



# Rochester Hills Minutes - Draft

1000 Rochester Hills Dr.  
Rochester Hills, MI 48309  
(248) 656-4600  
Home Page:  
[www.rochesterhills.org](http://www.rochesterhills.org)

## MR-42E Noise Barrier/Sound Wall Technical Review Committee

*Members: Paul Davis, Jennifer Lagerbohm, Charles Lam, Michael McGlynn, Doug Walther*  
*Council Members: Greg Hooper, Nathan Klomp*  
*Youth Representative: Trip Brennan*

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Tuesday, December 8, 2009

6:00 PM

1000 Rochester Hills Drive

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### CALL TO ORDER

*Chairperson Mike McGlynn called the meeting to order at 6:06 p.m., Michigan Time.*

### ROLL CALL

**Present** 6 - Greg Hooper, Nathan Klomp, Jennifer Lagerbohm, Charles Lam, Michael McGlynn and Doug Walther  
**Absent** 1 - Paul Davis

### Others Present:

*Trip Brennan, Rochester Hills Government Youth Council Representative*  
*Rich Diem*  
*Jim Masiak*  
*Olaf Nitsche*

### INTRODUCTIONS

### PUBLIC COMMENTS

*None.*

### APPROVAL OF MEETING MINUTES

**2009-0544** Approval of Meeting Minutes - November 30, 2009

**Attachments:** [113009 Minutes.pdf](#)  
[Resolution.pdf](#)

*Rich Diem questioned whether draft minutes could be distributed to members of the public prior to the meeting.*

*Member Greg Hooper stated that Leanne Scott, City Council Coordinator, could be contacted to request a copy of the minutes, once approved.*

*Member Jennifer Lagerbohm requested changes be made to the commenter's name on page five and page seven.*

A motion was made by Hooper, seconded by Lam, that this matter be Approved as Amended. The motion CARRIED by the following vote:

**Aye** 6 - Hooper, Klomp, Lagerbohm, Lam, McGlynn and Walther

**Absent** 1 - Davis

**Resolved**, that the Minutes of the MR-42E Noise Barrier/Sound Wall Technical Review Committee meeting held on November 30, 2009 be approved as amended.

## DISCUSSION ITEM

**2009-0502** Discussion of handling of areas excluded by the MDOT study

**Attachments:** [Noise Barrier Rating Form - Draft.pdf](#)  
[Table 7 with MDOT updates.pdf](#)  
[Masiak abstract.pdf](#)  
[Decision Matrix Article 111009.pdf](#)  
[McGlynn Category Criteria Draft 111009.pdf](#)  
[Noise Impact Info 111009.pdf](#)  
[Agenda 101309.pdf](#)

**Member Greg Hooper** reported that City Council voted last evening to extend the current citizen members' terms on the MR-42E Noise Barrier/Sound Wall Technical Review Committee for one year to expire December 31 2010 and that he and Council Member Nathan Klomp would serve as Council representatives to the committee for the coming year.

**Jim Masiak** questioned whether there was a date that the Committee had to complete its recommendations by for funding purposes.

**Member Hooper** responded that there was no funding for sound walls in the 2010 Budget. He noted that the budget process for 2011 would begin shortly and the Proposed Budget will be presented by the Mayor at the first meeting in August. He commented that the Capital Improvement Project (CIP) process is completed by the first of June. He stated that May 1 would be a preferable deadline for the Committee; however, he suggested that the Committee might not need to take that long.

**Chairperson Mike McGlynn** summarized the Committee's efforts at the last meeting and noted that he had the opportunity to talk with Paul Davis after that meeting to discuss suggested formatting for the ranking. He presented a revised draft Rating Form, and directed the Committee to discuss each item:

1. Predicted peak noise levels (per updated Michigan Department of Transportation [MDOT] report).

**Chairperson McGlynn** stated that MDOT's Table 7, utilizing the "Range of Future, Without Barrier, Noise Level" is the source for information for this rating criteria. He noted that the higher end of the range would be taken from this column.

**Member Hooper** questioned how the Committee would determine the noise level for the trailer park west of Crooks, which is not a part of the MDOT study.

