Memorandum

To: Programs, Projects, and Operations Subcommittees

Subject: MoPac Trail (Hwy. 50 to Lied Bridge) Engineering Fees – Contract with Ehrhart

Griffin and Associates

Date: May 29, 2008

From: Gerry Bowen

We have received a request from Ehrhart Griffin and Associates for an increase in engineering fees for the Mopac Trail (Hwy. 50 to Lied Bridge). The request letter is attached. The original contract amount was \$238,046.45. The total amount of the fee increase is \$85,860.23, resulting in a new not-to-exceed contract amount of \$323,906.68.

The additional fees resulted when significant design changes were necessary to accommodate landowner concerns about drainage issues remaining after the Nebraska Department of Roads paved Highway 31. After initial discussions with landowners, it became apparent that these design changes would be necessary to avoid acrimonious and lengthy land acquisition negotiations on the project. It was decided that accommodating the desires of the landowners was a worthwhile gesture. In some cases, the design required changes in the right-of-way necessary for the project. Revision of some of the legal descriptions was also an additional service.

The design changes noted above did not occur all at once, but as negotiations with each landowner occurred. The end result was the cumulative situation described above. Design changes affected six of the thirteen landowners.

As a result, all of the parcels were obtained through negotiation, without the use of eminent domain. (Note: The right-of-way on parcels owned by the Bureau of Education Lands and Funds were obtained by eminent domain as required by state law.)

Since the project is now under final review by NDOR, the only remaining engineering expense will be bidding and construction observation for the project.

➤ It is recommended that the Subcommittee recommend to the Board that the General Manager be authorized to amend the professional services contract with Ehrhart Griffin and Associates to increase the "not-to-exceed" amount from \$238,046.45 to \$323,906.68.

June 2, 2008



Mr. Gerry Bowen PMRNRD 8901 South 154th Street Omaha, Nebraska 68138-3621

RE: Platte River (MoPac) Trail

EGA Project No. 031340

Dear Gerry,

As per our earlier conversations, please accept this letter as our request for additional services for the above referenced project.

As you are aware, we have fully completed design and redesign efforts for this project, have submitted plans and specifications to the NDOR for their final review, and recently received their final comments, all of which were minor and have already been addressed. Currently, we are awaiting NDOR review and approval of the ROW acquisition process before we bid the project.

Our original fee was percentage based on a conceptual construction cost of approximately \$1,500,000 for the project. This cost was derived, as is always the case on trail projects such as this, using the information available to anyone, which was aerial photography and first hand visual observations. Hard survey data, of course, cannot be obtained until after a design contract is negotiated and approved.

Our initial design was completed and submitted to the NDOR in October, 2005 and the estimated cost of construction was \$ 2,133,670. Most of the difference in our conceptual cost opinion to the final design cost opinion can be attributed to the inordinate amount of earthwork that the project required, something that could not accurately be determined until a topographic survey became available and a definitive alignment, both horizontally and vertically, could be established. During the course of design, we were very cognizant of the increased construction costs and we worked very diligently to value engineer and explore every opportunity to minimize those costs. During this effort, we also maintained a balance of providing a design that also minimized land acquisition as much as possible.

At this time, I want to state that during our early design efforts, a public informational meeting was held to present the project and gather input from the public, especially the affected landowners. A preliminary plan, with a preliminary profile, of the trail alignment, was prepared and presented at the meeting. During the course of this meeting, there was no mention of any significant drainage concerns or past histories by any of the attendees. After the Public Informational Meeting, we proceeded towards final design based upon comments that were received at the meeting as well as using sound engineering judgment.

After the October, 2005 submittal date to the NDOR, Midwest Right of Way began performing the negotiations necessary for the required land acquisition that the project required. During the initial individual meetings held between Midwest and the individual affected landowners and tenants, it became readily apparent that there was a lot of ill will on behalf of the landowners regarding drainage issues that the previous highway project (designed by the NDOR) had created on their property. This issue had not been brought up until the negotiations began. The common (and biggest) complaint that all landowners had was the placement of new culverts

across the highway that dumped concentrated amounts of water onto their fields where, traditionally, it had not occurred before. The introduction of these concentrated flows led to significant erosion issues for the fields, all of which were corrected by the landowners at their time and expense without any help from the NDOR. It became very obvious, by both their statements and their negotiating posture, that the land acquisition was going to be very acrimonious, maybe even eventually requiring condemnation action in order to secure the required acquisition. It was agreed at that point that condemnation was not a desirable route that the PMRNRD wanted to pursue and that we, as client and designers, would work diligently to bring a reasonable design compromise to those issues.

