

Roof Condition Report

**Polaris Expeditionary Learning School
1905 Orchard Place
Fort Collins, Colorado**

FOR

Ms. Tammie Knauer
Poudre School District
2445 LaPorte Avenue
Fort Collins, Colorado 80521

2016

Job Number: 8523-A

TechniScan[®]

4155 E. Jewell Ave., Suite 414
Denver, CO 80222
(303) 329-0535 / (800) 266-8565
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Section A:
Deck Type: Wood Deck
Insulation: 3" ISO., 1/2" Cover Board
Roof Type: Built-Up Roof, Gravel Surface

Section **B**:
Deck Type: Metal
Insulation: 1.5" Perlite
Roof Type: Built-Up Roof, Gravel Surface

Section C:
Deck Type: Wood
Insulation: 1.5" ISO., 1" Perlite
Roof Type: 4-Ply Built-Up Roof, Gravel Surface

Section **D**:
Deck Type: LW Concrete
Insulation: 1.5" ISO., 1/2" Cover Board
Roof Type: 4-Ply Built-Up Roof, Gravel Surface

Section E:
Deck Type: Metal
Insulation: 2" ISO., 1" Wood Fiber
Roof Type: 4-Ply Built-Up Roof, Gravel Surface

Section F:
Deck Type: Metal
Insulation: 1" Wood Fiber
Roof Type: Modified Bitumen, Smooth Surface

Section **G**:
Metal Canopy

Section H:
Deck Type: Metal
Insulation: 4" ISO., 1/2" Cover Board
Roof Type: Modified Bitumen, Granule Surface

Section 1:
Deck Type: Wood
Roof Type: Shingles

ROOF PLAN

Scale: 1/32" = 1'-0"



job no.	
date	06/14/2016
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Revisions	
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Roof
Plan

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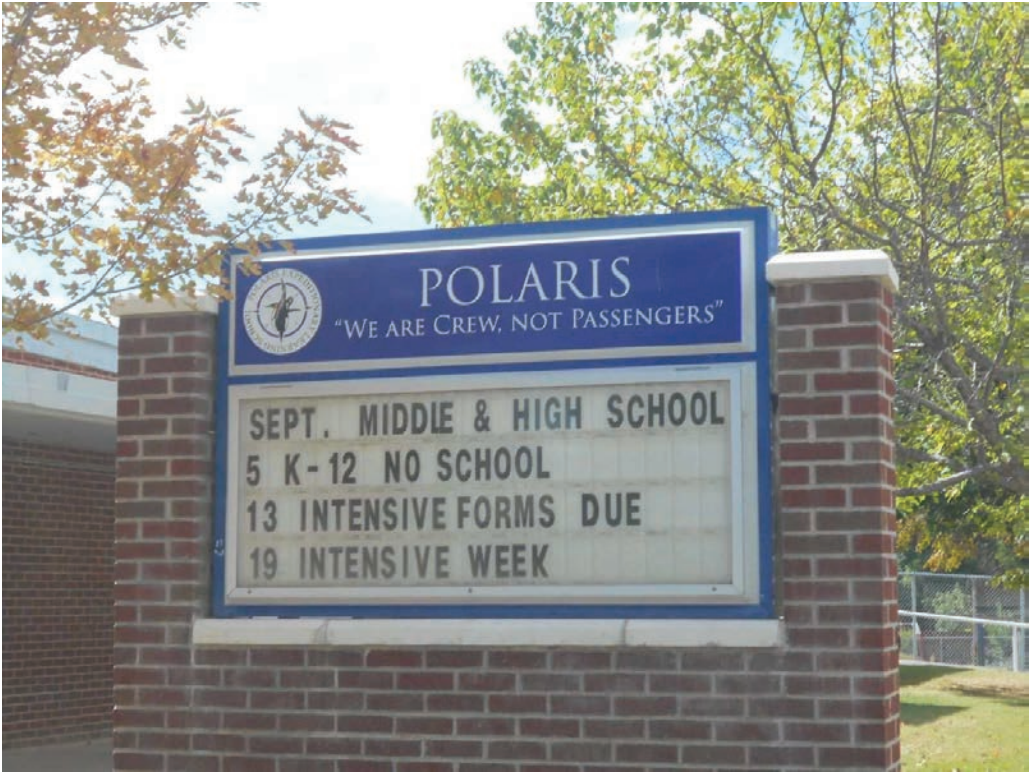
RP 1

**Poudre School District
2016 Roof Assessment**

Building Name	Polaris Expeditionary School
Street Address	1905 Orchard Place
Roof Section	A
Square Footage	23,195
Roof Type	Built-Up Roof, Gravel Surface
Date Installed	8/1/00
Manufacturer	Unknown
Warranty Number	N/A
Warranty Expiration	N/A
Estimated Service Life	7 years
Replacement Cost /sq ft	\$15.00
5-year Maintenance Budget	\$800
Notes: This roof area is still in good condition. The roofs were recommended for replacement in 2017 to have the entire building (excluding Section H) under one manufacturer warranty number and avoid additional mobilization costs and disruption in the future.	