**Member Jennifer Lagerbohm** stated that she had Housing and Urban Development (HUD) equations for calculating estimated noise levels and could arrive at a rough model for that area. She noted that the model parameters use traffic values, average daily traffic counts and annual increases in traffic and commented that the Southeast Michigan Council of Government (SEMCOG) data for traffic counts along most freeways could be used in the calculations. She stated that she could develop a model for this area by the next Committee meeting.

**Mr. Masiak** suggested that the SEMCOG traffic numbers could be compared to the MDOT numbers for adjacent areas to ascertain how close the SEMCOG numbers are to the MDOT model.

The Committee discussed whether the range as presented in the draft form was acceptable, utilizing a difference of four decibels (dBA) between the ranges (73 to 77 dBA; 68 to 72 dBA; and less than 68 dBA). It was noted that utilizing these ranges would not spread the walls that far apart in rankings.

**Mr. Masiak** suggested that a zero-to-ten-point scoring model could help expand the range for this criteria and suggested that the total weightings need to add up to some multiple of ten.

The Committee determined to add the words "without barrier" to this criteria for clarification.

**Mr. Masiak** stated that either a larger range could be added within the scoring ranges or weighting could be done to further emphasize specific criteria.

**Chairperson McGlynn** questioned whether there was a reason that the City used a maximum value of five for ranking criteria.

**Member Hooper** stated that the Committee would be free to do as it chooses in setting scoring and ranking ranges.

**Mr. Masiak** suggested that 100 be used as a total for scoring as this could correspond to 100 percent. He further commented that incremental steps of three to four decibels for ranking is consistent with the fact that the ear perceives noise differences of three decibels.

**Chairperson McGlynn** noted the peak noise ranges were generally from 70 to 77 decibels and commented that the rankings would not be spread very far apart for the different wall locations.

**Member Charles Lam** commented that according to the proposed draft rating form, those peak noise values that fell close to the ranking separations, such as 72 decibels versus 73 decibels, could result in a wide difference in values once the ranking and weighting was applied.

**Olaf Nitsche** commented that all wall segments were justified by MDOT on the basis of noise and noted that the other ranking criteria would differentiate the segments.

The committee discussed various ways to split the ranking for the noise levels and how much weight to give this category in the overall scoring. It was suggested that seven splits, one for each decibel difference, could be utilized and then weighted.

**Mr. Masiak** suggested that discussion was needed to determine what importance noise would have against the other ranking criteria to further determine weighting for this criteria.

2. Number of attenuated units (per updated MDOT report)

**Chairperson McGlynn** requested Committee input on this criteria and noted that the MDOT report counted how many units were above 67 decibels and would receive benefit from the wall.

**Member Hooper** noted that this criteria should only consider first floor attenuated units for condominiums and apartments and commented that MDOT did not consider second floor units. He questioned how the Committee wished to assign attenuated units for the manufactured home community.

**Chairperson McGlynn** questioned whether this could be done by computing a unit's distance from the freeway.

**Member Lagerbohm** noted that units within a certain distance would be counted for the manufactured home community.

**Rich Diem** questioned whether there would be a way to verify that the noise values that the computations arrive at for the manufactured home community would not be very different than MDOT numbers for similar distances.

**Chairperson McGlynn** responded that the resulting numbers would be reviewed before they were accepted into the rankings.

**Mr. Nitsche** questioned how elevation will be taken into account in computing noise levels for the manufactured home community.

**Ms. Lagerbohm** stated that she will be reviewing other models that include elevations.

**Member Hooper** stated that the City's GIS information will provide elevation data for inclusion in the model.

3. Public areas within 500 feet of M-59 (multi-count possible, maximum 15)

**Chairperson McGlynn** stated that notable public uses the Committee identified

*within these areas included School or Daycare, Church, Clubhouse, Swimming Pool, Common Area/Park/Pavilion/Event Center, Tennis Courts and Walking/Bike Trails. He questioned whether the Committee wished to include any additional uses.*

**Member Hooper** commented that a distinction might be made between a public tennis court versus a tennis court for private or subdivision use.

**Chairperson McGlynn** commented that the Committee agreed at the last meeting that an evaluation would be made of the impact that a wall would have within each community and noted that if individuals within each community would be affected by using these areas, they should be included. He stated that the Committee discussed the possibility of assigning reduced points or a lower rating for areas restricted to private use.

Questions were raised as to whether including these private areas could penalize areas that do not have these facilities available or potentially cause a double-counting of units and amenities for areas that do.

