

## MEMORANDUM

**To:** Mayor Dwyer, City Manager, Paul Sincock, City Commission,

**From:** City Commissioner Daniel Dalton

**Date:** June 3, 2015

**Re:** Railroad Quiet Zones: liability and insurance issues

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### *Overview*

I have been tasked with researching the potential liability and insurance issues that could arise out of the implementation of quiet zones within the City of Plymouth, Michigan. I provided an initial memorandum on October 21, 2014 addressing liability issues. The memorandum was updated on December 12, 2014 adding in insurance issues. This updated memorandum includes a review of the cost provided to the City of Plymouth from CSX Rail should the City decide to implement quiet zones.

### *Executive Summary*

- Briefly, as a matter of public safety, Congress has mandated that all railroad operators blow horns at all intersections to warn the public of a train coming through the intersection. This warning addresses two of three risk factors that occur at the crossing: pedestrian / train accidents and car / train accidents. The third risk factor of train derailment typically is based on the condition of the crossing itself rather than pedestrian or automobile interference. The law currently provides that if there are any accidents at the rail crossing (whether it be train derailment, auto / train or pedestrian/ train) the sole liability rests with the railroad. The City cannot be sued unless it affirmatively does something to the crossing, such as, implementing quiet zones. At that point in time, liability may attach to the City.
- With respect to quiet zones, the federal rules remove liability from the railroad when quiet zones are implemented. That means the City of Plymouth can implement quiet zones, which may result in train operators not blowing horns through intersections, and be liable for accidents at the train intersection. The horn can still be blown at the start and stop of trains, when a train leaves the train yard (Plymouth has a train yard), when a train is in reverse, and upon the decision of the operator that an emergency exists that requires a horn to be blown. In addition, the City would be required by its insurer to install a wayside horn at the train intersection to warn drivers and pedestrians of an on-coming train. In other words, the noise of the train horn will be replaced by another, less intrusive noise: the wayside horn.

- Federal law caps damages at \$200 million per accident per crossing. Insurers do not offer coverage for quiet zones. A separate rider policy created from the international insurance market, or a self-insurance fund, must be created for coverage of all incidents that occur at the crossings. We currently pay our insurer \$187,000 per year to cover all liability issues. If we implement quiet zones, we would have to pay an additional \$200,000 per year. However, the additional coverage for quiet zones does not reach the cap of \$200mm. Therefore, the City would have to raise additional cash in a reserve to pay for quiet zones.
- CSX has provided the cost of implementing quiet zones. The anticipated out of pocket cost for the City to pay CSX to implement quiet zones is \$4,410,913.82. This cost, however, does not include any utility relocation work, of which there will be several required, and that the City should plan on coordinating all utility relocations. In addition, it does not show the additional street engineering that will be required by the City to implement quiet zones. CSX also notes that should we close Farmer Street and Holbrook we might be able to obtain \$10,000 from the State of Michigan to use as the City sees fit, per crossing. However, the City will have to pay for the street upgrades to close the crossings to insure that it is not possible to cross the tracks at either Farmer or Holbrook. Finally, these cost estimates from CSX also do not include any costs for possible insurance for the City or for the annual maintenance and power fees for each crossing and no projections for utility relocation as well as street improvements is considered in these estimates.

It is my recommendation that the City Commission decline to adopt quiet zones for the City of Plymouth.

### ***What is the likelihood of a rail incident?***

The starting for this discussion is why do trains blow their horns at crossing. The reason is public safety. According to the National Transportation Safety Bureau, every three hours in America a train strikes a person. In 2014, there were 267 fatalities from crashes in Michigan, compared with 231 in 2013, a rise of about 19 percent. Trespasser incidents (meaning pedestrians on the tracks) accounted for 526 killed last year; up 22 percent from 2013. Michigan has the 10<sup>th</sup> highest collision rate in the country with 78 crashes last year: 12 people were killed and 25 were injured, according to recent figures released by the Federal Railroad Administration. In 2013, there were 61 crashes, three fatalities and 26 were injured. A sample of accidents involving trains in Michigan includes the following:

**Dec. 5, 2001:** Two State Police troopers rushing to help an officer who radioed for assistance tried to beat a train to the Scott Lake Road crossing in Waterford. Witnesses say the patrol car passed six vehicles stopped at the railroad crossing, ignored the flashing lights and the closed gated and drove into the path of an oncoming freight train.

