STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

memorandum

subject: Memorandum of Findings and Recommendation Regarding Maguire Group, Inc., and DOT Project No. 151-274/294

date: September 14, 2006

to: Ralph J. Carpenter
Commissioner

from: Arthur W. Gruhn
Chief Engineer
Bureau of Engineering and Highway Operations

This memorandum sets forth my recommendation that you terminate the existing contract (MGI Contract) with Maguire Group, Inc. for inspection services on State of Connecticut Department of Transportation (Department) Project No. 151-274/294, FAP Nos. NH-84-2 (182) 36 and HPP-NH-HO21[2] (Project) in the Town of Cheshire and the City of Waterbury. The memorandum also contains, in its final section, certain other recommendations regarding and related to the subjects discussed herein. The factual background of this matter and the reasons for my recommendation are set forth in detail below.

THE PROJECT AND THE MGI CONTRACT

On or about August 29, 2002, the Department entered into a contract ("LGD Contract") with L.G. DeFelice, Inc. ("LGD") for the construction of the Project, the general purposes of which were the widening of Interstate I-84 and various I-84 interchange improvements in Cheshire and Waterbury. Subsequently, on or about September 9, 2002, the Department also entered a contract (MGI Contract) with Maguire Group, Inc. ("MGI") to act as the Department's inspector of LGD's work on the Project. The MGI Contract provides that MGI will perform Project construction engineering and inspection for reconstruction of I-84 in the City of Waterbury and the Town of Cheshire. The MGI Contract also provides that MGI shall be required to carry at least $2 million of professional liability insurance to guarantee the proper exercise of its construction engineering and inspection duties on the Project.

On or about October 14, 2002, LGD commenced work on the Project. The LGD Contract required LGD to construct certain drainage facilities on I-84 from Sta. 6+822 (west of Pierpont Road) to Sta. 12+300 (west of Marion Road) in Waterbury and Cheshire. LGD worked on those drainage facilities, including the installation of catch basins and underdrain, primarily beginning in April of 2003 and continuing through the 2005 construction season. While LGD and its surety (USF&G) were responsible for seeing to it that the drainage work was performed in accordance with the requirements of the LGD Contract, the responsibility for inspecting and keeping a record of that drainage work directly on behalf of the State, and through its inspection services ensuring that LGD had met those contract requirements, belonged to MGI.

During the 2003–2005 construction seasons, MGI reviewed (ostensibly, at least) the drainage work of LGD and reviewed LGD's and its own paperwork regarding that drainage work, and approved all of such work for payments to LGD by the State. In total, MGI approved payments to LGD in the amount of $1.8 million for its Project drainage work.

Because LGD had ceased all work on the Project at least by some time in early May of this year, apparently due to lack of finances, the Department terminated the LGD Contract (as of LGD's receipt of the letter so informing it from former Department Commissioner Stephen E. Korta II), on or about May 26, 2006.

SUSPICIONS AND INDICATIONS OF PROBLEMS WITH LGD DRAINAGE WORK ON THE PROJECT

As part of its contractual Project duties, LGD was required to take, or engage a subcontractor to take, video tapes of existing drainage which had, in some cases, been extended due to the widening of I-84 by LGD. This taping was begun on November 28, 2005 by Green Mountain, a subcontractor of LGD. On November 30, 2005, Mr. Raymond Ward of MGI requested copies of Green Mountain's video tape because of the problems with the drainage work that Green Mountain had told him were observed during the taping.

Mr. Ward informed MGI Chief Inspector, Russell Tassie, of conditions recorded in the tape. In December of 2005, MGI personnel discussed the problems with LGD field personnel and directed LGD to propose a solution for the observed problems. On December 29, 2005, MGI received a copy of the Green Mountain's video recording (incomplete) of the drainage pipes that were to be treated by cured-in-place lining. The video was reviewed by MGI personnel, Mr. Ruitto, and LGD Superintendent Gary Morrissey. On December 30, 2005, video tapes were reviewed by MGI personnel, Green Mountain personnel and Department Supervising Engineer Russell Wagoner. On January 4, 2006, MGI Resident Engineer Peter Pardee, forwarded an e-mail to Department Design representative Greg Soja, with LGD's request to eliminate lining of the two (2) larger pipes, neither of which had been video taped at the time. On January 5, 2006, MGI field staff and MGI main office personnel viewed the video and saw the faults in the work that appeared on the tape. The personnel from MGI's main office suggested issuing a letter to LGD. On January 6, 2006, MGI started a draft letter to LGD, telling it to address problems observed in the tape concerning pipes that were to be lined, but MGI was still gathering information and did not send the letter.

