



# Old West End Roof Survey



**Prepared for:**  
**City of Danville**  
**Community Development**



**Prepared by:**  
**Friends of the Old West End**  
with the knowledge and expertise of  
**Outdoor Designs, Inc.**

# Introduction

Friends of the Old West End (FOWE) is the nonprofit (501c3) neighborhood organization for the Old West End National Historic District. On January 30, 2019, FOWE proposed to the City of Danville a study of failing metal roofs in the District. The fifteen (15) roofs to be studied were on homes owned by the Danville Redevelopment and Housing Authority acting as the City's temporary land bank. Water infiltration existed at many of those properties.

The temporary land bank is administered by the Community Development Division which approved the study's completion via Purchase Order P034870 on February 6, 2019. By subcontract with Outdoor Designs, Inc. (ODI), field work began immediately thereafter to:

- Capture photographs of each roof and roof segment – taken from a lift above
- Compute the area of each roof segment (top roof, porch, additions, etc.) accounting for pitch and overhang
- Assess the condition of each segment including the difficulty of repair or if replacement was required
- Record other site conditions including the condition of chimneys and external guttering as well as tree and shrub intrusion











Located in the historic district, ODI has extensive experience in the use of the Gaco silicone roof coating system on historic properties. The Gaco coating material providing the lowest life cycle cost for roof repairs while maintain their historic appearance. ODI also provided information on previous experiences with Gaco coatings. That information, beginning on page 107, includes an Old West End metal roof now 15 years since its initial treatment.

FOWE then compiled the results of the ODI field work providing a detailed assessment and cost estimate for each of the 15 homes. Those details begin on page 9. (While not included here, actual field notes and supplementary photographs have been retained for future reference.)

In addition, FOWE summarized those detailed results in two tables. The first, overleaf, shows the total repair and/or replacement cost for the 15 homes. The second attempts to assign a priority to the roof work on each home based on previous investments, the home's contribution to the historic fabric of the district, and its individual characteristics.

<b>Street Address</b>	<b>Roof Sq. Ft.</b>	<b>Estimated Cost</b>	<b>Page</b>
Chestnut 124	1,882	\$30,703	9
Chestnut 125	3,497	47,204	15
Green 862-866	2,881	28,574	23
Holbrook 614	2,579	34,875	29
Jefferson 238	2,172	24,192	37
Jefferson 241	2,081	28,520	41
Pine 820	2,999	70,518	49
Pine 830	2,316	25,841	55
Pine 841	2,225	24,163	61
Pine 844	2,239	39,103	67
Pine 855	2,035	26,306	73
Pine 858	2,253	27,583	81
Pine 861	1,938	27,336	87
Pine 870	3,355	83,253	93
Pine 871	3,095	25,975	99
Total	37,547	\$544,146	

**Overall Priority for Roof Repair / Replacement**

Address	124 Chestnut	125 Chestnut	862 Green	614 Holbrook	238 Jefferson	241 Jefferson	820 Pine	830 Pine	841 Pine	844 Pine	855 Pine	858 Pine	861 Pine	870 Pine	871 Pine
Vernacular	Queen Anne	Four Square	Italianate	Victorian	Victorian	Folk Vic	Folk Vic	Folk Vic	Folk Vic Cottage	Four Square	Raised Folk Vic	Italianate	Folk Vic	Italianate	Italianate
Circa	1899	1877	1877	1907	1910	1890	1890	1890	1899	1899	1888	1880	1899	1883	1888
Thumbnail															
Living Sq Ft	1,287	4,030	4,502	3,022	2,374	2,204	3,474	2,805	1,433	2,772	1,750	2,954	2,011	3,404	2,240
Roof Sq Ft	1,882	3,497	2,881	2,579	2,172	2,081	2,999	2,316	2,225	2,239	2,035	2,253	1,938	3,355	3,095
Cost \$	30,703	47,204	28,574	34,875	24,192	28,520	70,518	25,841	24,163	39,103	26,306	27,583	27,336	83,253	25,975
\$ / Living Sq Ft	23.86	11.71	6.35	11.54	10.19	12.94	20.30	9.21	16.86	14.11	15.03	9.34	13.59	24.46	11.60
\$ / Roof Sq Ft	16.31	13.50	9.92	13.52	11.14	13.70	23.51	11.16	10.86	17.46	12.93	12.24	14.11	24.81	8.39
Cost rank	L	M	H	M	M	L	L	M	M	L	M	M	L	L	H
Previous Investment	H	M	L	L	M	M	M	M	L	L	L	L	L	M	H
External integrity	M	M	M	H	H	M	M	H	L	L	M	M	M	H	H
Internal integrity	L	M	M	H	L	M	L	M	M	L	H	M	L	M	L
Likelihood of loss	H	M	L	M	H	L	H	M	M	L	M	H	M	H	L
Future cost avoidance	L	L	L	L	L	L	L	H	L	L	L	L	L	L	H
Overall priority	M/H	M/H	L	M	M	L	L	H	L	L	M/H	M/H	L	M	H

# Assumptions

Outdoor Designs Inc. prepared the roof repair costs in this report. They are based on the following:

- An overall assessment of each property was conducted from a lift from multiple vantage points where possible
- Included photographs show both overall condition and individual problem areas where possible
  - The survey did not attempt a detailed quantification of damaged areas
- Roofs to be scraped as needed with chips captured in ground-based plastic for disposal
- Roofs to be course-sanded (28 grit) as needed with dust collection via HEPA vacuum
- Gaco silicone roof coating system will be used
  - Gaco offers a fifty-year limited materials warranty – the longest in the industry
  - All holes, nail pops, open seams and joints, and cold joints to be double-taped using Gaco Seam Seal
  - Roofs to receive two coats of GacoRoof 100% silicone coating from a selection of nine colors
    - First coat on initial repair
    - Second coat six to twelve months later
  - Hidden gutters to receive an additional coating of Gaco Liquid Roof Tape for durability



Chimney repairs and cap costs are based on the following standard assumptions:

- \$1,000 for each chimney requiring repointing
- \$250 for each chimney not previously capped

External gutter repair assumptions are:

- \$20 per lineal foot

Tree removal costs based on the following assumptions:

- \$2,500 per tree requiring climbing
- \$500 to 1,000 per tree where accessible
- Trees cut flush, no stump grinding