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December 10, 2008

Central Corridor Project Office 540 Fairview Avenue North Suite 200 Saint Paul, MN 55104 Attention: Mark Fuhrmann

Re: Central Corridor LRT – EIS Process

Dear Mr. Fuhrmann,

Enclosed please find Minnesota Public Radio's request that the CCPO perform a second supplemental EIS relating to noise, vibration and safety issues affecting the "Fitzgerald Park" district in downtown Saint Paul.

Very Truly Yours,

LEONARD, STREET AND DEINARD

Professional Association

Joseph M. Finley

Enclosure

cc:

Thomas Kigin, Esq. (with enclosure/via email)

Jeff Nelson (with enclosure/via email)

LEONARD STREET AND DEINARD I 50 SOUTH FIFTH STREET SUITE 2300 MINNEAPOLIS, MINNESOTA 55402 612-335-1500 MAIN 612-335-1657 FAX

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December 10, 2008

Central Corridor Project Office 540 Fairview Avenue North Suite 200 Saint Paul, MN 55104 Att'n: Mark Fuhrmann

Re: Central Corridor LRT – EIS Process

Dear Mr. Fuhrmann,

As you know, our Firm is counsel to Minnesota Public Radio ("MPR") on the Central Corridor LRT Project. MPR and our Firm want to thank you and Peter Bell for taking the time on October 27th to visit with MPR's Public Affairs & Government Relations Committee to discuss the planned route of the Central Corridor LRT line along Cedar Street in downtown Saint Paul.

It is clear that MPR and the Metropolitan Council share much common ground regarding LRT. MPR strongly supports the efforts of the Metropolitan Council and the Central Corridor Project Office ("CCPO") to connect downtown Minneapolis and downtown Saint Paul with a light rail transit line. MPR also believes that the Central Corridor LRT line is vital to the continued economic viability of both downtowns and wants the project to go forward as soon as reasonably possible.

#### **Build the Project Right**

But, MPR wants the Central Corridor LRT Project to be built right, based on Environmental Impact Statement studies that adequately and realistically review the noise, vibration and safety impacts of LRT on adjacent uses in downtown Saint Paul—especially protected "Category 1/Special Use Buildings" such as recording studios and concert halls. MPR needs to know the CCPO's decisions will be based on adequate and realistic studies.

<sup>&</sup>lt;sup>1</sup> For the purposes of an EIS studying transportation infrastructure, "Category 1" and "Special Use Buildings" have operations that are highly sensitive to noise and vibration, including uses such as recording studios and concert halls. These uses are accorded greater protection against the effects of vibration and noise than Category 2 and 3 uses, which are still considered sensitive to noise and vibration impacts. Historic uses also are to receive heightened noise and vibration analysis in such EIS studies.

## **Unresolved Concerns**

As you well know, MPR has grave and unresolved concerns regarding the deleterious effects of an LRT line on Cedar Street running within 8 to 14 feet of the exterior wall of major recording studios and the main public entrance of MPR's Broadcast Center. According to Federal Transit Administration guidelines, recording studios and concert halls are considered Category 1/Special Use Buildings and are extremely sensitive to noise and vibration impacts. To date, we have not found an example anywhere in the United States of an LRT line running in such close proximity to a recording, concert or broadcast facility.

While it is true that MPR and its neighbors have been generally aware of the potential for LRT on Cedar Street for some time, it is only in the last six months that MPR has been given access to test data and engineering analysis disclosing the extent of the significant negative impacts created by an LRT line operating in such close proximity to a broadcast and recording center.

More to the point, MPR believes that the completed noise and vibration studies to date have been truly deficient in their analysis of the severe noise and vibration impacts that LRT is expected to have upon the multitude of protected Category 1 uses in downtown Saint Paul's "Fitzgerald Park" district.

## The Fitzgerald Park District

The Fitzgerald Park district is unique; it includes a tightly-packed cluster of Historic structures and Category 1/Special Use Buildings – such as the MPR Broadcast Center – centered around Cedar Street. A map showing the location of the MPR Broadcast Center and other Category 1 and/or "Historic" uses within Fitzgerald Park is attached as **Exhibit 1**. The map attached as **Exhibit 2** shows that this cluster of special land uses is truly unique in downtown Saint Paul.