Department District 1 personnel did, however, send a letter to LGD on February 6, 2006, stating that the pipe work performed by LGD had not made those pipes acceptable for placement of the lining required by the LGD Contract, and directing LGD to complete the video taping of all pipes that were to be lined, so that Department personnel could first examine the condition of those pipes.

On February 9, 2006, MGI field staff e-mailed Mr. Lewis Cannon, the Department's Construction Administrator (head of the Office of Construction), with a Project status report as of January 31, 2006, that listed outstanding construction issues, including the need to have LGD repair unacceptable storm culverts before installing cured-in-place pipe lining. At a February 14, 2006 Project progress meeting, MGI personnel mentioned problems with pipes that were to be lined. An LGD field representative, Mr. James Bailey, then the superintendent, declined to take the suggestion that he review the video tape, and he stated that LGD's cure-in-place lining of pipes would commence in the spring of 2006.

The lining work was not done, however, because LGD never recommenced its Project construction operations after December 1, 2005, the first day of the contractual 2005-2006 winter shutdown period. And, as it turned out, the indications of problems with preparations for the lining of pipes proved to be only the tip of a very large iceberg.

On February 15, 2006, Department Project Engineer Mr. James Ruitto, from Construction District 1, observed that a large pothole had developed at Sta. 6+940 (+/-), I-84 Westbound along the end of the Austin Road on-ramp. By February 23, 2006, the pothole had developed into a sinkhole. The size of the sinkhole was approximately 4 feet by 6 feet by 4 inches deep. Upon closer inspection, Mr. Ruitto, discovered that this condition had been caused by defects in the drainage work performed by LGD; namely, LGD's failure to compact properly the soil around its drainage installation. This caused Department personnel to be concerned about the quality of LGD's other drainage work on the Project as well.

Upon further examination, Mr. Ruitto noticed that there was no underdrain tied into the catch basin at that location. He also checked several other catch basins in the area, which were then accessible, and none of them had the required underdrain either. When he questioned MGI inspection staff regarding this critical omission, they gave him no explanation for it. Mr. Ruitto then directed MGI to inspect the entire Project to determine the extent of such deficiencies. On March 27, 2006, MGI began its review of the drainage work, using Department Maintenance forces, to provide Maintenance & Protection of Traffic services. LGD was unable to provide the necessary traffic control to perform the inspections. On April 11, 2006, MGI representatives came to the District office and presented the findings from their drainage investigation. This was done in discussion and in a printed report that they gave to District personnel (a copy is attached to this memorandum as Exhibit A.) The drainage deficiencies they had then discovered extended well beyond the problem of missing underdrain.

During the installation of the underdrain, Mr. Ruitto noticed that it also was not being installed at the correct grade. He so informed MGI inspectors, who then had LGD make appropriate corrections. LGD personnel were also directed to remove and reinstall the underdrain that they had placed on the eastbound off-ramp to Route 70, after Mr. Ruitto and Mr.Frank Dubish, the District's Environmental Coordinator, noticed that it also had not been installed properly.

On April 19, 2006, the Department sent a letter to LGD and its bonding company for the Project, USF&G, officially informing them of the deficient drainage work by LGD.

In the meantime, in March of 2006, apparently in response to unconfirmed statements by an unidentified source, Department Deputy Commissioner Charlie Urso had related to Department employees in the Management Services Division that there was a story that many catch basin covers were missing from Project catch basins, even though LGD supposedly had already been paid for the basins and covers by the Department. Management Services auditors and District 1 personnel investigated this story and found it to be false at that time. They also confirmed that no materials-stored-on-site for the Project (which would already have been paid for) were missing or unaccounted for.

