



## CITY OF SIGNAL HILL

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2175 Cherry Avenue • Signal Hill, CA 90755-3799

THE CITY OF SIGNAL HILL  
WELCOMES YOU TO A REGULAR  
PLANNING COMMISSION MEETING  
April 14, 2015

The City of Signal Hill appreciates your attendance. Citizen interest provides the Planning Commission with valuable information regarding issues of the community. Meetings are held on the 2<sup>nd</sup> Tuesday of every month.

Meetings commence at 7:00 p.m. There is a public comment period at the beginning of the regular meeting, as well as the opportunity to comment on each agenda item as it arises. Any meeting may be adjourned to a time and place stated in the order of adjournment.

The agenda is posted 72 hours prior to each meeting on the City's website and outside of City Hall and is available at each meeting. The agenda and related reports are available for review online and at the Community Development office and Library on the Friday afternoon prior to the Commission meeting. Agenda and staff reports are also available at our website at [www.cityofsignalhill.org](http://www.cityofsignalhill.org).

During the meeting, the Community Development Director presents agenda items for Commission consideration. The public is allowed to address the Commission on all agenda items. The Chair will announce when the period for public comment is open on each agenda item. The public may speak to the Commission on items that are not listed on the agenda. This public comment period will be held at the beginning of the public portion of the meeting. You are encouraged (but not required) to complete a speaker card prior to the item being considered, and give the card to a City staff member. The purpose of the card is to ensure speakers are correctly identified in the minutes. However, completion of a speaker card is voluntary, and is not a requirement to address the Commission. The cards are provided at the rear of the Council Chamber. Please direct your comments or questions to the Chair. Each speaker is allowed three minutes to make their comments.

## CALL TO ORDER

## ROLL CALL

CHAIR BENSON  
VICE-CHAIR FALCON  
COMMISSIONER AUSTIN  
COMMISSIONER MURPHY  
COMMISSIONER RICHÁRD

## PLEDGE OF ALLEGIANCE

The Chair will lead the audience in reciting the Pledge of Allegiance.

## PUBLIC BUSINESS FROM THE FLOOR ON ITEMS NOT LISTED ON THIS AGENDA

## PUBLIC HEARINGS

1. Site Plan and Design Review 15-02 for Modifications to a Single-Family Dwelling at 3347 Brayton Avenue

Summary: The applicant, Reginald McNulty, is requesting Site Plan and Design Review approval to remodel and add on to an existing one-story 768 sq. ft. single-family dwelling at 3347 Brayton Avenue. The proposal includes:

- 227 sq. ft. addition on the first floor to include a living room, den, bathroom, kitchen and demolition of one bedroom for a new 1-car garage; and
- 731 sq. ft. of new floor area on the second floor consisting of three bedrooms and one bathroom.

Recommendation: Waive further reading and adopt a resolution approving Site Plan and Design Review 15-02.

2. Municipal Code Amendment to Title 16 Entitled “Oil Code” and Chapter 20.52 Entitled “Site Plan and Design Review” Establishing Regulations to Allow Development On Top Of and In Close Proximity To Abandoned Wells and Revising Methane Assessment and Mitigation Procedures

Summary: The Planning Commission will consider an amendment to the Signal Hill Municipal Code establishing regulations for development on properties with abandoned wells, adding site restoration requirements for well abandonments, revising methane assessment and mitigation procedures for all development and updating the standards and procedures for well surveys, leak testing and venting. The amendment maintains the existing regulations for active wells, idle wells and oil production operations. An equivalency standard is added and new regulations related to the City's land use authority regarding development over and in close proximity to abandoned wells. Currently, the Oil Code does not allow

development over abandoned wells or if wells are not reasonably accessible for a maintenance rig. Without the amendment, development on properties with abandoned wells is constrained and some properties may be undevelopable.

The Commission will also consider the associated Negative Declaration. An Initial Study was prepared by the City's environmental consultant and is currently being circulated by the State Clearinghouse for a 30 day public comment period.

Recommendations: 1. Waive further reading and adopt a resolution recommending City Council adoption of Negative Declaration 04/03/15(1). 2. Waive further reading and adopt a resolution recommending City Council approval of Ordinance Amendment 15-01.

## COMMUNITY DEVELOPMENT DIRECTOR REPORTS

### 3. 995 E. 27<sup>th</sup> Street Request For A Construction Time Limit Extension

Summary: The project manager, Tarak Mohamed, on behalf of the Long Beach Islamic Center is requesting approval of an extension to the construction time limits (CTL) that expire April 30, 2015. The request is to allow 80 additional days to complete construction of the religious facility at 995 E. 27<sup>th</sup> Street. The request for 80 days is the maximum time allowed for non-residential projects less than 10,000 square feet. This is the first of two possible extensions allowed by the CTL ordinance.

The construction time limit ordinance was established in response to concerns over delays at construction projects and to mitigate the negative impacts and nuisances associated with long running projects. Based on the project history, staff has scheduled the item for Planning Commission consideration to give the public and Commission an opportunity to comment before the Community Development Director renders a decision.

Recommendations: 1. Receive testimony. 2. Provide comments to the Community Development Director to take into consideration when approving or denying the first extension request.

### 4. Beautification Award

Summary: Staff received two nominations for the Beautification Award: 1) a residence at 2001 Obispo Avenue; and 2) Century Calibrating at 1127 E. 25<sup>th</sup> Street.

Recommendation: Consider any additional nominations and select recipient(s).

