

**Location:**  
University Woods  
Fairborn, OH

**Photo Taken by:**  
Matthew Klein, P.E.

**Date:**  
April 11, 2010



**Description:**

Downspouts emptying next to the foundation of one of the buildings, which was also typical for most of the buildings. Note the moss growth along the foundation, indicating that the ground stays wet for long periods.

**Photo Number**

**1**



**Description:**

The downspout outlet of another building, showing extensive soil erosion. Over time, this erosion could undermine the foundation, causing structural problems.

**Photo Number**

**2**

**Location:**  
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**Description:**

One of the railroad tie retaining walls that is leaning and in the process of failing. Photo also shows downspout emptying onto the driveway, which could shorten the life of the asphalt and cause winter hazards.

**Photo Number**

**3**



**Description:**

Water stains on sidewalk showing where water has drained and ponded. Sidewalk appears to have settled due to the excess water. Ponding water can also create a winter hazard.

**Photo Number**

**4**

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**Description:**

The community detention pond—this pond has limited storage capacity and this limitation might be related to water getting into the basements of the nearby building.

**Photo Number**

**5**



**Description:**

Example of an area where improper grading has directed water onto an asphalt parking area where the water ponded. Water ponding has likely contributed to deterioration of the asphalt.

**Photo Number**

**6**

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**Description:**

Improper grading which has directed water toward the building and the retaining wall. Water has likely contributed to failure of the retaining wall and could lead to soil erosion around the foundation.

**Photo Number**

**7**



**Description:**

Another example of improper grading which directs water toward one of the building's foundation. A swell or French drain should have been installed between the buildings to divert the water.

**Photo Number**

**8**

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**Description:**

An example of soil settlement causing settlement and cracking of a sidewalk and increased step height from the stoop. Both of these issues can be trip hazards. Note that downspout drains onto ground next to sidewalk.

**Photo Number**

**9**



**Description:**

Another example of sidewalk settlement leading to potential trip hazards. Also shown is crack in stoop concrete caused by single foundation wall installed under the midpoint of the stoop.

**Photo Number**

**10**

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**Description:**

Deteriorated concrete that will need replacement. This degradation is likely due to poor concrete or installation.

**Photo Number**

**11**



**Description:**

Rebar sticking up out of concrete. This issue is due to improper rebar installation. Rebar will continue to rust and will cause concrete to degrade. Also note crack in stoop concrete due to single foundation wall under middle of stoop.

**Photo Number**

**12**

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**Description:**

Demonstration of where a single foundation wall, revealed by sidewalk settlement, has led to a crack in the stoop.

**Photo Number**  
**13**



**Description:**

An example of cracks and heaving of a patio due apparently to settlement. A number of patios had cracks in a similar location.

**Photo Number**  
**14**

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**Description:**

Example of the privacy fence along the boundary of the Association property leaning. This leaning could be due to the fence posts not being deep enough into the soil for the fence height and soil conditions.

**Photo Number**

**15**



**Description:**

One part of the privacy fence installed along the edge of a drainage ditch. Saturation of the soil can weaken the fence anchorage in the soil.

**Photo Number**

**16**

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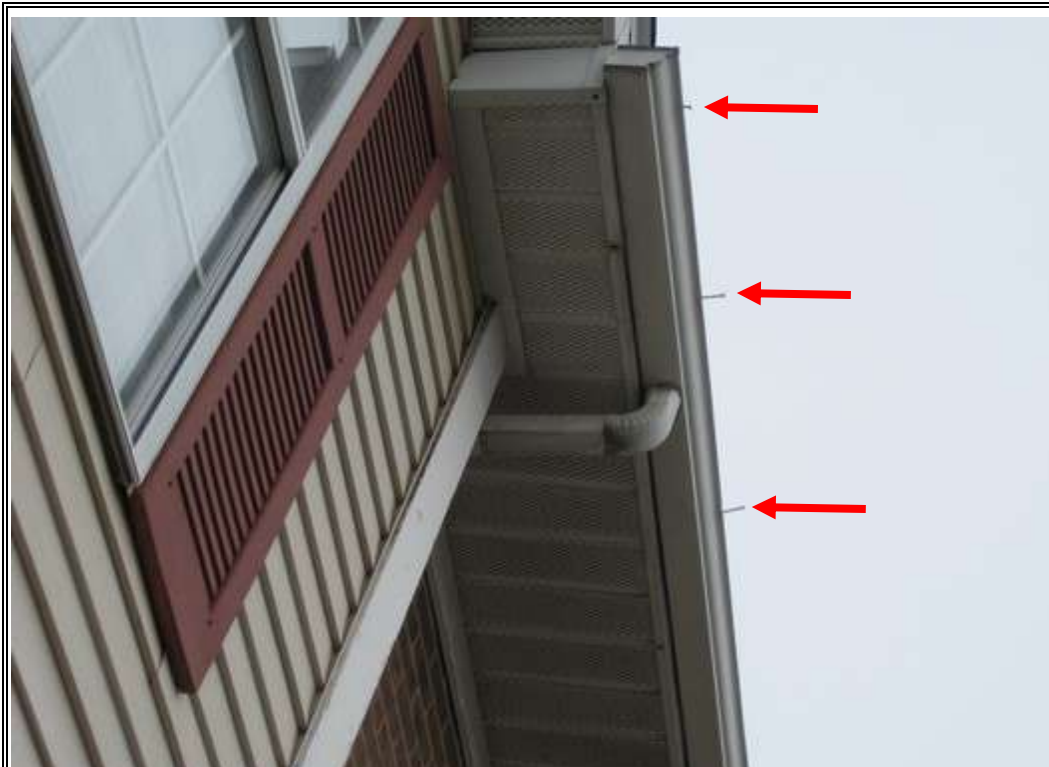