**June 4, 2004:** A railroad gate failed to lower in time to stop a Charlotte woman from driving into the path of an oncoming train in a collision that killed her and her 15-year-old daughter.

**July 4, 2006:** A 70-year-old man was killed in a train-car collision at 15 Mile and Groesbeck in Clinton Township. The flashing lights were obstructed, the red lights were operating at partial power, and the backgrounds to the lights were faded, all of which contributed to the crash.

**Feb. 25, 2009:** A 38-year-old Holly man driving a pickup appeared to deliberately drive his truck into the side of a freight train on Fish Lake Road shortly after 6 a.m. The victim, who was dead at the scene, was the focus of a domestic violence report filed just minutes earlier and a mile away, police said.

**July 9, 2009.** An Amtrak train travelling at 67 miles per hour in Canton Township, Michigan killed five teens. The victims included a 14-year-old girl an 18 year old boy, a 20 year old boy and a 21 year old man.

**Sept. 14, 2011:** A 19-year-old motorist was killed when his vehicle was struck in Hartford Township by an Amtrak train carrying 72 passengers from Chicago to Grand Rapids. Authorities said the crossing had working lights and barriers.

**Oct. 7, 2013:** A 45-year-old woman died after driving around a railroad crossing gate and being struck by an Amtrak train in Shiawassee County's Vernon Township.

**Jan. 1, 2014:** A 19-year-old Pontiac man driving a truck went around a crossing gate in Pontiac shortly before 10 p.m. when he was struck by a Chicago-bound Amtrak train. The man was taken to an area hospital where he was listed in stable condition.

From 2013 to last year, those killed in the state of Michigan in railway crashes is up almost 35 percent. One of the main reasons for the crashes is that it is not easy to stop a train. An average freight train traveling at 55 mph takes a mile or more to stop, which is the equivalent of 18 football fields.

Along with the increase of train incidents, the cost of litigating and settling train incidents has increased. One need only look north to the Lac-Mégantic rail disaster that occurred in the town of Lac-Mégantic located in the Eastern Townships of the province of Quebec at approximately 1:15 am on July 6, 2013, when an unattended 74-car freight train carrying Bakken formation crude oil rolled downhill and derailed in the center of town resulting in the fire and explosion of multiple tank cars.

Forty-two people were confirmed dead, with five more missing and presumed dead. More than 30 buildings in the town's center, roughly half of the downtown area, were destroyed and all but three of the thirty-nine remaining downtown buildings are to be demolished due to petroleum contamination of the town site. Initial newspaper reports described a .6

mile blast radius. The death toll of 47 due to the crash and resultant explosion makes it the fourth-deadliest rail accident in Canadian history and the deadliest involving a non-passenger train.

The families of the dozens of people killed in the 2013 Lac-Mégantic train crash have received a financial proposal that would see them split nearly \$80 million to compensate for the death of their loved ones. The \$80 million comes from the Canadian government, the local municipality, and several others. Notably, a week after the incident the rail company that caused the incident declared for bankruptcy. The release of the legal and financial plan by the firm overseeing the bankruptcy of the Montreal, Maine & Atlantic railway signals that the ordeal is nearing an end nearly two years after the train derailment and explosion that killed 47 people in the eastern Quebec town.

### ***Overview of the Train Horn Rule***

To make train crossings safer, Congress provided that train horns are required to be sounded at all public crossings, 24 hours a day, to warn motorists and pedestrians that a train is approaching.