## CONSENT CALENDAR

The following Consent Calendar items are expected to be routine and non-controversial. Items will be acted upon by the Commission at one time without discussion. Any item may be removed by a Commissioner or member of the audience for discussion.

### 5. Minutes of the Following Meeting

Regular Meeting of March 10, 2015

Recommendation: Approve.

### 6. Training Available for Planning Commissioners

Summary: American Planning Association webinars scheduled in the near future which may be of interest.

Recommendation: Receive and file.

### 7. City Council Follow-up

Summary: Attached for review is a brief summary on the City Council's action from the March 17, 2015 and April 7, 2015 meetings.

Recommendation: Receive and file.

### 8. Development Status Report

Summary: Attached for review is the monthly Development Status Report which highlights current projects.

Recommendation: Receive and file.

### 9. In the News

Summary: Articles compiled by staff that may be of interest to the Commission.

Recommendation: Receive and file.

## COMMISSION NEW BUSINESS

COMMISSIONER RICHÁRD  
COMMISSIONER MURPHY  
COMMISSIONER AUSTIN  
VICE-CHAIR FALLON  
CHAIR BENSON

## ADJOURNMENT

Adjourn tonight's meeting to the next regular meeting to be held Tuesday, May 12, 2015 at 7:00 p.m. in the Council Chambers located at City Hall.

## CITIZEN PARTICIPATION

If you need special assistance beyond what is normally provided to participate in City meetings, the City will attempt to accommodate you in every reasonable manner. Please call the City Clerk's office at (562) 989-7305 at least 48 hours prior to the meeting to inform us of your particular needs and to determine if accommodation is feasible.



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Revised Plans for Addition to  
Single-Family Dwelling at  
3347 Brayton Avenue

## CITY OF SIGNAL HILL

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### PROCEDURES RELATIVE TO PUBLIC HEARINGS/WORKSHOPS

1. At the request of the Mayor/Chair, the City Clerk/Secretary reports on the Form of Notice given:
  - a. Notice was published in the *Signal Tribune* newspaper on April 3, 2015.
  - b. Notice was posted in accordance with Signal Hill Municipal Code Section 1.08.010 on April 3, 2015.
  - c. Mailed to property owners within a 100' radius on April 3, 2015.
2. Mayor/Chair asks for a staff report, which shall be included in written materials presented to the City Council/Commission so that they can be received into evidence by formal motion.

In addition, the staff report shall include the following:

- a. Summarize the resolution/ordinance;
- b. The specific location of the property, and/or use, the surrounding properties;
- c. The criteria of the Code which applies to the pending application; and
- d. The recommendation of the Council/Commission and/or other legislative body of the City and staff recommendation.

3. Mayor/Chair declares the public hearing open.
4. Mayor/Chair invites those persons who are in favor of the application to speak.
5. Mayor/Chair invites those persons who are in opposition to the application to speak.
6. Applicant or their representative is provided a brief rebuttal period.
7. Mayor/Chair declares the public hearing closed.
8. Discussion by Council/Commission only.
9. City Attorney reads title of resolutions and/or ordinances.
10. City Clerk/Secretary conducts Roll Call vote.



## CITY OF SIGNAL HILL

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2175 Cherry Avenue ♦ Signal Hill, CA 90755-3799

April 14, 2015

### **AGENDA ITEM**

**TO: HONORABLE CHAIR  
AND MEMBERS OF THE PLANNING COMMISSION**

**FROM: SELENA ALANIS  
ASSISTANT PLANNER**

**SUBJECT: PUBLIC HEARING – SITE PLAN AND DESIGN REVIEW 15-02 FOR  
MODIFICATIONS TO A SINGLE-FAMILY DWELLING AT 3347  
BRAYTON AVENUE**

### **Summary:**

The applicant, Reginald McNulty, is requesting Site Plan and Design Review approval to remodel and add on to an existing one-story 768 sq. ft. single-family dwelling at 3347 Brayton Avenue. The proposal includes:

- 227 sq. ft. addition on the first floor to include a living room, den, bathroom, kitchen and demolition of one bedroom for a new 1-car garage; and
- 731 sq. ft. of new floor area on the second floor consisting of three bedrooms and one bathroom.

### **Recommendation:**

Waive further reading and adopt the following resolution, entitled:

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF SIGNAL HILL, CALIFORNIA, APPROVING SITE PLAN AND DESIGN REVIEW 15-02, A REQUEST TO REMODEL AND EXPAND THE EXISTING 768 SQUARE FOOT ONE-STORY SINGLE-FAMILY DWELLING TO A 1,580 SQUARE FOOT TWO-STORY, THREE-BEDROOM, TWO-BATH SINGLE-FAMILY DWELLING WITH A ONE-CAR GARAGE AT 3347 BRAYTON AVENUE IN THE RLM-2, RESIDENTIAL LOW/MEDIUM-2, ZONING DISTRICT

**Background:**

On July 12, 2011, the Planning Commission reviewed preliminary plans for the remodel and second unit and found them conforming to all applicable development and design standards.

On August 9, 2011, the Commission conducted a public hearing and approved the plans. The previously approved plans included:

- Front house - 307 sq. ft. addition and a new 1-car garage. With the addition, the front house included two bedrooms, two bathrooms, a living room, kitchen and 1-car garage.
- Second unit - 931 sq. ft. two bedroom, one bathroom, a living room, and kitchen above a 3-car garage at the rear of the property.