<sup>&</sup>lt;sup>2</sup> The Fitzgerald Park District contains four structures on or near Cedar Street listed on the National Register of Historic Places: (1) the Central Presbyterian Church; (2) the Exchange Building (former St. Agatha's Conservatory); (3) The Shubert Building; and (4) The Fitzpatrick Building. Two additional structures are considered eligible for historic preservation status: (1) the Church of St. Louis and its Parish House; and (2) the Fitzgerald Theater. The Fitzgerald Park District also contains, clustered around Cedar Street, a number of "Category 1" or similar "Special" uses that, under FTA standards, are to have the highest level of protection from LRT-caused noise and vibration. The Category 1 and Special uses include: (1) the MPR Broadcast Center; (2) Central Presbyterian Church and the Church of St. Louis (both double as a concert halls); (3) McNally Smith College of Music (which contains numerous studios and a concert hall); (4) the Fitzgerald Theater; (5) the History Theater; and (6) The Saint Paul Conservatory of Music (contains a recital hall). Several of these Category 1 / Special uses contain concert halls and/or recording studios.

## The MPR Broadcast Center

The MPR Broadcast Center, on Cedar Street north of 7th, is a renowned cultural center, containing 24 recording, broadcast and concert studios, and critical listening and audio- editing facilities, all of which are highly sensitive to noise and vibration. The importance and sensitivity of this environment must not be understated. **Exhibit 3**, attached, contains a list of the renowned classical, jazz and pop artists who have appeared in MPR's studios – Marilyn Horne, Pierre Rampal, Anne Sophie-Mutter, Keith Jarrett, Yo Yo Ma, James Galway, the Guarneri String Quartet and Chanticleer, to name a few. Moreover, radio programming broadcast to 840,000 listeners in our region and 15.9 million listeners nationally originates from the studios in MPR's Broadcast Center.

### EIS Studies to Date Are Incomplete and Insufficient

To date, the Central Corridor LRT Project has completed a "Draft" Environmental Impact Statement ("**DEIS**") and a "Supplemental Draft" EIS ("**SDEIS**"). MPR believes that the Central Corridor EIS process has elevated speed over due care, and thus has marginalized or ignored the noise, vibration and safety impacts of a Cedar Street LRT line on downtown's unique Fitzgerald Park district, and on the MPR Broadcast Center in particular.

In what specific respects does MPR consider the Central Corridor EIS studies incomplete and/or insufficient with respect to the protected uses in Fitzgerald Park? Here are just a few examples:

- Noise and vibration impacts were not considered when the Cedar Street alignment was chosen. The original "scoping" process that led to the selection of a single LRT route through downtown Saint Paul on Cedar Street considered 21 factors, but neither noise nor vibration was considered among those factors. Nor was the unique nature of the Fitzgerald Park district, which contains multiple Category 1/Special Use Buildings and Historic uses, considered as a scoping factor.
- Only one alignment was studied in the DEIS Noise and Vibration Study. The DEIS, in the noise and vibration study attached to it as an "Appendix" hereinafter the "2002 Noise & Vibration Study" studied only a single downtown LRT route along Cedar Street, eliminating any possibility to contrast the impact of the Cedar Street LRT route on Category 1/Special Use Buildings against alternative routes.
- MPR and other noise and vibration sensitive facilities were not even analyzed in the 2002 Noise and Vibration Study. In a remarkable omission, the 2002 study failed to identify or study the noise and vibration effect of LRT upon any of the Category 1/Special Use Buildings in Fitzgerald Park.
- Historic properties in Fitzgerald Park were not included in the 2002 Noise & Vibration Study. This 2002 study identified for analysis a total of 23 "Historic" uses in downtown Saint Paul (some of which were 700 feet or more away from the proposed

LRT line). But, in another remarkable omission, the study failed to address noise or vibration impacts upon <u>any</u> of the Historic properties in the Fitzgerald Park district, even though several of these Historic properties are located <u>adjacent</u> to the LRT line.

- Safety concerns caused by the extreme proximity of LRT to MPR and neighboring facilities were not examined in the DEIS. The EIS process purports to study safety factors relating to a new LRT line. Yet, neither the DEIS or the SDEIS addresses the obvious pedestrian hazards of running an LRT line on Cedar Street within 8 to 14 feet of the MPR Broadcast Center's main public entrance.
- The Fitzgerald Park District was not one of the areas designated for additional study in the SDEIS. While the Category 1/Special Use Buildings and Historic uses in the Fitzgerald Park District were given passing mention in the SDEIS, they still were not subjected to rigorous EIS-style analysis for noise, vibration, safety or like concerns in the SDEIS.
- The classification of recording studios and concert halls as Category 1 land uses was inexplicably deleted from FTA guidelines when reprinted in the SDEIS. The FTA's Transit Noise and Vibration Impact Assessment guide (2006) defines Category 1 land uses as "Tracts of land where quiet is an essential element of their intended purpose. This category includes lands set aside for serenity and quiet and such land uses as outdoor amphitheaters and concert pavilions, as well as National Historic Landmarks with significant outdoor use. Also included are recording studios and concert halls."