Concerns and suspicions concerning the performance of LGD and MGI on the Project persisted, however, and in April, Department officials decided to engage the consulting and inspection firm, STV, Inc. ("STV") as an additional consultant on the Project, both to inspect and monitor the ongoing Project work of LGD and MGI, and to investigate the possibility that still more Project drainage work by LGD might be defective. On or about May 15, 2006, the Department signed a contract with STV for those purposes.

Some time during the week of August 14-18, 2006, STV, though not yet finished with its investigation, was ready to make a preliminary or draft report to the Department and Federal funding authorities on its findings. On the morning of August 21, it made a verbal and visual presentation of those findings, in Power Point format, with spoken commentary, to representatives of the Department and the Federal Highway Administration. A printed copy of that presentation is attached to this memorandum as Exhibit B. The representatives of STV who made the presentation also handed out to the people in attendance the written report of its findings, which was later provided in somewhat updated form to MGI representatives at an August 31, 2006 meeting described below (Exhibit C of this memorandum.)

At that time, approximately 265 catch basins of the approximately 300 installed on the Project had been examined by STV; within the following week or so, STV had examined approximately 280 of them. Of those, 270 proved to need corrective work of some kind, ranging from simple punchlist types of corrections to removal of permanent paving and complete replacement of the basin structures. The defects were numerous, multiple, and severe. Basins were severely skewed. Basins were placed as much as a foot and a half from their proper locations, sometimes leaving little bearing for the tops or the pavement, or leaving only a few inches for water to drain into the basin. In some cases, the resulting basin opening was so small that no one would be able to get into it to inspect or repair it without tearing up the construction. In some cases, the basins extended behind or below the median barrier. Bricks had been placed by hand, with no mortar holding them in place, so that some of them could also be removed by hand. Gravel from surrounding median barrier had washed into basins, whose walls sometimes had large gaps at their upper edges. Debris, including a wooden palette, large chunks of concrete, and other materials had been left in basins. In a few cases, beams of wood of considerable size had been left clogging pipes; a couple of the beams were so large that they could be removed only by cutting them off a piece at a time. Underdrain that would be necessary to redirect collected water into the longitudinal runs that would carry them out of the basins and to their intended collection point was frequently missing or not connected. Plywood had been used to shore up components, providing essentially no structural support, and creating a hazardous condition for the traveling public. The numerous types of deficiencies, the particular as well as the general defects and omissions in the work, were and are stunning.

Having been disturbed to learn of the severity and extent of the deficiencies in LGD's drainage work, and of the virtually total failure of MGI's inspection activities with respect to that work, Department officials decided to call in the contractor that had replaced LGD on the Project, O&G Industries, Inc. ("O&G") and the Project sureties for LGD and O&G (USF&G and Zurich American Insurance Company, respectively) to hear and receive the STV presentation on the morning of August 31, and to call in MGI to hear and receive the same presentation and printed materials during the afternoon of that same day. In MGI's case, this was done by the sending of the attached letter (attached Exhibit D) from Department Deputy Commissioner H. James Boice to Mr. Richard J. Repeta, President of MGI, dated August 29, 2006. The letter alerted MGI that the Department would be represented by legal counsel at the meeting. At the end of STV's presentation during the meeting with MGI on August 31, MGI's representatives,

Mr. Repeta and Mr. David Gorman, MGI's Manager of Construction, were given the opportunity to ask the Department and STV representatives whatever questions Mr. Repeta or Mr. Gorman might have had at that time.

NOTICE TO MGI AND ITS OPPORTUNITY TO BE HEARD

Troubled by the apparently all-but-complete failure of MGI to have discovered or disclosed the drainage deficiencies at the time that the deficient work was done, or while it could still have been efficiently and economically corrected, or before MGI approved the work for payment, Department officials decided to have the attached August 31, 2006 letter (again from Department Deputy Commissioner H. James Boice to Mr. Repeta as President of MGI; see attached Exhibit E) hand-delivered to Maguire's representatives at the end of the August 31 meeting. This was done. Among other things, the letter insists that representatives of MGI attend a further meeting with representatives of the Department, on September 6, 2006, and be prepared to provide answers and whatever documents MGI might have, relating to the questions set forth in that letter and, generally, to MGI's failure to have caught or disclosed in a timely manner the drainage work deficiencies described in the STV reports. Various MGI documents had been examined by STV and by investigators or auditors from the Department or the federal government, although that would not have included some of the types of documents requested in the August 31 letter. In any event, MGI provided documents to the Department at the September 6 meeting, other than printed copies of the Power Point presentation that it made at that meeting.