In 2013, construction of the 3-car garage and second unit was completed, but the applicant requested changes to the plans for the front house to add a second story element and increase the square footage.

On March 10, 2015, at a public workshop the site plan, floor plans, architecture, and zoning development standards for the project were reviewed by the Planning Commission. After review of the preliminary plans, the Commission recommended that the roofline be revised to integrate the front balcony roofline with the second story. There were no members of the public that spoke either in favor of or against the project. The Planning Commission recommended that the project be scheduled for a public hearing (Attachment A).

**Analysis:**

The plans include a 227 sq. ft. addition on the first floor to include a living room, den, bathroom, kitchen and demolition of one bedroom for a new 1-car garage; and 731 sq. ft. of new floor area on the second floor consisting of three bedrooms and one bathroom. The project complies with all of the development standards of the RLM-2, Residential Low/Medium-2, zoning district. No special Planning Commission findings are required.

At the workshop, the Commission commented on the roofline and recommended modifications to the design. The applicant has revised the balcony roofline from a shed roof to a gable roof which matches the garage and rear unit.

Approved:

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Scott Charney

Attachments



Attachment A

Attachments to Staff Report  
not provided

## CITY OF SIGNAL HILL

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2175 Cherry Avenue • Signal Hill, CA 90755-3799

March 10, 2015

### AGENDA ITEM

**TO: HONORABLE CHAIR  
AND MEMBERS OF THE PLANNING COMMISSION**

**FROM: SELENA ALANIS  
ASSISTANT PLANNER**

**SUBJECT: WORKSHOP - REVISED PLANS FOR ADDITION TO SINGLE-FAMILY  
DWELLING AT 3347 BRAYTON AVENUE**

### Summary:

The applicant, Reginald McNulty, is requesting a workshop review of plans to remodel and add on to an existing one-story, 768 sq. ft. single-family dwelling at 3347 Brayton Avenue in the RLM-2, Residential Low-Medium Density, zoning district. In 2011, the Planning Commission approved the applicant's plans to:

- Demolish an existing 3-car garage;
- Construct a 931 sq. ft. second unit over a new 3-car garage at the rear of the property; and
- Remodel and add 307 sq. ft. of floor area and new 1-car garage to the single-family dwelling existing in the front of the property.

Construction of the 3-car garage and second unit has been completed, but the applicant is requesting changes to the plans for the front house to add a second story element and increase the square footage by 958 sq. ft. The change requires Planning Commission review.

### Recommendations:

- 1) Open the workshop and receive public comments.
- 2) Direct the applicant to make revisions as deemed appropriate.

### **Background:**

On July 12, 2011, the Planning Commission reviewed preliminary plans for the remodel and second unit and found them conforming to all applicable development and design standards (Attachment A).

On August 9, 2011, the Commission conducted a public hearing and approved the plans (Attachment B). The previously approved plans included:

- Front house - 307 sq. ft. addition and a new 1-car garage. With the addition, the front house included two bedrooms, two bathrooms, a living room, kitchen and 1-car garage.
- Second unit - 931 sq. ft. two bedroom, one bathroom, a living room, and kitchen above a 3-car garage at the rear of the property (Attachment C).

### **Analysis:**

#### *Existing Conditions*

The subject site is located on the west side of Brayton Avenue between 33<sup>rd</sup> Street and Wardlow Road in the North End neighborhood.



The surrounding land uses are a mix of one and two-story homes with detached garages. Several of the properties have similar second units over 3-car garages. The immediately surrounding properties include:

Direction	Zoning Designation	Existing Land Use
Project Site	RLM-2, Residential Low/Medium-2	One-story single-family dwelling at front of the property and detached 3-car garage with second unit above at the rear of the property
North	RLM-2, Residential Low/Medium-2	One-story single-family dwelling and detached second unit
South	RLM-2, Residential Low/Medium-2	One-story single-family dwelling and detached two-story second unit
East	OS, Open Space	Reservoir Park
West	RLM-2, Residential Low/Medium-2	One-story single-family dwelling and detached second unit

Currently, there are two structures on the property:

- The unaltered 768 square foot one-story house fronting Brayton Avenue (two bedrooms, one bathroom, living room and kitchen); and
- 931 square foot second unit over a 3-car garage with alley access in the rear (two bedroom, one bathroom, living room and kitchen).

### Proposed Plans

The applicant has elected to modify the plans for the front house by adding a second story thereby increasing the dwelling's square footage to a total of 1,580 square feet (Attachment D). The building footprint is similar to the previously approved plans which met all of the development standards. The revised proposal includes:

- 227 sq. ft. addition on the first floor to include a living room, den, bathroom, kitchen and demolition of one bedroom for a new 1-car garage; and
- 731 sq. ft. of new floor area on the second floor consisting of three bedrooms and one bathroom.

### Zoning Development Standards

The lot size is 5,104 sq. ft., which exceeds the minimum lot size required to allow two dwelling units on the lot. No dedications to the street or alley are required. The project

complies with all of the development standards of the RLM-2, Residential Low/Medium-2, zoning district including:

Standard	Required	Proposed/Existing
Setbacks		
Front (east)	20' minimum	20' existing to remain
Side (north)	5' minimum	4' and 5' for new floor area
Side (south)	5' minimum	4' and 5' for new floor area
Rear (west)	5' minimum	9' existing to remain
Height	25' height limit	23'-7" from finished grade to top of structure
Off-street parking	2 garage spaces per unit =4 spaces, 10'x20' interior dimension	New 1-car garage 12' x 20' and 3-car garage (4 spaces total)
Lot Coverage	50% maximum	38%
Floor Area Ratio	.5 maximum	.49
Open Space	600 sq. ft. / unit = 1,200 sq. ft. 10'x10' minimum area	1,296 sq. ft.