Typically, as designers in a project of this nature where there is an existing culvert, we merely extend the culvert through the proposed trail section, thereby keeping intact existing drainage paths that are in place before our construction. In this particular project, the increased runoff from our trail construction in these areas were very small and usually consisted of capturing runoff that fell immediately between the highway and the trail and channeling it into the existing culverts. As a result of numerous meetings with both landowners and, in some cases, with the Civil Engineer they retained to review our plans, a significant amount of redesign was performed to address the drainage concerns. These design efforts included extended driveways and revising profile grades and, occasionally, alignment adjustments in order to re-channel the culvert drainage away from the fields into natural or roadway ditches adjacent to the fields. This effort involved the design of numerous drainage pipes in order to achieve this goal. In addition to the redesign effort, a majority of the right of way acquisition descriptions had to be reannotated and rewritten in order to reflect the revised design.

The current opinion of probable construction cost, prepared in February, 2008, contains all design modifications that occurred during negotiations and is estimated at \$ 2,422,622.96.

Obviously, the amount of redesign effort was significant and involved a number of iterations and conversations with the land owners before a final solution was accepted on each parcel. As you know, our original design phase was to be completed in June, 2004. Extensive surveying, submittal reviews by the NDOR and other governmental agencies and the intense design effort that the project entailed led to an unfortunate and uncalculated extension of the completion date to October, 2005.

As is customary and normal, our wage rates have increased over the course of the project at a reasonable rate of inflation per year.

In light of the above facts, we are requesting the following fee for additional services for the redesign effort:

RIGHT OF WAY ACQUISITION DOCUMENT REVISIONS \$ 5,950.00

This work involved re-computation and drafting of the previously written right of way acquisition documents in use during the land negotiations.

REDESIGN EFFORTS

\$ 79.910.23

This work involved several meetings with affected land owners, iterative design processes throughout land negotiations, including alignment, profile and drainage revisions to the project. Also included in this amount is the aforementioned adjusted yearly wage rates for the years in which the work was performed.

TOTAL CONTRACT AMENDMENT	\$ 85,860.23
PREVIOUSLY APPROVED CONTRACT AMOUNT	\$ 238,046.45
TOTAL NEW CONTRACT AMOUNT	\$ 323,906.68

As stated in paragraph 2 of this letter, we consider the design status of this project to be complete. The final review comments we recently received from the NDOR have been addressed and the plans are ready to print, pending NDOR sign off of their ROW acquisition review.

Upon completion of the NDOR's review process, the project will undergo a three week bidding process, all of which EGA will coordinate and conduct. Our scope of work during this process will include making calls to generate bidding interest among contractors, answering questions as they arise, issuing addenda as needed, opening bids, evaluating bids and making a presentation to the Board for approval.

Once construction begins, our construction management services will include conducting a precon meeting, periodic observation and reporting, coordinating and conducting construction progress meetings with the Contractor and the PMRNRD staff, NPDES reporting, pay app review and submittals and project closeout. Generally, a majority of this project involves earthwork. The geotechnical testing required per specification for the embankment procedure will serve as our main observation during this phase. EGA personnel will conduct the NPDES reporting and progress meetings (on-site), and at that time, will also review the work in progress. Construction of the more intense items, such as storm sewer, bridge construction and concrete driveways, will require a more significant observation effort on our part and the bulk of our time will be spent during those periods. As always, we will be available to immediately address any questions or unforeseen conditions that may arise. Project closeout includes all documentation necessary as required by NDOR.

Construction staking and any right of way acquisition pinning will be handled by the PMRNRD surveying department. We will supply all electronic data and formats they will require and be available to answer all questions they may have as they set up their control.

I am enclosing 2 copies of this letter to serve as our contract amendment. This letter does not change the original terms and conditions of our contract. Please execute and return one copy back to our office.

Please do not hesitate to call with any questions or comments.

Sincerely, EHRHART GRIFFIN & A	ASSOCIATES	
Daniel J. Dolezal, P.E.	9	
Accepted this	day of	, 2008
Bv:		