**Description:**

Rust around one building's chimney cap. Rust was also seen on other chimney caps. Also note that roof is pitched into the siding on the chimney without proper flashing to divert the rainwater.

**Photo Number**

**17**



**Description:**

Gutter nail pops which could indicate possible fascia problems, such as wood rot.

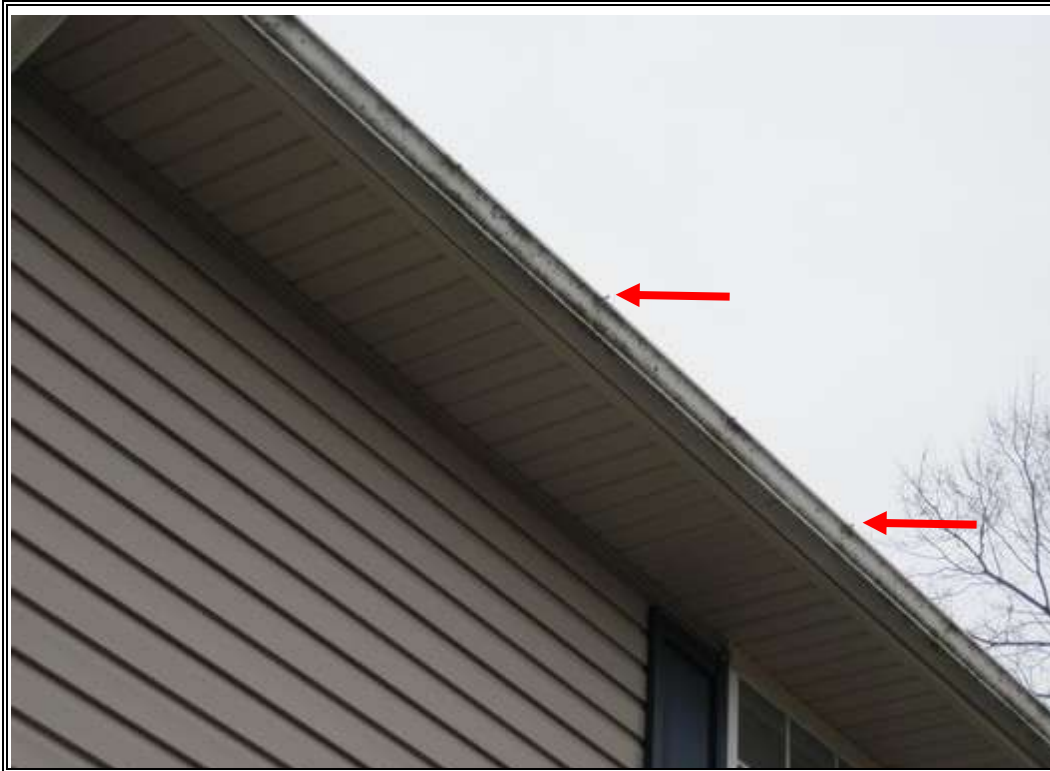
**Photo Number**

**18**

**Location:**  
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**Description:**

Gutter nail pops on another building. Also visible are water stains showing where the gutter has chronically overflowed.

**Photo Number**  
**19**



**Description:**

Example problems due to overflowing gutters. In this case, they are rotting wood and algae growth.

**Photo Number**  
**20**

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**Description:**

Example of another area where overflowing gutter has led to algae growth and rotten wood. T1-11 such as that shown in photo is particularly susceptible to water damage.

**Photo Number**  
**21**



**Description:**

Another building where overflowing gutters have led to algae growth and wood rot.

**Photo Number**  
**22**

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**Description:**

An example of missing siding. This problem was present but not widespread. Another example of a gutter nail pop is shown in this photo.

**Photo Number**

**23**



**Description:**

An example of loose siding that needs repair. Gaps opened by loose siding can allow water behind the siding that can cause damage and leaves edges where wind can rip the siding off.

**Photo Number**

**24**

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**Description:**

Another example of loose siding. A relatively large number of loose siding problems were found in the community. This problem is one that needs Association attention.

**Photo Number**  
**25**



**Description:**

A hole in the cedar siding where pests or moisture can enter behind the siding. These holes should be repaired as rapidly as possible.

**Photo Number**  
**26**

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**Description:**

Gaps between wood siding boards. These gaps allow moisture to get behind the siding particularly during wind-driven rains. These gaps need to be caulked.