### Parking

The North End is a parking impacted neighborhood. The west side of Brayton Avenue is permit only parking and the east side of Brayton Avenue adjacent to Reservoir Park is limited to 2-hour parking. Without the 1-car garage the property does not conform to development standards which require two garage spaces per dwelling. The driveway curb cut and driveway apron along Brayton Avenue have been completed and the applicant is committed to constructing the 1-car garage to meet the required off-street parking regulations.

### Sideyard Setbacks

The sideyard setback requirement is 5'. The first floor of the front house is nonconforming and has a 4' sideyard setback. The previously approved plans included a new garage setback 4' and new master bedroom setback 5'. The new garage is not habitable floor area and buildings walls that are nonconforming may be extended. The second story addition will jog in 1' on each side to comply with the 5' setback requirement.

### Design

The existing dwelling is a simple California neo-traditional style home built in 1950. It has simple stucco walls, a hip roof, and balcony, small front porch with straight wood support columns. The second story addition will match the existing home and rear home in style, color and finishes. A color and materials board will be available at the meeting.

Green Features

The new dwelling unit will have to comply with the new California Green Building Code, or CALGreen. The rear dwelling unit is also oriented with the ridge pointing east to west which gives the home the proper solar orientation to the south and therefore better for passive heating and cooling and ideal for a future solar panel system angled to the south. The new rear unit also features available 220 volt outlets on both sides of the garage to allow for future installation of an electric vehicle charging station.

Approved:

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Scott Charney

Attachments

**RESOLUTION NO. \_\_\_\_\_**

**A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF SIGNAL HILL, CALIFORNIA, APPROVING SITE PLAN AND DESIGN REVIEW 15-02, A REQUEST TO REMODEL AND EXPAND THE EXISTING 768 SQUARE FOOT ONE-STORY SINGLE-FAMILY DWELLING TO A 1,580 SQUARE FOOT TWO-STORY, THREE-BEDROOM, TWO-BATH SINGLE-FAMILY DWELLING WITH A ONE-CAR GARAGE AT 3347 BRAYTON AVENUE IN THE RLM-2, RESIDENTIAL LOW/MEDIUM-2, ZONING DISTRICT**

**WHEREAS**, the applicant Reginald McNulty filed a request to modify the existing 768 square foot one-story single-family dwelling unit, modifications include a 227 sq. ft. addition on the first floor to include a living room, den, bathroom, kitchen and demolition of one bedroom for a new 1-car garage and 731 sq. ft. of new floor area on the second floor consisting of three bedrooms and one bathroom at 3347 Brayton Avenue in the RLM-2, Residential Low/Medium-2, zoning district; and

**WHEREAS**, the site is legally described as Lot 24 of Tract #8223 in the City of Signal Hill, in the County of Los Angeles, State of California, as per map recorded in book 98, page 3-4 of maps in the office of the County Recorder of said county; and

**WHEREAS**, pursuant to Signal Hill Municipal Code Chapter 20.52, "Site Plan and Design Review," building placement and design is properly a matter for Planning Commission review and determination; and

**WHEREAS**, on July 12 2011, at a duly noticed public workshop the Planning Commission reviewed the plans to remodel the 768 square foot one-story single-family dwelling unit and addition of 307 square feet and a 1-car garage and construction of a new 3-car garage and 931 square foot second unit above and all interested parties were given an opportunity to be heard regarding the proposal; and

**WHEREAS**, on August 9, 2011, at a duly noticed public hearing the Planning Commission approved Site Plan & Design Review 11-03; and

**WHEREAS**, the applicant completed construction of the 3-car garage and 931 square foot second unit above; and

**WHEREAS**, the applicant has elected to modify the plans for the front house by adding a second story thereby increasing the dwelling's square footage to a total of 1,580 square feet and the building footprint is similar to the previously approved plans which met all of the development standards; and

**WHEREAS**, on March 10, 2015, at a duly noticed public workshop the Planning Commission reviewed the proposed project and all interested parties were given an opportunity to be heard regarding the proposal; and

**WHEREAS**, at the public workshop the Commission commented on the roofline and recommended modifications to the design. The applicant has revised the balcony roofline from a shed roof to a gable roof which matches the garage and rear unit; and

**WHEREAS**, on April 3, 2015, notice of a Planning Commission public hearing regarding the proposed project was mailed to all property owners within a 100 foot radius of the subject property, was published in the Signal Tribune newspaper and was posted in accordance with S.H.M.C. Section 1.08.010; and

**WHEREAS**, the project is Categorically Exempt pursuant to Section 15303, Class 3(a), New Construction or Conversion of Small Structures, of the California Environmental Quality Act; and

**WHEREAS**, on April 14, 2015, a public hearing was held before the

Planning Commission, and all interested parties were given an opportunity to be heard regarding the request; and

**WHEREAS**, the City has incorporated all comments received and responses thereto.

**NOW, THEREFORE, BE IT RESOLVED** that the Planning Commission of the City of Signal Hill, California, does hereby find as follows:

1. The proposed project, subject to the attached conditions, is in conformance with the zoning ordinance, other ordinances and regulations of the City, and the following policies of the General Plan Land Use Element:

**LAND USE ELEMENT GOAL 1 – Manage growth to achieve a well-balanced land use pattern that accommodates existing and future needs for housing, commercial, and industrial land, open space, and community facilities and services, while maintaining a healthy, diversified economy adequate to provide future City revenues.**

Land Use Policy 1.2 – Provide opportunities for a variety of residential densities and housing styles.

