4141 Douglas Drive North • Crystal, Minnesota 55422-1696

Tel: (763) 531-1000 • Fax: (763) 531-1188 • www.crystalmn.gov

Posted: May 16, 2014

CRYSTAL CITY COUNCIL
SECOND WORK SESSION AGENDA

Tuesday, May 20, 2014
To immediately follow the Regular City Council Meeting
Conference Room A

Pursuant to due call and notice given in the manner prescribed by Section 3.01 of the City Charter, the second work session of the Crystal City Council was held at _____ p.m. on Tuesday, May 20, 2014 in Conference Room A located at 4141 Douglas Drive, Crystal, Minnesota.

I. Attendance

Council members	Staff
____ Peak	____ Norris
____ Selton	____ Therres
____ Adams	____ Revering
____ Budziszewski	____ Meehan
____ Deshler	____ Peters
____ Hoffmann	____ Mathisen
____ Libby	____ Gilchrist
	____ Serres

II. Agenda

The purpose of the work session is to:

- Consider formal comments on Bottineau Transitway Draft Environmental Impact Statement (DEIS)
- Discuss changes to City Code regarding securing ignitions
- Receive commission liaisons reports/updates*

III. Adjournment

The work session adjourned at _____ p.m.

Auxiliary aids are available upon request to individuals with disabilities by calling the City Clerk at (763) 531-1145 at least 96 hours in advance. TTY users may call Minnesota Relay at 711 or 1-800-627-3529.

Memorandum

DATE: May 12, 2014
TO: Mayor and City Council (for May 20, 2014 Council Work Session)
cc: Anne Norris, City Manager
Tom Mathisen, City Engineer
John Sutter, City Planner/Assistant Community Development Director
FROM: Patrick A. Peters, Community Development Director PAP
SUBJECT: Bottineau Light Rail – Comments on Draft Environmental Impact Statement

The Draft Environmental Impact Statement (DEIS) for the development of the Bottineau Transitway has been published and is out for review and Public Hearings. The comment period ends May 29, 2014, following which the Bottineau initiative moves into Project Development (includes preliminary and final engineering) and preparation of a Final Environmental Impact Study (FEIS) with an eye on securing federal funding and, ultimately, construction of the Bottineau LRT (aka, Blue Line Extension). The DEIS is available for viewing on-line at http://www.bottineautransitway.org/ and at Crystal City Hall, among other locations.

In accordance with the parameters of the DEIS process, it is appropriate that the City of Crystal offer comments specific to the potential impacts that the construction and operation of the Bottineau LRT may have on the city and its residents. Following discussion at the May 20 Council Work Session, staff will prepare a comment letter, to be signed by the City Manager, that itemizes the primary issues associated with the Bottineau line's planned route through Crystal and for which satisfactory mitigation measures will need to be identified in the FEIS and planned for implementation during the Project Development phase. The impacts identified in the DEIS that are of particular interest to Crystal are noise, vibration and traffic.

Noise

With regard to the projected noise impacts along the C Alignment (that portion of the Locally Preferred Alternative in Crystal), the report indicates that there are a significant number of adjacent noise sensitive land uses that are predicted to experience noise impacts from LRT construction and operation, if unmitigated. The attached *Figures 21 and 22: Alignment C Noise Impact Locations*, illustrate the properties in Crystal that are assumed to suffer noise impacts, either "moderate" or "severe." A total of approximately 246 dwelling units (single-family, 2-family and apartment units) are assumed to have "severe" impacts from noise. While there are some anticipated impacts associated with construction noise, the DEIS does acknowledge the city's noise ordinance restrictions in that regard, and the construction activity is temporary.

The predicted operational noise impacts that are of profound concern are those most directly associated with the sounding of a train horn in advance of at-grade crossings at Corvallis and West Broadway, where the train is operating in excess of 45 miles per hour. Noise from the sounding of a train horn is particularly concerning at or near those two crossings because it poses an increase to the baseline noise within what are predominantly residential neighborhoods.