On September 6, the scheduled meeting took place, attended by many Department construction officials and employees, and, on behalf of MGI, Mr. Repeta; Mr. Gorman; John Treichel, MGI's Vice President; Peter Pardee; Joseph Szarkowicz; and Joseph Caruso. Mr. Treichel made a Power Point presentation, and handed out to the people in attendance printed copies of the presentation, titled "Project Overview, Drainage Deficiencies, I-84 Reconstruction – Waterbury/Cheshire, Fed. #NH-84-2(182)36, HPP-NH-HO21(2), State Project #151-274 & 294." (A copy of that presentation is attached as Exhibit F of this memorandum.)

Among the primary reasons given by MGI as to how and why it had failed to discover and disclose the drainage deficiencies in a timely and useful way were:

(1) that the staged nature of the construction kept some of the deficiencies from being apparent when earlier phases of the work were carried out (for example, it was not clear how severely mislocated many basins were until median construction was carried out);

(2) that Defelice was a difficult contractor, rejected the directions of MGI personnel, and sought to evade inspection of its work;

(3) that while some drainage work was being carried out, MGI inspectors may have been busy inspecting other Project work, and that FHWA and the Department would not allow MGI to use a sufficient number of inspectors to cover all of the Project work;

(4) that many of the deficiencies were caused by attempts to make up for survey layout errors, and that MGI was not "[c]ontractually responsible to verify 100% of [the] survey lay-out [sic]";

(5) that having to conduct inspection during night hours or in the immediate vicinity of live traffic made inspection of the catch basins difficult; and

(6) that MGI inspectors assumed that almost all of the deficiencies in LGD's drainage work would and could be corrected by LGD as punchlist work at the end of the job. MGI in its presentation admitted various failures in its inspection work on the Project but denied having any legal or financial responsibility for the correction of the drainage deficiencies, for these and other reasons stated in its presentation.

Following MGI's presentation, representatives of the Department put various questions to the MGI officials and employees who were present. Those questions and the answers given to them are incorporated to a great extent in the following section of this memorandum.

DEPARTMENT PERSONNEL'S RESPONSE TO MGI'S PRESENTATION

By the time of the September 6 presentation by MGI officials and inspection staff members, MGI had been aware for months that Federal agencies and the Department were raising questions about the professionalism and propriety of MGI's Project-related activities. This was apparent from questions being asked by government

representatives and from the hiring of STV to monitor and investigate MGI's work on the Project. In light of that awareness, it speaks well for the belief of MGI management in its innocence, at least from any criminal wrongdoing, that they attended the September 6 meeting, spoke relatively freely at the meeting, and brought inspection staff members to the meeting, making them available for questioning by Department and Federal agency representatives. The fact that MGI officials had hired a criminal defense attorney well in advance of that meeting (Attorney Richard Brown), but not only did not decline to attend or speak on advice of counsel, but did not even bring legal counsel to the meeting, militates in favor (though not conclusively) of believing that MGI management is not "implicated" in the failure of the firm to discover or disclose in a timely manner almost any of the far-flung, egregious deficiencies in the drainage work done by Defelice on the Project.

Department construction officials were, however, of one mind in believing that the reasons offered by MGI to explain or excuse its inspection failures were not sufficient to do so. Among the former's reasons for finding MGI's presentation unpersuasive are the following:

-- One of MGI's first and principal responses to the STV presentation and report and the questions of the Department was that the contractor was responsible for performing the Project construction work in conformance with contract requirements. While that it true, it does not absolve the consultant inspector of its own obligation to see that the contractor does just that. Each is responsible and liable to the Department for seeing that the end result is just what the contract requires. The Department's informational pamphlet for consultants, dated January 2000; the Department's Construction Manual, from the 1998 edition through the most recent version; and the boilerplate of the CE&I Agreement all clearly define the responsibilities of consultant inspectors, which MGI did not fulfill on this project.