Finding regarding Policy 1.2 – The modifications to the existing single-family dwelling will increase the square footage of the dwelling and provide additional living space. The dwelling unit will contribute to the various housing styles of the North End neighborhood.

**LAND USE ELEMENT GOAL 3 – Assure a safe, healthy, and aesthetically pleasing community for residents and businesses.**

Land Use Policy 3.7 – Maintain and enhance the quality of residential neighborhoods.

Finding regarding Policy 3.7 – The proposed project will maintain the quality of the North End residential neighborhood by providing a custom single-family home. As the home features an architectural design which complements the neighborhood and include high quality building materials.

Land Use Policy 3.12 – Encourage and promote high quality design and physical appearance in all development projects.

Finding regarding Policy 3.12 – The proposed project is for a neo-traditional design. The paint and stucco will complement the second unit on the lot and the balcony is an added architectural feature to the front elevation which will overlook Reservoir Park.

2. The proposed project is in conformance with any redevelopment agency and any executed owner's participation agreement or disposition and development agreement.

3. Subject to the attached conditions, the following will be arranged as to avoid traffic congestion, to ensure the public health and safety and general welfare, and to prevent and adverse effects on surrounding properties: facilities and improvements; pedestrian and vehicular ingress, egress and internal circulation; setbacks; height of building and structures; signs; mechanical and utility service equipment; landscaping; grading; lighting; parking; drainage; and intensity of the land use.

4. The topography is suitable for the proposed site plan and the site plan, subject to the attached conditions, is suitable for the use intended.

5. The proposed development provides for appropriate exterior building design and appearance consistent with and complementary to present and proposed buildings and structures in the vicinity of the subject project, while still providing for a variety of designs, forms and treatments.

**NOW, THEREFORE, BE IT FURTHER RESOLVED**, that the Planning Commission of the City of Signal Hill, California, does hereby:

1. Approve Site Plan and Design Review 15-02, subject to the Conditions of Approval attached hereto as Attachment A.

**PASSED, APPROVED AND ADOPTED** at a regular meeting of the Planning Commission of the City of Signal Hill, California, on this 14th day of April, 2015.

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TOM BENSON  
CHAIR

ATTEST:

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SCOTT CHARNEY  
COMMISSION SECRETARY

STATE OF CALIFORNIA        )  
COUNTY OF LOS ANGELES    ) ss.  
CITY OF SIGNAL HILL        )

I, Scott Charney, Secretary of the Planning Commission of the City of Signal Hill, do hereby certify that Resolution No. \_\_\_\_\_ held on the 14<sup>th</sup> day of April, 2015, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

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SCOTT CHARNEY  
COMMISSION SECRETARY

**Site Plan and Design Review 15-02**  
***Recommended Conditions of Approval***

**Project: 3347 Brayton Avenue – Single-family dwelling remodel and addition**

**Applicant: Reginald McNulty**

1. The applicant shall agree to defend, indemnify and hold harmless, the City of Signal Hill, its agents, officers and employees from any claim, action or proceeding against the City of Signal Hill or its agents, officers or employees to attach, set aside, void or annul, an approval of the City of Signal Hill, its legislative body, advisory agencies, or administrative officers concerning the subject application. The City of Signal Hill will promptly notify the applicant of any such claim, action or proceeding against the City of Signal Hill and the applicant will either undertake defense of the matter and pay the City's associated legal or other consultant costs or will advance funds to pay for defense of the matter by the City Attorney. If the City of Signal Hill fails to promptly notify the applicant of any such claim, action or proceeding, or fails to cooperate fully in the defense, the applicant shall not, thereafter, be responsible to defend, indemnify or hold harmless the City of Signal Hill. Notwithstanding the foregoing, the City retains the right to settle or abandon the matter without the applicant's consent, but should it do so, the City shall waive the indemnification herein, except, the City's decision to settle or abandon a matter following an adverse judgment or failure to appeal, shall not cause a waiver of the indemnification rights herein.
2. The project shall substantially conform to the site and building plans on file with the Community Development Department, as herein or as modified by the Planning Commission. It shall be the responsibility of the developer, the architect and the contractor to develop the project consistent with the aforementioned plans. Any substantial modification to the approved site and building plans shall be subject to approval of the Director of Community Development.
3. Applicant shall pay building plan check and permit fees as estimated in Exhibit A and comply with all Public Works Improvements conditions as shown in Exhibit B attached hereto.
4. Construction of the improvements set forth in the approved site plan shall commence within one year from the date permit-ready plans are signed by the Director of Community Development in accordance with Section 20.52.060 of the Signal Hill Municipal Code.
5. At all times after the start of construction related to the building, grading, or demolition permit, the site must be secured and screened to the satisfaction of

the Building Official.

6. Pursuant to the Construction Time Limits Ordinance, Section 20.52.100 of the Signal Hill Municipal Code the Building Official or Director of Community Development may deem any building, grading, or demolition permit to be null and void if a Certificate of Occupancy has not been issued within 360 days, starting from the date of issuance of the first building, grading or demolition permit for the project.