In addition, the impacts associated with the horn are intensified by the number of train trips through these crossings as shown by the service schedule in the report, which is assumed to be:

- Early morning (4:00–6:00 a.m.): every 20-30 minutes
- Peak periods (6:00–9:00 a.m. and 3:00 – 6:30 p.m.): every 7.5 minutes
- Midday (9:00 a.m.–3:00 p.m.) and Evening (6:30-10:00 p.m.): every 10 minutes
- Late evening (10:00 p.m.– 2:00 a.m.): every 30 minutes

In keeping with DEIS preparation protocol, the report identifies a range of noise mitigation measures that may have varying levels of effectiveness in reducing the severity of the predicted impacts. *Table 5.6-8 Proposed Noise Mitigation Measures for Operational Impacts* (attached) identifies various potential noise mitigation methods that may be considered, including the establishment of quiet zones, which the City holds will be the most effective within the Crystal segment of Alignment C. The report states that the request for quiet zones for at-grade crossings must be initiated by the respective municipality. However, it also states that "...the municipalities may also be required to provide improvements at grade crossings such as modifications to the streets, raised medians, warning lights, and other devices." It appears reasonable from the City's perspective that, while the city will certainly work with responsible agencies to initiate the quiet zone requests, any and all costs associated with quiet zone improvements must be borne by the project and not by the City.

With regard to the proposed crossing at West Broadway, the Crystal Comprehensive Plan (relevant excerpt attached) contemplates Hennepin County-initiated discussions about removing that part of West Broadway (CSAH 8) south of Douglas from the county road system and subsequently whether the West Broadway s-curve crossing of the BNSF tracks at 48th Avenue North either ought to be reconstructed as is, reconfigured, replaced by a crossing in a different location or eliminated. The Bottineau project should incorporate this roadway evaluation into the FEIS and Project Development phase to determine the feasibility of eliminating the rail crossing at West Broadway, thereby eliminating one of the two potential crossings in Crystal needing quiet zone treatment.

Finally, also regarding *Figure 22: Alignment C Noise Impact Locations*, there are two commercial/industrial properties misidentified as residential (the vacant industrial property at 5216 Hanson Ct and the vacant commercial property at 4940 West Broadway), and one commercial property (4947 West Broadway) that as of May 8, 2014, is no longer a church and will be developed for the City's a new Public Works facility. These three properties should no longer be included in the list of properties with potential for severe impacts from noise.

Vibration

Ground-borne vibration (GBV) is the oscillatory motion of the ground that, for transit projects, can be best described in terms of vibration velocity. Typical GBV levels from common sources range from imperceptible background vibrations of approximately 50 VdB (vibration decibels) to 100 VdB, the threshold for structural damage. Annoyance is reportedly not significant unless the vibration exceeds 70 VdB. Typical rapid transit GBV is around 70-72 VdB.

Four residential properties (classified as "Category 2" uses) in Crystal have been identified as having potential for impacts from vibration (Figure 39 in the Technical Report, attached) in the range of 72-90 VdB, depending on proximity to the track centerline. There are various mitigation measures identified in the study that can be implemented in the Crystal segment, but the report specifically discusses "...modification or relocation of crossovers between Corvallis Avenue North and West Broadway Ave....as well as installation of track vibration isolation treatment."

The Bottineau project should incorporate successful mitigation measures for vibration evaluation in the FEIS and during Project Development.

Traffic

The only transit station proposed in Crystal will be located within the BNSF railroad right-of-way just south of Bass Lake Road. The current proposal for this station does not contemplate any park and ride or kiss and ride facilities. If this is to be the case, it is reasonable to expect that, without appropriate design considerations that anticipate such activity, some vehicles will drop off and pick up transit riders by stopping on Bass Lake Road and Bottineau Boulevard, thus obstructing traffic flow.