In 2005, the Federal Railroad Administration (FRA) adopted new regulations regarding the use of train horns with the Final Rule on Use of Locomotive Horns at Highway-Rail Grade Crossings, commonly known as the “Train Horn Final Rule.” 49 CFR Part 222. Under the Train Horn Final Rule, railroads must sound the locomotive horn 15-20 seconds prior to a train’s arrival at the highway-rail grade crossing, but not more than 1/4 mile in advance of the crossing. The pattern for sounding the horn is two long, one short and one long blast repeated or prolonged until the locomotive occupies the highway-rail grade crossing. The rule also includes a minimum and maximum volume level for the train horn, 96 dBA and 110 dBA respectively, when measured at 100 feet in front of the locomotive. The rule addresses use of the horn only with respect to highway-rail grade crossings.

Federal law mandates that trains approaching an intersection from a quarter of a mile sound a horn. Federal rules further require trains to sound their warning horns when they start from the yard (*as we have one in the City of Plymouth*), when they are in reverse, and also upon the discretion of the engineer for safety reasons. Train crews sound their horns when there is a vehicle, person or animal on or near the track, or, the crew determines it is appropriate to provide warning. Crews may also sound the horn when there are track or construction workers within 25 feet of a live track, or when gates and lights at the crossing are not functioning properly.

### ***Quiet Zones***

The Train Horn Final Rule also contains a provision for local municipalities to manage the use of train horns through the creation of “quiet zones.” The intent of the quiet zone regulations is to give local communities the opportunity to promote neighborhood quality of life when risk could be balanced at the intersection. In general, a quiet zone is defined as a section of a rail line at least one-half mile in length that contains one or more consecutive

public railroad crossings at which locomotive horns are not routinely sounded. A quiet zone is specific to the use of the train horn and does NOT include other railroad conditions and equipment such as rail joints, engine braking, engine noise, car suspension or railroad crossing lights and bells.

When an entity requests to establish a quiet zone, it must choose between two classes of safety measures, in addition to the standard mandatory at-grade crossing measures, that must be installed at the crossing(s). The decision is essentially the one that will not increase the number of accidents at a given crossing as a result of the elimination of the locomotive horn blast. The first set of measures, called Supplemental Safety Measures, or SSMs, consist of physical barriers. These include one of the following measures: the closure of a public Highway-Rail Grade Crossing; installing Four-Quadrant Gate System; installing gates with medians or channelization devices; and, installing a one-way street with gate(s).

Use of SSMs at all crossings within the quiet zone is generally sufficient to reduce the Risk Index calculations as set out by the FRA to qualify for quiet zone designation on an almost automatic basis. Alternative Safety Measures, or ASMs, by contrast involve an evaluation by the FRA before approval is granted and are subject to annual reevaluation based on revised estimates of risk reduction of the measures employed on a nationwide basis. A common form is the use of an additional gate, on one side of the crossing, with a curb median located on the opposite side. An ASM may be selected due to site-specific constraints, where the configuration of the crossing and close proximity of nearby intersections and driveways preclude the use of curb medians on both sides of the crossing. ASMs consist of the following: Modified SSMs (SSMs which do not meet all FRA requirements); Non-engineered ASMs such as: Programmed enforcement, Public education and awareness, Photo enforcement, and, Engineered ASMs (measures that improve geometrics such as sight distance).

### ***Liability in Quiet Zones***

As a quick primer in railroad liability law, railroad crossings are generally under the ownership and control of the railroad owning the tracks, and maintenance is the responsibility of the railroad and not the community, which owns or maintains the streets. Where there are statutory duties to perform a safety function, such as sounding a horn before entering an intersection, it has long been settled that failure to do so by a railroad can constitute negligence per se.

Again, as noted above, railroad crossings are generally under the ownership and control of the railroad owning the tracks, and maintenance is the responsibility of railroad and not the community that owns or maintains the streets. The FRA drafted the Train Horn Final Rule to specifically “preempt[] all State and local laws that govern the sounding of locomotive horns at grade crossings located within duly established quiet zones.” 49 CFR Part 222 at 28146. This means that train companies no longer have absolute liability, and municipalities no longer have absolute immunity for a train/ car, train/ pedestrian or train derailment accident at a quiet zone rail crossing.

