevator Corp.	<b>Total Estimated Cost:</b>	10,124
<b>Action Date</b>	08/28/2009	<b>Funding Type</b>	-
<b>Funding Year</b>	-	<b>Annual Energy/Ops Savings \$</b>	-
<b>Requirement Location</b>	1951 Elementary Addition - East Wing		
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Work required falls into two categories: Life Safety Issues and Product Upgrades.

**PHOTOS**

**ACTION DESCRIPTION**

Upgrade elevators for life safety issues and product upgrades.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Life Safety

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Exterior Walls: Wall Restoration		
<b>Linked System</b>	Exterior Walls	<b>Inspection Date</b>	08/01/2006
<b>Prime System</b>	Exterior Walls	<b>Finish Date</b>	-
<b>Priority</b>	1- Currently Critical (Immediately)	<b>Status</b>	Open
<b>Inspector Name</b>	Inspec	<b>Actual Cost</b>	0
<b>Action Date</b>	08/01/2006	<b>Total Estimated Cost:</b>	413,000
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement</b>	1959 Pool Addition and 1930 Industrial Arts	<b>Annual Energy/Ops</b>	-
<b>Location</b>	Addition	<b>Savings \$</b>	
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Severely deteriorated roof-level and grade-level walls at the 1959 Pool Addition. Severely deteriorated window lintel above Roof Area 15 (1930 Industrial Arts Addition).

**PHOTOS**



Exterior Walls: Wall Restoration

-

**ACTION DESCRIPTION**

Restore 1959 Pool Addition walls and roof-level wall at Roof Area 15. Rebuilding, tuck pointing, brick replacement, and joint sealant replacement in addition to repair recommendation for 1959 Pool Addition and window lintel. Sequence work with reroofing in Areas 15,16,17, and 18.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Life Safety

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Lighting Equipment: Exterior Lighting	<b>Inspection Date</b>	09/19/2006
<b>Linked System</b>	Lighting Equipment	<b>Finish Date</b>	-
<b>Prime System</b>	Lighting Equipment	<b>Status</b>	Open
<b>Priority</b>	1- Currently Critical (Immediately)	<b>Actual Cost</b>	0
<b>Inspector Name</b>	Ruud, Mark	<b>Total Estimated Cost:</b>	43,896
<b>Action Date</b>	09/19/2006	<b>Funding Type</b>	-
<b>Funding Year</b>	-	<b>Annual Energy/Ops Savings \$</b>	-
<b>Requirement Location</b>	Exterior		
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

The existing exterior lighting for this facility is getting old and the light levels and coverage for adequate safety is a concern.

**PHOTOS**

**ACTION DESCRIPTION**

Replace and add exterior fixtures as needed to improve light levels and coverage.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Occupant Security

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Communication and Security: Access Control		
<b>Linked System</b>	Communications and Security	<b>Inspection Date</b>	09/20/2006
<b>Prime System</b>	Security and Detection Systems	<b>Finish Date</b>	-
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Crotteau, Paul	<b>Actual Cost</b>	0
<b>Action Date</b>	09/20/2009	<b>Total Estimated Cost:</b>	23,600
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Building Wide	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Doors need ability to be locked down with access allowed only to authorized people. Also doors without card readers should be monitored for unauthorized access.

**PHOTOS**



Communication and Security: Access Control

-

**ACTION DESCRIPTION**

Install 6 proximity card readers at main entry doors for both public and personal  
 And add magnetic door contacts to all other exterior doors on a alarm system.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Occupant Security

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Communications and Security: CCTV		
<b>Linked System</b>	Communications and Security	<b>Inspection Date</b>	11/30/2006
<b>Prime System</b>	Communications and Security	<b>Finish Date</b>	-
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Crotteau, Paul	<b>Actual Cost</b>	0
<b>Action Date</b>	11/30/2007	<b>Total Estimated Cost:</b>	114,485
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Building Wide	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

There are currently no cameras located in the school. Cameras would add an increased security throughout the school which is becoming more critical.

**PHOTOS**

**ACTION DESCRIPTION**

Provide cameras throughout school. Camera locations provided by ISD 709.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Occupant Security

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Fire Alarm Systems: Outdated System		
<b>Linked System</b>	Fire Alarm Systems	<b>Inspection Date</b>	09/20/2006
<b>Prime System</b>	Fire Alarm Systems	<b>Finish Date</b>	-
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Crotteau, Paul	<b>Actual Cost</b>	0
<b>Action Date</b>	09/20/2009	<b>Total Estimated Cost:</b>	212,400
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Building Wide	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Fire alarm systems are old analog system. System is prone to malfunctions and is very hard to identify exact area of alarm. It is also difficult to troubleshoot and find malfunctions.