The DEIS points out that station area plans, which would include the park and ride facilities (and presumably kiss and ride facilities, as well) have not been developed but would include a full traffic analysis of such facilities. The DEIS states that roadway improvements such as turn lanes or additional intersection controls may be needed to accommodate the additional traffic generated. Similarly, the station area planning effort for the Bass Lake Road station, the FEIS and Project Development all need to include a detailed analysis that satisfactorily addresses the potential adverse impacts associated with the lack of an off-street drop off or parking area that can support the station without compromising traffic operations.

With regard to pedestrian crossings, the DEIS proposes that new or improved sidewalk crossings of the railroad corridor are to be included in the final design of the Bass Lake Road, Corvallis Avenue (replacing existing sidewalk on south side of roadway) and West Broadway Avenue crossings in Crystal. The City looks forward to participating in the process to ensure that Crystal residents will have safe pedestrian facilities that connect neighborhoods across the rail corridor.

FIGURE 21: ALIGNMENT C NOISE IMPACT LOCATIONS

FIGURE 22: ALIGNMENT C NOISE IMPACT LOCATIONS

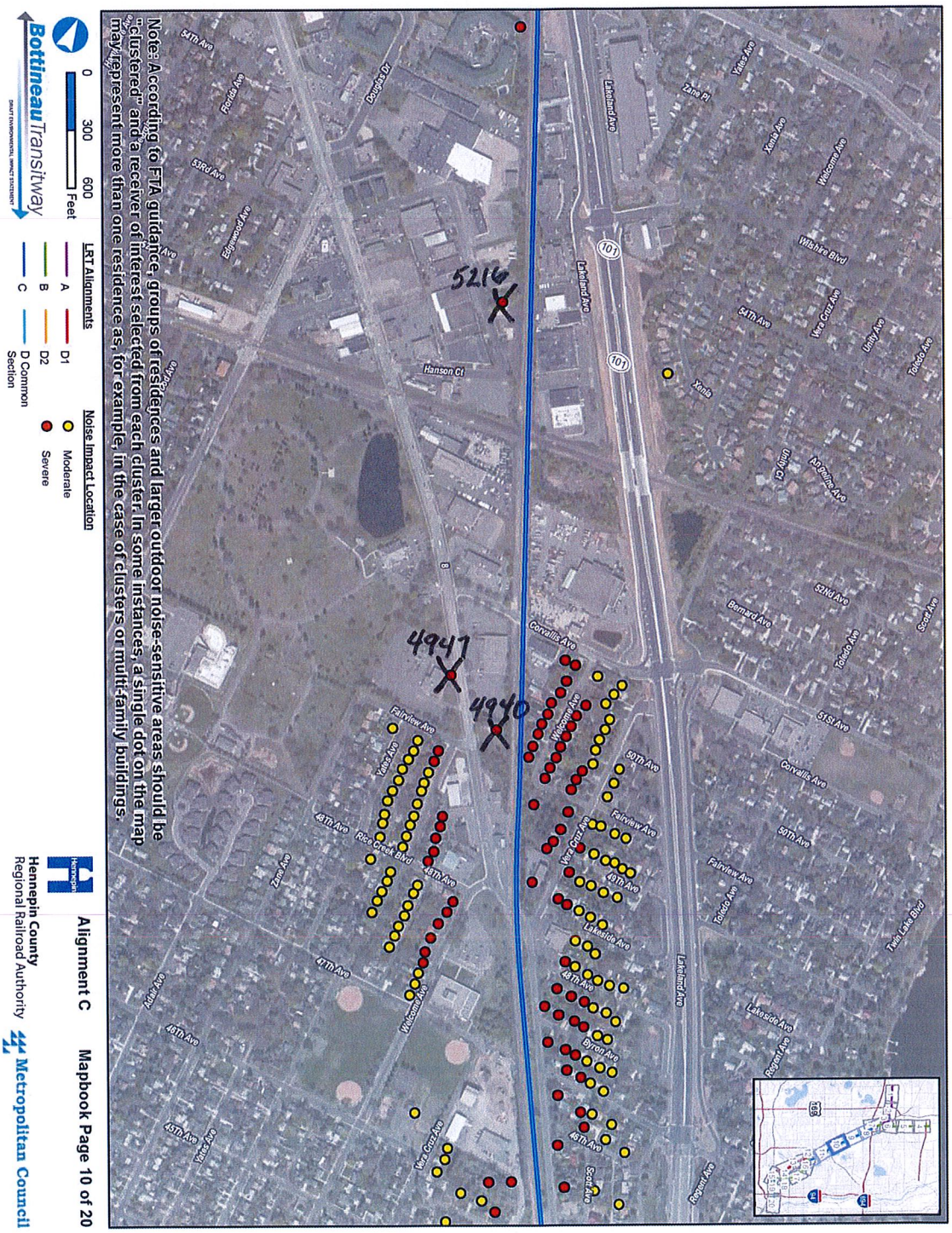


Table 5.6-8. Potential Noise Mitigation Measures for Operational Impacts

Mitigation Location	Mitigation Option	Description
Source		An effective option for mitigating noise impacts along the alignment would be to establish "quiet zones" near at-grade crossings. Quiet zones would need to be established in accordance with FRA regulations. In quiet zones, because of safety improvements at the at-grade crossings, train operators would sound horns only in emergency situations rather than as a standard operating procedure. Establishing quiet zones would require cooperative action among the municipalities along the corridor, Minnesota DOT, FRA, BNSF, and the transit agency. The municipalities are key participants in the process, as they must initiate the request to establish quiet zones through application to the FRA. To meet safety criteria, the municipalities may also be required to provide improvements at grade crossings such