Polaris Expeditionary Learning School - 1905 Orchard Place, Fort Collins, Colorado

Photo 1



(09/12/2016 12:45:10 PM)

Roof Section A

Polaris Expeditionary Learning.

Photo 2



(09/12/2016 01:07:52 PM)

Built-up roof, gravel surface.

Polaris Expeditionary Learning School - 1905 Orchard Place, Fort Collins, Colorado

Photo 3



*View of one of the skylights.
The skylight has been
repaired with caulking.
It may be recommended that
new skylights be installed
during the roof replacement.*

(09/12/2016 01:08:26 PM)

Photo 4

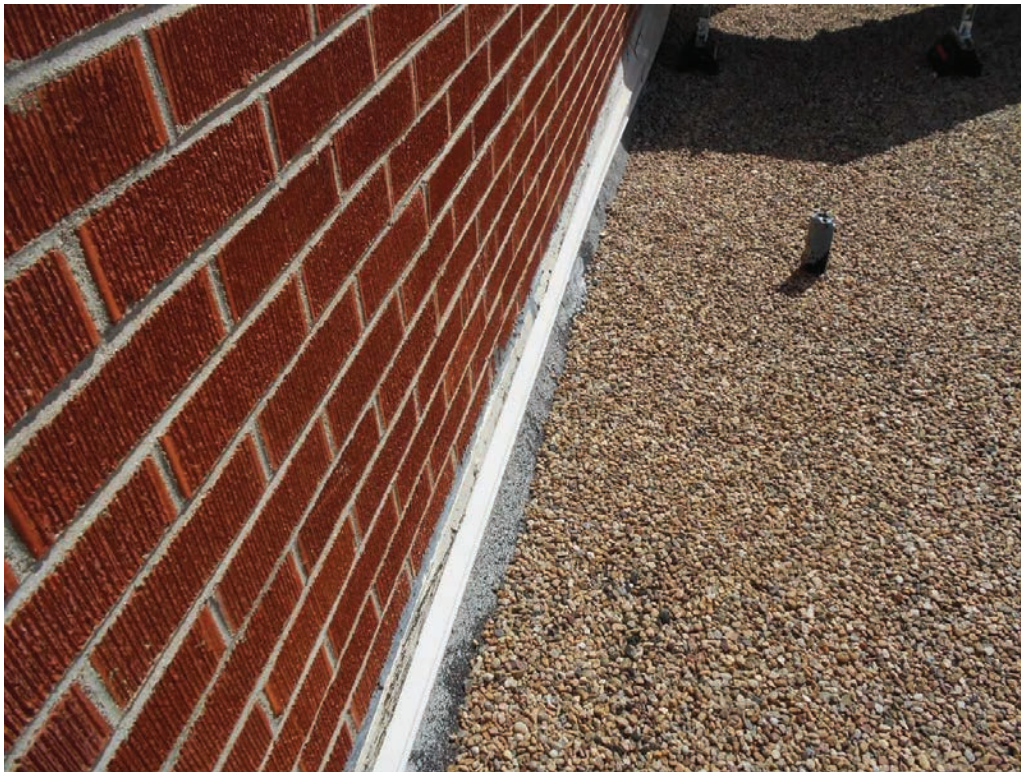


View of Section A.

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Polaris Expeditionary Learning School - 1905 Orchard Place, Fort Collins, Colorado

Photo 5



The caulking on top of the reglet flashing is deteriorating. The reglet will be removed and a new surface-mounted counterflashing will be installed during the roof replacement.

(09/12/2016 01:10:12 PM)

Photo 6



View of the expansion joint. The expansion joint will be replaced during the roof replacement.

(09/12/2016 01:10:58 PM)

Polaris Expeditionary Learning School - 1905 Orchard Place, Fort Collins, Colorado

Photo 7



East area of Section A.

