TO:

Office of the City Administrator

ATTN:

Deborah Edgerly

FROM:

Community & Economic Development Agency

DATE:

July 18, 2006

RE:

Adoption Of A Resolution Approving the Formation Of The Oakland Area Geologic Hazard Abatement District (GHAD) And Appointing the City Council

of the City of Oakland as the GHAD Board of Directors.

SUMMARY

The resolution before the City Council approves the formation of the Oakland Area Geologic Hazard Abatement District (GHAD pronounced "GAD"). On November 12, 2002 the City Council adopted Resolution No. 77524 C.M.S. declaring that the City is subject to the statutory provisions of the GHAD laws for initiating formation proceedings as required by Public Resources Code 26500 et seq. Agencies are required to adopt this type of resolution before a GHAD is created in their jurisdiction. On June 20, 2006, the City Council adopted Resolution No. 79986 C.M.S. initiating the formation of the Oakland Area GHAD and setting a public hearing for July 18, 2006.

The purpose of this hearing is to take public testimony concerning the proposed GHAD and to consider action to form the Oakland Area GHAD. GHADs are political subdivisions of the state and are formed in specific geographic areas to address potential geologic hazards. The purpose of a GHAD is to prevent, mitigate, control, or abate defined geologic hazards through maintenance, improvements, or other means. Financing of a GHAD is accomplished through an assessment of only those property owners who live within the boundaries of the designated district. Issuing and servicing of bonds, notes, or other debentures is also authorized under a GHAD.

The Oakland Area GHAD would initially include the Siena Hill project. This project is a 32-unit attached single-family development with a private driveway. In addition, Planning and Zoning staff requests that the City Council consider the formation of the Oakland Area GHAD to include new approved development projects that are deemed to have potential geologic hazards as defined in GHAD law. These new projects would annex into the proposed GHAD.

POTENTIAL LIABILITY ISSUES

At the Council meeting of June 20, 2006, some questions arose about the City's liability and risk associated with GHADs. The City Attorney's Office has not located any court decisions that

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specifically address whether and under what circumstances the City may be held liable for the actions or inactions of a GHAD. Therefore, staff cannot say with absolute certainty that a court would never find a City liable for a GHAD's actions or inactions. However, because under state law, a GHAD is an independent political subdivision of the state and is not an agency or instrument of the city or county in which it is formed (even if the City Council sits as the Board of Directors of the GHAD) the City generally would not be liable for actions or inactions of the GHAD or its Board if the two entitles remain truly separate.

Note: For reference, the opinion that the City Attorney's office prepared in connection with the formation of Oakland's first GHAD (the Leona Quarry GHAD) is attached (Attachment A). The analysis in the opinion is applicable to the Oakland Area GHAD and remains valid because there have been no new legal developments on this issue. For convenience, the key points are summarized below.

Hillside Developments

At the meeting of June 20, 2006, some concerns were also raised about the Planning Commission approving projects that are on hillsides and/or in areas of geologic hazard. A City is generally immune from liability for injury resulting from the issuance or denial of development permits relating to projects (See Government Code § 818.4). Thus, the approval of hillside projects is unlikely to expose the City to liability. The memo attached and the summary below also address the range of liability issues associated with approving geologically hazard development. However, it must be noted that GHADs do not regulate or encourage hillside or geologically hazardous development.

From a policymaking perspective, if the City Council wishes to curb new development in such areas, there are various tools to accomplish this. For example, the City Council can amend the Planning Code so that development in such areas go to the City Council and not only the Planning Commission. There is also the possibility of having zoning overlays, or conditional use permit requirements for geologically hazardous areas. The City Council may wish to have staff return with detailed recommendations on this point. In addition, the California Environmental Quality Act (CEQA) requires mitigation of significant geologic hazards and other environmental impacts. GHADs are not mechanisms to preclude or encourage development, be it a new and un-subdivided land or exiting legal parcels where there is a right to develop. GHADs are simply an additional tool to address geologic hazards.

Vice Mayor Quan also requested actuarial data on development on hillsides. It is staff's understanding that the City does not have such data currently. Although more information may help policymaking, as to development on the hillsides, the legal analysis regarding the City's liability due to a GHAD remain the same and are included below as well as in the opinion attached.

Structure and Purpose of GHADs

As indicated previously, a GHAD is an independent governmental district created under California law formed specifically to address geologic hazards. The laws authorizing the creation of GHADs were promulgated in 1979 to address the aftermath of the landslides in the Palos Verdes area of Southern California.

The original intent behind the GHAD law was to provide a mechanism for landowners to abate geologic hazards threatening an existing neighborhood. However, there is a trend to use GHADs for newly formed and unoccupied subdivisions, such as the Siena Hills subdivision.

The GHAD law states that either the City Council or five landowners shall act as the GHAD Board of Directors. Staff has proposed, following the Leona Quarry model, to have the City Council act as the proposed GHAD's Board of Directors for two reasons: (1) this would provide the City with more power to manage geologic hazards at the site; and (2) the only alternative form of governance is appointing a Board of Directors consisting of five property owners and currently there is only one landowner within the proposed GHAD. In the early years, following the passage of the GHAD law, GHADs were generally governed by property owners. More recently, however, the trend has shifted so that now the city councils and county boards of supervisors assume the role of the all of the current GHAD Boards.

The GHAD as a Separate Legal Entity from the City

Under California law, a GHAD is a separate political subdivision of the state, not an agency or instrumentality of the city or county in which it is formed. Accordingly, even if the City Council sits as the Board of Directors of the GHAD, the City generally would not be liable for actions or inactions of the GHAD or its Board.

In analyzing the extent of the City's potential liability associated with the GHAD, the City Attorney's Office has reviewed court decisions that address the question of the liability of a governmental body, such as the City Council, for the liabilities of another governmental body that the Council forms. In general, the question of liability of such separately formed bodies hinges on the extent to which the separately formed body is truly separate and distinct from the body that created it.

It is likely a reviewing court will look not only at the City Council's action to form the GHAD but at the true independent nature of the entity. An entity's independence is determined from such factors as: (1) whether there is any express law, stating that the entity is a body corporate and politic; (2) whether the entity has a separate governing body; and (3) whether it has the statutory power to own property, levy taxes, or incur indebtedness in its own name.

¹ As noted earlier, there is very little case law on GHADs, and this Office's research has revealed no cases specifically addressing a City or individual public official's liability associated with GHADs.

If the City Council established a landowner managed GHAD that does not rely on City resources for operation, maintenance, repair or any other functions, there is a strong likelihood that the City would be shielded from liability associated with the GHAD. First, as noted above, the GHAD Statute specifies that a GHAD is a political subdivision of the state and is not an agency or instrumentality of a local agency. Second, the GHAD's governing body would be completely independent of the City. Finally, the GHAD would have statutory power to own property, levy assessments and incur indebtedness in its own name and, additionally, would enjoy independent powers of eminent domain.

However, if the City Council elects to sit as the GHAD board, it is not clear that the City would be shielded from liability. Although the GHAD would have an express statutory declaration that it is a separate body corporate and politic and would have statutory powers to own property, levy taxes, incur indebtedness and exercise eminent domain powers, its independence with respect to governance would not be as clear as that of a GHAD managed by five landowners.

City/GHAD independence may become even murkier over an extended period during which the City Council manages the GHAD. For example, the extent to which (1) the City Council includes City staff in the activities of the GHAD, (2) the Council enforces City policies through the meetings and activities of the GHAD, and (3) City/GHAD functions are interwoven will affect the likelihood of a court concluding whether these entities are "independent." Over time, the more that a City Council managed GHAD takes on the trappings of a City run affair, the greater the probability that any protection the City obtains by creating an independent government body could be eroded.

In addition, as is the case with any other development, staff notes that the City itself assumes potential liability risks to the extent that it accepts public improvements and/or undertakes operation, maintenance, replacement or repair functions in connection with the project that are not the responsibility of the GHAD. For example, similar to other hillside development, the City's acceptance of public streets, drainage facilities or other improvements associated with projects could expose the City to potential liability.

In short, the extent of City liability increases in proportion to the amount of control and involvement it has with the GHAD, and therefore it would be advisable to minimize the City's control and involvement. As to the City's potential liability, it appears to be more advantageous to form the GHAD as a landowner-managed entity, rather than designating the City Council as the Board of Directors. Staff recognizes, however, that potential liability is not the only factor the Council will consider, and, as discussed below, there are potential ways to substantially reduce (but not eliminate) some of the risks through indemnity and insurance.

If the Council ultimately decides to form the GHAD, some protections have been incorporated in the GHAD formation resolution (See attached) that may reduce the risk of liability by clarifying the separateness of the City from the GHAD. For instance, the GHAD will be responsible for hiring its own staff or contracting with non-City parties, including all workers who will

undertake operation, maintenance, replacement, repair and other activities, and that no City employees shall be relied upon to perform such services. In addition, adequate funding for any such staffing must be fully provided for in the GHAD budget and in the authorization of assessments that must occur prior to the filing of any division of the property (i.e., final subdivision maps).

Potential Bases of Liability Associated with GHADs

GHAD Liability

By its nature, any GHAD will be exposed to potential liability. This would pose significant concerns if the liability were ever imputed to the City or the Council. A primary purpose of GHADs is to facilitate the mitigation of hazardous geologic conditions by spreading the cost (and associated risks) of prevention and remediation of such hazards across the ownership of the GHAD area.

The GHAD will be accepting an array of on-going maintenance and monitoring of the project site improvements. There are a host of unknown liability risks associated with these improvements, and with developments generally, which will largely be assumed by the GHAD. Potential sources of liability include tort or negligence claims associated with construction, operation, maintenance or repair of improvements owned by or otherwise undertaken by the GHAD. There are a number of government immunities available for such claims, which may limit City (and GHAD) liability in connection with such claims.² For example, the City is immune from liability associated with the decision to form or not to form a GHAD. Government Code § 818.2 (public entities immune from liability for adopting, or failing to adopt, an enactment (including an ordinance or resolution), or failing to enforce any such law.³ See also Bogan v. Scott-Harris, 523 U.S. 44 (1998) (local legislators are entitled to absolute immunity for their legislative activities).

In addition, there is potential GHAD liability for inverse condemnation. Such claims commonly arise as a result of landslides, drainage failures and similar problems. Generally, if a public work or improvement is a substantial factor in causing damage to a private property, the public entity will be strictly liable (i.e., liable without regard to fault or the reasonableness of its improvement). In such cases, the fact that an improvement (such as a drainage line, culvert, roadway, etc.) was actually constructed by a private party will not insulate a public entity if the system has been adopted for use by the public entity.

A detailed analysis of such immunities is outside the scope of this memorandum.

Similarly, the City is immune from liability for injury resulting from the issuance or denial of permits relating to the project. Gov't Code § 818.4.

The Full Extent of Potential Liability Cannot Be Ascertained At this Time

The full extent of potential exposure posed by the GHAD depends heavily upon the determinations of engineers and other technical experts regarding the feasibility and safety of the project. Accordingly, attendant liability risks depend largely on the accuracy and detail of the technical information provided to date and that will be developed in the future. The GHAD Plan of Control, as currently proposed, is very general and does not provide details regarding the relationship of the City and GHAD with respect to property ownership. It is staff's understanding that these details will be developed at later stages of the project, through amendments to the Plan of Control and development of more detailed management plans. Once these details have been further developed, it may be possible to provide a more specific risk analysis.

Individual Councilmembers, Sitting As The GHAD Board, Are Generally Immune From Liability

Individual Councilmembers, sitting as GHAD Board, generally should *not* be personally liable for GHAD actions/inactions. As is the case with individuals sitting as members of a city council, there are a number of immunities that apply to claims against individuals (whether councilmembers or landowners) that serve on the board of a GHAD or other public entity. As noted above, there is broad immunity for claims based on legislative actions/inactions. Government Code § 818.2. In addition, Government Code section 820.9 provides that city councils, mayors, school boards or members of governing boards of local public entities "are not vicariously liable for injuries caused by the act or omission of the public entity or advisory body." The only limits of this immunity are liability for "that individual's own wrongful conduct." This immunity should protect individual GHAD Board members from liability associated with the GHAD, whether they are members of the City Council or landowners.

Issues regarding Indemnity and Insurance

Recognizing that it is not possible to eliminate all potential risk to the City, staff explored options for indemnity and insurance specifically related to the GHAD. However, although these additional mechanisms are going to be in place and are reflected either in the project's conditions of approval or the resolution before you on July 18, 2006, they cannot entirely immunize the City against all potential risk, nor can they account for all unknown potential sources of liability. All development projects present some measure of risk and, as discussed above, the greater the City's degree of involvement or control, the greater the possibility that some liability will be incurred.

For example, the project developer is required to indemnify, defend and hold harmless the City for liability associated with the GHAD and development at the project site. Although this requirement is in place, there are some limitations on any such indemnity. First, indemnity is only as effective as the indemnitor—i.e., if the developer lacks sufficient funds to indemnify or if the claims arise subsequent to completion of the project (i.e., once the applicant has moved on),

an indemnity will have no practical value. Second, it is unclear whether such an indemnity could remain in place in perpetuity. The City shall also require the applicant and the GHAD to obtain insurance to secure performance and indemnify the City in the event of financial shortfalls (such as might be associated with a catastrophic event). Although this is seen as an area of potential promise, it is unclear whether an adequate amount of insurance could be identified or obtained. While no insurance for GHADs is currently available, staff believes such policies are under development in other jurisdictions.