The SDEIS, when reciting this FTA standard, omitted the phrase "Also included are recording studios and concert halls."

- The CCPO has been unable to provide an example of LRT running in such close proximity to a recording and broadcast center anywhere in the United States; examples that have been provided have only raised new concerns. The CCPO told MPR staff and board members that the Salt Lake City LRT line runs "right past" the Mormon Tabernacle (MT) broadcast studios without any untoward noise or vibration effects. But when MPR staff contacted the senior audio engineer at the Mormon Tabernacle they learned that the Salt Lake City LRT line runs 200 feet (not 8 to 14 feet) from the Mormon Tabernacle and 120 feet from its recording studio. In the view of the MT audio engineer, LRT vibration has rendered this recording studio unusable; it is now used as a rehearsal space only. See correspondence from the MT audio engineer attached as Exhibit 4.
- Data that did not conform with the CCPO's assumptions regarding vibration mitigation was thrown out in preliminary vibration analyses. As part of its currently-pending 2008 Noise & Vibration Study, the CCPO took vibration readings along the Hiawatha LRT line at distances of 25, 50, 75 and 100 feet. Although the MPR Building would be within 8 to 14 feet of the proposed LRT line, the author of the 2008 study simply discarded (as "anomalous") vibration readings obtained at 25 feet from the

Hiawatha line – readings showing that a Cedar Street LRT alignment would have <u>severe vibration impacts</u> on the MPR Broadcast Center. Instead, the study's author, without apparent methodological justification, chose to analyze the vibration effects of LRT on <u>adjacent</u> buildings (such as the MPR Broadcast Center) by using the average of vibration readings measured at 50 and 75 feet from the LRT line! The author's decision to discard the 25-foot readings is even more odd given that the supposedly "anomalous" 25-foot readings appear generally to be in line with those presented in the CCPO's 2002 Noise & Vibration Study as the FTA's "typical case." <u>See</u> Figure 2.2 on page 34 of the Appendix (Section 9.9) to the DEIS.

- Conclusions regarding vibration mitigation assume an unrealistic level of wheel maintenance. The 2002 Noise & Vibration Study notes that vibration effects can be significantly amplified beyond the "typical case" by flattened wheels on LRT vehicles. Yet, the DEIS, when projecting vibration effects of LRT, assumes round wheels without flat spots. Among the 200+ LRT trains that will pass the MPR Broadcast Center each day over the next few decades, there will eventually be many wheels with flat spots.
- Newly developed data refutes the CCPO's assertion that LRT would cause no severe noise impacts anywhere in downtown Saint Paul. On-site testing undertaken by MPR at its own expense has now proven the CCPO's conclusion that LRT will cause no severe noise impacts to be manifestly untrue. LRT noise bells and horns will be a constant throughout the day and at piercingly high sound pressure levels, well beyond the ranges permitted by FTA standards for Category 1/Special Use Buildings.

## **Request for a Second Supplemental Draft EIS**

The FTA's Transit Noise and Vibration Impact Assessment guide (2006) (FTA-VA-90-1003-06) states, on pp. 3-11: "[B] efore mitigation measures are considered, the project sponsor should first evaluate alternative locations/alignments to determine whether it is feasible to avoid the severe impacts altogether." The plain fact is that no alternative route to the Cedar Street alignment has ever been studied in full-blown EIS context (a level of analysis well beyond mere "scoping" discussions). MPR believes that, had alternative routes through downtown Saint Paul been studied in the manner contemplated by FTA guidelines, Cedar Street could never have been chosen as the preferred route for LRT into downtown Saint Paul.

Given FTA requirements and this litany of study shortcomings, MPR hereby formally requests that the CCPO conduct an additional, "Second" Supplemental Draft EIS before moving forward with a Final EIS. This Second SDEIS should contrast the currently-preferred Cedar Street LRT route with at least two alternative LRT routes through downtown Saint Paul, analyzing closely the noise, vibration and safety impacts on the various Category 1 and Historic Uses present along each route.

MPR suggests two alternate routes for study, depicted in **Exhibits 5** and **6** attached hereto, but these routes are simply offered as illustrative.