as modifications to the streets, raised medians, warning lights, and other devices. The FRA regulation also authorizes the use of automated wayside horns at crossings along with flashing lights and gates as a substitute for the train horn. While activated by the approach of trains, these devices are pole-mounted at the grade crossing, thereby limiting the horn noise exposure area to the immediate vicinity of the crossing.
	Establishment of Quiet Zones	
	Modified Use of Audible Warning Devices	An approach for mitigating noise impacts due to LRV and wayside audible warning devices (e.g., horns and bells) would be to modify the design, settings, or use of these devices.
	Special Trackwork	Turnouts are a major source of noise impact when they are located in sensitive areas. If turnouts cannot be relocated away from sensitive areas, other methods can be used to reduce noise impacts such as the use of spring-rail, flange-bearing, or moveable-point frogs in place of standard rigid frogs at turnouts. These devices allow the flangeway gap to remain closed in the main traffic direction for revenue service trains.
	Wheel/Rail Lubrication	There are several options to mitigate potential wheel squeal from small-radius curves, including on-board solid-stick rail lubrication and wayside rail lubrication. Automated wayside top-of-rail friction modifier systems put a small amount of lubricant onto the top of the rail, which maintains a constant coefficient of friction. This type of lubricant has been shown to reduce or eliminate the potential for wheel squeal.
Path	Noise Barriers	This is a common approach to reducing noise impacts from surface transportation sources. The primary requirements for an effective noise barrier are that the barrier must be high enough and long enough to break the line-of-sight between the sound source and the receiver, be of an impervious material with a minimum surface density of four lb/sq. ft., and not have any gaps or holes between the panels or at the bottom. Because numerous materials meet these requirements, the selection of materials for noise barriers is usually dictated by aesthetics, durability, cost, and maintenance considerations. Noise barriers for transit projects typically range in height from eight feet to twelve feet.