Recognizing these limitations, staff believes indemnity and insurance requirements can greatly increase the City's protection; accordingly, if the Council decides to form the GHAD, staff recommends and has added such provisions to the GHAD formation resolution as well as project conditions of approval. Specifically, the provisions require the project applicant to indemnify the City and the GHAD until the GHAD has sufficient funding to enable it to indemnify the City. The GHAD is also obligated to indemnify the City for the duration of its existence. Both the applicant and the GHAD are required to carry insurance (if and when available), or other security determined adequate (at the City's sole discretion) to secure this obligation and to provide for any financial shortfalls. Adequate general liability insurance and insurance for unforeseen or catastrophic events also is required. The full authorization of assessments for the GHAD must provide for adequate funding of the indemnity and insurance requirements, and a thorough financial analysis must be prepared prior to such authorization to ensure that the assessments are sufficiently high to cover these and other GHAD financial requirements.

Summary and Recommendations Concerning Liability and Limiting Potential Liability

The City Council's decision to form a GHAD and appoint the Council as the GHAD Board of Directors creates some risks of potential liability. At this juncture, there is no alternative form of governance other than to appoint the City Council as the GHAD Board, because the Siena Hills project site is owned by one landowner. The City's risk turns on the degree to which the GHAD is truly independent of the City. The City Council must weigh the risks against the project benefits in reaching its decision regarding whether to form the GHAD.

If the Council ultimately decides to form the GHAD as proposed, staff recommends that, as the resolution forming the GHAD before you on July 18th reflects: (1) the GHAD will be responsible for hiring its own staff (or contracting with non-City parties), including all workers who will undertake operation, maintenance, replacement, repair and other activities, and no City employees shall be relied upon to perform such services for GHAD facilities and improvements; (2) the GHAD operations should be completely independent of the City, including, without limitation, no City funding, administration or ownership of facilities or improvements. In addition, adequate funding for these costs must be fully provided for in the GHAD budget and in the authorization of assessments; (3) the project applicant shall indemnify the City and the

Again, the GHAD's indemnification of the City is only as effective as the funding that supports it.

GHAD until the GHAD has sufficient funding to enable it to indemnify the City. The GHAD shall also indemnify the City for the duration of its existence; (4) Both the applicant and the GHAD should be required to carry insurance (if and when available), or other security determined adequate (at the City's sole discretion) to secure their indemnification obligations. Adequate general liability insurance and insurance for unforeseen or catastrophic events (including normally excluded events, such as earth movement, subsidence, etc.) also shall be required. The full authorization of assessments for the GHAD provide for adequate funding of this insurance or other security.

Benefits of a GHAD

The formation and/or implementation of a GHAD provides several attractive features. Many development projects in California possess some degree of geotechnical or geologic risk. Although locations for development remain a land planning and/or public policy decision, a GHAD serves to protect against risk by acting as a form of insurance, providing a financial reserve for significant probable, yet unforeseen geologic issues. Because GHADs provide a means of documenting property conditions, maintenance, and repairs, they serve to increase long-term security of property values.

GHADs also offer an efficient mechanism to respond to foreseen or unforeseen geologic issues. Because GHADs are public entities and the GHAD Board of Directors is often composed of members of an independent legislative body, GHADs are typically administered in an independent, objective manner. All GHADs are required to have a "Plan of Control", prepared by a certified engineering geologist. The Plan of Control provides specific monitoring schedules for the preventive maintenance of GHAD improvements as well as minimizing cost uncertainty and protecting budget line items. In addition, the Plan of Control outlines how geologic events that occur are handled. GHADs can respond to emergency situations in a timely fashion because their activities are exempt from LAFCO and CEQA regulations. In carrying out their operations, GHADs enjoy significant liability protection (immunity typical of other state political subdivisions). Additionally, GHADs are an attractive administrator of common open space areas; when they own common open space, GHADs may carry out any activity typical of a prudent landowner.

FISCAL IMPACTS

As proposed, the GHAD would be a self-sustaining entity and costs for all related City staff and professional services to operate the GHAD would be recovered through the annual assessment of the property owners living within the district boundaries. No direct fiscal impacts on the City are therefore anticipated.

BACKGROUND

Siena Hill Project

The Planning Commission approved a project with a total of 32 attached residential units and a private driveway off of Keller Avenue, between Rilea Way and Greenridge Drive. On March 2, 2005, the Planning Commission approved Preliminary and Final Planned Unit Development (PUD) Permits and Minor Variances for the project. In addition, the Commission also required that a GHAD be formed in order to maintain and monitor the slope stabilization, drainage and other improvements required to mitigate potential geologic hazards. On June 1, 2005, the Planning Commission approved a Tentative Tract Map (TTM) that allows the property to be subdivided into the residential lots. The TTM included additional Conditions of Approval related to the formation of a GHAD.

Initiation of the Oakland Area GHAD

On June 20, 2006, the City Council adopted Resolution No. 79986 C.M.S. initiating the formation of the Oakland Area GHAD and setting a public hearing for July 18, 2006. Per that resolution, the Oakland Area GHAD would initially include the Siena Hill project, but would also be available for other new approved projects. Staff mailed a Notice of a Public Hearing to all owners of real property to be included within the proposed GHAD as shown on the assessment roll last equalized by Alameda County. The Notice of a Public Hearing included a copy of Resolution No. 79986 C.M.S. The notice also included the address where objections to the proposed formation could be mailed.

KEY ISSUES AND IMPACTS

Rationale for Formation of the Oakland Area GHAD for the Siena Hill Project.

Both the Planning Commission and staff believe that the GHAD is an appropriate tool to use for this project for the following reasons:

- The project includes extensive grading of the hillside
- Construction of numerous retaining walls that retain earth and stabilize the site
- Construction of walls and improvements within the public right-of-way and in access easements
- Installation of drainage improvements that affect slope stability
- A landslide was previously noted at the north-western edge of the property

Rationale for Formation of the Oakland Area GHAD for Future Development Projects

The City of Oakland has many geologic hazards within its jurisdiction. City Council has determined that it is prudent to require certain developments to be part of a GHAD. The Oakland

Area GHAD will be available for the annexation of projects that are located in areas that meet the criteria as defined in GHAD law. Staff believes that the GHAD is an appropriate tool for future projects for the following reasons:

- The City is generally bisected by the Hayward Fault and many properties are located within the Seismic Hazard Zone as delineated by the California Geologic Survey.
- The City boundaries contain soils subject to liquefaction per the California Department of Conservation, Division of Mines and Geology.
- The City boundaries contain mapped and unmapped landslides.
- Many parcels within the City are hillside properties with slope grades of 20% or more and exhibit the potential for severe soil erosion.
- Many properties require a high level of care needed to maintain and monitor the site with regard to slope stability, vegetation and fire management.
- The City needs the ability to act immediately with adequate resources should a geologic event occur.

The criteria used to determine which projects are eligible for annexation into the GHAD as Conditions of Project Approval are:

- Staff will only apply the GHAD as a condition of approval to new development projects.
 This could include residential, commercial, or industrial properties, etc. It would exclude
 the imposition of the GHAD on existing uses. However, per California Public Resource
 Section 26507, existing property owners do have the ability to petition the GHAD board
 for annexation, if they so choose.
- Staff will use the definition of a geologic hazard as provided in GHAD law. California Public Resource Section 26507 defines a "geologic hazard" as an actual or threatened landslide, land subsidence, soil erosion, earthquake, fault movement, or any other natural or unnatural movement of land or earth.
- Staff will review the technical, environmental, peer review, and other applicable report documents pertaining to the actual or threatened geologic hazard. These documents will need to specifically require a GHAD or require a greater than normal degree of construction attention, monitoring of the site, or maintenance of project improvements.
- The development project shall be 200 units or less.

PROJECT DESCRIPTION

As previously noted in the *Summary* section, GHADs are political subdivisions of the state and are formed in specific geographic areas to address potential geologic hazards. The purpose of a GHAD is to prevent, mitigate, control or abate defined geologic hazards through maintenance, improvements, or other means. Both the Siena Hill project and the City of Oakland would

benefit from the formation of a GHAD. The GHAD ensures that there are funds available to perform preventive inspections and maintenance on improvements within the GHAD boundaries. The GHAD also ensures that there are funds to address catastrophic failure of the improvements due to the defined geologic hazards. The key advantage here is that there is a documentation of the as-built conditions, a process to collect the assessments, and a GHAD Board of Directors formed with the technical and organizational resources to immediately respond to the potential or unforeseen geologic hazards.

Formation of the GHAD for the Siena Hill project and the Process for Full Implementation

On June 20, 2006, the City Council approved Resolution No. 79986 C.M.S. initiating the Oakland Area GHAD, which would initially include the Siena Hill project. That resolution merely established the legal basis required to consider the formation of a GHAD. Agencies are required to adopt that type of resolution before a GHAD is created in their jurisdiction.

The resolution now before the City Council is an action to form the Oakland Area GHAD. This is the first major step required to implement the GHAD. In forming the GHAD, the City Council will be establishing the framework for implementation and operation of the GHAD. In this way, the preliminary basis for moving forward with the GHAD is established and the Siena Hill project applicant has certainty that this tool can be relied upon to help implement the project.

The formation of the GHAD includes three actions:

- 1. Initially establish the GHAD boundaries (as presented in Attachment B to the Resolution). These boundaries follow the site boundaries for the Siena Hill project and include improvements within the access easement and right-of-way areas since these improvements are part of the proposed development.
- 2. Appoint the City Council as the GHAD Board of Directors. The Council must act as the GHAD Board, at least temporarily, because the only other alternative available is to appoint five property owners within the proposed GHAD boundaries, and there is only one owner at the present time. Further information is provided in the *Role of the City Council as the GHAD Board of Directors Section* of this report.
- 3. Accept the "Plan of Control", a preliminary plan required by state law that generally describes the monitoring and other requirements. A Plan of Control for the Oakland Area GHAD (which initially includes the Siena Hill project) dated April 19, 2006 is attached. It lays out the on-going work and monitoring that would need to be accomplished through the GHAD. This plan also describes the geotechnical hazards, their location and provides a set of measures to prevent, mitigate, abate, and otherwise control the hazards. The term "geologic hazard" means an actual or threatened landslide, land subsidence, soil erosion, earthquake, fault movement, or any other natural or unnatural movement of land or earth.

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Once the GHAD is formed, the initial Siena Hill's project applicant will work to complete the following actions:

- 1. Complete the as-built grading plans and other geotechnical requirements.
- 2. Complete the Engineer's Report, budget, and the financial analysis for the GHAD (as detailed further under the Additional Information Regarding the Formation of the Oakland Area GHAD section of this report), in compliance with the GHAD Conditions of Approval, and submit them to the City for review. These reports will provide a more specific and detailed set of information upon which to base the actual operation and work of the GHAD.
- 3. If required, the Plan of Control may be amended to reflect updated and more specific information based on the reports.

Thereafter, the GHAD Board of Directors will take the following actions:

- 1. Adopt a Resolution appointing officers of the GHAD.
- 2. Adopt a resolution accepting the GHAD budget and the Plan of Control.
- 3. Adopt a resolution of intention to order an assessment, set a public hearing on the proposed assessment, and order the notice of the levy and assessment ballots be mailed.
- 4. Conduct a public hearing on the proposed assessment and establish the levy and collection of assessments.

Annexation Process for New Development projects into the Oakland Area GHAD

Once the Oakland Area GHAD is formed, additional new development projects may be annexed to the GHAD if those properties meet the geologic hazard criteria as defined in GHAD law and the criteria established in the Supplemental Report initiating the formation of the GHAD. These projects would require annexation into the GHAD as Conditions of Approval. Furthermore, existing properties could submit a petition to annex into the GHAD. Annexation proceedings are similar to the formation procedures except that the GHAD Board of Directors acts in place of the City Council. However, the annexation must also be approved by the City Council since it initially approved the formation of the GHAD.

Annexation into the GHAD includes six actions:

1. The GHAD Board considers approving a resolution or approves a resolution to accept a petition to annex the properties into the GHAD. This resolution would also set a public hearing. If more than 50% of the assessed valuation of the property object to the proposed

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annexation, the proceedings must be abandoned. The Board authorizes the Notices of the Hearing to be mailed out.

- 2. The GHAD Board holds a public hearing regarding the proposed annexation and then closes the hearing to consider any objections received regarding the annexation. If no objections are made the GHAD Board may approve the annexation by resolution.
- 3. The GHAD Board will hold a public hearing on the amendment to the GHAD boundaries and the Plan of Control. If no objections are made, the GHAD Board may approve the amendments to the Plan of Control by resolution.
- 4. The GHAD Board will direct the GHAD Clerk to open and tabulate the assessment ballots. The GHAD Board then adopts a resolution accepting the canvass of votes.
- 5. The GHAD Board will adopt a resolution accepting the assessment and ordering the levy and collection of the assessment. The GHAD Clerk will record a Notice of Assessment where the lien will be attached to the property.
- 6. If the GHAD Board approves all of the above steps, the City Council will consider approval of a resolution accepting the annexation of the property.