**Mr. Nitsche** stated that if these communities did not have areas devoted to these amenities, they might have additional units to be counted that would have been developed where these facilities are located.

**Ms. Lagerbohm** agreed, however, she noted that she was concerned with the idea of giving one point each for clubhouse, pools, tennis courts and walking trails.

**Member Lam** noted that affluent subdivisions could be given more focus if each amenity was given its own point.

**Chairperson McGlynn** commented that this category could be given less weight than other categories to accommodate any discrepancies this ranking could create.

**Member Lagerbohm** noted that assigning one point to each public area or facility could result in a subdivision receiving more points than a daycare.

**Member Nathan Klomp** noted that while including amenities in the rankings could favor affluent neighborhoods, these affluent neighborhoods also typically feature larger lots and less density, which would decrease the number of units and influence that ranking category. He commented that a perfect system would most likely never be possible. He stated that he was disappointed that MDOT did not include a weighting for the Clubhouse facility in Country Club Village.

**Member Hooper** commented that public and private amenities should remain in the ranking system and stated that the weighting for this category could be discussed along with the other ranking categories.

**Member Lagerbohm** noted that it is not only affluent neighborhoods that have

*pools, tennis courts and clubhouses; and commented that apartment complexes and condominiums do as well.*

**Member Lam** questioned whether all the amenities in a neighborhood should be bundled into one category and given one ranking.

**Mr. Masiak** questioned whether a distinction should be made to those facilities with outdoor activities versus indoor activities, commenting that a church's activities are indoors, while a swimming pool's activities are outdoors.

**Chairperson McGlynn** noted that only one potential wall area contained a church.

#### 4. Elevation difference between first homes and M-59

*A question was raised whether the elevation difference of six feet mentioned in this criteria was of significance or whether other elevation differences should be considered.*

*The Committee discussed the various heights of the proposed barriers, and how sound travels over the barrier.*

**Member Lagerbohm** noted that the Committee should rank the walls without consideration of barrier height. She noted that barrier height required would be factored in to the wall cost ranking.

*The Committee agreed to leave this ranking category in and decided to have Member Davis, not in attendance, weigh in on whether six feet or nine feet would be a better number to use for elevation differences.*

#### 5. Number of homes within 500 feet of M-59

*It was noted that Ranking Criteria #2 discussed earlier included reference to noise levels based on the MDOT report, however, this ranking criteria addressed the density within the communities. He commented that only first floor units of multi-level condominiums and apartments would be counted.*

**Member Doug Walther** noted that the Committee decided at the last meeting that the reference to "homes" should be changed to "home sites" and noted that he would re-map the areas once more to arrive at more accurate numbers.

*The Committee reviewed the various areas and the numbers contained in the neighborhoods within each areas.*

**Member Hooper** commented that this category was good to include to reflect density.

**Mr. Nitsche** commented on the length of the sound walls, noting that the wall has to be four times as long as the distance to the unit otherwise the noise will

come from the sides.

**Member Lagerbohm** questioned whether the Committee had decided to include only units that had fifty percent or more of the lot within the 500 foot range or whether to include these units if any portion of their property touched the 500 foot line.

After discussion, **Chairperson McGlynn** summarized that it was the Committee's decision to include the number of first floor home sites that will have some influence within the 500 foot line.

6. Does the wall location provide suitable maintenance access

**Member Hooper** noted that Member Davis wanted this category included to take into account the future cost to the City of maintaining the wall.

**Chairperson McGlynn** questioned whether this criteria belonged in this evaluation or whether it should be included in the CIP rankings.

After discussion, the Committee opted to keep this criteria in the ranking system.

7. Cost per benefitting unit (per updated MDOT study)

Discussion ensued as to how to include the manufactured home community in this ranking item. It was noted that while the length and height required for that wall segment could be determined, and average unit prices could be used to determine wall costs, it would be difficult to determine the number of attenuated units.

**Member Lagerbohm** noted that it will be difficult, without the MDOT computer program, to determine attenuated units for this area.

The Committee discussed whether to count all units within the 500 foot range in the trailer park as the density of units was so high. The possibility of renting a sound meter to obtain some base measurements in this area was also discussed.

**Mr. Nitsche** mentioned that any sound levels taken now could be inaccurate as the traffic has slowed due to the construction activities.

