

October 18, 2022

John Caterino  
City of Billings  
PO Box 1178  
Billings, MT 59105

Re: 760 Lake Elmo Drive  
Pre-Purchase Roof Inspection

John,

The purpose of this report is to outline our findings from the roof inspection on the building located at 760 Lake Elmo Drive. The inspection was performed on October 10, 2022.

The building consists of a gable roof that connects to a hip section on the west side. The main gable roof is approximately 3:12 or 12° slope and the west side hip section is a 28:12 or 67° slope. The roof system consists of one layer of architectural asphalt shingles with a standard 5 5/8" exposure. The shingles appear to be 8-10 years old and in good condition throughout.

The following maintenance items were found during the inspection:

1. There is a photocell conduit pipe penetration right at the top of the ridge on the east side that does not have a proper flashing installed. The conduit penetrates the roof and has sealant installed at the roof level. This pipe needs a flashing installed. ***See Pic #1***
2. There is a small rectangular sheet metal box penetration installed through the roof with two galvanized pipes coming through the box and sealant with silicone. The sheet metal box is sealed at the roof level as well. The one pipe has been sealed off at the top and the other appears to be abandoned. If this is the case, this entire assembly should be removed from and the roof patched. If not, this box needs to be flashed into the roof system. ***See Pic #2***
3. Along the 2'x2' curb, there are no step flashings along the east and west sides. Any area where the roof meets a wall or curb, these locations require one (1) step flashing per each row of shingles. Once these are installed, a counterflashing will be required to cover the tops of the step flashings. ***See Pics #3 and #4***
4. There is a 1/2" photocell conduit with a sheet metal flashing that needs to be sealed at the top. We would also recommend installing a storm collar. ***See Pic #5***

5. The gutters along the south side of the building are full of leaves/debris from the tree in the corner of the building. These need to be removed to allow the water to properly drain and prevent backing up. *See Pics #6 and #7*
6. Back of gutter has been notched out at the corner. There needs to be slip flashing installed to keep water from running back behind gutter and against the fascia. *See Pic #8*
7. Corner of 'D' Style edge metal needs slip flashing installed at corner to extend over back of gutter. *See Pic #9*

- ***Budget to repair items 1 – 7 above: \$3,800.00***

**General Notes:**

- The eave soffits have venting channels, but there is no venting along the ridge. Buildings require venting at both the eaves and ridges. Over time, this can lead to early deterioration of the shingles due to excessive heat. We would recommend installing vented ridge during next reroof project. *See Pic #10*
- Ridge does not have proper ventilation. *See Pic #11*
- Where we were able to visually inspect along the eave and rake edges, there has been ice and water shield installed at these locations. *See Pic #12*
- The 'D' style drip edge has been installed using plastic cap nails. Manufacturers require standard roofing nails to attach edge metal. The reason for this is to allow the shingles to sit flat on the edge metal and seal down properly. During the inspection, it appeared that most areas along the eave and rake edges were adhered. Over time, there is a potential for winds to lift the shingles and possibly break them off. Wind driven rain and snow also have the potential to enter under at these locations. Continually monitor these areas. *See Pics #13 and #14*
- There is a ridge/buckle approximately 8' in from the west corner that runs north/south. It appears to be in the decking and/or structure. There does not appear to be any damage or concern at this time. Recommend continually monitoring and inspecting this area during next reroof project. *See Pic #15 and #16*
- There was no evidence of hail damage found to the actual shingles. The only hail damage found was on the vents and vent caps, which was very minimal.

**Summary:**

In summary, the roof overall is in good condition. We would recommend completing the above repair items to prevent potential leaks. Some of the items would be considered preventative maintenance and may not leak in the near future but these should be addressed as soon as possible to prevent damage and/or leaks.

The average lifecycle of an asphalt shingle roof is 20 – 30 years. As long as all the repairs are completed in this report, annual inspections and maintenance are

performed and no unforeseen issues occur, the roof should perform throughout its remaining service life.

The means and methods by which we conducted our inspection conform to current practices being utilized within the roofing industry. There may be existing conditions within the roofing system and/or the building structure that are not apparent or detectable, based upon the inspection means, methods and sampling employed. Accordingly, we disclaim any responsibility to the addressee or any other persons who may rely upon the contents of this report for any and all damages, liability, expenses and costs of any kind, which result from or arise because of any such latent, hidden or undetected condition(s).

Please don't hesitate to call with any further questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Travis Kennedy", with a long horizontal flourish extending to the right.