Additional Information Regarding the Formation of the Oakland Area GHAD

The Role of the City Council as the GHAD Board of Directors

The GHAD establishes a new role for the Council as the GHAD Board of Directors. The GHAD Conditions of Approval (for the Siena Hill project) gives the Board full authority to ensure that all work is completed properly; that other GHAD requirements are met; that assessments are established to cover the costs and to adequately establish reserves; and to minimize potential risk of unforeseen geotechnical events. It is anticipated that other projects that meet the criteria to annex into the Oakland Area GHAD would have the same Conditions of Approval applied to those projects. Specifically the role of GHAD Board of Directors includes:

- 1. Overseeing the financial aspects of the GHAD, including the establishing the rate of property assessment, adopting a budget, etc.
- 2. Hiring professionals to run the GHAD and monitor all activities and their effectiveness.
- 3. Deciding annually the work program and activities of the GHAD.
- 4. Responding to any problems that arise and directing appropriate resources to resolve the problems.

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Engineer's Report

Submission of an Engineer's Report is required as part of the GHAD. This report, along with all the other geotechnical and other analysis required by the City, will enable a specific set of measures to be developed for ongoing maintenance, monitoring, and inspection. It will be one of the key sources of information upon which the GHAD operating and reserve budgets will be based. In addition, consistent with other, similar requirements for the GHAD, the Engineer's Report will be prepared by a licensed geotechnical engineer with full consideration of the state requirements and site geotechnical conditions. The report will build on the site specific geotechnical analyses already completed for the site and the project. Both City staff and outside professional review will be undertaken to ensure that the final work program for the GHAD minimizes, to the maximum extent feasible, any risk of geotechnical problems or failure.

Under recommendations contained in the GHAD resolution, the GHAD Board of Directors, at their sole discretion, will have the final authority to review and approve the report, along with the operating budget, and the maintenance and monitoring plan developed from this report.

A project that is annexed into the GHAD will require its own Engineer's Report. In addition, the existing GHAD Engineer's Report will be amended to include the specific set of measures for ongoing maintenance, monitoring, and inspection for the new project annexing to the GHAD.

GHAD Budget, Reserves, and Financial Analysis

Under the requirements established in the Conditions of Approval for the Siena Hill project (PUD: COA 24 and TTM: COA 8), the project applicant is required to fund the initial amount of reserves. In addition, (PUD: COA 24 and TTM: COA 8) requires that the GHAD budget must separately identify the projected costs associated with the 1) geotechnical slope stability maintenance work; 2) drainage facilitates including the storm inlets, drainage ditches, and detention basin operation and maintenance; 3) storm water quality maintenance; and 4) a reserve fund. As part of the initial budget submittal, staff also recommends that a pro forma financial analysis be included which would set forth revenue and expenditure projection, the amount of reserves that are projected to be established over time, and an assessment of the type and amount of bonding capacity that could be relied upon in the event of an emergency. The City, acting as the GHAD Board, will have the sole authority and discretion to set the amount of reserves and establish the assessment.

It is anticipated that other projects that meet the criteria to annex into the Oakland Area GHAD would have the same Conditions of Approval requiring the project applicant to fund the GHAD. The new project will require its own budget, which separately identifies the project costs for maintenance, monitoring, and prevention.

Plan of Control (Management Plan) for the GHAD

A Plan of Control is required for the GHAD which would include a scope of work for implementing the actual work of the GHAD, including repair, maintenance, replacement, monitoring, and inspection of all facilities that fall under the GHAD. Emphasis is placed on preventative maintenance and inspection. For example, establishing periodic inspections of storm drains, drainage ditches, seasonal inspections (prior to the rainy season), and monitoring earth movement. As with the Engineer's Report, this Plan of Control will be a key source of information upon which both the operating budget and reserves for the GHAD are established.

Initially the Plan of Control would only include a scope of work associated with the Siena Hills Project. Under the requirements set forth in the Conditions of Approval for the Siena Hill project (PUD: COA 24 and TTM: COA 8), the Plan of Control must include both on-going maintenance activities as well as a plan for unexpected maintenance and events. As other projects are approved that meet the criteria for annexation into the GHAD, similar Conditions of Approval will be applied requiring amendments to the existing Plan of Control. This would occur during the annexation process as described above.

GHAD Operation During Project Construction

As established in the GHAD requirements for the Siena Hill project, the GHAD will be formed and operating prior to the approval of the first final subdivision map (i.e. sale of a parcel for residential). This ensures that the GHAD is established and operating with adequate reserves prior to the sale of the property for development. No later than the completion of grading work for the preparation of site development, the project applicant would be financially obligated to provide an initial reserve for the GHAD and assume all responsibility for all geotechnical work related to the GHAD. As noted previously, both the amount of the initial reserve and the time period for responsibility for the geotechnical work would be solely determined by the City.

Thereafter, the GHAD would be funded through annual assessments from the property owners (who would be subject to the assessment upon the City issuing an occupancy certificate for the unit), as well as the project applicant during the construction period.

ENVIRONMENTAL DETERMINATION

GHAD formations are exempt from the environmental review requirements of the California Environmental Quality Act (CEQA) pursuant to California Public Resource Code Section 26559 (GHAD law that specifically exempts the application of CEQA to GHADs).

SUSTAINABLE OPPORTUNITIES

The consideration of a GHAD, in and of itself, does not present sustainable opportunities.

<u>Economic:</u> Economically, the GHAD will assure the appropriation of adequate resources to manage potential geotechnical, drainage, and other problems. Furthermore, the GHAD will ensure that the required services are provided in a responsible manner for those properties within the district.

<u>Environmental</u>: The GHAD's purpose is to prevent, mitigate, control or abate defined geologic hazards through maintenance, improvements, or other means. These geologic hazards include landslides, mudslides, steep slopes, and soil erosion all of which could impact Oakland's creeks, riparian corridors, native plant communities, wildlife habitat, and water quality. The GHAD ensures that there are adequate resources to address these problems.

<u>Social Equity:</u> All properties deemed to exhibit potential geologic hazards could request to annex into the GHAD. However, the GHAD requires field-verified geologic mapping, detailed as-built construction documents, and an assessment from the property owners that may discourage many economically disadvantaged properties from joining the GHAD.

However, the GHAD will mitigate or minimize environmental impacts on Oakland's creeks, plant and wildlife communities, and water quality, thereby serving to create a safer environment for all of Oakland.

DISABILITY AND SENIOR CITIZEN ACCESS

The formation of the GHAD will not directly affect accessibility for people with disabilities or senior citizens. Any new development in the area would be subject to the Americans with Disabilities Act (ADA), as provided for in the Uniform Building Code (UBC), and in Title 24 of the California State Code.

ACTION REQUESTED OF THE CITY COUNCIL

Planning and Zoning staff recommends that the City Council hold a public hearing and take any testimony concerning the formation of the Oakland Area GHAD. After the close of the public hearing, staff recommends that the City Council adopt the resolution entitled: Resolution Approving the Formation of the Oakland Area Geologic Hazard Abatement District (GHAD) and Appointing the City Council of the City of Oakland as the GHAD Board of Directors.

Respectfully submitted,

CLAUDIA CAPPIO
Development Director

Community & Economic Development Agency

Reviewed by:

Gary Patton, Deputy Director of Planning Planning & Zoning Division

Prepared by:

Heather Klein, Planner III Planning & Zoning Division

APPROVED AND FORWARDED TO THE

COMMUNITY AND ECONOMIC DEVELOPMENT COMMITTEE:

OFFICE OF THE CITY ADMINISTRATOR

ATTACHMENTS:

A. Legal Opinion on liability Issues regarding the Leona Quarry GHAD

B. Oakland Area GHAD Plan of Control



ONE FRANK H. OGAWA PLAZA • 6TH FLOOR • OAKLAND, CALIFORNIA 94612

Office of the City Attorney John A. Russo City Attorney (510) 238-3601

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(510) 238-6500

December 3, 2002

TTY/TDD: (510) 238-3254

HONORABLE CITY COUNCIL Oakland, California

President De La Fuente and Members of the City Council

Subject:

Liability Issues – Leona Quarry Geologic Hazard Abatement District

I. INTRODUCTION

At the November 19, 2002 Community and Economic Development Committee meeting, Councilmember Brunner asked that the City Attorney's office provide a written opinion regarding (1) the extent of City liability associated with the proposed Geologic Hazard Abatement District ("GHAD") for the Leona Quarry project; and (2) measures to ensure that the City and individual council members are fully indemnified and otherwise protected from liability that may be associated with the GHAD. This office also was asked whether the GHAD governing structure could be established so that landowners (rather than the City Council) would serve as the GHAD Board of Directors or assume positions as the Board of Directors for the GHAD at some later time.

Please note that this opinion does not address the validity of the Planning Commission approvals or of the CEQA document prepared for this project.

II. QUESTIONS

- 1. What is the potential liability of the City and individual Council members if the City Council approves the staff proposal that the City Council serve as the Board of Directors for the proposed Leona Quarry GHAD?
- 2. Could the GHAD Board consist entirely of landowners at the outset or, alternatively, could the GHAD be structured so that the City Council would serve as the GHAD Board for a finite period of time (e.g., until the first lots are sold) and the landowners would serve as the Board of Directors thereafter?

S-9-1 ORA/City Council December 3, 2002 Honorable City Council December 3, 2002 Page 2 of 12

3. What legal measures would ensure that the City and/or individual Council members are fully indemnified and otherwise protected from liability that may be associated with the GHAD?

III. SUMMARY OF ANSWERS

Answer to Question No. 1

We have found no cases that address this issue with respect to GHADs; therefore we cannot say with absolute certainty that a court would never rule that the City is responsible for the GHAD's liabilities. However, because a GHAD is an independent governmental district, legally distinct from the City, the City should not be liable for the GHAD actions/inactions that are independent of the City. The potential risks of City liability would increase to the extent that the City undertakes GHAD-related functions.

Recommendation: If the Council ultimately decides to form the GHAD as proposed by staff, the City Attorney's Office recommends that the GHAD formation resolution and conditions of approval specify that the GHAD will be responsible for hiring its own staff (or contract with non-City parties), including all workers who will undertake operation, maintenance, replacement, repair and other activities, and that no City employees shall be relied upon to perform such services. The GHAD operations should be completely independent of the City, including, without limitation, no City funding, administration or ownership of facilities or improvements. In addition, adequate funding for these costs must be fully provided for in the GHAD budget and in the assessment authorization.

Answer to Question No. 2

By definition, a GHAD board consists either of five landowners or the City's governing body. At this juncture, one landowner owns all of the land in the project area and, therefore, could not serve as the Leona Quarry GHAD Board. The GHAD enabling statute, which provides the exclusive means for formation of GHADs, does not provide a mechanism for, nor appear to authorize, the transfer of Board membership from the City Council to landowners. Based on our review of the GHAD Statute, the City Attorney's Office believes that the GHAD governing structure cannot be established so that the City Council acts as the initial Board of Directors and transfers those positions to landowners at some later time,

Recommendation: As a policy matter, the Council must decide whether the risk of liability associated with the GHAD is outweighed by the benefits associated with approving the project. Because the CEQA document and Planning Commission project approvals depend upon the GHAD, the project could not go forward at this time if a GHAD is not formed.

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Answer to Question No. 3

By its essential nature, any GHAD is exposed to potential liability. This would be of significant concern if the potential liability were ever imputed to the City. At this juncture, it is not possible for this office to ascertain the full extent of potential exposure posed by the GHAD. Ultimately, the feasibility and safety of the project, and the attendant liability risks, depend largely on the accuracy and detail of the engineering, design and other technical information and specifications. Some of this information has been completed, but additional engineering, design and other technical data will be prepared as and when the project proceeds. The information developed in this process must be scrutinized by technical experts who are both qualified and independent from the applicant.

Recommendation: If the Council decides to form the GHAD, we recommend that the GHAD formation resolution and conditions of project approval incorporate additional indemnification provisions and require insurance or other security in amounts that would cover any potential City liability. It is critical to require insurance or other security, because indemnification is only effective to the extent that the indemnitor has adequate resources to cover the indemnitee's costs. As noted above, this Office does not have the expertise to determine the extent of such potential liability and therefore must rely upon the evaluations and analyses of technical and insurance experts. As discussed below in Section V(C) of this report, indemnification and insurance will help mitigate the City's potential exposure. However, as in many ventures, indemnification and insurance will not completely insulate the City from liability.

IV. BACKGROUND

The Leona Quarry project proposes construction of a 477 unit residential development on a 128-acre active quarry site. The project includes extensive reclamation, restoration and revegetation of the quarry site, involving re-engineering of slopes and stabilization of slope areas along the western edge of the project site.

After an intensive EIR process extending over approximately an 18-month period, on October 23, 2002, the Planning Commission certified the EIR and approved land use entitlements for the project. The conditions of approval that the Planning Commission adopted include provisions for (1) project applicant indemnification of the City for challenges associated with the project approvals; (2) project applicant indemnity of the City for claims arising from project implementation, except for public improvements when the claims arise after City accepts the improvements.