## Further Study is Mandatory

The CCPO recently began its own study called "DRAFT: Vibration and Noise Measurements and Predictions for Central Corridor LRT Project," ATS Consulting (July 19, 2008) ("2008 Vibration and Noise Study"). Out of frustration over the lack of verifiable noise and vibration data made available to it, MPR has also begun its own study to critique the methods and findings in the CCPO's 2008 Vibration and Noise Study. MPR believes that these studies will provide significant new noise and vibration data regarding the heretofore unexamined Category 1/Special Use Buildings in Fitzgerald Park – information that renders the requested "Second" SDEIS mandatory.<sup>3</sup>

In summary, the discrete segment of the Central Corridor LRT line running through downtown Saint Paul's Fitzgerald Park district requires further study regarding the noise and vibration impacts upon Category 1/Special Use Buildings and Historic uses, and regarding safety concerns. Such a study could be undertaken quickly in a "Second" SDEIS – and we believe a Second SDEIS to be mandatory given the new information that has recently been, and is still being, developed.

## **Additional Project Costs**

It is obvious and foreseeable that the noise, vibration and safety impacts of an LRT line operated along the eastern edge of Cedar Street could well shut down the highly sensitive MPR Broadcast Center, leaving MPR with no practical alternative but to sue (in "inverse condemnation") to recover the value of its \$100 + million Broadcast Center—a special use building—plus relocation costs and related fees. The cost of a condemnation of the MPR Broadcast Center is something the CCPO must take into account as it assesses alternative LRT routes through downtown Saint Paul.

We look forward to hearing from you regarding the MPR's request.

Very Truly Yours,

LEONARD, STREET AND DEINARD

Professional Association

Joseph M. Finey

<sup>&</sup>lt;sup>3</sup> Under the National Environmental Protection Act (NEPA), a Supplemental Draft EIS study is <u>mandated</u> if there are significant new circumstances or information relevant to environmental concerns and bearing upon the proposed action or its impacts. 40 C.F.R. § 1502.9(c)(1). We believe the conditions for a mandatory SDEIS, focusing on the noise, vibration and safety impacts gradually being revealed as to the many Category 1 and Historic Uses within the Fitzgerald Park District are met amply in this situation. Of course, the CCPO may, in its discretion, at any time prepare a Supplemental DEIS if it believes that circumstances warrant.

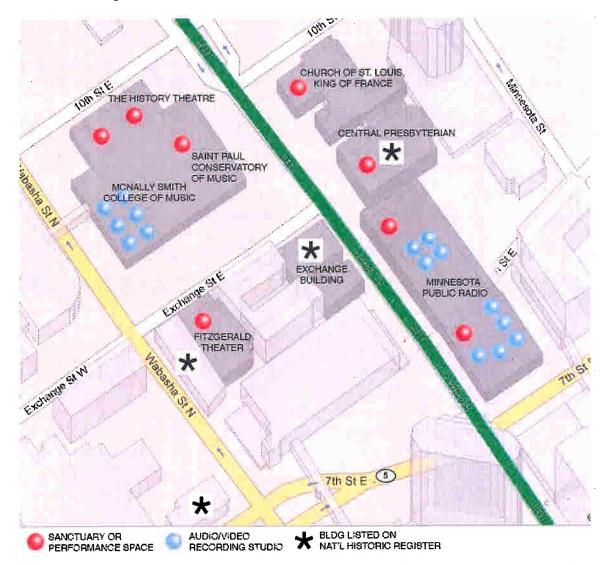
cc: Peter Bell

Tom Weaver Kathryn O'Brien Sherry Little Marisol Simon

## Attachments:

- Exhibit 1 Map of Fitzgerald Park District (1 page)
- Exhibit 2 Distribution of Noise/Vibration Sensitive Facilities in Downtown Saint Paul (1 page)
- Exhibit 3 List of MPR's Maud Moon Weyerhaeuser Studio Major Recording Artists (3 pages)
- Exhibit 4 Letter from Trent Walker, Senior Audio Engineer, Church of Jesus Christ of Latter Day Saints
- Exhibit 5 Map of Alternative Route on Minnesota Street (1 page)
- Exhibit 6 Map of Alternative Route on Robert Street (1 page)

Exhibit 1: Map of the Central Corridor Alignment through the Fitzgerald Park District



#### The Fitzgerald Park District includes:

#### **37 Audio Recording Studios**

- McNally Smith College of Music (12 recording studios)
- Minnesota Public Radio (24 recording studios)
- The Fitzgerald Theater (home of A Prairie Home Companion)

#### 8 Concert Halls / Theaters

- Central Presbyterian Church\*\*
- The Church of St. Louis, King of France\*\*
- The Fitzgerald Theater
- The History Theater\*\*
- McNally Smith College of Music Auditorium
- The Maud Moon Weyerhaeuser Studio\*
- The St. Paul Conservatory of Music Recital Hall
- The UBS Forum at Minnesota Public Radio\*