-- MGI personnel stated that Defelice had always been a very difficult contractor, inclined to evade inspection and to perform shoddy work where possible. That being the case, MGI should have kept an even closer watch on Defelice's work than it would have with a less troublesome contractor, especially where the work was of a kind that lends itself to concealment, as any underground work such as drainage installations would.

-- MGI has not been, as consultant inspection firms generally are not, reluctant to ask the Department for permission to use more inspectors on a project when necessary. MGI never made such a request on this project. In fact, one Department District staff member asked an MGI inspector at one point whether or not MGI had sufficient inspectors on the Project, and the response was that it did.

-- MGI stated that they were not allowed enough senior inspectors to supervise the junior inspectors. Typically, a flatter organizational structure is implemented for project management, with all inspectors reporting to the Chief Inspector and Resident Engineer. Senior inspectors are not in a supervisory role over junior inspectors, but rather are assigned more complex work.

-- The original 7.6% fee for MGI's inspection services on the Project may have been somewhat low, but MGI agreed to perform the required services for the negotiated fee. Also, it is relatively common for supplemental agreements to be executed with CE&I firms when conditions on the project change or are different than anticipated. Those opportunities were available to MGI and in fact one or two supplements were executed on this project.

-- It does, indeed, appear that errors in LGD's survey layout may have been a primary underlying cause of the many deficiencies in its drainage work, whether such errors occurred because of a confusion between metric measurements and English measurements or for some other reason. In any event, MGI must also be held accountable for those survey errors, in that it should have verified or checked the offset baseline(s) used by LGD in order to set catch basins and median barriers, to ensure that they were properly aligned. If MGI didn't check an offset baseline, it is difficult to see what its surveyors did check or what the Department was paying for in paying for their work.

-- At no time prior to or during the course of the drainage work did MGI notify the Department that additional survey work would be required due either to lack of information provided by LGD or errors in LGD's survey layouts.

-- In fact, MGI personnel did use surveying, on their own, when they felt it was necessary. Department personnel knew that they did, and did not question it, and certainly would have permitted further survey work if MGI personnel have said that it was necessary.

-- Sumps and catch basins installed by LGD were frequently misaligned. This should have been checked for and discovered by MGI when the sumps and basins were installed. Although some basins were plated, the basins could not have been more than a couple of feet deep, and would not have been particularly difficult to examine.

-- When the catch basins were brought to grade and aligned with the median barrier, MGI should have noted the many instances of their misalignment. In fact, it is difficult to understand how MGI could have failed to see the misalignments.

--MGI did not notify either LGD or the Department of any of the incomplete or defective drainage work in a timely manner that would have allowed for its correction before additional or permanent work had complicated and compounded any possible correction of the deficiencies.

-- MGI stated that it never accepted the incomplete or defective drainage work, but this is largely a matter of semantics. In fact, MGI approved payment for most of the work in question. MGI indicated that even though its staff had approved the items for payment that did not mean that they had accepted the work: It was simply work paid for in progress. This does not explain why full payment was made in 2003 for items for which drastic corrective work was still required. Further, MGI allowed subsequent work to be placed around and on top of the incomplete or defective work and then approved payment for the subsequent work as well. To have failed to have observed and recorded the defective work to begin, and to fail to see that it was corrected at the time it was being done, was an egregious failure of MGI to perform its work, but then to allow permanent pavement to be placed over such defective or incomplete work was an even more serious failure by MGI.

-- MGI's statements that it provided notice to the Department as soon as the incomplete or defective work became apparent do not appear to be accurate. Even if one takes at face value MGI's argument that the staging of the work kept the errors from being immediately apparent (that is, that much of the work and many of the errors were "hidden"), LGD began uncovering the basins in early 2005. MGI did not provide any notice until 2006 and then only after prodding by the Department when a sinkhole developed in the area of drainage work. For that matter, MGI's staging argument hurts its case more than it helps it, since its inspectors approved payment for work in 2003 which it says was not completed until a later stage in 2005. Not only was payment approved prematurely in that case, but it was also approved inappropriately, since the work was defective, incomplete, or both