The Planning Commission conditions further direct the City staff to evaluate the possibility of long-term developer indemnity for problems that arise *after* the project is complete and developer has moved on.

V. DISCUSSION

A. ISSUES WITH THE GHAD STRUCTURE AND GOVERNANCE

1. GHAD Nature and Function.

A GHAD is an independent governmental district formed specifically to address geologic and related issues. A GHAD is responsible for routine maintenance of the common areas, including planting and restoring vegetation, monitoring sensitive areas, clearing ditches and drains, and other activities intended to mitigate the potential for geologic hazards. GHADs also are responsible for remediation of geologic hazards.

GHADs are authorized by state law, Public Resources Code § 26500, et seq. (the "GHAD Statute"). There are very few court decisions that provide guidance regarding GHADs, their structure, authority, and liability issues associated with them.

A GHAD has been proposed for the Leona Quarry area because it is anticipated that a GHAD would be more effective than a homeowners' association to address the geologic hazards associated with development of this site. In the absence of a GHAD, the common areas for a project of this nature ordinarily would be owned and maintained by a homeowners' association established through the subdivision process.

It should be noted that the original legislative intent behind the GHAD Statute was to provide a mechanism for landowners to abate an immediate hazard threatening an existing neighborhood. Given the paucity of legal guidance, a reviewing court likely would look to legislative history in interpreting the GHAD Statute. It is our understanding that the increased use of GHADs for newly-formed and, as yet, unoccupied subdivisions is a relatively recent development in GHAD law, and one which was not necessarily contemplated by the original GHAD legislation. However, there are a number of such GHADs in Northern California, and we are not aware of any challenge to such a use of the GHAD law.

In terms of addressing geologic hazards, GHADs have certain distinct advantages over homeowners' associations. These include:

- GHADs are public agencies operated for the sole and specific purpose of addressing
 geologic and related issues. A homeowners' association generally addresses a variety of
 neighborhood concerns but does not have any specific expertise or authority to manage a
 geologically sensitive area.
- GHADs have numerous powers to enable them to quickly and effectively address geologic issues. These include powers to assess landowners (in accordance with

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Proposition 218) for the acquisition, operation and maintenance of improvements acquired under the GHAD Statute, and the powers of eminent domain.

- The GHAD Statute requires that a GHAD have a "Plan of Control," prepared by a certified engineering geologist, which is implemented by the GHAD to prevent hazards resulting from earth movement. A homeowners' association is not obligated to prepare or implement a Plan of Control and frequently does not have the expertise or resources necessary to do so.
 - 2. The GHAD Statute Specifies That Either The City Council Or Five Landowners Shall Act As The GHAD Board Of Directors But Does Not Authorize Transfer Of Board Membership From The City Council To Property Owners

If the City Council decides to form the proposed Leona Quarry GHAD, the GHAD Statute requires that the resolution of formation appoint a Board of Directors. The statute specifies that the resolution ordering formation of a GHAD shall appoint an initial Board of Directors. Pub. Res. Code § 26567. The statute specifies that this initial Board shall either be five property owners within the district or the legislative body itself (i.e., the City Council). If five property owners are appointed, they are appointed for an initial term not to exceed four years, after which time, the directors shall be elected by the landowners.¹

The GHAD Statute establishes the exclusive means for formation and governance of GHADs. Pub. Res. Code § 26560. The formation provisions of the statute are the only provisions that address the composition of the Board. The GHAD Statute does not authorize any configuration of Board membership other than five property owners or the City Council. It also does not expressly authorize the transfer of Board functions from the City Council to the property owners subsequent to GHAD formation. Although an argument could be advanced that a decision to shift governance is within the inherent powers of the district to restructure the Board, the exclusivity of the GHAD provisions for district formation undermine such an interpretation.

Under the current proposal, the City Council would serve as the Board of Directors for the Leona Quarry GHAD. Staff has proposed City Council governance of the GHAD, in part, because this approach would provide the City with more power to properly manage geologic and drainage hazards. In addition, the only statutorily authorized alternative form of governance—appointing a Board of five landowners—is currently unavailable, because there is only one landowner within the proposed GHAD boundaries.²

We understand that in the early years following enactment of the GHAD Statute, districts ordinarily were governed by property owners. There is a trend toward city councils and county boards of supervisors assuming the role of GHAD board.

² It is our opinion, as well as the opinion of the applicant's counsel, that the legality of appointing a landowner GHAD board consisting of less than five members is unclear and, therefore, inadvisable.

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As discussed below, however, this approach poses certain risks, which the City Council must weigh against the benefits.

3. The City is a Separate Legal Entity from the GHADs, and, Provided that the GHAD Functions are Truly Separate from the City, the City Should Not Be Liable for the GHAD's Actions/Inactions.

A GHAD is a separate political subdivision of the state, not an agency or instrumentality of the city or county in which it is formed. Pub. Res. Code § 26570. Accordingly, even if the City Council sits as the Board of Directors of the GHAD, the City generally would not be liable for actions or inactions of the GHAD or its Board.

In analyzing the extent of the City's potential liability associated with the GHAD, we have reviewed case law that addresses the question of the liability of a governmental body, such as the City Council for the liabilities of another governmental body that the Council forms.³ In general, the question of liability of such separately formed bodies hinges on the extent to which the separately formed body is truly separate and distinct from the body that created it, or as one court put it, whether or not the one entity enjoys a "legal personality" separate from the body that formed it. Bauer v. County of Ventura, 45 Cal. 2d 276 (1955).

A reviewing court looks not only at the City Council's action to form the GHAD but at the true independent nature of the entity. An entity's independence is determined from such factors as: (1) whether there is an express statutory declaration that the entity is a body corporate and politic; (2) whether the entity has a separate governing body; and (3) whether it has the statutory power to own property, levy taxes, or incur indebtedness in its own name.

If the City Council established a landowner managed GHAD that does not rely on City resources for operation, maintenance, repair or any other functions, we believe there is a strong likelihood that the City would be shielded from GHAD liability. First, as noted above, the GHAD Statute specifies that a GHAD is a political subdivision of the state and is not an agency or instrumentality of a local agency. Second, the GHAD's governing body would be completely independent of the City. Finally, the GHAD would have statutory power to own property, levy assessments and incur indebtedness in its own name and, additionally, would enjoy independent powers of eminent domain.

However, if the City Council elects to manage the GHAD, it is not clear that the City would be shielded from liability. Although the GHAD would have an express statutory declaration that it is a separate body corporate and politic and would have statutory powers to

³ As noted above, there is very little case law on GHADs, and this Office's research has revealed no cases interpreting the specific questions of City or individual public official liability associated with GHADs.

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own property, levy taxes, incur indebtedness and exercise eminent domain powers, its independence with respect to governance would not be as clear as that of a landowner managed GHAD.

City/GHAD independence may become even murkier over an extended period during which the City Council manages the GHAD. For example, the extent to which (1) the City Council includes City staff in the activities of the GHAD, (2) the Council enforces City policies through the meetings and activities of the GHAD, and (3) City/GHAD functions are interwoven will affect the likelihood that a court would conclude these entities are "independent." Over time, the more that a City Council managed GHAD takes on trappings of a City run affair, the greater the probability that any protection the City obtains by creating an independent government body could be eroded.

In addition, as is the case with any other development, it should be noted that the City itself will assume potential liability risks to the extent that it accepts public improvements and/or undertakes operation, maintenance, replacement or repair functions in connection with the project that are not the responsibility of the GHAD. For example, similar to other hillside development, the City's acceptance of public streets, drainage facilities or other improvements associated with the project could expose the City to potential liability

In essence, the extent of City liability increases in proportion to the amount of control and involvement it has with the GHAD. From a legal perspective, it would be advisable to minimize the City's control and involvement. In terms of the City's potential liability, it appears to be more advantageous to form the GHAD as a landowner-managed entity, rather than designating the City Council as the Board of Directors. We recognize, however, that potential liability is not the only factor the Council will consider, and, as discussed below, there are potential ways to reduce substantially (but not eliminate) some of the risks through indemnity and insurance.

If the Council ultimately decides to form the GHAD as proposed, we recommend, at a minimum, specifying in the GHAD formation resolution that the GHAD will be responsible for hiring its own staff, including all workers who will undertake operation, maintenance, replacement, repair and other activities, and that no City employees shall be relied upon to perform such services. In addition, adequate funding for any such staffing must be fully provided for in the GHAD budget and in the authorization of assessments that must occur prior to the filing of any division of the property (i.e., final subdivision maps).

B. POTENTIAL BASES OF LIABILITY ASSOCIATED WITH THE GHAD

1. GHAD Liability

By its essential nature, any the GHAD will be exposed to potential liability. This would pose significant concerns if the liability ever were imputed to the City or the Council. A primary purpose of GHADs is to facilitate mitigation of hazardous geologic conditions by spreading the

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costs (and associated risks) of prevention and remediation of such hazards across the ownership of the GHAD area.

The GHAD will be accepting a number of improvements within the open space areas of the project site, including restored slopes, drainage improvements and the detention basin. It also will have an array of on-going maintenance and monitoring responsibilities for these improvements. There are a host of unknown liability risks associated with these improvements, and with the project generally, which largely will be assumed by the GHAD.

Potential sources of liability include tort or negligence claims associated with construction, operation, maintenance or repair of improvements owned by or otherwise undertaken by the GHAD. There are a number of governmental immunities available for such claims, which may limit City (and GHAD) liability in connection with such claims. For example, the City is immune from liability associated with the decision to form or not to form a GHAD. Government Code § 818.2 (public entities immune from liability for adopting, or failing to adopt, an enactment (including an ordinance or resolution), or failing to enforce any such law. See also Bogan v. Scott-Harris, 523 U.S. 44 (1998) (local legislators are entitled to absolute immunity for their legislative activities).

In addition, there is potential GHAD liability for inverse condemnation. Such claims commonly arise as a result of landslides, drainage failures and similar problems. Generally, if a public work or improvement is a substantial factor in causing damage to a private property, the public entity will be strictly liable (i.e., liable without regard to fault or the reasonableness of its improvement). In such cases, the fact that an improvement (such as a drainage line, culvert, roadway, etc.) was actually constructed by a private party will not insulate a public entity if the system has been adopted for use by the public entity.

2. The Full Extent of Potential Liability Cannot Be Ascertained At this Time.

The full extent of potential exposure posed by the GHAD depends heavily upon the determinations of engineers and other technical experts regarding the feasibility and safety of the project. Accordingly, attendant liability risks depend largely on the accuracy and detail of the technical information provided to date and that will be developed in the future. The GHAD Plan of Control, as currently proposed, is very general and does not provide details regarding the relationship of the City and GHAD with respect to property ownership. It is our understanding that these details will be developed at later stages of the project, through amendments to the Plan

A detailed analysis of such immunities is outside the scope of this memorandum.

Similarly, the City is immune from liability for injury resulting from the issuance or denial of permits relating to the project. Goy't Code § 818.4.

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of Control and development of more detailed management plans. Once these details have been further developed, it may be possible to provide a more specific risk analysis.

3. Individual Councilmembers, Sitting As The GHAD Board, Are Generally Immune From Liability

Individual members of the City Council, sitting as GHAD Board, generally should not be personally liable for GHAD actions/inactions. As is the case with individuals sitting as members of a city council, there are a number of immunities that apply to claims against individuals (whether councilmembers or landowners) that serve on the board of a GHAD or other public entity. As noted above, there is broad immunity for claims based on legislative actions/inactions. Government Code § 818.2. In addition, Government Code section 820.9 provides that city councils, mayors, school boards or members of governing boards of local public entities "are not vicariously liable for injuries caused by the act or omission of the public entity or advisory body." The only limits of this immunity are liability for "that individual's own wrongful conduct." This immunity should protect individual GHAD Board members from liability associated with the GHAD, whether they are members of the City Council or landowners.

C. ISSUES REGARDING INDEMNITY AND INSURANCE

Recognizing that it is not possible to eliminate all potential risk to the City, we have explored options for indemnity and insurance to recommend as additions to the indemnity provisions already contained in the Planning Commission adopted conditions of project approval.

Although we can draft and recommend these requirements, they cannot entirely immunize the City against all potential risk, nor can they account for all unknown potential sources of liability. All development projects present some measure of risk, and, as discussed above, the greater the City's degree of involvement or control, the greater the possibility that some liability will be incurred.

For example, we have been asked about the feasibility of requiring the applicant (and its successors) to indemnify, defend and hold harmless the City for liability associated with the GHAD and development in Leona Quarry. Although we recommend the addition of further indemnification provisions, it should be noted that there are some limitations on any such indemnity. First, indemnity is only as effective as the indemnitor—i.e., if the applicant lacks sufficient funds to indemnify or if the claims arise subsequent to completion of the project (i.e., once the applicant has moved on), an indemnity will have no practical value. Second, it is unclear whether such an indemnity could remain in place in perpetuity. Thus, the practical difficulties with this approach are (1) identifying an acceptable duration for this obligation; and (2) securing performance, especially after the project is complete.