The Train Horn Final Rule is intended to remove “failure to sound the horn” as a cause of action in lawsuits involving collisions that have occurred at grade crossings located within Quiet Zones. Thus, the FRA fully anticipated that the courts would be able to determine liability issues based on each case’s facts, the FRA’s regulatory intent, and the nature of the Train Horn Final Rule and its requirements. It is important to recognize that liability for accidents in Quiet Zones is of particular and sensitive concern given the potential for such severe damages from rail accidents. We know that the ultimate scope of liability is capped at \$200 million per accident at each crossing by federal law.

According to the FRA, it is ultimately up to the Courts to determine who will be held liable if a collision occurs at a crossing located within a Quiet Zone. The determination must be based upon the particular facts of each case, as a collision may have been caused by factors other than the absence of an audible warning. This puts the community at risk of being named in a lawsuit, having a jury determine the liability exposure of the community and the jury awarding damages. The lawsuits may be due to a variety of factors *besides* the lack of an audible warning. Therefore, the Train Horn Final Rule created a federal standard of care that replaces the standard of care that would otherwise apply in each state at highway-rail grade crossings.

### ***Insurance***

Individual railroads can, and in most instances, require additional insurance (with the railroad listed as additional insureds) as a stipulation of their individual agreements with communities. And as stated above, the maximum risk for the City is \$200 million per crossing per accident as set forth by federal law. Accordingly, the issue of insurance is based on the \$200 million threshold. The City of Plymouth’s insurance carrier specifically excludes quiet zones from coverage. The insurer does not offer insurance riders to add coverage for a City that seeks to have Quiet Zone coverage and questioned why the City would consider placing its citizenry at risk for this liability.

Contact has been made with other commercial insurance carriers and brokers to find out if there is any other carrier that offer insurance for Quiet Zones. A review of other states who have quiet zone coverage (California, New Mexico and Ohio) have secured it through their own state insurance risk sharing insurance pools or the risk has been eliminated through the state legislature who has passed “governmental immunity” laws for quiet zone accidents. This statutory protection eliminated liability for local governments with respect to quiet zone issues. Colorado, for example, enacted governmental immunity for quiet zones, which has resulted in the City of Boulder, Colorado beginning the process of implementing quiet zones. Michigan does not offer governmental immunity for train crossings and does not include coverage in the risk sharing pools.

It is important to note that even in states that have governmental immunity for the risk, or state insurance pools, railroads also require the installation of wayside horns – yet another noise generating horn that is sounded at quiet zone crossings. This is in part, due to the fact that the community, not the railroad, maintains the wayside horn itself. Only the connection of the wire from outside the railroad signal bungalow to the inside of the

railroad signal bungalow is the railroad's responsibility. The insurance requirement associated with the wayside horn is to protect the railroad in the event that the community does not maintain the wayside horn, and an incident occurs. The wayside horns have 'power out indicators' which tells locomotive engineers if the horn is not functioning, in which case, they have the authority to sound the locomotive horn. In short, the rail line includes additional insurance requirements and wayside horn agreements.

I have reached out to the City of Carrollton, Texas with respect to their experience with Quiet Zones as it is the most recent City in the United States to implement a Quiet Zone in a community. Carrollton, a suburb of Dallas, Texas, has nine crossings within its thirty six mile footprint. The City used the lower cost option of installing two gates and the 100 foot no-left-turn-concrete median in the middle of a road. This project cost the City of Carrollton in excess of \$2 mm to implement the Quiet Zones. In addition, the City was required to pay the rail company all of its cost to update grades at the rail crossings, even those unrelated to the Quiet Zones, simply because the City impacted the crossing by implementing Quiet Zones. The City has budgeted an additional \$50,000 for the quiet zones, per year, based on a contractual requirement with the railroad company.