**PHOTOS**



Fire Alarm Systems: Outdated System

-

**ACTION DESCRIPTION**

Replace fire system with a fully addressable fire system.  
 This will allow for quick response to exact alarm device  
 And allow for better maintenance and safety

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Upgrades

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Ceiling Finishes: Install New Suspended Acoustical Ceiling		
<b>Linked System</b>	Ceiling Finishes	<b>Inspection Date</b>	08/17/2006
<b>Prime System</b>	Ceiling Finishes	<b>Finish Date</b>	-
<b>Priority</b>	4- Mid Term Needs (6-10 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Fern, Bob	<b>Actual Cost</b>	0
<b>Action Date</b>	08/17/2012	<b>Total Estimated Cost:</b>	63,021
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	All classrooms and corridors, 1951 addition	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Existing 12X12 tile is generally in good condition however looks dated.

**PHOTOS**



Ceiling Finishes: Install New Suspended Acoustical Ceiling

-

**ACTION DESCRIPTION**

Install new suspended acoustic board ceiling system.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Upgrades

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Communication and Security: Cabling Upgrade		
<b>Linked System</b>	Communications and Security	<b>Inspection Date</b>	08/15/2006
<b>Prime System</b>	Local Area Networks	<b>Finish Date</b>	-
<b>Priority</b>	5- Recommendations/ Improvements	<b>Status</b>	Open
<b>Inspector Name</b>	The Westlund Group	<b>Actual Cost</b>	0
<b>Action Date</b>	-	<b>Total Estimated Cost:</b>	246,620
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Entire Facility	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Existing building cabling has older categories of cabling.

**PHOTOS**

**ACTION DESCRIPTION**

Replace old and mixed telephone/data cabling with up to date category 6 of 6A. Add basic wireless coverage. Add high bandwidth Fiber Optic Cabling between wiring closets. Standardize quantity of phone and data in classroom and offices.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Upgrades

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Communication and Security: Clock System		
<b>Linked System</b>	Communications and Security	<b>Inspection Date</b>	09/20/2006
<b>Prime System</b>	Clock and Program Systems	<b>Finish Date</b>	-
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Crotteau, Paul	<b>Actual Cost</b>	0
<b>Action Date</b>	09/20/2009	<b>Total Estimated Cost:</b>	25,960
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Building Wide	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Master clock systems no longer keep clocks in time. Most are only used for running the bells. Atomic clocks may not receive a signal through the brick buildings. Many clocks do not work at all.

**PHOTOS**



Communication and Security: Clock System

**ACTION DESCRIPTION**

Install new wireless master clock system. The main clock receives the GPS signal for exact time and then sends signal to other clocks in facility. This will allow for accurate time and less tardiness between classes.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Upgrades

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Communication and Security: Public Address and Sound System		
<b>Linked System</b>	Communications and Security	<b>Inspection Date</b>	09/20/2006
<b>Prime System</b>	Intercommunication and Paging System	<b>Finish Date</b>	-
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Crotteau, Paul	<b>Actual Cost</b>	0
<b>Action Date</b>	09/20/2009	<b>Total Estimated Cost:</b>	33,040
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Building Wide	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

PA system is 25+ years old but is still functional.  
 There are no speakers located in hallways or commons areas

**PHOTOS**



Communication and Security: Public Address and Sound System  
 -

**ACTION DESCRIPTION**

Update paging head end with new system and amplifier  
 And install speakers where needed.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Upgrades

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Communication and Security: Telephone System Upgrade		
<b>Linked System</b>	Communications and Security	<b>Inspection Date</b>	08/15/2006
<b>Prime System</b>	Telephone Systems	<b>Finish Date</b>	-
<b>Priority</b>	1- Currently Critical (Immediately)	<b>Status</b>	Open
<b>Inspector Name</b>	The Westlund Group	<b>Actual Cost</b>	0
<b>Action Date</b>	08/15/2006	<b>Total Estimated Cost:</b>	6,490
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Entire Facility	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

The telephone system should be upgraded to the new District standard of CISCO VOIP. The telephone system should include port for access to the Paging/Intercom system. The Paging/Intercom system should be modified to allow access from the new telephone system.