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We also have considered the possibility of requiring the applicant and the GHAD to obtain insurance to secure performance and indemnify the City in the event of financial shortfalls (such as might be associated with a catastrophic event). Although we see this as an area of potential promise, it is unclear whether an adequate amount of insurance could be identified or obtained. While no insurance for GHADs currently is available, we believe such policies are under development in other jurisdictions.

Recognizing these limitations, we believe indemnity and insurance requirements can greatly increase the City's protection; accordingly, if the Council decides to form the GHAD, we recommend adding such provisions to the GHAD formation resolution and/or project conditions of approval. Specifically, we recommend requiring the project applicant to indemnify the City and the GHAD until the GHAD has sufficient funding to enable it to indemnify the City. The GHAD also should be obligated to indemnify the City for the duration of its existence. Both the applicant and the GHAD should be required to carry insurance (if and when available), or other security determined adequate (in the City's sole discretion) to secure this obligation and to provide for any financial shortfalls. Adequate general liability insurance and insurance for unforeseen or catastrophic events also should be required.

The full authorization of assessments for the GHAD must provide for adequate funding of the indemnity and insurance requirements, and a thorough financial analysis (as well as a Proposition 218 analysis by the City Attorney's office) must be prepared prior to such authorization to ensure that the assessments are sufficiently high to cover these and other GHAD financial requirements. The City should retain the authority to suspend the project if the insurance or other security is not provided prior to the first final subdivision map, or at any time thereafter if at any time the City determines the security is inadequate.

We will provide specific recommended language for these conditions, which should be incorporated into the formation resolution and project conditions of approval, at the December 3, 2002 City Council hearing.

VI. CONCLUSION AND RECOMMENDATIONS

The City Council's decision to form a GHAD and appoint the Council as the GHAD Board of Directors creates some risks of potential liability. At this juncture, there is no alternative form of governance than to appoint the City Council as the GHAD Board, because there is only one landowner within the proposed GHAD boundaries. The law does not provide a mechanism for shifting Board membership from the Council to the landowners.

⁶ Again, the GHAD's indemnification of the City is only as effective as the funding that supports it.

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The City's risk hinges upon the degree to which the GHAD is truly independent of the City. The Council must weigh the risks against the project benefits in reaching its decision regarding whether to form the GHAD.

If the Council ultimately decides to form the GHAD as proposed, we recommend the inclusion of the following conditions of approval, the specific language of which will be developed for inclusion in the formation resolution and/or project conditions of approval (as appropriate) and provided at the December 3, 2002 City Council hearing on GHAD formation:

- The GHAD will be responsible for hiring its own staff (or contracting with non-City parties), including all workers who will undertake operation, maintenance, replacement, repair and other activities, and that no City employees shall be relied upon to perform such services for GHAD facilities and improvements. The GHAD operations should be completely independent of the City, including, without limitation, no City funding, administration or ownership of facilities or improvements. In addition, adequate funding for these costs must be fully provided for in the GHAD budget and in the authorization of assessments that must occur prior to the filing of any division of the property (i.e., final subdivision maps).
- The project applicant shall indemnify the City and the GHAD until the GHAD has sufficient funding to enable it to indemnify the City. The GHAD also should be obligated to indemnify the City for the duration of its existence.
- Both the applicant and the GHAD should be required to carry insurance (if and when available), or other security determined adequate (in the City's sole discretion) to secure their indemnification obligations. Adequate general liability insurance and insurance for unforeseen or catastrophic events (including normally excluded events, such as earth movement, subsidence, etc.) also shall be required. The full authorization of assessments for the GHAD provide for adequate funding of this insurance or other security.
- The full authorization of assessments for the GHAD must provide for adequate funding of the indemnity and insurance requirements, and a thorough financial analysis (as well as a Proposition 218 analysis by the City Attorney's office) must be prepared prior to such authorization to ensure that the assessments are sufficiently high to cover these and other GHAD financial requirements.

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• The City should retain the authority to suspend the project if insurance or other security determined by the City Attorney and Risk Manager is not provided prior to the first final subdivision map, or at any time thereafter if at any time if the City determines the security is inadequate.

Respectfully submitted,

JOHN A. RUSS

Attorney Assigned: Heather B. Lee



Project No. 6964.1.001.01

May 9, 2006

Mr. Ed Patmont Hillside Homes Group, Inc. 184 Rudgear Drive Walnut Creek, CA 94596

Subject:

Oakland Area Geologic Hazard Abatement District (GHAD)

Oakland, California

CERTIFIED ENGINEERING

GEÓLÓGIS1

GEOLOGIC HAZARD ABATEMENT DISTRICT (GHAD) PLAN OF CONTROL

Dear Mr. Patmont:

ENGEO Incorporated is pleased to present this Oakland Area Geologic Hazard Abatement District (GHAD) Plan of Control.

We are pleased to be of service to you on this project. If you have any questions concerning the contents of our report, please do not hesitate to contact us.

Very truly yours,

ENGÉO INCORI

Eric Harrell, CEG

Reviewed by:

Uri Eliahu, l

ATTACHMENT B

GEOLOGIC HAZARD ABATEMENT DISTRICT (GHAD) PLAN OF CONTROL

OAKLAND AREA GHAD OAKLAND, CALIFORNIA

SUBMITTED

TO

HILLSIDE HOMES GROUP, INC.

WALNUT CREEK, CALIFORNIA

PREPARED

BY

ENGEO INCORPORATED

PROJECT NO. 6964.1.001.01

MAY 9, 2006

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Exhibit C Retaining Walls Outside of Project Area



I. AUTHORITY AND SCOPE

The Oakland Area Geologic Hazard Abatement District ("GHAD" or "District") is proposed to be formed under authority of the California Public Resources Code (Division 17, commencing with Section 26500).

Section 26509 of the Public Resources Code requires a Plan of Control, prepared by a State-Certified Engineering Geologist, as a prerequisite to formation of a GHAD. Pursuant to Section 26509, this Plan of Control was prepared by an Engineering Geologist certified pursuant to Section 7822 of the Business and Professions Code and describes, in detail, the geologic hazards, their location, and the area affected by them. It also provides a plan for the prevention, mitigation, abatement, or control thereof.

As used in this Plan of Control, and as provided in Section 26507, "geologic hazard" means an actual or threatened landslide, land subsidence, soil erosion, earthquake, fault movement, or any other natural or unnatural movement of land or earth.

Property Identification

The proposed GHAD boundary is shown in Figure 1. The GHAD area includes the areas within the proposed Siena Hill project. The legal description of the land to be included within the Siena Hill GHAD is included in Exhibit A.



II. BACKGROUND

The Siena Hill property is located at Keller Avenue and Greenridge Drive in Oakland, California. The irregularly shaped site has approximately 950 feet of frontage on Keller Avenue and extends approximately 250 feet in width. Prior to the grading activities, elevations ranged from a low of about 340 feet above mean sea level (msl) near Keller Avenue to a high of about 450 feet above msl in the most elevated portion of the site.

Proposed Development

A Geotechnical Investigation was completed by Gary E. Underdahl (2001) for the Siena Hill site. Geotechnical corrective recommendations provided in this report have presumably been incorporated into plans prepared by A.C.K. Engineering and Surveying dated March 3, 2005. Current grading plans for the Siena Hill project show a total of 32 multi-family residential lots. The building pads and streets will be developed with cuts of up to about 30 feet, and placement of engineered fill up to approximately 15 feet thick from the original grade. To establish building pads, a number of retaining walls are planned for the site. Final grading work at the site will have been completed prior to acceptance of the property by the GHAD.

Easement and Keller Avenue Right of Way

As part of the proposed development, retaining walls and appurtenant drainage facilities are to be constructed within an off-site easement (Easement) and within the Keller Avenue right-of-way (Right-of-Way). Although these areas are located outside of the property boundary, the GHAD will be responsible for the maintenance of the retaining walls and appurtenant drainage facilities, as they directly benefit the Sienna Hill project. The legal description of the Easement and a depiction of the retaining walls outside of the property are presented in Exhibits B and C, respectively.



The GHAD is charged with responsibilities that relate to the prevention, mitigation, abatement, or control of geologic hazards, which includes the maintenance of facilities that enhance geologic as well as hydrogeologic stability such as drainage facilities and associated improvements. This may include the monitoring and maintenance of drainage facilities which, if subject to improper care, could result in decreased slope stability, the prime concern of the GHAD. As currently planned, the drainage facilities to be maintained by the GHAD include Best Management Practice (BMP) water quality treatment facilities and filter systems, concrete-lined drainage ditches, storm drain facilities, and drain inlets.

The GHAD will mitigate or abate landslide or erosion hazards that could directly affect improved, developed, and accepted properties (as defined in Section VII) within the project, in accordance with Section VI. The GHAD will also perform maintenance of water control and conveyance facilities.



III.SITE GEOLOGY

Geologic Setting

The Siena Hill property is located within the Coast Ranges geologic province of California, a series of northwest-trending ridges and valleys. Bedrock in the province has been folded and faulted during regional uplift beginning in the Pliocene period, roughly 4 million years before present. According to a geotechnical investigation report prepared by Gary E. Underdahl (2001), the Siena Hill property is situated on geologically young volcanics, labeled as Leona Rhyolite (Radbruch (1969), Dibblee (1980) and Crane (1988)). The bedrock strength of the formation reportedly varies considerably in strength and hardness. Nilsen (1975) has mapped the site as rock and colluvial-filled swales. The Nilsen map reportedly identifies colluvium and numerous landslides on adjacent hillsides and swales.

Geologic Units

The geologic units mapped on the site include bedrock and surficial deposits consisting of artificial fill, topsoil, and colluvium that are described below. The fill and topsoil geologic units were described in the Underdahl (2001) geotechnical investigation report.

<u>Artificial Fill</u>. The upper soil in the central swale is a well-compacted fill. The fill is composed of a gravelly silt or clay or silty gravel, with the gravel consisting of sandstone and shale rock fragments.

<u>Topsoil</u>. The natural layer, under the fill, is a firm and dry sandy clay topsoil, ranging from 6 to 18 inches in thickness. The topsoil is moderately to highly plastic and probably highly expansive. Sand and gravel content is relatively high.



<u>Colluvium</u>. Mantling the unquarried bedrock and filling swales are colluvial deposits. These sediments are derived from weathering of the underlying bedrock and consist mostly of silty clay. This material generally is moderately expansive and has low strength. Where colluvium is located on sloping ground, it may be characteristically unstable. Within swales, the colluvial deposits tend to be relatively thicker and may be subject to flow or slip downslope.

Groundwater

Groundwater was not encountered during the field investigation performed by Underdahl. Fluctuations in groundwater levels may occur seasonally and over a period of years because of precipitation, changes in drainage patterns, irrigation and other factors. Future irrigation may cause an overall rise in groundwater levels.

Seismic Sources

No faults are have been mapped as crossing the site (Underdahl, 2001). The nearest State of California-zoned, active¹ fault is the Hayward fault located about 350 feet southwest of the site. As discussed in the geotechnical investigation, there is a high probability that the site and any improvements will be subject to strong ground shaking and some deformation of the site slopes during the lifetime of the project.

¹ An active fault is defined by the State Mining and Geology Board as one that has had surface displacement within Holocene time (about the last 10,000 years) (Hart, 1994). The State of California has prepared maps designating zones for special studies that contain these active earthquake faults.



IV. GEOLOGIC HAZARDS

The following geologic hazards were identified for the Property in the previous site studies and are expected to remain to some extent after site grading has been completed.

- Slope instability
- Seismically induced ground shaking

Slope Instability

Earth stability is the GHAD's prime geotechnical concern at this site. This is not unique to this project, but is of importance for hillside projects in the San Francisco Bay Area. This section describes several types of slope instability which are within the GHAD's responsibility, subject to the provisions of Sections VI and VII.

Landslides are a common geologic phenomenon and are part of the process of mass wasting. Weathered or fractured bedrock and soil are transported downslope over geologic time as a result of gravitational and hydrostatic forces. Landslides and earth movement in this bedrock formation are typically rotational slumps and earthflows. Depth of movement is typically about 10 to 30 feet below the ground surface. Earthflows are confined to the upper 3- to 5-foot-thick clayey soil mantle. In the winter rainy season, these earthflows can move at a rate of several feet per day.

A landslide is a deposit of soil and/or bedrock moving downward from its original position under the influence of gravity. Landslides include a variety of morphologies and are further defined by type of materials, wetness, and mode of movement. They can consist of mass movements of earth materials that are primarily intact, and occur along discrete shear surfaces. These surfaces (shear or slip planes) can be rotational (conchoidal or concave), such as for earth slumps, or planar, as for translational earth slide or bedrock block slides. Most landslides are truly



"complex landslides", sliding, falling and flowing with more than one type of movement and/or material. According to the Underdahl report, numerous landslides have been mapped on hillsides and within swales adjacent to the Siena Hill property. Additionally, a small landslide area is mapped by Nielsen (1975) near the north boundary of the property (DMA, 2006).