**Before the issuance of demolition permits of existing structures on the project site, the applicant shall satisfactorily address all of the following as required by the Building Department:**

7. Submit AQMD Rule 1403 documentation for asbestos removal.

**Before issuance of building permits, the applicant shall satisfactorily address all of the following as required by the Planning Department:**

8. The following notes shall be included on the final site plan:
  - a. All exposed metal flashing or trim shall be anodized or painted to match the building.
  - b. All utilities serving the site shall be underground.
  - c. Final adequacy of landscape materials shall be subject to field inspection by the Community Development Department; additional landscaping deemed necessary upon inspection shall be installed by the applicant at his sole expense.
  - d. Exterior colors and materials shall be specified on the plans and be consistent with the color boards on file in the Community Development Department.
  - e. Street address numbers, which are visible from the street and alley, shall be provided.
  - f. Exterior lighting shall be shielded and directed so as to not interfere with adjacent properties.
  - g. Show all easement areas on site plan.
  - h. All new gas meter locations must be approved by the Gas Department.
  - i. The dwelling shall be provided with separate gas and electrical meters.
9. The garages shall include automatic garage door openers and include 72 cubic feet or storage area. Garage doors shall be sectional.

**Before issuance of building permits, the applicant shall satisfactorily address all of the following as required by the Building Department:**

10. The applicant shall satisfactorily address the following items:

- a) Three complete sets of plans must be stamped and approved by the Los Angeles County Fire Department.
- b) Provide Los Angeles County Fire Department Fire Flow Test – coordinate with Public Works and submit to Building Department (R3 form).
- c) Provide a detailed Precise Grading Plan including drainage plans prepared by a Civil Engineer showing all existing and proposed retaining walls, fencing, drainage structures and facilities and containing an erosion control plan. Structural observation by the engineer of the retaining walls is required at the time of grading plan submittal and findings shall be submitted prior to grading plan approval. The Precise Grading Plan must be coordinated with Landscaping and Site Plans and must be approved by the City Engineer. The Precise Grading Plan shall be consistent with the Preliminary Grading Plan and shall provide for building pads that are no higher than those shown on the Preliminary Grading Plan. The applicant shall be responsible to submit a Grading Bond.
- d) A soils report prepared by a registered soils engineer dated within 12 months of plan check submittal.
- e) On-site utilities shall be underground.
- f) Show all easements on a site plan.
- g) Submit a construction and material recycling plan per SHMC 8.08.055.
- h) Plans to comply with 2013 California Building Code.

11. Plumbing/Engineer/Contractor must calculate minimum water meter size. If a meter upgrade is required the applicant is responsible for installation fees.

**Before the issuance of building permits, the applicant shall satisfactorily address all of the following as required by the Public Works/Engineering Department:**

- 12. All Public Works requirements shall be complied with as in Exhibit B of the Recommended Conditions of Approval for Site Plan and Design Review 15-02 pursuant to the approval of the City Engineer.
- 13. Submit a precise grading plan, wall plan, paving plan and erosion control plan, all prepared by a Civil Engineer, to the City for approval, showing all retaining walls, drainage structures and facilities. These plans must be coordinated with the approved site and landscape plans. The precise grading plan shall include an erosion control plan for construction during the rainy season; details for the construction of all stormwater containment and recycling facilities; all structures and facilities required to demonstrate, to the satisfaction of the City Engineer, that water quality impact mitigation measures will be addressed during the construction phase and during the operation of the completed facility. Additional City Consultant fees may apply for water quality plan review.

**Before issuance of certificate of occupancy, the applicant shall satisfactorily address all of the following as required by the Public Works/Engineering Department:**

14. Public Works requirements shall be complied with, pursuant to the approval of the City Engineer (Exhibit B).

(End of conditions)

# FEE ESTIMATE

14-Apr-15

<b>Project Address</b>	3347 Brayton
Owner	Reginald McNulty
Phone	(213)219-0210
Designer	
Phone	

<b>Zone</b>	RLM-2
<b>Lot Size</b>	

<b>Building Area</b>	Living 958	Garage 240	
		Balcony 108	Porch 99
<b>Stories</b>	2	<b>Units on Lot</b>	2

<b>Description:</b>	1st Fl living room, den, BA, kitchen, demo BR for 1-car garage, 2nd Fl 3 BR, 1 BA
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<b>Valuation</b>	\$ 151,684.80
<b>Building Plan Check</b>	\$ 574.94
<b>T-24 Energy Review</b>	\$ 35.00
<b>Total</b>	<b>\$ 609.94</b>

<b>Building Permit Fees</b>	
\$ 676.40	Structural
\$ 73.00	Electrical
\$ 73.00	Plumbing
\$ 73.00	Mechanical
\$ 8.16	Field Energy
\$ 19.72	S.M.I.P. cat 1
TBD	Grading
\$ 73.00	Demo
\$ 10.00	Issue
<b>\$ 1,006.28</b>	<b>Permit subtotal</b>
<b>\$ 7.00</b>	<b>BSC Fee</b>
<b>\$ 1,013.28</b>	<b>Total on Permit</b>

<b>Development Impact Fees</b>	
	-
	-
	-
<b>\$</b>	<b>-</b>
	<b>Total</b>

Estimates are based on current fee schedules which are subject to change.