Travis Kennedy  
Consulting Services Manager

# ROOF INSPECTION WORK SHEET

DATE : 10/10/2022



BUILDING NAME : \_\_\_\_\_

INSPECTOR : TJK

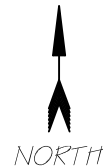
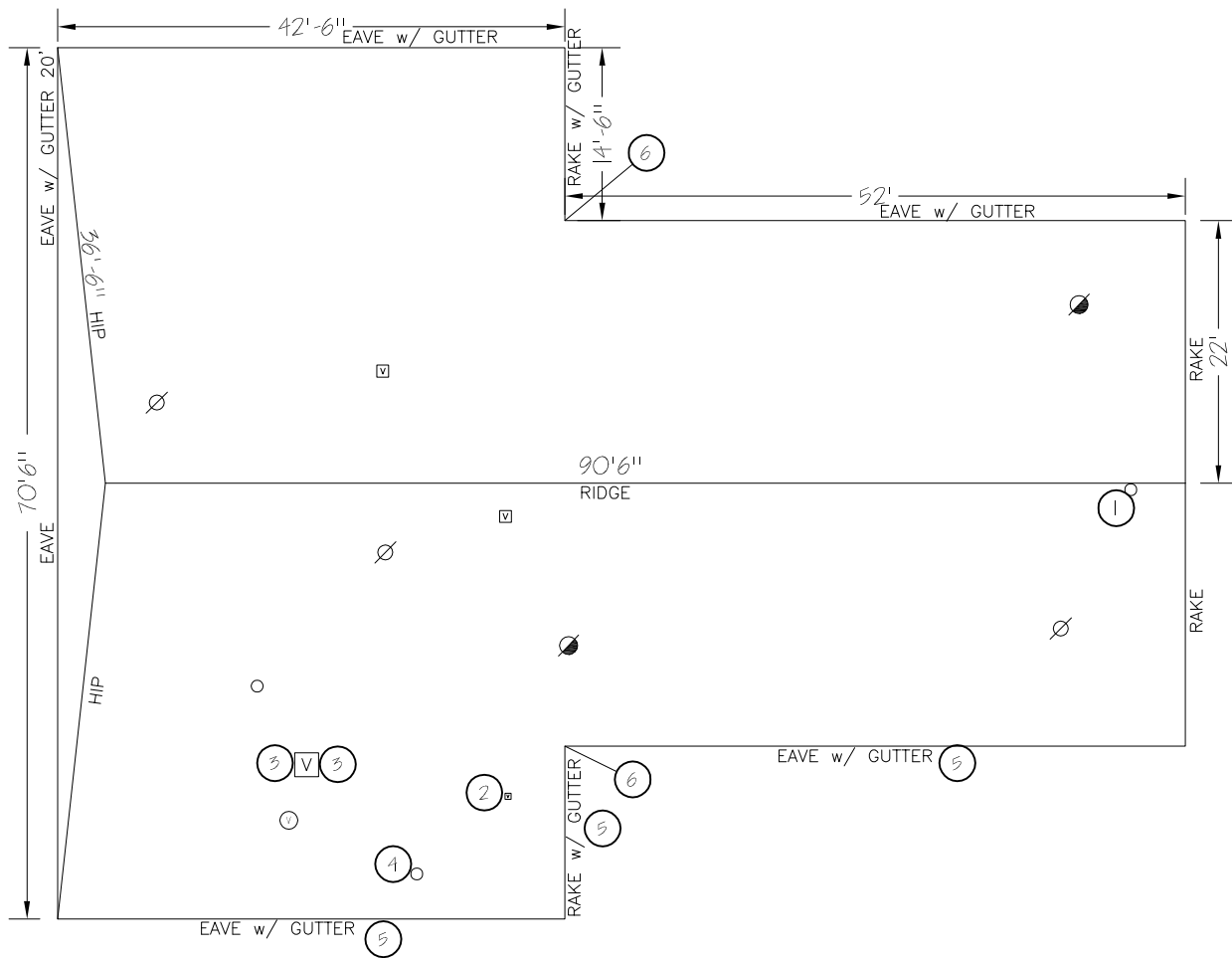
ADDRESS : 760 Lake Elmo Drive

SECTION : A

BUILDING NUMBER : 001

AREA : 5,579 sq. ft.