# 4 Buildings Listed on the National Register of Historic Places

- Central Presbyterian Church
- The Fitzpatrick Building
- The Schubert Building / Fitzgerald Condos
- The St. Agnes Conservatory / Exchange Building

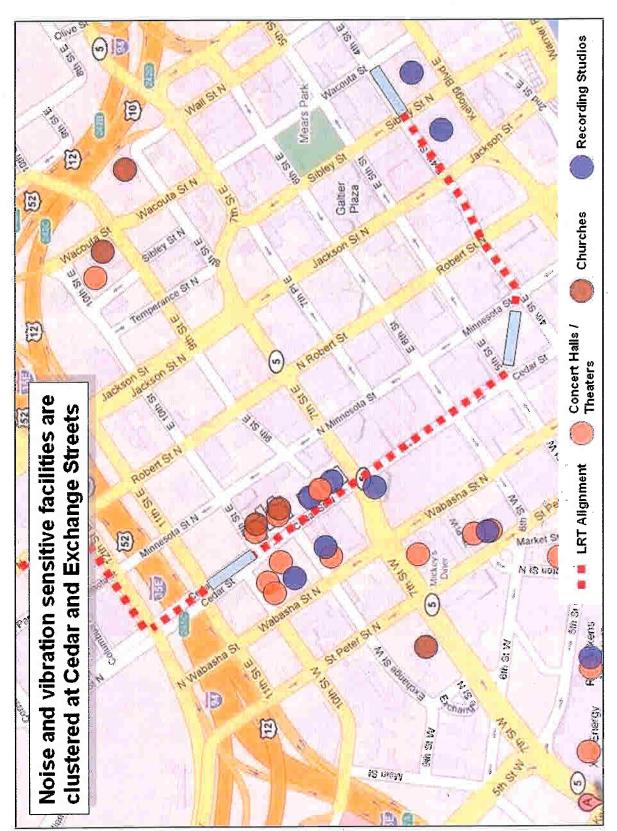
## 2 Buildings Considered Eligible for Historic Status

- The Church of St. Louis, King of France
- The Fitzgerald Theater

<sup>\*</sup> Used for recordings with a live audience

<sup>\*\*</sup> Used for concerts and other performances/events

Exhibit 2 – Distribution of Noise/Vibration Sensitive Facilities in Downtown Saint Paul



## Exhibit 3: List of MPR's Maud Moon Weyerhaeuser Studio Major Recording Artists

This is a partial list of classical artists who have performed and/or recorded in MPR's Maud Moon Weyerhaeuser music studio including notable artists such as Yo Yo Ma, Renée Fleming, James Galway, Joshua Bell, Lang Lang and Dawn Upshaw.

Numerous additional classical and contemporary groups have used the studio which is considered to be one of the finest recording venues in the nation.

Les Arts Florissants

Leo Kottke Pinchas Zukerman Keith Jarrett **AAM Octet** 

Academy of St. Martin Fields Octet

Ahn Trio Alan Feinberg

Alba Trio/Bassoon Quartet

Alexander SQ

Alexandre da Costa, violin; Margo Garrett, piano

ALK/Harp Consort

Altramar Amadeus Winds Amelia Piano Trio American Brass Quintet American String Quartet Ames Piano Quartet Amherst Sax Quartet

Amsterdam Baroque Orchestra Amsterdam Loki Stardust Quartet

An die Musik Andras Schiff Andreas Bach

Andrew Manze, violin; Richard Egarr, harpsichord

Angeles SQ

Annapolis Brass Quintet Anne-Sophie Mutter

Orkis Anonymous 4 Antares Arden Trio Arditti SO

Arnold Steinhardt, violin; Victor Steinhardt, piano

Ars Musica Art Farmer Quartet Arte Chorale Artymiw Aspen Wind Quintet

Assad Duo

Australian Chamber Ensemble **Avalon String Quartet** Awadagin Pratt **Baltimore Consort** Baroque Violin Masters **Barry Douglas** Beaux Arts Trio Belcea Quartet Bell/Gingold/Cheng

Bell/Thibaudet Bergen Woodwind Quintet

Best of Bach Bogorad/Ullery/James **Borodin Trio Borromeo String Quartet Boston Camerata** 5781457v1

**Boston Chamber Music Society** 

Boston Museum Trio Braginsky/Remenikova **Brentano String Quartet** Bridge Ensemble Browning Bulsma/Bilson Bylsma/Wright Calliope