Falls are an abrupt free-fall of earth materials off cliffs, steep cuts, or steep stream banks while earthflows are mass movements of earth materials in which the type of movement is one of flowing. When composed of soil finer than gravel size, the flowing material is commonly called a mudflow. A debris flow/debris avalanche is composed of natural earth materials, artificial fill, and/or organic debris which flow downslope with speed. Most of the material is transported away from the area of initial ground failure.

Slope failures are also often triggered by increased pore water pressure due to the infiltration of rainwater. The resulting decrease of shear resistance (internal resistance to deformation by shearing) can cause the slope to move. The level of groundwater table varies with the amount of rainfall for the area. If rainfall is higher than average during the winter season, the water table will become higher than average on a hillslope and groundwater pressures may become sufficiently high to activate the hillside.

Soil creep is the slow, often imperceptible, deformation of slope materials under low stress levels, which normally affects the shallow portion of the slopes, but can be deep seated where a weak zone of soil or bedrock exists. It results from gravitational and seepage forces, and may be indicative of conditions favorable for landsliding. Creep can be caused by wetting and drying of clays, by solution and crystallization of salts, by the growth of roots, by burrowing animals and by downslope movement of saturated ground. Colluvium refers to the mantle of loose soil and weathered bedrock debris that progresses down hillsides by creep.



The District shall also be concerned with erosion and sedimentation affecting developed lots or improvements. Erosion is defined as the process by which earth materials are loosened and removed by running water on the ground surface or in the subsurface. Sedimentation is the depositing or settling of soil or rock particles from a state of suspension in a liquid.

Hilly terrain in a natural condition or particularly on excavated slopes can be subject to erosion. Landslide deposits which are sometimes in a loosened condition are particularly prone to erosion. Earth flow-, debris flow- and mud flow-type landslides typically have an area of deposition or accumulation (sedimentation area) at their base. Graded slopes in the District, particularly those not sufficiently vegetated, can be subject to erosion, and therefore, a source of transported sediment.

It is necessary that field-verified geologic field mapping will be prepared during mass grading operations. The detailed maps showing bedrock structure, springs, and landslide limits and repairs should be provided to the GHAD when available. The cuts should be viewed by the project geologist during grading to provide mitigation schemes for unsuspected slope conditions which could decrease the slope stability. Such conditions include unfavorable bedrock attitudes and seepage conditions.

In repaired or buttressed landslide areas, the landslide debris should be overexcavated to firm undisturbed materials below the landslide plane as determined by the Geotechnical Engineer or Engineering Geologist at the time of grading. In the case of the complete removal of a landslide, systems of surface and subsurface drains should be installed to collect the subsurface waters which may have initially caused the landslide. The configuration of each subdrainage system should be tailored to the individual landslide at the time of grading. The Geotechnical Engineer and/or the Engineering Geologist should determine the location and depths of subdrains at that time. The location and elevation of subdrains and outlets should be recorded by survey. Each



landslide subexcavation then would be reconstructed to final grade by keying and benching below the landslide plane with compacted, drained, engineered fill.

Seismically Induced Ground Shaking

As identified in the geologic and geotechnical reports pertaining to the project, an earthquake of moderate to high magnitude generated within the San Francisco Bay Region could cause considerable ground shaking at the Property, similar to that which has occurred in the past. To mitigate the shaking effects, all structures should be designed using sound engineering judgment and the latest building code requirements, as a minimum.

Seismic slope stability analysis has presumably been incorporated in the corrective grading plans for the graded portions of the Property; however, seismically generated slope failures could occur in open space areas outside of the development limits.



V. CRITERIA FOR GHAD RESPONSIBILITY

In forming the GHAD and establishing the assessment levels and budgets for the District, it is important to clearly define the limits of the GHAD's responsibilities. The GHAD will accept responsibility for property and retaining walls and appurtenant drainage facilities within the Easement and the Right-of-Way as described in Section VI of this Plan of Control. However, the intent of this Plan of Control is not to extend the GHAD's responsibilities to every potential situation of instability; rather, the following are exclusions from GHAD responsibility.

Isolated or Remote Feature Requiring Mitigation

The GHAD shall not have responsibility to monitor, abate, mitigate or control slope instability that does not involve damage to or pose a significant threat to damage site improvements or retaining walls and appurtenant drainage facilities within the Easement and/or the Right-of-Way.

Single Property

The GHAD will not prevent, mitigate, abate or control geologic hazards which are limited in area to a single parcel of property unless the geologic hazard has damaged, or poses a significant threat of damage to site improvements located on other property within the GHAD boundaries. As used herein, the term "site improvements" means buildings, roads, sidewalks, utilities, improved trails, swimming pools, tennis courts, gazebos, cabanas, geologic stabilization features, or similar improvements. This exclusion does not apply to geologic hazards existing on commercial property, recreational property, and open space property owned by any homeowner's associations or within the GHAD-owned property.



Geologic Hazards Resulting From Negligence of Property Owner

The GHAD may, in the general manager's sole discretion, decline to prevent, mitigate, abate or control geologic hazards which occurred or resulted from any negligence of the homeowner and/or the homeowner's contractors, agents or employees in developing, investigating, grading, constructing, maintaining or performing or not performing any post-development work on the subject property as long as the geologic hazard is limited to a single lot, pursuant to exclusions described herein.

Property Not Accepted

The GHAD shall not have responsibility to repair damage, which is situated on a parcel of real property, which the GHAD has not accepted in accordance with Section VI, below. The GHAD, however, may monitor, abate, mitigate or control geologic or hydrogeologic hazards on a parcel of real property which the GHAD has not accepted in accordance with Section VI, below, and is not excluded from GHAD responsibility by Paragraphs 1, 2 and 3; provided, however, that GHAD responsibility on such parcel shall be limited to the extent necessary to address damage or a significant threat to damage site improvements which are within a parcel of real property which the GHAD has accepted in accordance with Section VI, below.

Geologic Hazard Which Requires Expenditure in Amount Exceeding the Value of the Threatened or Damaged Improvement

The GHAD may elect not to prevent, mitigate, abate or control a geologic hazard where, in the general manager's sole discretion, the anticipated expenditure required to be funded by the GHAD to prevent, mitigate, abate or control the geologic hazard will exceed the value of the structure(s) and site improvement(s) threatened with damage or loss.



GHAD Funding or Reimbursement for Damaged or Destroyed Structures or Site Improvements

In the event a residence or any other structure, site improvement or landscaping is damaged or destroyed due to, or as a result of, a geologic hazard, the GHAD may fund or reimburse the property owner for the expenses necessary to repair or replace the damaged or destroyed structure, site improvement or landscaping. Unless authorized by the Board of Directors, the dollar amount of the GHAD funding or reimbursement may not exceed ten percent (10%) of the costs incurred by the GHAD in preventing, mitigating, abating or controlling the geologic hazard responsible for the damage. In the event the geologic hazard damaged or destroyed a structure, site improvement or landscaping which violated any provisions of the City Building Code or City Ordinance Code at the time of its installation or improvement, the GHAD may decline to provide any funding, or reimbursement to the property owner, for repair or replacement of the damaged structure, improvement or landscaping.

No Reimbursement of Expenses Incurred by Property Owners

The GHAD will not be obligated to reimburse a property owner for expenses incurred for the prevention, mitigation, abatement, or control of a geologic hazard absent a written agreement between the property owner and the GHAD to that effect, which agreement has been executed prior to the property owner incurring said expenses, and following an investigation conducted by the GHAD.



VI. ACCEPTANCE

Activation of Assessment

An annual assessment shall be promptly authorized on all residential parcels in the GHAD. The assessment shall be levied by the GHAD on each individual parcel beginning the first fiscal year following issuance of a building permit for that parcel.

Responsibility for GHAD Activities

The party that, on the date the Final Map within the boundaries of the GHAD is approved by the City of Oakland, owns the developable parcels shown on that Final Map shall have the responsibility to perform all the activities of the GHAD on property within that Final Map. Such responsibility shall become eligible for transfer to the GHAD on the day exactly three years after the first residential building permit is issued by the City of Oakland, two years following final approval of all retaining wall construction, or two years following final approval of site grading, whichever is later. This turn-over date may be extended at the sole discretion of the project developer provided that the assessments shall continue to be levied during the extension period and that notice of such extension is delivered to the District Manager at least 30 days prior to the turn-over date. The Board of the GHAD intends that the period between the levying of the GHAD assessment and the GHAD becoming responsible to perform activities on property within the Final Map will allow the District to accumulate reserve funds without incurring significant expenses.

Process for Transferring Responsibility for GHAD Activities

After the Transfer Eligibility Date for parcel(s), the process for transferring responsibility for performing GHAD activities on such parcel(s) shall be as follows:



- A. In the calendar year of the Transfer Eligibility Date or in any subsequent year, at its discretion, the developer may apply to the GHAD ("Transfer Application") to transfer the responsibility for performing GHAD Activities for parcel(s) to the District.
- B. Within 30 days of receiving such notice, a representative of the GHAD shall verify that all the facilities for which the GHAD will have maintenance responsibility have been constructed and maintained according to the city-approved plans and specifications for the individual improvements, and that such facilities are operational and in good working order.
- C. Within 15 days of such inspection, the GHAD will send the developer a list ("Punch list") of all of the items that need to be constructed, repaired or otherwise modified in order to comply with the city-approved plans and specifications.
- D. The developer may notify the GHAD when it has completed the items identified on the Punch list.
- E. Within 30 days of receipt of such notice, the GHAD shall verify that all Punch list items have been completed and notify the developer that the District accepts responsibility for performing all future GHAD Activities on the parcel(s).



VII. SIENA HILL GHAD PLAN OF CONTROL

The GHAD shall be responsible for the maintenance of geologic stabilization and hydrogeologic features within the GHAD boundaries and retaining walls and appurtenant drainage facilities within the Easement and the Right-of-Way. The GHAD's maintenance responsibilities include prevention, abatement, vegetation control, and control of landslide and erosion hazards within the project as applicable, as provided in this Plan of Control.

General maintenance of the surface drainage improvements in the open space will be the GHAD's responsibility. Additionally, the GHAD will have the following maintenance responsibilities as outlined below:

- Inspection and maintenance of lined ditches.
- Monitoring and maintenance of measurement devices, such as piezometers, inclinometers, and tiltmeters, if any.
- Inspection and maintenance of retaining walls.
- Maintenance of designated trails or fences, if any.
- Inspection and maintenance of surface water quality treatment and detention facilities within the development, if any.

General Landslide and Erosion Hazard Mitigation

The techniques which may be employed by the GHAD to prevent, mitigate, abate, or control geologic hazards include, but are not limited to, the following.

- A. Removal of the unstable earth mass.
- B. Stabilization (either partial or total) of the landslide by removal and replacement with compacted, drained fill.



- C. Construction of structures to retain or divert landslide material or sediment.
- D. Construction of erosion control devices such as gabions, riprap, geotextiles, or lined ditches.
- E. Placement of drained engineered buttress fill.
- F. Placement of subsurface drainage devices (e.g. underdrains, or horizontal drilled drains).
- G. Slope correction (e.g. gradient change, biotechnical stabilization, slope trimming or contouring).
- H. Construction of additional surface ditches and/or detention basins, silt fences, sediment traps, or backfill or erosion channels.

Potential landslide and erosion hazards can be mitigated best by controlling soil saturation and water runoff and by maintaining the surface and subsurface drainage system. Maintenance shall be provided for lined surface drainage ditches and drainage terraces including debris benches or drop inlets.



VIII. PRIORITY OF GHAD EXPENDITURES

Emergency response and scheduled repair expenditures by the GHAD are to be prioritized by the General Manager, utilizing his or her discretion, based upon available funds and the approved operating budget. When available funds are not sufficient to undertake all of the identified remedial and preventive stabilization measures, the expenditures are to be prioritized as follows in descending order of priority:

- A. Prevention, mitigation, abatement or control of geologic hazards that have either damaged or pose a significant threat of damage to residences, critical underground utilities or paved streets.
- B. Prevention, mitigation, abatement or control of geologic hazards which have either damaged or pose a significant threat of damage to ancillary structures, including but not limited to water quality facilities, pool cabanas or restroom buildings.
- C. Prevention, mitigation, abatement or control of geologic hazards which have either damaged or pose a significant threat of damage to open space amenities.
- D. Prevention, mitigation, abatement or control of geologic hazards which have either damaged or pose a significant threat of damage limited to loss of landscaping or other similar non-essential amenities.
- E. Prevention, mitigation, abatement or control of geologic hazards existing entirely on open-space property and which have neither damaged nor pose a significant threat of damage to any site improvements.

In performing its duties as described above, the GHAD may seek reimbursements from public and private entities including, but not limited to, FEMA, City and County agencies, insurance companies, etc.



IX. MAINTENANCE AND MONITORING SCHEDULE

Geologic features and GHAD-maintained facilities should be inspected by GHAD staff or GHAD-assigned consultants as presented below. The site inspections should be undertaken at appropriate intervals as determined by the GHAD manager using supporting documents prepared for the site and its improvements. The GHAD budget should provide for four or more inspections in years of heavy rainfall. Generally, the inspections should take place in October, prior to the first significant rainfall; mid-winter as necessary during heavy rainfall years; and in early April at the end of the rainy season. The frequency of the inspections should increase depending upon the intensity and recurrence of rainfall. Site inspections should increase sufficiently to provide for mitigation of potential hazards.