ROADWAY JURISIDCTION POLICIES

1. Hennepin County continues to express their intent to eliminate CSAH 8 from their road system and turn it over to the city. The city would accept responsibility for this roadway only after it is reconstructed to urban standards with municipal consent or the county provides the city with the funds to accomplish same. The city agrees that the segment south of CSAH 102 (Douglas Dr) is a good candidate for turnback. However, the city is unsure whether the segment north of CSAH 10 (56th/Bass Lake Rd) is a good candidate for turnback and would not consider such a change without further study and consultation with the cities of New Hope and Brooklyn Park.

2. To make the MSA street system better fit with traffic patterns, hierarchy of streets and land uses, some MSA designation changes are desirable. However, MSA designations influence the amount of motor fuel tax revenue the city receives from the state. Some of the existing designations were made to maximize revenue for early stages of the street reconstruction program, resulting in a disproportionate share of MSA mileage in the southern third of the city. However, any attempts to un-designate streets that have already been reconstructed might trigger MnDOT requirements for return of MSA funds. Therefore any such changes would require analysis of their financial impacts for the city; if such impacts are significant, the financial impacts would likely trump planning considerations and the changes would not be made. This means that most changes to MSA designations are likely to occur in those neighborhoods where the streets have not yet been reconstructed. The implementation section reflects this reality, and the map differentiates between those changes that are practically unlikely (labeled "Idealized") and those that could realistically be accomplished (labeled "Implement").

ROADWAY JURISIDCTION IMPLEMENTATION ITEMS

1. Negotiate with Hennepin County regarding the removal of CSAH 8 (West Broadway) from the county road system (likely after 2010). For the segment south of CSAH 102 (Douglas Dr), this includes addressing the question of whether the West Broadway s-curve crossing of the BNSF railroad at 48th Avenue ought to be reconstructed as-is, reconfigured, replaced by a crossing in a different location, or eliminated. For the segment north of CSAH 10 (56th/Bass Lake Rd), this would include consideration of the broader question of whether such a turnback is warranted in the first place

2. Implement the following MSA route designation changes:

   - Designate as MSA Sumter Avenue from 56th Avenue to 58th Avenue. This is the best north-south route for designation in the Broadway neighborhood due to the presence of medium and high density residential uses on the west side of the street in New Hope.

   - Designate as MSA 58th Avenue from Sumter Avenue to West Broadway. This is the best east-west route for designation in the neighborhood because it is the longer of the two routes connecting to West Broadway (59th is the other). Also, it serves the Crystal Towers apartments which are within New Hope but are located approximately halfway between 56th Avenue and West Broadway along the proposed Sumter-58th MSA route.

Corvallis where it transitions into a lower speed, lower volume roadway in a predominantly residential area (see item 5 below).

5. Hennepin County has expressed a desire to remove CSAH 8 (West Broadway) from its road system and turn it over to the city. Typically this would include reconstruction of the older sections north of 57th Avenue and south of Fairview Avenue from rural to urban standards. As part of the negotiations between the county and the city, there would be a planning and design process including a study of the s-curve crossing of the BNSF railroad at 48th Avenue. The study should consider at least the following four alternatives for dealing with the railroad crossing:

- Reconstruct the railroad crossing essentially as-is, possibly with some property acquisition to meet current design standards.
- Reconfigure the railroad crossing into a more right-angled 48th Avenue crossing.
- Close the crossing and replace it with a new crossing, for example by completing the gap in 47th Avenue between West Broadway and Vera Cruz Avenue, and possibly also closing another existing crossing at 45½ Avenue in Robbinsdale. On the east side of the railroad, West Broadway would transition north into Vera Cruz Avenue, and on the west side of the railroad, West Broadway would transition south into Welcome Avenue.
- Close the crossing without replacing it with a new crossing. Again, on the east side of the railroad, West Broadway would transition into Vera Cruz Avenue, and on the west side of the railroad, West Broadway would transition into Welcome Avenue.

