Guidance for addressing noise for construction traffic mitigation measures

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**Background**

In early 2018, the increased emphasis on Traffic Management Plans (TMPs) by FHWA and MNDOT as well as non-TMP-based traffic mitigation for construction raised the questions regarding noise analyses, noise abatement, and traffic mitigation measures in general. MnDOT desired clarity in as to when certain decisions would trigger environmental obligations and definitively drawing lines between temporary vs permanent. MnDOT Office of Environmental Stewardship (OES), including the OES Director and the Environmental Modeling and Test Unit (EMTU), collaborated with elements of the MnDOT Metro District (Environmental Coordinator, Noise Abatement/Air Quality Program Supervisor, and MnDOT Project Managers) to arrive at an approach that would provide a more consistent experience during NEPA and development of Plans, Specifications, and Estimates. This document memorializes the discussions and agreed upon approach to apply consistently across the Federal-aid program.

So you have a Type I project consisting of two or more parts. The ‘parts’ consists of:

1) The primary physical construction, which we’ll call “mainline construction” for purposes of illustration, and
2) Work on another route with the intent of relieving construction-based traffic congestion or the like. Such work could include, but not be limited to the following:
   a. An official detour route(s)
   b. Striping extra lanes on nearby facilities, even if they are not designated as official detour routes
   c. Signal timing optimization
   d. Turn lanes which facilitate throughput on alternate routes
   e. Any combination of the above and/or other items

**Do I have to do a noise analysis for the work away from mainline construction?**

It depends. If the work is temporary: no. If the work is not temporary: maybe, see exceptions below

**What is temporary? What is permanent?**

“Temporary” means that the facility off the mainline construction will be returned to its pre-project state no later than 90 days after the contractor is demobilized from the mainline construction project. Note the caveat for activities prohibited by cold weather as outlined in the next question. “Permanent” is anything that does not meet the above definition of “temporary.”

**What if the work away from the main construction project is striping (as an example) and it is now winter and cannot be completed within the 90 days?**

Ideally, the mainline construction would be scheduled such that (assuming typical conditions in fall-to-winter transition) the work of returning the striping/configuration to the pre-project setting is done before it is too cold to execute any striping work. If the weather has turned such that it is too cold for striping
with any product on the market and that striping operations are impossible (note: “impossible” does not equal “inconvenient”) for the remainder of the calendar year, then the returning of the striping/configuration to pre-project setting must be completed within 90 days of April 15th of the next calendar year or when season striping operations begin, whichever comes first. The overarching theme is that natural environment conditions (as opposed to inconvenience or politics) make the reversion to pre-project conditions impossible until favorable conditions return in the spring.

Are there any possible “exceptions”?

Legally, there are not supposed to be any exceptions.

The Division Office, working with MnDOT, may allow two potential exceptions:

First: What if the work off mainline construction was solely signal timing optimization entirely with equipment already in place?

Short answer: It depends. “Solely signal timing optimization” entirely with existing equipment in place before the NEPA process has started for the mainline project would not require a noise analysis. However, if the work includes other physical construction (e.g.: addition of new fiber optic cables (not replacement), roadway sensors, the addition of a new traffic signal control cabinets (not replacement)) then this project area would need to be included within the Type I noise analysis performed for the overall project. Engage MnDOT OES Environmental Modeling and Testing Unit (EMTU) and the Division Office to discuss the situation when necessary.

Second: What if there is a desire to do a mill and overlay (or concrete overlay) for ride quality purposes because the pavement on the detour/alternative route was ‘beat up’ much more than anticipated from the diverted traffic? Answer: If the proposed work is *solely* a mill and overlay (or concrete overlay), then no Type I analysis would be required. “Solely” assumes no work of than addressing pavement condition. This includes no ADA or PROWAG-induced work, no turn lane additions, etc. The facility must be configured to have the same cross section, lane configuration, and profile as before it was used for an alternative/detour route; only the driving surface will be new. If the project proposer is of the opinion they have no choice but to deliver they typically PROWAG-induced/related work on the detour/alternative route, then all work on that alternative route is considered permanent; therefore, it is part of the mainline undertaking.

What is the premise of this approach? Is this a new interpretation?

The premise of this approach is twofold:

1) 23 CFR §772.5: “If a project is determined to be a Type I project under this definition then the entire project area as defined in the environmental document is a Type I project.”

2) If not but for the work of the mainline project, the work on the other routes would not be done, then it’s part of the mainline project.

This is not a new interpretation. This is a memorialization of existing practice.
What if the detour route already has the same transportation needs that would allow it to also adequately function as a detour route?

On a case-by-case basis, it may be acceptable to design and deliver a separate project on the detour/alternate route provided the contractor is demobilized from the separate project before the contractor is mobilized on the mainline construction project. In other words, but-not-for the mainline construction project, the alternative route does not have those transportation needs, it is segmentation when the separate project is delivered distinct from the mainline construction undertaking. Engage MnDOT OES/State-Aid and the Division Office to discuss the situation.

Change log:

3/6/2018: Original issue

2/22/2019: Added background and change log.