-- MGI offered in its defense that it discovered and reported a substantial amount of the drainage deficiencies when, following the discovery of the sinkhole on I-84 in February of this year, it initiated a review, in consultation with the Department's District 1 personnel, of all median drainage structures on the Project. This was far too late, and MGI did not provide us with any information to show that it had been aware of any of the drainage problems prior to the spring of this year, after the Department suggested that it go back to look for them, after almost all of the work had ceased and been paid for. Upon questioning about what procedures MGI had had in place to ensure that defective work was discovered and corrected, the Resident Engineer responded that the quantity computations had been maintained and that those were the only available records of that kind. It appears, based on its representatives' answers, that MGI did not keep a log of work that required correction. They could not identify where any notation of the defective drainage work or the necessary corrections of that work had been recorded in MGI's Project records.

-- MGI was questioned about the missing underdrain connections. The response given by its Resident Engineer was that the contractor had elected to run the underdrain trunk line the full length of the Project and planned to make the connections as the catch basins were built. He said, in fact, that he had strongly suggested to LGD project people that this was not a good way to go about the work, but that LGD had disregarded his comments. He said that the reason that the underdrain connections were never made was "an oversight." MGI had objected to LGD's delaying the installing of the underdrain connections, and was fully aware that the underdrain connections were not made during the initial installation, MGI's staff and field supervisor did nothing to follow up and make certain that the underdrain connections were made as the catch basin installation progressed. A large number of those connections were not made, even though the plans clearly show the details for them. Pavement was allowed to be placed, including final pavement, without any underdrain installations having been installed beneath it. Correction of this major inspection "oversight" by MGI will be costly, will require the use of pavement joints that could affect pavement serviceability, and will interfere with the traveling public.

-- MGI did not offer any credible explanation as to why its inspectors and internal control procedures so completely failed to produce a record (or even any recognition of) the extensive amounts of incomplete or extremely defective work on the Project. And MGI did not offer any persuasive explanation as to why the daily inspection reports failed to note incomplete and defective work as it occurred. We hire consultant inspection firms to administer our construction projects in accordance with the plans and specifications. The inspector's daily report is the written record of that inspector's activities consistent with that charge. If the inspector is failing to witness incomplete and defective work and seeing to it that it is corrected, or if he is witnessing incomplete and defective work but failing to note it in the daily report, he is failing to perform his work in the most basic ways. The consequences of such failures are apparent, for instance, in the fact that MGI personnel paid for the deficient drainage work and for other permanent work adjacent to or above it because the personnel checking the work records saw no record that the work was deficient or incomplete.

-- Even if one accepted the assumptions of the MGI presentation, one would believe that the proper time to identify the median drainage deficiencies and to suspend the work until repairs had been made would have been when the plates were removed prior to the construction of the top section and the setting of the top of each basin. No explanation was given as to why MGI did not do so at that time.

-- MGI did not offer any plan to address the evident institutional shortcomings that led to the current problems other than to say that some of the employees who had been responsible for inspection of LGD's drainage work are no longer with MGI. It appears that there are procedural and systemic problems with the manner in which MGI has administered the quality provisions of this contract. MGI seems not to recognize that these problems exist, and did not describe any remedial plan for improving its inspection performance. In fact, MGI officials seemed at a loss to explain how this disastrous failure of its inspection services had occurred.

-- In responding to the STV presentation and report, MGI complained that STV had exaggerated the severity of some of the identified problems, but MGI did not challenge in any significant way the facts presented by STV.

-- While Mr. Treichel in his presentation repeatedly acknowledged mistakes, oversights, and failures on the part of MGI project inspection personnel, the firm has stated that it does not believe that it has legal or financial responsibility for any of the deficient drainage work which it did not record or prevent during the course of construction or, in most instances, prior to its approving payment by the State for that deficient work. This is not appropriate, just, or acceptable to the Department.

SUMMARY COMMENTS AND RECOMMENDATIONS

One of the most disturbing aspects of this matter is apparent only when viewing the circumstances as a whole. One might, as MGI has attempted to do, find specific defects that may look drastic, but for which the fix might be relatively simple; or find possible excuses for some lapses in inspection, perhaps an occasion when an inspector was taken away from the site of drainage work to inspect other work, or was hindered in his inspection because work was occurring at night or immediately adjacent to live traffic. But nothing suffices to give a reasonable explanation or adequate justification of the complete failure to discover and disclose in a useful, timely manner the many, many serious defects and deficiencies in the work in question. During MGI's September 6 presentation, an MGI spokesperson said that as far as he knew, no one had accused any of the MGI personnel of being "a bad guy," and that if they had, then "this might make sense."