In terms of liability, the City of Carrollton's is moving forward without insurance at the crossings for the reason that they believe the crossings is safer (the belief that there is no way for a car or pedestrian to cross based on the safety measures) and they cannot obtain any coverage from any carrier. Accordingly, they are essentially self-insured for accidents at the crossings. Finally, when I asked about train derailments at the crossing the City felt the possibility was remote so they were not concerned about the same.

Residents of the City were surprised to learn that the train horn noise was not eliminated at the rail crossing. Rather, the noise was substituted by a wayside horn maintained and operated by the City at the insistence of the railroad operator.

In sum, the City of Carrollton has spent over \$2 mm general fund dollars to improve nine crossings to make them quiet zones, which, will cost them an additional \$50,000 a year for maintenance.

### ***The Michigan Experience***

Michigan does not have any communities that have opted into the post 2005 quiet zones. The primary reason is the liability concerns and the insurance cost. The secondary reason is that the benefit of a quiet zone has not been significant in communities throughout the United States as train noise continues to flow through communities and the wayside horns create similar but less expensive noise .

Michigan has two communities that have quiet zones that were created before the 2005 quiet zone rules. Iron Michigan has one zone and the City of Durand has four. Neither quiet zone would be approved as they are currently in place as both have stop signs with no gates at the rail line intersections.

The Michigan Municipal League (MML) insures Durand. The MML indicated that they were not aware of any claims or lawsuits arising out of the quiet zone because the pre-2005 rules retain the risk of loss with the railroad. The MML is not aware of the cost of coverage for a quiet zone but indicated that it would *consider* pricing out a rider policy to cover the risk if the City changed its insurance relationship to the MML.

The Michigan Municipal Risk Management Authority insures the City of Iron Mountain. As with Durand, the MMRMA has had no claims arising out of the quiet zone in Iron Mountain because the pre-2005 rule leaves the risk of loss solely with the railroad. And like the MML the MMRMA is not aware of a cost for coverage at a quiet zone as no community has looked into it. The MMRMA would consider costing out a rider for quiet zones if the City of Plymouth changed its entire insurance relationship to the MMRMA.

My research has confirmed that there is no commercially available liability coverage for municipalities seeking to employ quiet zones. In speaking with the actual insurers (AON, AIG), they have gotten out of the market of selling quiet zone coverage because of the risk of loss and the inability to subrogate the claim. This means that there is no entity for the insurer to recoup a loss from if the City is sued and damages arise. Accordingly, in order to have coverage for the risk at the quiet zone crossings, the City would have to secure a “rider” for the Quiet Zone from the insurance markets in London or create a self-insurance pool for coverage of claims arising at the rail crossings. A rider is similar to an additional policy for a specific item. For example, a typical homeowner policy would not cover expensive artwork. If the homeowner wanted coverage for the artwork, he or she would have to have the insurer appraise the work of art and then provide an additional insurance certificate (also known as a rider) for the loss of the artwork through theft, fire or damage.

Likewise, in this case, the City of Plymouth would need to secure additional coverage from the London insurance market for the seven crossings within the City. The insurance market will determine the cost of a rider. Each crossing will be considered in light of the \$200 million cap on damages. The insurer will then provide the City with the cost of a premium for quiet zone coverage. The alternative is for the City of Plymouth to self-insure each crossing.

### ***The Request for Insurance***

Based on the request of the City Commission, the City Administration established a bid for coverage for the Quiet Zones, only. As a basis for comparison, the City Commission will recall that our current entire liability and property insurance package, including Officer/Directors insurance cost is approximately \$187,000+ on an annual basis. That covers all of our buildings, parks, public property, police liability, fleet, water/sewer system.

The City first looked to its insurer for coverage and quickly learned that the carrier, Trident Insurance, does not offer coverage for Quiet Zones. The response of the carrier is telling, wherein the insurer asked why the City would want to increase the risk of liability for its

citizens with respect to Quiet Zones. Therefore, the City looked to bid insurance for a rider that covers Quiet Zones, only.