Canadian Brass #3 Canadian Brass Carler Brey Cascade Soloists Cavani SQ, Cerovsek/Cerovsek

Chamber Music Soc. Of Lincoln Center

Chanticleer Charles Rosen

Charles Wadsworth and Friends

Chee/Yun

Chester String Quartet/Aspen WQ Chicago Chamber Musicians Chicago String Quartet Chilingirian String Quartet

Christian Tetzlaff

Christopher Hogwood and the Academy of Ancient Music

Christopher O'Riley Claude Frank Cleo Laine #2 Clerk's Group

Cleveland String Quartet Colin Carr, cello; Lee Luvisi, piano

Colorado String Quartet

Concertante Contrasts Quartet Cyril Huve, fortepiano Da Capo Chamber Players Dale Warland Singers

David Finckel, cello; Wu Han, piano

**David Owen Norris** Davidovich/Sitkovetsky Davies/Holland Davis/"Double Moon" Dawn Upshaw Gilbert Kalish, piano **Debussy Trio** Deller Consort Denman/Fan/Haskell Divertimento Dorian Wind Quintet Dorothy Delay

Eberli

Edgar Meyer, bass; Mike Marshall, mandolin

eighth blackbird Eiji Hashimoto

Dubravka Tomsic

## Mr. Mark Fuhrmann December 10, 2008

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Eliot Fisk Elkina Sisters

Ellen Hargis, soprano; Paul O'Dette, lute

Elmer Iseler Singers **Emerson String Quartet** 

Emma Kirkby, soprano; Fretwork

Emmanuel Pahud, flute; Eric LeSage, piano

**Emmanuel Wind Quintet** 

**Empire Brass** 

**Endellion String Quartet** Ensemble for Early Music

Ensemble Wien-Berlin/Elena Bashkirova, piano

**Enso String Quartet** Eroica Trio Estrem/Holmquist F. Chris

Fisk/Robison Fleezanis/Ohlsson Fleezanis/Ross/Meyer Flim & the BB's Flute Force FOG Trio Frank/Frank Frederic Chiu, piano

Free Flight\* Garrick Ohlsson Garrick Ohlsson, piano **Gary Burton Quintet** 

Gibbons

Gil Shaham, Akira Eguchi, piano Gil Shaham, violin; Orli Shaham, piano

Golufs/Kaplan/Carr Trio

Goode

Gottlieb Wallisch, piano

Grieg Trio

Guarneri String Quartet Guildhall String Ensemble

Guinn/SPCO Gulli/Cavallo Gurrutio Gustav Leenhardt Guy Bovet Hagegard/Jones Hagen SQ Hampson/Rutenberg

Hanell/Smith Harrell Bronfman

Helen Callus, viola; Philip Bush, piano

Helene Grimaud, piano Hesperion XXI

Hewitt Hexagon

Hilary Hahn, violin; Natalie Zhu, piano

Hilton

Holliger/Ritter

Holloway - Assenbaum - Mortensen Trio

Holloway & Friends Hugo Wolf Quartet

Ilya Gringolts, violin; Christopher Guzman, piano

Imani Winds Imogen Cooper Isbin/Adelante SQ Isbin/Coryell/Almeida Isbin/Geanokoplos

Isbin/Van

Israelievitch/Schuster

Jacques Ogg, harpsichord; Wilbert Hazelzet, flute

Jacques Thibaud Trio

James Ehnes, violin; Eduard Laurel, piano

James Galway, flute James Tocco 5781457v1

James/Brunelle

Jean-Yves Thibaudet, piano

Jeffrey Kahane

Jeffrey Kahner, flute; Linda Mark, piano

JK Parker Johannes Quartet Jon Kimura Parker, piano Jonathan Biss, piano

Jorg Demus Jorja Fleezanis, concertmaster of MN Orch Jorja Fleezanis, violin; Cyril Huve, forte piano

Jorja Fleezanis, violin; Karl Paulnack, piano Jorja Fleezanis, violin; Kenneth Broadway, piano

Joshua Bell, violin

Joshua Bell, violin; Frederic Chiu, piano

Juilliard String Quartet

Juilliard String Quartet/Greenhouse

Kahane/Brey/Swenson Kalichstein/Laredo/Robinson Kalichstein/Laredo/Robinson Trio

Kansas City Symphony Kashkashian/Abramovic Kashkashian/Nagy Kavafian-Schub-Shifrin Trio

Ken Kesey, novelist

Kennedy, violin (Nigel Kennedy)

Kennedy/Noda King's College Choir King's Noyse King's Singers Kirschbaum/Siegel Kronos Quartet Krosnik/Kalish Krosnik/Kalish #2 Kuijken Quartet