Any of these alternatives should also consider whether to maintain West Broadway as a Major Collector south of Corvallis Avenue. It might make sense to designate Corvallis Avenue from CSAH 81 (Bottineau Boulevard) to West Broadway as a Major Collector and designate West Broadway south of Corvallis as a Minor Collector. (See item 4 above.)

6. Study 36th Avenue from Welcome Avenue west to CSAH 102 (Douglas Drive) to determine the appropriateness of the existing four-lane configuration for current and future traffic volumes. The study should examine options to improve safety and handle traffic volumes, including but not limited to the following alternatives:

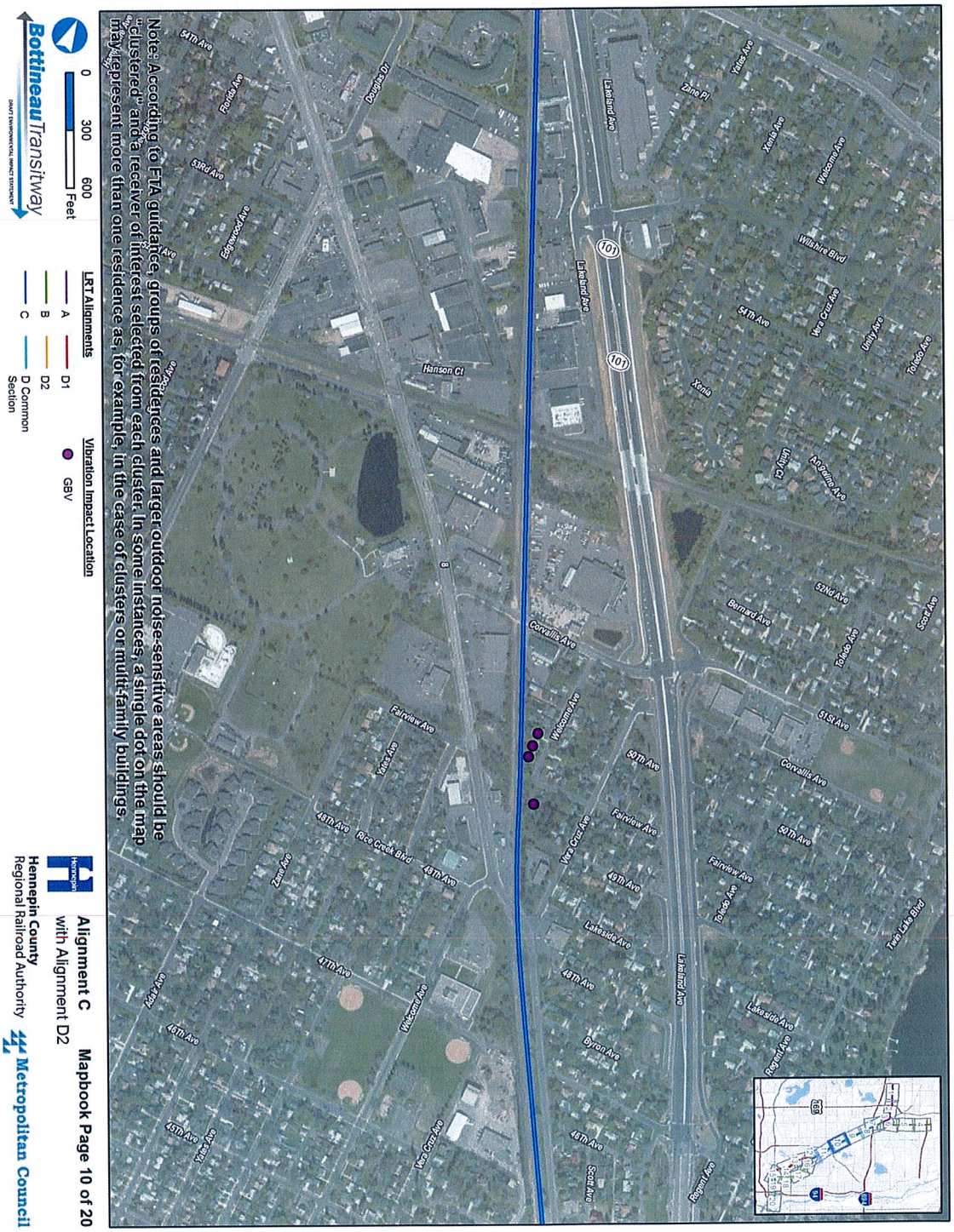
- Leaving the roadway as-is.
- Leaving the roadway as-is but restricting left turns during peak hours.
- Re-striping the roadway so it has two westbound lanes, a center left turn lane, and one eastbound lane.
- Widening the roadway approximately 12 feet to add a center left turn lane.
- Widening the roadway approximately 18 feet to add a median with left turn lanes.
- Some hybrid of one or more of the above alternatives.