(09/12/2016 01:11:36 PM)

Photo 8



View of east area of Section A.

(09/12/2016 01:12:06 PM)

Polaris Expeditionary Learning School - 1905 Orchard Place, Fort Collins, Colorado

Photo 9



View of the east area of Section A looking south.

(09/12/2016 01:13:26 PM)

Photo 10



Overview of Section A. This is a new curb that was installed in the summer of 2016.

(09/12/2016 01:21:40 PM)

Polaris Expeditionary Learning School - 1905 Orchard Place, Fort Collins, Colorado

Photo 11



(09/12/2016 01:23:10 PM)

Poudre School District
2016 Roof Assessment

Building Name	Polaris Expeditionary School
Street Address	1905 Orchard Place
Roof Section	B
Square Footage	4,523
Roof Type	Built-Up Roof, Gravel Surface
Date Installed	8/1/93
Manufacturer	Unknown
Warranty Number	N/A
Warranty Expiration	Expired
Estimated Service Life	1
Replacement Cost /sq ft	\$15.00
5-year Maintenance Budget	\$67,845
Notes: This roof has reached the end of its service life. A replacement is scheduled for 2017. A tear off to the deck is recommended for this roof.	

Polaris Expeditionary Learning School - 1905 Orchard Place, Fort Collins, Colorado

Photo 1



Built-up roof, gravel surface.

(09/12/2016 01:13:52 PM)

Photo 2



View of Section B. This is located on the north side of the school. It is recommended the metal cap be replaced during the roof replacement.

(09/12/2016 01:16:04 PM)

Polaris Expeditionary Learning School - 1905 Orchard Place, Fort Collins, Colorado

Photo 3



Northeast area of the school.
This view is looking east.

(09/12/2016 01:16:32 PM)

Poudre School District
2016 Roof Assessment

Building Name	Polaris Expeditionary School
Street Address	1905 Orchard Place
Roof Section	C
Square Footage	3,905
Roof Type	Built-Up Roof, Gravel Surface
Date Installed	8/1/89
Manufacturer	Unknown
Warranty Number	N/A
Warranty Expiration	Expired
Estimated Service Life	1
Replacement Cost /sq ft	\$15.00
5-year Maintenance Budget	\$58,575
Notes: This roof has reached the end of its service life. A replacement is scheduled for 2017. A tear off of the existing roof is recommended for this roof.	

Polaris Expeditionary Learning School - 1905 Orchard Place, Fort Collins, Colorado

Photo 1



(09/12/2016 01:18:24 PM)

Roof Section C

Gymnasium roof.

Photo 2



(09/12/2016 01:19:20 PM)

Open corner at a bell fan curb.

Polaris Expeditionary Learning School - 1905 Orchard Place, Fort Collins, Colorado

Photo 3



Caulking is deteriorating at the counterflashing.

(09/12/2016 01:19:30 PM)

Photo 4



View of the gymnasium roof.

(09/12/2016 01:19:54 PM)

Polaris Expeditionary Learning School - 1905 Orchard Place, Fort Collins, Colorado

Photo 5



Gymnasium roof, the caulking is cracking open in this corner.

(09/12/2016 01:23:54 PM)

Poudre School District
2016 Roof Assessment

Building Name	Polaris Expeditionary School
Street Address	1905 Orchard Place
Roof Section	D
Square Footage	11,692
Roof Type	Built-Up Roof, Gravel Surface
Date Installed	6/1/89
Manufacturer	Unknown
Warranty Number	N/A
Warranty Expiration	Expired
Estimated Service Life	1
Replacement Cost /sq ft	\$15.00
5-year Maintenance Budget	\$175,380
Notes: The roof has reached the end of its service life. A replacement is scheduled for 2017. It is recommended this roof be torn off to the deck.	

Polaris Expeditionary Learning School - 1905 Orchard Place, Fort Collins, Colorado

Photo 1



(09/12/2016 01:26:40 PM)

Roof Section D

Built-up roof, gravel surface.

Photo 2



(09/12/2016 01:27:00 PM)

View of Section D looking north.

Polaris Expeditionary Learning School - 1905 Orchard Place, Fort Collins, Colorado

Photo 3



It is recommended that any obsolete penetrations be removed during the roof replacement.