The GHAD shall obtain copies of geologic or geotechnical exploration reports related to site development and keep these reports on file in the records of the GHAD. In addition, copies of any earthwork-related testing and observation reports that will be finalized at the completion of grading, when as-built drawings are available, shall be maintained as part of the GHAD records.

Following are guidelines for a monitoring plan. The actual timing, scope, frequency and other details regarding such maintenance, inspection and similar activities shall be at the discretion of the GHAD manager.

• The engineer and/or geologist retained by the District should carry out an inspection of lined surface ditches at least twice a year, budget permitting. One inspection should be in the fall prior to the onset of winter rains. The inspection shall check for sedimentation and cracking or shifting of the concrete lined ditches. Repairs and maintenance, as needed, should be undertaken including removal of excess silt or sediment in ditches and patching or replacement of cracked or broken ditches, prior to the beginning of the next rainy season.



- Subsurface drain outlets and horizontal drilled drain outlets, if any, should be checked.
 Water flowing from these outlets should be measured and recorded during each inspection.
 The inspections should take place at least twice annually, preferably in the fall and spring.
 Any suspicious interruption in flow should signal a need to unplug or clean by flushing the affected drain.
- Piezometers to measure groundwater levels, or instruments such as inclinometers or tiltmeters measuring potential slope instability should be monitored quarterly, if installed.
- Settlement monitoring devices, if any, should be measured annually and tracked. In the event of anomalous readings or excessive settlement, the monitoring frequency should be increased to once per quarter.
- Inlets, outfalls or trash racks, if used, must be kept free of debris and spillways maintained. It is anticipated that initially at least once every two (2) years, cleanup of vegetation and removal of silt would be in order. Attention should be given to plantings or other obstructions which may interfere with access by power equipment.
- An annual inspection shall be made by the engineer and/or engineering geologist to assess the effectiveness of the preventive maintenance program and to make recommendations as to which landslide or erosion measures should be undertaken in the next fiscal year. Any appropriate site-specific study of landslide or erosion conditions shall be determined at that time. Consultants, if necessary, will be retained to undertake the needed studies. An annual inspection report to the GHAD shall be prepared by the District Engineer and/or Engineering Geologist.



SELECTED REFERENCES

- A.C.K. Engineering and Surveying, Siena Hill Subdivision, Oakland, California, dated March 3, 2005.
- California Division of Mines and Geology, January 1, 1982, State of California Earthquake Fault Zones, Oakland East 7-1/2' Quadrangle.
- Darwin Myers Associates, April 7, 2006, Engineering Geology Peer Review, Proposed Siena Hill GHAD, Keller Avenue at Greenridge Drive, Oakland, California; Project Number 2002.06.
- Graymer, R. W., 2000, Geologic Map and Map Database of the Oakland Metropolitan Area, Alameda, Contra Costa and San Francisco Counties, California: United States Geological Survey MF-2342.
- Nilsen, T. H., 1975, Preliminary Photointerpretation Map of Landslide and Other Surficial Deposits of the Oakland East 7½' Quadrangle, Alameda and Contra Costa Counties, California; USGS Open File Map 75-277-14.
- Radbruch, D.H., 1969, Areal and Engineering Geology of the Oakland East Quadrangle, Alameda and Contra Costa Counties, California; USGS GQ769.
- Underdahl, G. E., September 10, 2001, Geotechnical Investigation, Planned Townhouse Development, Keller Avenue, Oakland, Alameda County, California, Project Number 9460501023.



APPENDIX A

Figure and Exhibits

Figure 1 GHAD Boundary

Exhibit A Legal Description of Siena Hill Property

Exhibit B Legal Description of Siena Hill Easement Area

Exhibit C Retaining Walls Outside of Project Area

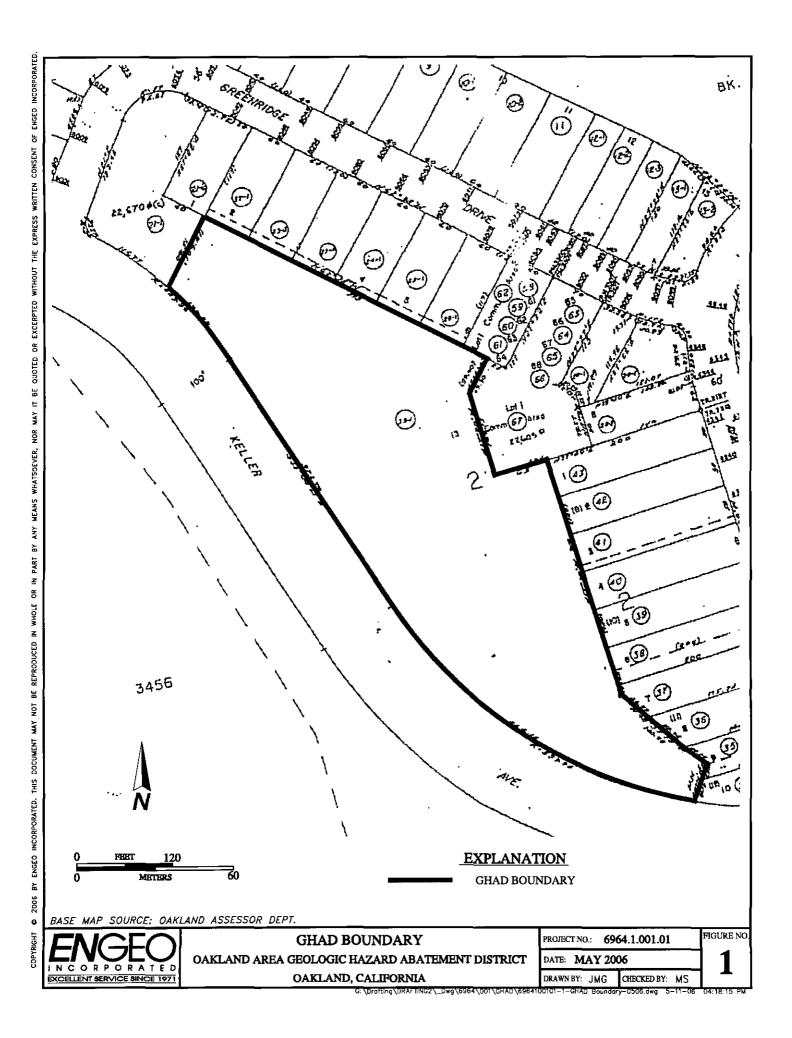


EXHIBIT A - [

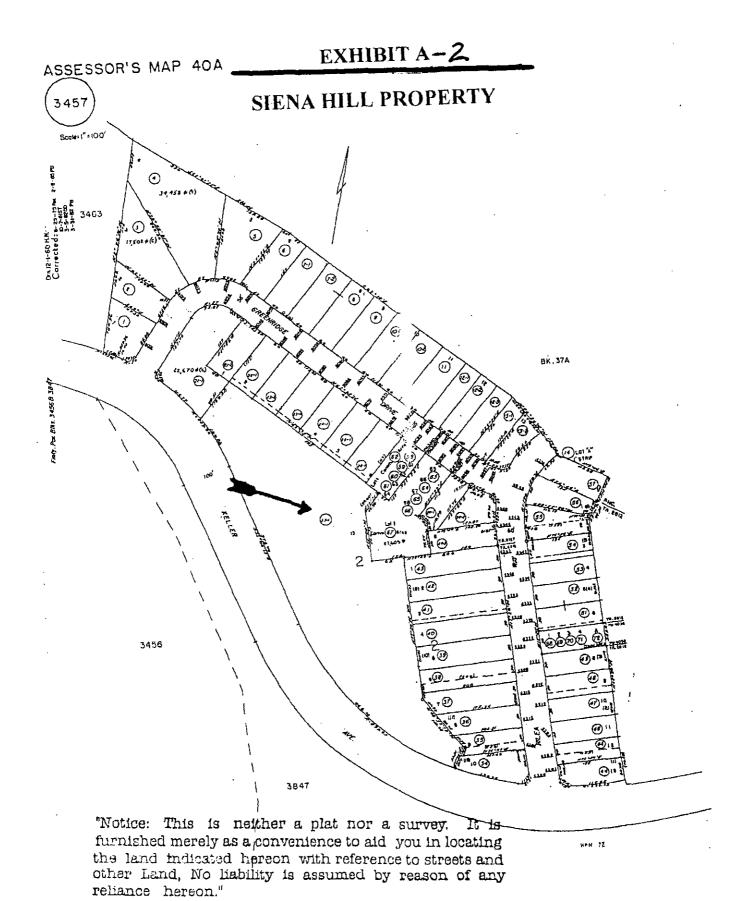
SIENA HILL PROPERTY

The land referred to is situated in the County of Alameda, City of Oakland, State of California, and is described as follows:

Lot 13 in Block 2, as said lot and block are shown on the Map of "Tract 2127, Oakland, Alameda County, California", filed July 28, 1960, in Book 42 of Maps, Page 27, Alameda County Records.

EXCEPTING THEREFROM: Those portions thereof described in Parcels 2, 3, 4, 5, 6, 7 and 8, as described in the Deed by Sterling Development Company to Oddstead Homes, dated February 12, 1962, recorded February 19, 1962, Reel 518, Image 315, Instrument No. AT/22269, Alameda County Records.

(BEING APN 040A-3457-033-01)



Description: 40.3457 Page 1 of 1 Comment:

EXHIBIT B - 1

ROADWAY EASEMENT ON ADJACENT PROPERTY

EASEMENT FOR INGRESS & EGRESS

AN EASEMENT FOR INGRESS & EGRESS AND PUBLIC UTILITIES INCLUDING STORM DRAINAGE IN THE CITY OF OAKLAND, COUNTY OF ALAMEDA, STATE OF CALIFORNIA BEING DESCRIBED AS FOLLOWS:

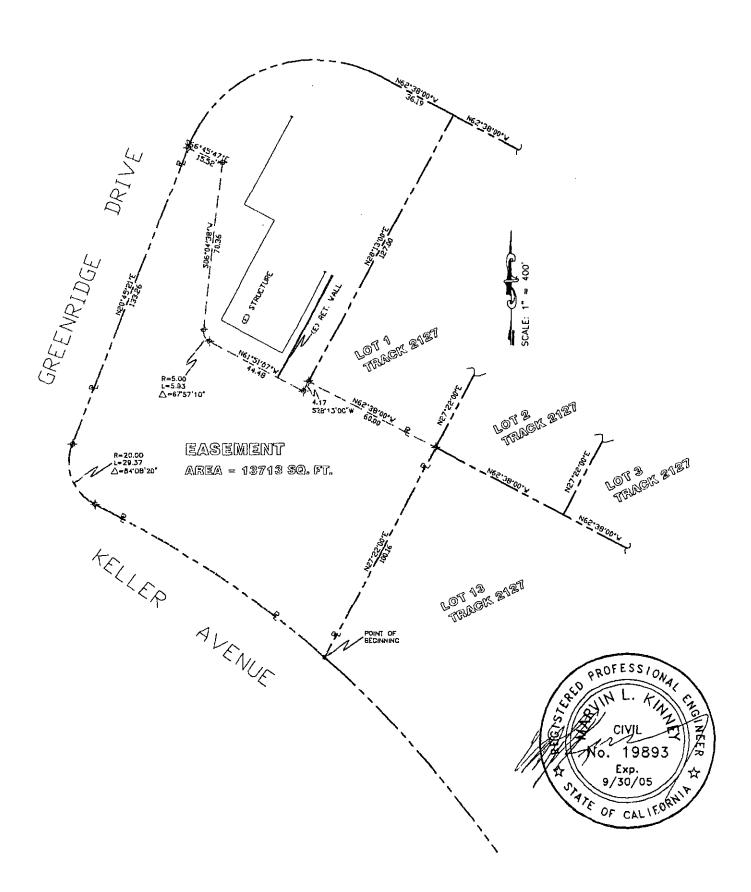
BEGINNING AT THE SOUTHWEST CORNER OF LOT 13 IN BLOCK 2 AS SHOWN ON THE MAP OF "TRACT 2127, OAKLAND, ALAMEDA COUNTY, CALIFORNIA", FILED JULY 28. 1960 IN BOOK 42 OF MAPS, PAGE 27, ALAMEDA COUNTY RECORDS. SAID POINT ALSO BEING ON THE NORTHERLY RIGHT-OF-WAY LINE OF KELLER AVENUE: THENCE ALONG THE WESTERLY LINE OF SAID LOT 13, NORTH 27° 22' 00" EAST, 100.16 FEET, MORE OR LESS TO THE SOUTHWEST CORNER OF LOT 1 AS SHOWN ON SAID MAP OF "TRACT 2127": THENCE ALONG SAID SOUTHERLY LINE OF SAID LOT 1, NORTH 62° 38' 00" WEST. 60 FEET TO THE SOUTHWEST CORNER OF SAID LOT 1; THENCE SOUTH 28° 13' 00" WEST, 4.17 FEET; THENCE NORTH 61° 51' 07" WEST, 44.48 FEET, THENCE ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 5 FEET, AN ARC LENGTH OF 5.93 FEET AND A CENTRAL ANGLE OF 67° 57' 10"; THENCE ALONG A LINE TANGENT TO THE CURVE NORTH 06° 04' 38" EAST, 70.36 FEET; THENCE NORTH 66° 45' 47" WEST, 15.52 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF GREENRIDGE DRIVE; THENCE ALONG THE SAID RIGHT-OF-WAY LINE SOUTH 20° 45' 21" WEST, 133.26 FEET; THENCE ALONG A CURVE TO THE LEFT THROUGH A CENTRAL ANGLE OF 84° 08' 20", AN ARC LENGTH OF 29.37 FEET AND A RADIUS OF 20.00 FEET TO POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF KELLER AVENUE: THENCE ALONG THE SAID NORTHERLY RIGHT-OF-WAY LINE, BEING A CURVE TO THE RIGHT HAVING A RADIUS OF 449.96 FEET. AN ARC LENGTH OF 115.77 FEET AND THROUGH A CENTRAL ANGLE OF 14° 44' 31" TO THE POINT OF BEGINNING.