Kuijken Trio L.A. Guitar Ouartet L.A. Vocal Arts Ensemble Lafayette String Quartet Lang Lang, piano

Lanier Trio LAPQ/Bretschger Lark Quartet Lark String Quartet Lars Vogt, piano Leif Ove Andsnes, piano

Leila Josefowicz, violin; John Novacek, piano

Leo Kottke, guitar Levinson Family Lin/Bronfman Lin/Rivers London Brass Lydia Artymiw, piano Lydian Quartet Lvnn Harrell, cello

Lyra Concert; David Douglas, violin; Ellen Hargis, soprano

M. Dichter M. McPartland

Marian McPartland, jazz pianist Marilyn Horne, mezzo-soprano Mark O'Connor, fiddle virtuoso Mark O'Connor's Appalachia Waltz Trio Matt Haimovitz, cello; Jean Marchand, piano

Max Roach Quartet

McKelway/Costanza/McDermott

McNeil Jubilee Singers

Melvyn Tan

Members of the MN Orchestra Mendelssohn String Quartet

Mendelssohn String Quartet; Robert Mann, viola

Menuhin-Chen-Coker

# Mr. Mark Fuhrmann December 10, 2008

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Meridian Arts Ensemble

Meyer/Dorfman

Miami String Quartet/Nokuthula Ngwenyama, viola Michala Petri, recorder; Lars Hannibel, guitar

Midori

Milan Turkovic, bassoon; David Shifrin, clarinet; Shai Wosner,

piano Millenium

Mills/Mpls Artists Ens. Minneapolis Guitar Quartet

Mirecourt Trio Miro String Quartet Modern Jazz Quartet Mozartean Players Muir SO/Orth Music from Oberlin Musica Antiqua Koln Musical Offering Musicians from Marlboro Musicians of Swanne Alley

Nash Ensemble Neidich/Levin New World Quartet New Zealand String Quartet

Musicians/Newberry/Library

Newberry Consort Nigel Kennedy Nigel North Nixon/Mayorga

NY Cornet and Sackbut Ensemble

NY Wind Soloists

Oberlin Baroque Ensemble

**OPUS ONE** O'Riley/Brey Orion SQ Orion String Quartet Orpheus Quartet Osiris Trio Palladian Ensemble

Pam Frank, violin; Claude Frank, piano

Paris Piano Trio Parley of Instruments

Pasquier Trio

Paul Coletti, viola; Lydia Artymiw, piano Paul Coletti, viola; Phillip Bush, piano Paul Jacobs, organ

Peabody Trio Pepe and Celin Romero Pepe Romero Pepe Romero, guitar Pepe Romero, guitar Petersen String Quartet

Petri/Hannibal Petri/Petri Phantasm Phelps Phillips/O'Riley Pierre Rampal, flute

Pieter Wispelwey, cello, Dejan Lazic, piano

Pinchas Zukerman, violin Portland String Quartet Prague Wind Ouintet Primavera String Quartet Pro Musica Nipponia Quartet Sine Nomine Quartetto Gelato

Rachel Barton Pine, violin; Matthew Hagle, piano

Ragin/Hogan Chorale Rampal/Ritter Ravi Shankar Rebel 5781457v1

Reiko Aizawa, piano Renée Fleming, soprano

Bado, piano Richard Goode #2

Ritchie/Wright-Duo Geminiani

Robison/Gibbons

Robison-Lubambo-Baptista Trio

Romanesca **Ronald Smith** Rudolf Firkusny Rumillajta Sanders/Revzen Sanders/Wadsworth Saturday Brass Savall/Hesperion XX Schickele/Lark SQ Schiff/Sanders Schoenberg SQ Schroeder/Thornburgh

Seattle Chamber Players and Friends

Sequenza

Sequoia String Quartet

Sequoia String Quartet/Claude Frank

Shaham/DeSilva

Shai Wosner, piano [Ara Guzelimian, guest host] Shanghai String Quartet; Eugenia Zukerman, flute

Shank/Hagedorn Shelton/SPCO

Shifrin/Sherry/McDermott (CMSLC)

Shifrin/Vallecillo Siegel/Horvath/Frisch

Silverstein

Skampa String Quartet Slatkin/Buechner **Smithson String Quartet** Smithsonian Chamber Players Smithsonian Chamber Players #4

Smithsonian/Bylsma

Saint Paul Chamber Orchestra

Speidel/James Spillville

SPSM (Easter) Brass and Chorus St Lawrence String Quartet St. Lawrence String Quartet