Whatever it was exactly that the MGI representative meant by this, if he meant, as it seemed that he did, that such complete neglect and obliviousness on the part of all MGI inspection personnel as would have to be implied from the findings in the STV presentation and report might perhaps "make sense" only if it had been willful. Whether or not the neglect was deliberate or the obliviousness was feigned, is a matter for later consideration or examination for other parties. For the Department's present purpose it is sufficient that the apparent neglect and obliviousness shows MGI's inspection services in connection with LGD's drainage work to have been essentially either nonexistent or worthless or worse, in that if they had never purported to provide those services, then another firm or individuals would have been called upon to do the work, and it is highly improbably that they could have failed more completely than did MGI in ensuring that LGD constructed the subject facilities in accordance with contract requirements.

Whether or not MGI's management had knowledge of or directly responsibility for the failure of the firm's inspection staff in these regards, the firm must be held responsible, administratively, legally and financially, for those failures. This is all the more appropriate in light of the failure of MGI to demonstrate either than it has

procedures in place that would have prevented a failure like this, or that it has means in place for ensuring that its inspection staff members adhere to those procedures, or that it has made any reforms that would provide assurance to the Department that such failures have not occurred on its other Department inspection assignments and will not occur on any such future assignments.

Based on the information in this memorandum, including the exhibits attached to it, we recommend that you terminate MGI's existing contract for inspection of the Project, and consider whether or not it is in the State's best interests to terminate other current contracts that MGI has with the Department. Further meetings with and without MGI representatives will be necessary to take up that further consideration. The conclusion seems inescapable that, at a minimum, MGI did not provide the expected construction engineering and inspection services that are required under its agreement with the Department. At a minimum, MGI's field inspectors failed miserably in their duty to discover and disclose to the Department any defective work that occurred on the Project while there was time to correct it efficiently and economically, and they failed to ensure that the required work met an appropriate standard of quality, or that the quality was maintained before allowing subsequent work to proceed. In some cases, they failed to make certain that necessary work, such as connecting the underdrain, was performed at all.

In addition, MGI supervisory staff on the Project, at a minimum, did not provide adequate supervision to ensure that their inspectors were performing in the required manner. There appears to have been a complete breakdown of the inspection process on this Project that was neither prevented nor discovered by MGI supervisors and managers during the course of the work. As a result of these errors and omissions, the Department is facing the potential for additional costs that the State may not be able to recover from the contractor or the Project sureties.

For the reasons stated above, we make recommend the following actions:

(1) The immediate termination for cause of MGI's agreement with the Department for inspection services on the Project.

(2) Further investigation by the Department and its consultants into the possibility that other defective work by contractors and other related inspection failures by MGI have occurred on the Project or on other recent Department projects.

(3) The further examination and consideration by the Department of whether or not it is in the State's best interests to terminate any other existing contract between the Department and MGI.

(4) The making of demands upon MGI and its insurance company, once the extent of MGI's inspection failures on Department projects and the costs of those failures are known, for reimbursement of those costs; and the taking of any further steps necessary to collect those costs or an appropriate or reasonable portion of them.

(5) The withholding of any further payments by the Department to MGI, pending the outcome of the actions recommended in (2) and (4).

(6) An examination by the Department of whether or not staffing reductions have hampered the Department's ability to prevent the occurrence of such construction and inspection failures as were eventually discovered by the Department on the subject Project, and of whether or not, for instance, the Department should petition for the restoration of staff that would allow the Department to conduct more frequent project record reviews.

We hope that this memorandum has given you the information and analysis that you will need in making your decisions regarding these matters. We will certainly do our best to provide you with any further information that might be helpful to you.

Exhibits attached

Cc: Dep. Comr. Boice – Dep. Comr. Curtis
Arthur W. Gruhn
Lewis S. Cannon
David Lavado