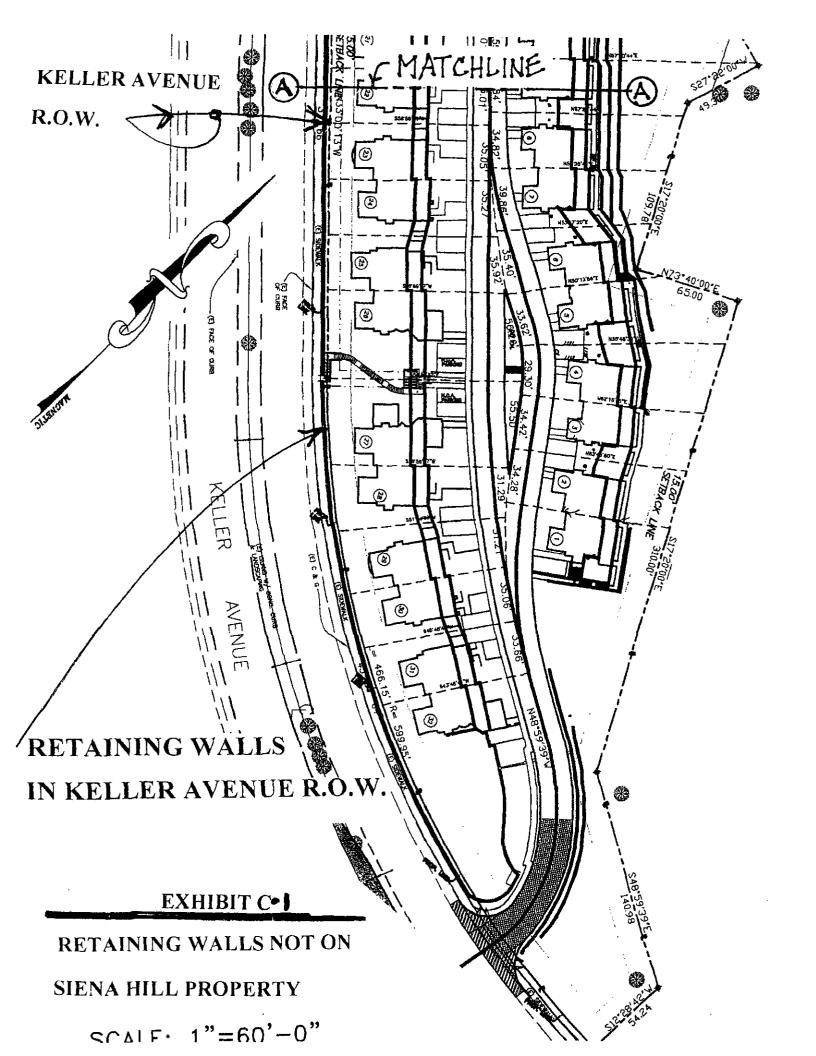
CONTAINING 13,713 SQUARE FEET.

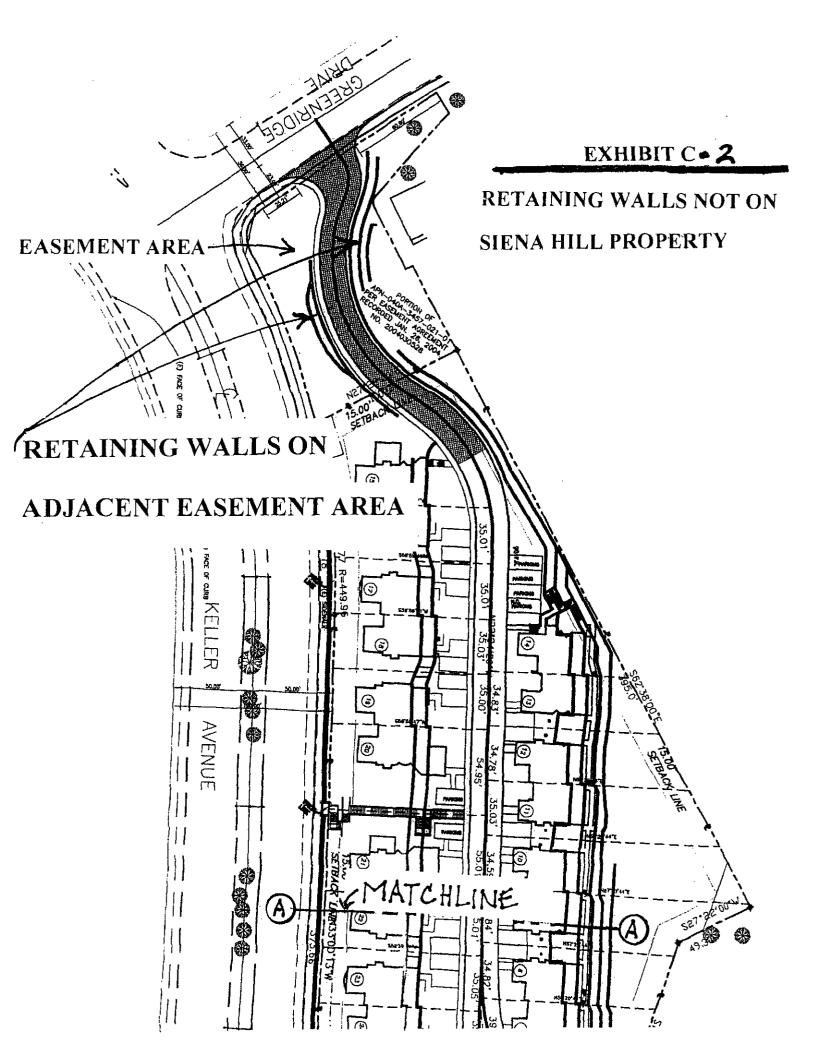


EXHIBIT B -2

ROADWAY EASEMENT ON ADJACENT PROPERTY







Approved as to Form and Legality

DEFICE OF THE COMMENTAL COUNCIL

Hee City Attorney

2006 JUL - RESOLUTION NO	C.M.S.
Introduced by Councilmember _	

RESOLUTION APPROVING FORMATION OF THE SMALL PROJECT GEOLOGIC HAZARD ABATEMENT DISTRICT (GHAD) AND APPOINTING THE CITY COUNCIL OF THE CITY OF OAKLAND AS THE GHAD BOARD OF DIRECTORS

WHEREAS, pursuant to the provisions of Section 26550 of the Public Resources Code, the City Council adopted Resolution No. 77524 declaring that the City Council is subject to the provisions of Division 17 (Sections 26500 et seq.) of the Public Resources Code, and forwarded a copy of Resolution No. 77524 to the State Controller; and

WHEREAS, on June 20, 2006, the City Council considered and adopted Resolution No. 79986 C.M.S. initiating the proceedings for the formation of the GHAD and set a hearing on the formation for July 18, 2006 at 7:00 p.m.; and

WHEREAS, notice of the hearing on the formation was given in accordance with the provisions of Public Resources Code Sections 26558 and 26561-63; and

WHEREAS, a public hearing before the City Council on the formation of the GHAD was held on July 18, 2006 at 7:00 p.m.; and

WHEREAS, at the time set for the hearing, no owner of real property within the proposed GHAD had made a written objection to its formation in accordance with the provisions of Public Resources Code Section 26564; and

WHEREAS, at the hearing, the owners of more than 50 percent of the assessed valuation of the real property within the proposed GHAD did not object to the GHAD's formation; the City Council closed the hearing; and

WHEREAS, upon adoption of this Resolution, the GHAD shall be immediately formed as a governmental district, a political subdivision of the State of California, governed in accordance with Public Resources Code Sections 26500, et seq., and a legal entity entirely distinct and separate from the City of Oakland; now, therefore be it

RESOLVED: The City Council approves and orders the formation of the Small Project Geologic Hazard Abatement District as described in the GHAD Plan of Control dated April 19, 2006; and be it

FURTHER RESOLVED: That in accordance with Public Resources Code Section 26567, the City Council appoints itself as the Board of Directors for the Small Project GHAD (GHAD Board); and be it

FURTHER RESOLVED: That in addition to all other legal requirements, the GHAD shall be subject to the following:

- The GHAD shall defend, hold harmless, and indemnify the City of Oakland and its respective officers, agents, and employees ("Indemnified Parties") and their insures against any and all liability, damages, claims, demands judgments, losses, ("Indemnified GHAD claims") or other forms of legal or equitable relief related to the formation and operation (including, without limitation, maintenance of GHAD owned property) of a GHAD and in the case of the City Council members, actions taken by said members while acting as the GHAD Board. This indemnity shall include, without limitation, payment of litigation expenses associated with any action herein. The Indemnified Parties shall have the right to select counsel to represent the Indemnified Parties, at the GHAD's expense, in defense of any action specified herein. The Indemnified Parties shall take all reasonable steps to promptly notify the GHAD of any claim, demand, or legal actions that may create a claim for indemnification. Within 90 days of the formation for the GHAD, the GHAD shall be required to enter into an Indemnification Agreement in a form acceptable to the City Attorney to establish in more specific detail the terms and conditions of the GHAD's indemnification obligations set forth herein. Any failure of any party to timely execute such Indemnification Agreement shall not be construed to limit any right or obligation otherwise specified herein.
- 2. The GHAD shall obtain general liability insurance and directors' insurance for the GHAD Board to the extent that the GHAD Board determines in its sole discretion that such insurance is available at commercially reasonable rates. In the event subsidence insurance becomes available, the GHAD also shall obtain such insurance provided that the GHAD Board determines that premiums for such insurance are a prudent expenditure of the GHAD's financial resources.
- 3. The assessments authorized for the GHAD must be determined by the GHAD Board following a thorough financial analysis and must include adequate funding for the indemnity and insurance obligations set forth herein. The GHAD's attorney and the City's attorney shall also review the adequacy of the funding for the indemnity and insurance and any make recommendations regarding such funding.
- 4. The GHAD will be responsible for hiring its own staff (or contracting with non-City parties to perform such services), including all workers who will undertake operation, maintenance, replacement, repair and other activities of the GHAD, and no City employee, including employees of the City Attorney's office shall perform such services for the GHAD facilities and improvements. Further, the City shall not fund or otherwise administer any of the GHAD's operations, property or facilities; and be it

FURTHER RESOLVED: The City Council finds that the formation of the GHAD is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) in accordance with Public Resources Code Sections 21080(b)(4) and 26559 and directs staff to file a Notice of Exemption with the Alameda County Clerk; and be it

FURTHER RESOLVED: The Council determines that the GHAD shall be fully consistent with and comply with all conditions, requirements and other standards as set forth in the Conditions of

Approval for the Siena Hill Project (TTM7396) as approved by the City Planning Commission on June 1, 2005; and be it

FURTHER RESOLVED: This Resolution shall become effective immediately upon its passage and adoption; the GHAD shall become operational only after the parcels within the boundaries of the GHAD have been successfully assessed in accordance with Public Resources Code Section 26650 and Article XIII(D) of the California Constitution; and the GHAD Board intends to adopt separate Resolutions to initiate the establishment and authorization of an assessment on the real property included in the GHAD; and be it

FURTHER RESOLVED: That the custodians and locations of the documents or other materials which constitute the record of proceedings upon which the City Council's decision is based are respectively: (a) Community & Economic Development Agency, Planning & Zoning Division, 250 Frank H. Ogawa Plaza, 3rd floor, Oakland CA.; and (b) Office of the City Clerk, 1 Frank H. Ogawa Plaza, 1st Floor, Oakland, CA.; and be it

FURTHER RESOLVED, That, the recitals contained in this resolution are true and correct and are an integral part of the City Council's decision.

IN COUNCIL, OAKLAND, CALIFORNIA,	, 20
PASSED BY THE FOLLOWING VOTE:	
AYES - BROOKS, BRUNNER, CHANG, KERNIGHAN, NADEL	, QUAN, REID, and PRESIDENT DE LA FUENTE
NOES -	
ABSENT -	
ABSTENTION -	ATTEST:
	LaTonda Simmons City Clerk and Clerk of the Council of the City of Oakland, California