St. Lawrence String Quartet; Todd Palmer, clarinet "Golijov"

St. Olaf Choir Stars of D'Oyly Carte Stephen Prutsman, piano

Steven Isserlis, cello; Ana-Maria Vera, piano

Stockholm Chamber Choir Stoltzman/Allen/Vallcillo Stoltzman/Douglas Stoltzman/Foss Stravinsky Stuttgart WQ/Davies Summit Brass Swanne Alley\* Swenson/Kahane Swingle Singers #1 Swingle Singers\* Sylvan/Breitman Sylvan/Breitman\*

**Tallis Scholars** 

Tan/New Mozart Ensemble **TASHI** 

**Taverner Consort** 

**Takacs Quartet** 

Talich Quartet

The Art Farmer Quartet (jazz)

The Beaux Arts Trio The Czech Nonet

The Dale Warland Singers

The Emerson String Quartet The Empire Brass (holiday program)

The Guarneri String Quartet

The Harp Consort ("Missa Mexicana")

The Juilliard String Quartet

The King's Singers

The Modern Jazz Quartet

The Romeros

The Romeros (Royal Family of the Guitar quartet)

The Sixteen

Theatre of Voices

Thomas Hampson, baritone

Thomas Hampson, baritone; Craig Rutenberg, piano

**Tokyo String Quartet** 

Tree/Artymiw

Trevor Pinnock

Trio Fontenay

Trio Mediaeval

Trio Solisti

Truls Mork, cello; Mark Gimse, piano

Tuba Quartet/Bassoon Quartet

**Turtle Island String Quartet** 

U of M Wind Ensemble

Upshaw/Goode

Valente/Isbin/Artymiw

Vandervelde

Vellenger String Quartet

Verbruggen/Haas

Vienna Piano Trio

VocalEssence

VocalEssence and Philip Brunelle

Wallace Collection

Waverly Consort

Weilerstein Trio

Wincenc

Winkler/Lee/Levine/Berman

Winslow/Betts/James/Nilsson

Xmas Brass Ensemble

Yefim Bronfman, piano

Ying Quartet Yo-Yo Ma, cello

Ysaye Quartet

Zehetmair String Trio

Zehetmair/Gross

Ziegler New Tango

Zuill Bailey, cello; Awadagin Pratt, piano

Zukerman/ Kondenanis/Shanghai SQ

Zukerman/Neikrug

# Exhibit 4: E-mail correspondence from Trent Walker, Senior Audio Engineer, Church of Jesus Christ of Latter Day Saints (typographical errors corrected/emphasis added)

12.01.2008

Dear Minnesota Public Radio:

I am writing in regards to the proposed rail system being built next to your recording studio and audio production facility. I am only stressing my opinion and not that of the LDS Church. I am the Senior Audio Engineer for the LDS Church and the lead engineer for The Mormon Tabernacle Choir. I am the Mixing engineer for *Music and the Spoken Word*, a weekly music broadcast on CBS Radio Network. The longest continuous network broadcast in the world.

I only tell you this to let you know that I am directly involved in recording and music production on a daily basis, not only for radio but for TV and live events as well.

In hearing of the proposed rail system next to your production facility it brings up some of the same issues which we deal with here at Temple Square in our newly built recording studio. Our studio is located underground about 120 feet from a rail tracks station. Since the rail has gone in the studio is not useable for recording of most programs and has been only useable for rehearsals. There is excessive low-end transfer from the weight of the train through the ground and into the studio. It is very easy not only to hear with the naked ear but to be picked up on condenser microphones used in the recording process.

We however have a different set of problems in The Tabernacle, which is our main concert performance and recording hall for The Mormon Tabernacle Choir. The Hall is located at ground level about 200 feet from the tracks. The low-end transfer is not as much of a problem because of another building between the tracks and the hall. However high end transfer is a problem generally related to sirens and bells from emergency vehicles. The train, when it passes by, does not use a siren or bell. This is the only reason we are able to record and do not have major problems with the train in the hall.

When I heard of the closeness of the tracks to your facility and that there would be a horn involved in signaling the trains arrival I was highly concerned that you would experience the worst possible situation in operating a production studio next to this. Not only will you have low-end transfer but also worse is the high-end transfer that will be very difficult if not impossible to eliminate from interfering with or destroying your recordings being produced.

If you find you can hear the sound being transferred with your ear, the problem will only be far worse once you start using microphones.

I wish you the best in trying to resolve this situation. Let me know if there is any additional information needed.

Best of luck.

Trent Walker Senior Audio Engineer Church of Jesus Christ of Latter Day Saints