SCALE : 1/16" = 1'





OVERVIEW OF SOUTH SIDE



OVERVIEW OF NORTH SIDE



OVERVIEW OF SOUTH WEST EXPOSURE



OVERVIEW OF WEST EXPOSURE



OVERVIEW OF NORTH SIDE OF ROOF LOOKING EAST.



OVERVIEW OF SOUTH SIDE OF ROOF LOOKING EAST.



PIC #1



PIC #2



PIC #3



PIC #4



PIC #5



PIC #6



PIC #7



PIC #8



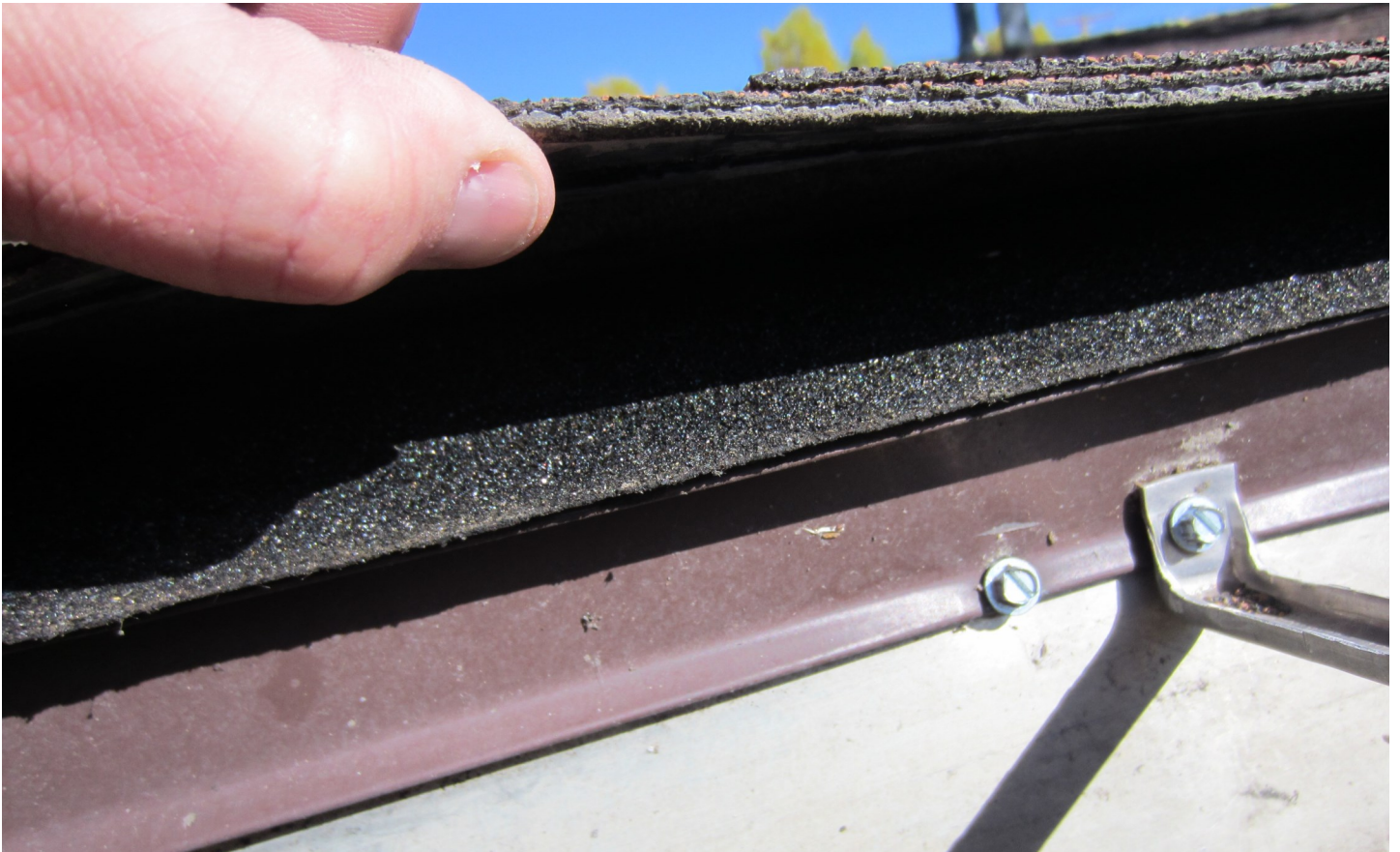
PIC #9



PIC #10



PIC #11



PIC #12



PIC #13



PIC #14



PIC #15



PIC #16