**Photo Number**

**27**



**Description:**

An example of moisture damage to T1-11 siding, which is particularly susceptible to such damage. Also notable is that flashing should have been installed behind the T1-11 and over the trim board.

**Photo Number**

**28**

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**Description:**

Another example of moisture damage to T1-11. This damage was widespread for buildings with T1-11.

**Photo Number**  
**29**



**Description:**

Moisture damage in another area of T1-11. Moisture in this case has likely splashed onto the siding due to overflowing gutters.

**Photo Number**  
**30**

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**Description:**

A location where flashing should have been installed—under the threshold and over the kickboard.

**Photo Number**  
**31**



**Description:**

An example of where kickout flashing should have been installed on the roof to direct water away from the gap between the gutter and wall.

**Photo Number**  
**32**

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**Description:**

Warping of molding due to moisture exposure. Flashing should have been installed over the molding. Once molding warps, water can get behind it and cause rot, as shown by blue arrow.

**Photo Number**

**33**



**Description:**

Water staining under gap between fascia and gutter indicating that water is running through gap rather than into gutter. A drip edge may not have been installed along the roof edge.

**Photo Number**

**34**

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**Description:**

Flashing should have been installed between the brick and top of the door lintel. None of the doors had this flashing and in several cases, the molding was warped due to the moisture exposure.

**Photo Number**  
**35**



**Description:**

Two locations where flashing should have been installed—over the window molding and trim board. In this case, moisture has led to the top molding warping.

**Photo Number**  
**36**

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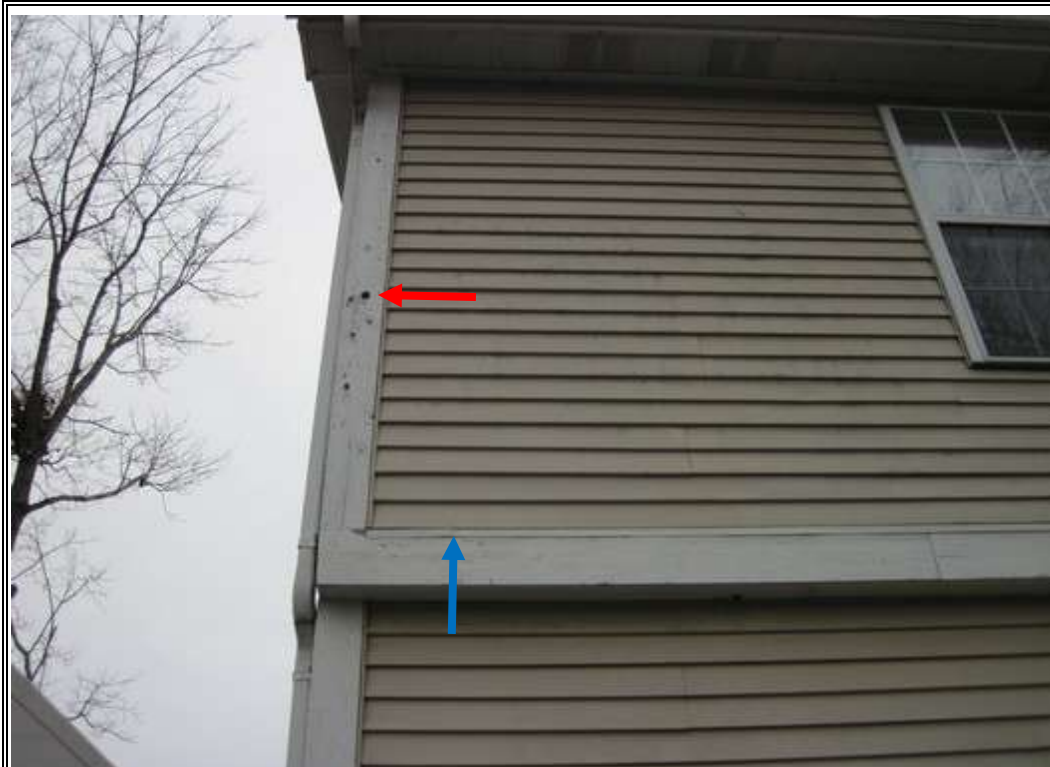
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**Description:**

Door pilaster installed below concrete surface of the stoop, or more likely the stoop was installed after the pilasters were installed. This location is one where water can collect and rot the wood.

**Photo Number**  
**37**



**Description:**

Holes in trim board where knot apparently fell out. These holes should be repaired to keep pest and rain out. Blue arrow points to improper flashing installation—flashing should overlap several inches.

**Photo Number**  
**38**

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**Description:**

Vertical siding installed in place of wood trim board. This siding should be specifically designed for vertical installation to prevent water getting behind the siding.

**Photo Number**  
**39**



**Description:**

Degrading electrical panel mounting board, which needs replacing.

**Photo Number**  
**40**

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**Description:**

Water stains on eave trim due to an unknown cause. These stains were found on a number of buildings and should be investigated.

**Photo Number**  
**41**



**Description:**

Water stains on another eave trim. In this case, the gutter next to the area had water stains indicative of chronic overflow problems, although that problem might not be related to the eave trim stains.

**Photo Number**  
**42**