**PHOTOS**

**ACTION DESCRIPTION**

Install a new CISCO phone system. Add paging interface. Remove old system after installation of new.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Upgrades

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Communication and Security: Video/TV Distribution Upgrade		
<b>Linked System</b>	Communications and Security	<b>Inspection Date</b>	08/15/2006
<b>Prime System</b>	Television Systems	<b>Finish Date</b>	-
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	The Westlund Group	<b>Actual Cost</b>	0
<b>Action Date</b>	08/15/2009	<b>Total Estimated Cost:</b>	49,324
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Entire Facility	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Analog Broadcast TV Signals are required by the FCC to be turned off in the Spring of 2009.

**PHOTOS**

**ACTION DESCRIPTION**

Install new TV Distribution System capable of digital signals in all classrooms and administrative areas as required.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Upgrades

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Communications and Security: Sound System Upgrades		
<b>Linked System</b>	Communications and Security	<b>Inspection Date</b>	08/15/2006
<b>Prime System</b>	Classroom Sound Systems	<b>Finish Date</b>	-
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	The Westlund Group	<b>Actual Cost</b>	0
<b>Action Date</b>	08/15/2007	<b>Total Estimated Cost:</b>	272,580
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Entire Facility	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

There are little or no Audio Enhancement systems in the classrooms. Both of the Gymnasium Sound Systems are somewhat inadequate, barely audible.

**PHOTOS**

**ACTION DESCRIPTION**

- Add audio enhancement systems to Classrooms.
- Replace Gymnasium sound systems (2).

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Upgrades

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Controls and Instrumentation: BAS and Controls Upgrade		
<b>Linked System</b>	Controls and Instrumentation	<b>Inspection Date</b>	07/18/2006
<b>Prime System</b>	Building Automation Systems	<b>Finish Date</b>	-
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Schmidt, Brian	<b>Actual Cost</b>	0
<b>Action Date</b>	07/18/2007	<b>Total Estimated Cost:</b>	354,000
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Entire building	<b>Annual Energy/Ops Savings \$</b>	3,794
<b>Savings Description</b>	Energy saving through optimization and repairs of existing control system.		

**REQUIREMENT DESCRIPTION**

Upgrade existing, outdated BAS to new Web-based BAS and tie to new District-wide BAS network. This will allow for central monitoring and control of all buildings from the Facilities Management building.

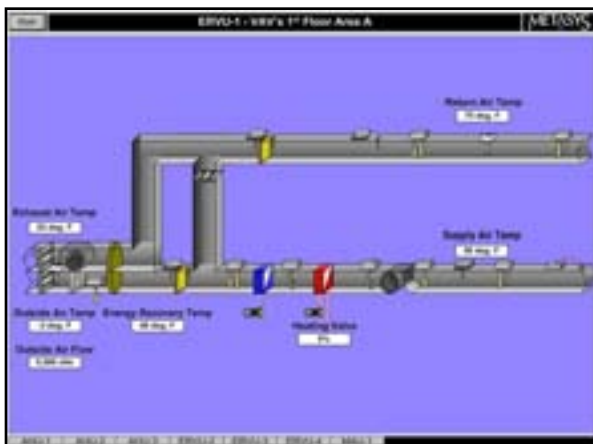
Upgrade existing pneumatic controls (old technology) to new Direct Digital controls.

Upgrade/replace existing temperature control valves, dampers, and actuators. The majority are beyond rated life and many are disconnected and not functioning, thus not operating as energy efficiently as possible.

Replace existing temperature control air compressor and air dryer with new and repair control air line leaks. This will improve the energy efficiency of the existing control system.

The existing controls shall be recommissioned to verify proper sequence of operation and optimize energy efficiency. Additional control and monitoring points shall also be added to the BAS system to optimize HVAC system performance.

**PHOTOS**



BAS Graphic

**ACTION DESCRIPTION**

Replace existing BAS headend to Web-based headend to tie to District wide BAS network. Replace existing DDC and pneumatic controls with new JCI DDC controls to allow integration to District wide BAS.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Upgrades

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Emergency Power Distribution: Generator Backup		
<b>Linked System</b>	Emergency Light and Power Systems	<b>Inspection Date</b>	09/19/2006
<b>Prime System</b>	Emergency Light and Power Systems	<b>Finish Date</b>	-
<b>Priority</b>	2- Potentially Critical (1-2 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Crotteau, Paul	<b>Actual Cost</b>	0
<b>Action Date</b>	09/19/2007	<b>Total Estimated Cost:</b>	147,028
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Exterior near Electrical Room	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

School currently has no backup power system to be used during a power failure. To keep students in school during power outage sufficient lighting must be maintained along with necessary life safety systems.