8. Is a berm or other alternative feasible?

**Member Hooper** commented that including the feasibility of a berm or other sound abatement alternative in the ranking criteria would give the Committee an opportunity to review whether there were any possibilities on a site for any alternative sound abatement options. He noted that a berm is cheaper to construct than a wall, and noted that a berm required a one-in-three slope. He commented that Member Davis would be able to determine which areas could accommodate a berm.

*Mr. Masiak* noted that the feasibility of installing a berm for sound abatement rather than a wall would result in a higher number of ranking points.

9. Other considerations

**Chairperson McGlynn** reviewed the next potential ranking criteria that had been discussed and noted that a few of the communities have existing berms or partial berms already. He noted some consideration should be given in the rankings to the berms in existence in these areas.

**Mr. Masiak** questioned whether any of the areas that have current berms were above the 69 decibel level.

**Mr. Diem** noted that his area had a 77 decibel noise level.

**Member Lagerbohm** commented that since the Committee decided to break down predicted peak noise levels into one-decibel increments for the first ranking criteria, a consideration for a noise barrier on the opposing side of the freeway should be taken into account as an increase in noise from an opposing barrier could cause that wall to move up in the rankings.

**Chairperson McGlynn** commented that loss of existing obstructions through construction should also be considered in the rankings. He noted that other areas were being affected as the MDOT construction activities progressed.

**Member Lagerbohm** commented that while vegetation removal affected the aesthetic quality of an area, it had nothing to do with attenuated units and therefore should not be included in the rankings.

**Member Hooper** concurred, stating that it would be difficult to rate aesthetics.

**Mr. Nitsche** commented that his neighbors did not purchase their homes with torn-down trees and an adjacent six-lane highway.

**Member Lam** commented that his subdivision has been affected by vegetation removal as well; however, he noted that funding the replacement of vegetation should be taken up as a separate topic for Council to consider.

10. Possible future category consideration - subdivision cost share

**Chairperson McGlynn** noted that information on community cost participation would not be available when the rankings are developed, but could become a future consideration. He questioned whether this should be left as a possible ranking criteria or removed to become a part of the CIP process.

**Member Hooper** noted that this becomes political as subdivisions come forward at the Council level to offer a cost share. He commented that it would be difficult to include any reference to cost share in the ranking process.

Ranking Criteria Category Summary

**Chairperson McGlynn** summarized that categories one through eight would be included and the ninth category would be dependent on how the ranking and breakdown for Category Number One would be finally determined. He questioned whether any Committee member wished to include any other categories for consideration.

**Member Lagerbohm** commented that she would like to see aesthetics or safety issues be considered.

**Member Trip Brennan**, Rochester Hills Government Youth Council Representative, commented that aesthetics and safety could be considered after the ranking process.

Discussion ensued as to whether to include the separation from backyards to the MDOT right-of-way

**Member Hooper** commented that reference could be made in the ranking to areas where backyards directly abut the MDOT right-of-way fence and noted that Member Davis could arrive at a number of units that would be affected in this category.

The Committee further discussed and concurred that a ranking criteria based on assessed value reduction would not be included.

**Mr. Masiak** commented that as the Committee moves on to assign weighting to the categories, it should focus on assigning weights that could expand the range between projects. He noted that the most difficult part of developing the weights for the different criteria is how to determine the importance of each criteria in the ranking system.

**Chairperson McGlynn** noted that Committee Members would discuss the individual categories under each ranking criteria at the next meeting.

After discussion, the Committee set the next meeting schedule as follows:

- Tuesday, January 12, 2009 - 6:00 p.m.
- Tuesday, February 9, 2009 - 6:00 p.m.

Discussed.

## NEXT MEETING AGENDA

## REVIEW TIMELINE

## ANY OTHER BUSINESS

None.

## **NEXT MEETING DATE**

- January 12, 2010, 6:00 p.m.; February 9, 2010, 6:00 p.m.

## **ADJOURNMENT**

*Chairperson McGlynn adjourned the meeting at 7:35 p.m., Michigan Time.*

*Minutes were approved as presented/amended at the (insert date) MR-42E Noise Barrier/Sound Wall Technical Review Committee Meeting.*

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*MIKE McGLYNN, Chairperson*

*Prepared by Mary Jo Whitbey  
Administrative Secretary, City Clerk's Office*