The bid provided by the City included the following:

*The issuance of the Request for Proposals (RFP) constitutes only an invitation to submit proposals to the City.*

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*Coverage offered by any potential policy would be a separate coverage specifically covering the possible risk of loss at any railroad crossing where what is commonly known as a Railroad Quiet Zone is in effect. In addition, the provider of the policy should also name CSX Railroad and Wayne County, Michigan as additional insured as part of any Policy.*

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*Proposer's may "layer" multiple policies together in order to satisfy the requirements of the RFP to meet the \$200,000,000 U.S. Dollar, per crossing, per incident limits. This could include a base policy with an additional "excess coverage" policy in order to the meet the requirements of the RFP.*

The City of Plymouth received two sealed bids with three proposals.

1. The Michigan Municipal League Liability & Property Pool. The MML indicated that "the Pool" does not exclude coverage for this type of exposure, so therefore the coverage limits on a Member's policy would apply. We are not sure if the "coverage limits on a Member's Policy" would meet the requirements set forth by the Federal Government or even meet the \$200 million dollar limit for one crossing. The "Pool" also indicated that they do not offer stand-alone coverage for this type of exposure and we would have to move all of our insurance needs from private insurance that we currently use to the "Pool." The limits of liability for the pool is \$5mm.
2. HUB International provided two different options:
  - a. Offering a policy through Travelers Insurance, with a policy limit of \$5mm in coverage and costs, that would require the City to change its entire insurance portfolio to Travelers. The added cost for the quiet zone coverage would be in the range of \$20,000 - \$40,000 annually. Again, this leaves a gap in coverage of \$195mm.
  - b. Securing a policy through Lloyds of London for \$200mm of coverage. The estimated cost is \$100,000 - \$200,000 annually. It is not clear if the pricing is for the \$200 Million per crossing (recall that Plymouth has seven crossings) /per incident or a single \$200mm for all of the crossings.

The broker also indicated that there have been numerous issues at grade crossings in the U.S. recently, so we would need to ensure that in order to take away one of the protections

that are commonly used, these crossings need to be as safe as possible. The broker also indicated that the concept of insurance for quiet zones is a relatively new concept and not one U.S. domestic insurance companies have been willing to take on.

Again, as a basis for comparison, the City Commission will recall that our current entire liability and property insurance package, including Officer/Directors insurance is approximately \$187,000+ on an annual basis. That covers all of our buildings, parks, public property, police liability, fleet, water/sewer system, etc.

### ***The Cost of Implementing Quiet Zones***

The City Commission asked CSX to cost out the construction of quiet zones for the City. CSX has responded with the attached quotes. We then asked CSX to provide a “high cost” option and a “low cost” option. Both were provided. The attachments provide that the cost of construction will be in the \$4 million dollar range. This cost does not cover road engineering and the cost of relocating underground utilities.

I have also investigated the future maintenance cost of quiet zone intersections. This number is very difficult to ascertain, as there are not many cities that track this information. However, the one city in Texas that I spoke with indicated that they have installed nine quiet zones and budgeted \$50,000 per year in maintenance.

### ***Recommendation***

As the quality of life issues will not be reduced, and the cost of implementing quiet zones will increase, I recommend that quiet zones not be implemented in the City of Plymouth, Michigan because:

- The ultimate objective of reducing noise and increasing the quality of life will not be achieved with quiet zones.
  - The sounding of train horns will occur when trains start, stop, go into reverse, leave the train yard and upon an emergency.
  - Even with the reduction of a train horn, we will be introducing a new sound: a wayside horn that will sound every time a train crosses the intersection.
- The facts confirm that liability may attach to the City at all train intersections if the City implements quiet zones.
- The cap on damages for train accidents is \$200m and the cost to insure quiet zones intersections will likely exceed \$200,000 per year.
- The cost to build quiet zones will likely exceed \$4mm.
- The cost to maintain quiet zones will likely be \$50,000 per year