

Town of Chester Highway Department Review

Current Staffing:

- We currently have a total of 10 Public Works employees
- One Highway Director; 9 laborers with 2 of the 9 split with Cemetery

Training Requirements:

- There are currently no ongoing training requirements.
- We do have a couple of employees that would like to obtain their Class A license; and a couple of employees would like to get their welding certifications
- Currently, nobody holds a herbicide certification which we need to investigate

Skills Required:

- Staff possess all levels of skill sets to include operating all heavy equipment, CDL licensing, mechanical abilities, fabrication skills, bridge building

Equipment:

- Equipment includes: 5 Dump trucks; 2 Loaders; 1 Excavator; 2 Graders; 1 Compaction Roller; 1 Sidewalk Plow; Tractor with Mower & Blower attachments; 1 Backhoe; 1 Chipper; 3 pickup trucks; 1 one-ton pickup; and 3 Trailers

Operational:

- Maintains 136 town roads. Approximately 90 miles of dirt road; 109 miles of total roads.
- Maintains 74 bridges and approximately 733 culverts
- Chester staff installs the majority of our bridge replacements on timber deck bridges
- Chester staff completes culvert replacement up to 6' in diameter
- Annually, ditching is completed in necessary areas. Ditching involves cleaning up ditch lines of debris and native materials, reshaping so that they remain uniform, clearing culvert inlets and outlets, and in some cases stone lining.
- Annually, all 90 miles of dirt is graded, some roads multiple times. Grading not only resurfaces the road but is primarily used to reshape the road to ensure proper drainage and sheeting of water off the road surface.
- During the grading process, the compaction roller is typically following the grader. We have found that the addition of the compaction roller in 2018 has made a difference on how long the road holds together.

- There are times calcium chloride is applied to the dirt roads which acts as a binding agent for moisture retention. This helps the road stay compacted and does also serve as a dust suppressant.
- Annually, culvert work includes flushing, repairing where needed and replacing as needed. Typically, there are approximately 6-10 full replacements per year. This does not include culverts replaced or upsizing in grant projects.
- Annually, there is roadside mowing of 90 miles - both sides of the road. Tree cleanup is also completed throughout the year.
- Annually, staff completes asphalt repair in areas where there are extreme potholes or a project has disrupted the asphalt and replacement is needed. This year the town worked with P&L to try patch work in a different way. This included milling the area prior to installing asphalt. We found this to be a far more effective way to handle the worst of the potholes. We intend to continue with this method.
- When new asphalt is installed by an outside contractor, Chester staff will complete all shoulder work which is extensive
- Other duties include items such as catch basin cleaning and repair; crosswalk painting every year; line striping parking areas; sidewalk sweeping; clean up lawns where the sidewalk plow did damage
- Winter weather requires plowing all town roads, salting asphalt sections and sanding dirt roads for each storm. We usually begin plowing the dirt portions once there is an accumulation of approximately 3 inches of snow. There are 10 plow routes. The shortest route takes approximately 3 hours to complete for 1 trip around for just the plowing portion. Larger storms require multiple trips.
- Sanding takes an additional 3 hours to complete.
- Clearing snow piles as they accumulate
- Winging back snowbanks on all roads and intersections in between storms
- All staff completes extensive maintenance on all equipment within our capabilities. This includes items such as painting snowplows, rebuilding plows, changing oil and routine truck maintenance, changing out hydraulic hoses, rebuilding cylinder seals, brake replacements, airlines, grease lines, etc.

Challenges/Future Considerations:

- We are going to tackle the installation of box culverts in-house. We are thinking up to a 6'x8' size. This would save substantial money in the future.
- We need to improve our sidewalk maintenance, especially in areas where the curbing butts directly to the sidewalk edge. Grass needs to be removed, and a sealant applied to help prevent future growth. The issue is time and labor.

- Typically, we would trim around the bridges to prevent foliage from getting out of control. However, these areas are heavy in poison ivy and we have 1 staff member that is not allergic. No staff members hold a herbicide certification.
- Highway Department has several employees that are or will become eligible for retirement in the next 2-4 years. Finding qualified individuals for this line of work is becoming very difficult. Hiring inexperienced staff takes a significant amount of time to train for these positions.
- Establishing a better system for monitoring condition of bridges and replacement/repair cycles
- We are looking into additional length of warranty for equipment and vehicles to see if we can get a longer life. We are currently stretching replacement of most equipment. However, this has caused an increase in vehicle maintenance which has doubled since 2020.
- The state implemented the Clean Water Act several years ago which required stone line ditching on certain slopes and hydrologically connected segments. This stone lining brings a maintenance issue. We stone lined parts of Smokeshire in 2018 and you wouldn't know that the stone is there. These ditches will have to be dug out, screened, and reinstalled. This is a substantial project. As we come into compliance with the Road Erosion rules, much of Chester's ditch lines will become stone lined and this issue gets compounded.
- Working on the Capital plan would make an impact on the highway budget. Especially if we include roads, bridges and culvert inventories.