In addition to the cost of such a project, the impact of widening on the adjacent properties and neighborhoods must be considered along with the traffic and safety benefits of such a project. Alternatives involving widening would not be eligible for federal financial participation through the regional solicitation process unless the classification is changed from Major Collector to Minor Arterial.

7. Work with Hennepin County and the City of Robbinsdale to study CSAH 9 (42nd Avenue a.k.a. Rockford Road) through Crystal to determine the appropriateness of the existing four-lane configuration for current and future traffic volumes. The study should examine options to improve safety and handle traffic volumes, including but not limited to the following alternatives:

- Leaving the roadway as-is.
- Leaving the roadway as-is but restricting left turns during peak hours.

FIGURE 39: ALIGNMENT C VIBRATION IMPACT LOCATIONS



CRYSTAL POLICE DEPARTMENT

"Service with Compassion and Integrity"

TO: Mayor and Council Members

FROM: Stephanie K. Revering, Chief of Police SKR

CC: Anne Norris, City Manager

DATE: May 15, 2014

SUBJECT: **Work Session: SECURING IGNITIONS**

MEMORANDUM

In an attempt to follow state law and guidelines we have drafted an addition to our parking ordinance regarding securing vehicle ignitions.

City Attorney Mike Norton has reviewed the draft ordinance.

Attached is a copy for your review. Deputy Chief Meehan will be presenting at the work session in case you have any follow up questions. Thank you.

CITY OF CRYSTAL

ORDINANCE #2014-

AN ORDINANCE RELATING TO CHAPTER XIII TRAFFIC, MOTOR VEHICLES AND OTHER VEHICLES - AMENDING SECTION 1310-PARKING REGULATIONS REGARDING SECURING IGNITIONS

The City of Crystal Does Ordain:

Section 1. **Section 1310.05. Other parking restrictions** of the Crystal city code is amended by adding a new Subdivision 9 as follows:

Subd 9. Securing Ignitions:

a) No person may leave a motor vehicle, except commercial motor vehicles engaged in loading or unloading, unattended upon any street, alley, used car lot, or unattended parking lot, without first stopping the vehicle, and rendering it inoperable and removing the key from the ignition or the fob from the activation area.

b) Whenever a police officer, or community service officer or reserve officer working under the direction of a police officer, finds a motor vehicle standing unattended with the ignition key in the vehicle in violation of this section, such officer is authorized and empowered to remove such key from the vehicle and to deliver the key to the Crystal Police Department for safekeeping. Alternatively, the officer may secure the keys by placing them in the vehicle so they are not visible from the outside and lock the vehicle.

c) A violation of this subdivision will not mitigate the offense of stealing such motor vehicle, nor may such violation be used to affect a recovery in any civil action for theft of such motor vehicle, or the insurance thereon, or have any bearing in any civil action.

Section. 2. This ordinance is effective in accordance with Crystal City code, subsection 110.11.

First Reading:
Second Reading:
Publication:
Effective Date:

_____
Jim Adams, Mayor

ATTEST:

_____
Christina Serres, City Clerk