Fees not included on this sheet:      Public Works, Planning, NPDES  
 L.A. County Sanitation, LBUSD  
 L.A. County Fire Department R-3 Form

**Exhibit A**

**CITY OF SIGNAL HILL**  
**DEPARTMENT OF PUBLIC WORKS**  
**CONDITIONS OF APPROVAL**

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Public Works requirements for issuance of a Building Permit (over \$66,762 valuation) and for a Land Subdivision. In addition, a Subdivision must fulfill all requirements of the California Subdivision Map Act, and the City of Signal Hill Subdivision Ordinance.

Project: **Proposed Addition**

Address: **3347 Brayton Avenue**

Developer: **Reginald McNulty**

Date: **March 5, 2015**

Prepared by:

*Anthony Cavarro*

Approved by:

*John J. [Signature]*

**1. REQUIREMENTS OF DEVELOPER/APPLICANT**

Prior to issuance of any permits (grading, excavation, etc.) all improvement plans (street, sewer, water, alley, grading, etc.), all dedication/vacation drawings, must be approved to the satisfaction of the City Engineer.

**2. GRADING PLAN**

The applicant shall submit a Grading Plan prepared by a registered Civil Engineer, on City Title Block Mylar, subject to the review and approval of the City Engineer.

**3. SEWER CONNECTION/EXTENSION OF DISTRICT'S COLLECTOR SEWER**

The City of Signal Hill will perform a preliminary review of the applicant's method of connection to the sewer. Based on the City's review, a review form will be issued by the City. The applicant is to bring the signed review form to the County Sanitation District of Los Angeles County (District), 1955 Workman Mill Road, Whittier, CA 90601 or (562) 699-7411 for any sewer connection information and/or design standards for preparation of a sewer extension. An appointment may be scheduled with the Public Counter by calling (562) 699-7411, extension 1204.

If an extension of a collector sewer is required, the applicant shall design and construct the sewer to District's standards. The applicant is responsible for design and construction costs, reimbursement of District's design review cost and

District's construction inspection costs. Applicant is required to have an executed agreement with District outlining these financial responsibilities prior to District reviewing the design plans. After construction is completed and approved by District, applicant shall file Notice of Completion and prepare a Bill of Sale in accordance with the agreement.

#### **4. WATER SERVICES**

The existing domestic water service(s) currently serving the existing development may potentially be utilized if it is (they are) of adequate size, conforms to current standards, and are in good working condition as determined by the Water Department. If the property owner elects to utilize the existing water service(s), any non-conforming water service(s), meter(s), and backflow protection device(s) shall be upgraded to conform to the current Public Works Standards. Alternatively, a new separate domestic water service(s), meter(s) and backflow protection device(s) may be installed per Public Works Standards and shall be sized to meet the minimum requirements set by the California Plumbing Code (CPC). The new domestic water service(s) shall be a minimum of 1-inch in size.

If the existing domestic water service(s) and meter(s) are not to be utilized, they shall be properly abandoned by the developer per Public Works Standard Plan No. 409.

The Developer has two options of installing the water meter connections, hire their own contractor or hire the City Water Department. Please refer to the most current City of Signal Hill Schedule of Fees – Public Works Department, for the cost of hiring the City Water Department.

#### **5. PLAN CHECK DEPOSIT**

Applicant shall submit a plan check deposit upon first submittal for Construction Plans prepared by developer's Registered Engineer in the amount of **\$1,000.00**.

#### **6. STORM WATER POLLUTION PREVENTION**

This project will result in soil disturbance of less than 1 acre. Prior to the issuance of a grading permit, the applicant shall submit a completed Owners Certification form (OC-1). This form is available in the Building and Safety Department.

#### **7. STORM WATER POLLUTION PREVENTION/LOW IMPACT DEVELOPMENT**

(a) Applicant shall submit to the City for review and approval a Low Impact Development (LID) Plan incorporating Best Management Practices (BMP) in conformance with the requirements of the City's LID manual. Requirements of the LID Plan will include construction of onsite water treatment, and maximization of infiltration except in hillside areas where alternative LIDs must be proposed maximizing vegetation and use of biofiltration with underdrains to limit infiltration.

- (b) Applicant shall demonstrate that all LID and other structural Best Management Practices (BMPs) described in the LID Plan have been constructed and installed in conformance with approved plans and specifications.
- (c) Applicant shall properly maintain all LID and other structural Best Management Practices (BMPs) installed in new developments, as listed in the approved Low Impact Development Plan (LID Plan).
- (d) Applicant shall identify parties responsible for the long-term operation and maintenance of all LID and other structural Best Management Practices (BMPs) for the life of the project and a funding mechanism for operation and maintenance prior to approval of the LID Plan. This shall be identified and recorded with the County Recorder's office by the property owner or any successive owner.