**PHOTOS**



Emergency Power Distribution: Generator Backup

**ACTION DESCRIPTION**

Install transfer switch and generator to feed distribution system during a power outage. Generator will be sized to handle the full building demand.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Upgrades

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Equipment and Furnishings: Replace Computer Room Workstations		
<b>Linked System</b>	Equipment and Furnishings	<b>Inspection Date</b>	08/17/2006
<b>Prime System</b>	Equipment and Furnishings	<b>Finish Date</b>	-
<b>Priority</b>	5- Recommendations/ Improvements	<b>Status</b>	Open
<b>Inspector Name</b>	Fern, Bob	<b>Actual Cost</b>	0
<b>Action Date</b>	-	<b>Total Estimated Cost:</b>	39,294
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Computer Lab 143, 1930 Addition	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Existing computer work stations are below district standards.

**PHOTOS**



Equipment and Furnishings: Replace Computer Room Workstations

-

**ACTION DESCRIPTION**

Remove existing computer workstations and replace with new. 30 Workstations

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Upgrades

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Equipment and Furnishings: Visual Systems (Smart Boards)		
<b>Linked System</b>	Equipment and Furnishings	<b>Inspection Date</b>	08/15/2006
<b>Prime System</b>	Audio-visual Equipment	<b>Finish Date</b>	-
<b>Priority</b>	5- Recommendations/ Improvements	<b>Status</b>	Open
<b>Inspector Name</b>	The Westlund Group	<b>Actual Cost</b>	0
<b>Action Date</b>	-	<b>Total Estimated Cost:</b>	636,020
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Entire Facility	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Site has no Smart Board installed. Two Smart Boards are on order.

**PHOTOS**

**ACTION DESCRIPTION**

Install additional Smart Boards.

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Upgrades

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Fittings: Replace Existing Chalkboards/Tackboards		
<b>Linked System</b>	Fittings	<b>Inspection Date</b>	08/17/2006
<b>Prime System</b>	Fittings	<b>Finish Date</b>	-
<b>Priority</b>	5- Recommendations/ Improvements	<b>Status</b>	Open
<b>Inspector Name</b>	Fern, Bob	<b>Actual Cost</b>	0
<b>Action Date</b>	-	<b>Total Estimated Cost:</b>	42,773
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	All classrooms, 1951,, classroom 341, 342, 343, 1930 addition	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Existing chalkboards and tackboards should be replaced to bring up to modern district standards.

**PHOTOS**



Fittings: Replace Existing Chalkboards/Tackboards

-

**ACTION DESCRIPTION**

Remove/replace/resurface existing chalkboards with new marker boards. 2332 SQFT

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Upgrades

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Superstructure: Construct Room Around AC Equipment.		
<b>Linked System</b>	Superstructure	<b>Inspection Date</b>	08/17/2006
<b>Prime System</b>	Superstructure	<b>Finish Date</b>	-
<b>Priority</b>	4- Mid Term Needs (6-10 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Fern, Bob	<b>Actual Cost</b>	0
<b>Action Date</b>	08/17/2012	<b>Total Estimated Cost:</b>	3,245
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Workroom #130, 1889 Building	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Existing air conditioning unit is exposed to the room. New partition/doors should be constructed around.

**PHOTOS**



Superstructure: Construct Room Around AC Equipment.

-

**ACTION DESCRIPTION**

Construct new metal stud and GYP BD wall around equipment, new door and frame. 300 SQFT

**District:** Duluth Public Schools  
**Facility:** Lincoln Park Elementary School  
**Category:** Upgrades

**Asset Name:** Lincoln Park Elementary School  
**Asset Number:** 515

<b>Requirement Name</b>	Superstructure: Refurbish Pool Locker Rooms		
<b>Linked System</b>	Superstructure	<b>Inspection Date</b>	08/17/2006
<b>Prime System</b>	Superstructure	<b>Finish Date</b>	-
<b>Priority</b>	3- Necessary - Not Yet Critical (3-5 Yrs)	<b>Status</b>	Open
<b>Inspector Name</b>	Fern, Bob	<b>Actual Cost</b>	0
<b>Action Date</b>	08/17/2009	<b>Total Estimated Cost:</b>	197,792
<b>Funding Year</b>	-	<b>Funding Type</b>	-
<b>Requirement Location</b>	Ground Floor Pool Locker Rooms, 1959 Addition	<b>Annual Energy/Ops Savings \$</b>	-
<b>Savings Description</b>	-		

**REQUIREMENT DESCRIPTION**

Existing locker room is in worn condition and requires upgrades including new lockers.

**PHOTOS**



Superstructure: Refurbish Pool Locker Rooms

-

**ACTION DESCRIPTION**

Retile showers, replace lockers, paint.