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Photo 4



*North side of Section D.
Smooth coat built-up roof.*

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Poudre School District
2016 Roof Assessment

Building Name	Polaris Expeditionary School
Street Address	1905 Orchard Place
Roof Section	E
Square Footage	2,291
Roof Type	Built-Up Roof, Gravel Surface
Date Installed	8/1/93
Manufacturer	Unknown
Warranty Number	N/A
Warranty Expiration	Expired
Estimated Service Life	1 year
Replacement Cost /sq ft	\$15.00
5-year Maintenance Budget	\$34,365
Notes: This roof has reached the end of its service life. A replacement is scheduled for 2017. It is recommended this roof be torn off to the deck.	

Polaris Expeditionary Learning School - 1905 Orchard Place, Fort Collins, Colorado

Photo 1



Roof Section E

South end of Section E.

(09/12/2016 01:29:32 PM)

Photo 2



View of Section E looking west.

(09/12/2016 01:29:48 PM)

Poudre School District
2016 Roof Assessment

Building Name	Polaris Expeditionary School
Street Address	1905 Orchard Place
Roof Section	F
Square Footage	2,946
Roof Type	Modified Bitumen
Date Installed	1/1/91
Manufacturer	Unknown
Warranty Number	N/A
Warranty Expiration	Expired
Estimated Service Life	1
Replacement Cost /sq ft	\$12.00
5-year Maintenance Budget	\$35,352
Notes: The roof has reached the end of its service life. A replacement is scheduled for 2017. This roof will need to be torn off to the deck.	

Polaris Expeditionary Learning School - 1905 Orchard Place, Fort Collins, Colorado

Photo 1



Roof Section F

Built-up roof, gravel surface.

(09/12/2016 01:31:24 PM)

Photo 2



View of Section F.

(09/12/2016 01:31:58 PM)

Polaris Expeditionary Learning School - 1905 Orchard Place, Fort Collins, Colorado

Photo 3



*Another view of Section F.
This area is recommended
for replacement in 2017.*

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Poudre School District
2016 Roof Assessment

Building Name	Polaris Expeditionary School
Street Address	1905 Orchard Place
Roof Section	G
Square Footage	2,300
Roof Type	Standing Seam Metal (Canopy)
Date Installed	Unknown
Manufacturer	Unknown
Warranty Number	N/A
Warranty Expiration	Expired
Estimated Service Life	1
Replacement Cost /sq ft	\$14.00
5-year Maintenance Budget	\$32,200
Notes: The roofs on the walk-way canopy have reached the end of their service life. A replacement is recommended in 2017. The replacement cost is based on an overlay over the existing roof. Approval from a structural engineer will be required for the proposed roof system.	

Polaris Expeditionary Learning School - 1905 Orchard Place, Fort Collins, Colorado

Photo 1



Roof Section G

Metal canopy.

(09/12/2016 01:32:16 PM)

Photo 2



West area of the canopy looking north.

(09/12/2016 01:33:24 PM)

Poudre School District
2016 Roof Assessment

Building Name	Polaris Expeditionary School
Street Address	1905 Orchard Place
Roof Section	H
Square Footage	3,100
Roof Type	Modifed Bitumen
Date Installed	12/9/05
Manufacturer	Johns Manville
Warranty Number	ANM111043881
Warranty Expiration	12/9/25
Estimated Service Life	9 years
Replacement Cost /sq ft	\$12.00
5-year Maintenance Budget	\$600
Notes: These roofs are in good condition. No repairs are recommended at this time.	

Polaris Expeditionary Learning School - 1905 Orchard Place, Fort Collins, Colorado

Photo 1



(09/12/2016 01:20:26 PM)

Roof Section H

*The roof is in good condition.
No repairs are recommended.*

Photo 2



(09/12/2016 01:20:32 PM)

*View of Section H looking
southeast. The roof is in good
condition.*

Poudre School District
2016 Roof Assessment

Building Name	Polaris Epeditionary School
Street Address	1905 Orchard Place
Roof Section	I
Square Footage	300
Roof Type	Shingles
Date Installed	Unknown
Manufacturer	Unknown
Warranty Number	N/A
Warranty Expiration	N/A
Estimated Service Life	1
Replacement Cost /sq ft	\$8.50
5-year Maintenance Budget	\$2,550
Notes: The shingles have reached the end of their service life. A replacement is scheduled for 2017. When reroofed a single ply TPO roof is recommended.	

Polaris Expeditionary Learning School - 1905 Orchard Place, Fort Collins, Colorado

Photo 1



(09/12/2016 01:35:40 PM)

Roof Section I

The shingles have reached the end of their service life. A single-ply roof system is recommended for this area.