## PROJECT GENERAL NOTES

- ALL WORK SHALL CONFORM TO THE 2001 EDITION OF THE UNIFORM BUILDING CODE, AND ALL OTHER APPLICABLE CODES, STANDARDS, AND REGULATIONS OF THE COUNTY OF ORANGE.
- A COMPLETE PROJECT IS INTENDED, THE BUILDING IS TO BE READY FOR OCCUPANCY WHEN COMPLETED.
- THE GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION (A.I.A. LATEST EDITION) ARE A PART OF THESE CONTRACT DOCUMENTS. A COPY IS ON FILE AT THE ARCHITECT'S OFFICE.
- THE COMPLIANCE FORMS ARE PART OF THESE CONTRACT DOCUMENTS AND THE CONTRACTOR IS RESPONSIBLE FOR CARRYING OUT SPECIFIED REQUIREMENTS.
- DO NOT SCALE OFF THESE DRAWINGS. VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD. ANY DISCREPANCIES IN THESE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO STARTING WORK.
- ALL PROPOSED SUBSTITUTIONS SHALL BE APPROVED BY THE OWNER/ARCHITECT IN WRITING PRIOR TO INSTALLATION.
- G.C. SHALL COMPLY WITH ALL CITY APPROVED "CONDITIONS OF APPROVAL" RELATING TO THE CONSTRUCTION OF THIS PROJECT.
- G.C. SHALL PROVIDE EACH SUBCONTRACTOR WITH A COMPLETE AGENCY-PERMITTED DRAWING SET AT TIME OF CONSTRUCTION.
- THESE DOCUMENTS INDICATE THE GENERAL SCOPE OF THE PROJECT IN TERMS OF ARCHITECTURAL DESIGN CONCEPT. (THE DIMENSIONS (OF THE IMPROVEMENT, THE MAJOR ARCHITECTURAL ELEMENTS, THE TYPE OF STRUCTURAL, MECHANICAL, AND ELECTRICAL SYSTEMS, ON THE BASIS OF THE GENERAL SCOPE INDICATED OR DESCRIBED, THE CONTRACTOR SHALL FURNISH ALL ITEMS REQUIRED FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK. DECISIONS OF THE ARCHITECT AS TO THE ITEMS OF WORK INCLUDED WITHIN THE SCOPE OF THIS DOCUMENTS SHALL BE FINAL.
- ALL CONSTRUCTION AND MATERIALS SHALL BE AS SPECIFIED AND AS REQUIRED BY THE CURRENT EDITION OF THE UBC, TITLE 24.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS BEFORE STARTING WORK. SHOULD A DISCREPANCY APPEAR IN THE SPECIFICATIONS OR DRAWINGS, OR IN THE WORK DONE BY OTHERS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AT ONCE FOR INSTRUCTIONS ON HOW TO PROCEED. IF THE CONTRACTOR PROCEEDS WITH THE WORK AFFECTED, WITHOUT INSTRUCTIONS AFFECTED FROM THE ARCHITECT OR OTHER CLIENT APPROVED REPRESENTATIVE, THE CONTRACTOR SHALL MAKE GOOD ANY RESULTING DAMAGE OR DEFECT TO THE SATISFACTION OF THE ARCHITECT.
- THE CONTRACTOR SHALL CONFIN his OPERATIONS ON THE SITE TO THOSE AREAS PERMITTED BY THE OWNER. THE WORK SHALL BE DONE IN ACCORDANCE WITH APPLICABLE LAWS, STATE ORDINANCES, PERMITS AND THE CONTRACT DOCUMENTS. THE JOB SITE SHALL BE MAINTAINED IN A CLEAN, ORDERLY CONDITION, FREE OF DEBRIS AND WASTE, AND SHALL NOT BE UNREASONABLY ENCUMBERED WITH ANY MATERIALS OR EQUIPMENT. EACH SUBCONTRACTOR IMMEDIATELY UPON COMPLETION OF EACH PHASE OF HIS WORK, SHALL REMOVE ALL TRASH AND DEBRIS AS A RESULT OF HIS OPERATION.
- ALL WORK AND CONSTRUCTION SHALL COMPLY WITH REQUIREMENTS OF "CAL-OHSA".
- CONTRACTOR SHALL DETERMINE, COORDINATE AND ACCOMMODATE ALL SERVICES (ELECTRICAL, GAS, TELEPHONE, TELEMETRY, ETC.) REQUIREMENTS FOR THE FACILITY WITH THE APPROPRIATE OWNERS REPRESENTATIVE PRIOR TO COMMENCING CONSTRUCTION.
- PROVIDE ALL NECESSARY BLOCKING, BACKING AND FRAMING FOR ACCESSORIES, HANDRAILS, GRAB BARS, PLUMBING FIXTURES, CABINETS, LIGHT FIXTURES, ELECTRICAL UNITS, A.C. EQUIPMENT AND ALL OTHER ITEMS REQUIRED.
- CONTRACTOR SHALL COORDINATE ALL WORK PROVIDED BY OTHERS.
- ALL MANUFACTURED MATERIALS SHALL BE DELIVERED IN THE ORIGINAL PACKAGES, CONTAINERS, OR BUNDLES BEARING THE NAME OF THE MANUFACTURER OR BRAND.
- ALL MATERIALS STORED ON THE SITE SHALL BE PROPERLY STACKED AND PROTECTED TO PREVENT DAMAGE AND DETERIORATION UNTIL USE. FAILURE TO PROTECT MATERIALS MAY BE CAUSE FOR REJECTION OF WORK.
- THE CONTRACTOR SHALL DO ALL CUTTING, FITTING, OR PATCHING OF HIS WORK THAT MAY BE REQUIRED TO MAKE ITS SEVERAL PARTS FIT TOGETHER PROPERLY AND SHALL NOT ENDANGER ANY OTHER WORK BY CUTTING OR OTHERWISE ALTERING THE TOTAL WORK OR ANY PART OF IT. CUTTING, FITTING AND PATCHING OF MATERIALS AND SURFACES CUT OR DAMAGED IN EXECUTION OF WORK SHALL BE DONE WITH APPROPRIATE MATERIALS SO THAT SURFACES REPLACED WILL, UPON COMPLETION MATCH SURROUNDING SIMILAR SURFACES.
- CHANGES OF TYPES OF FLOOR FINISHES SHALL BE MADE UNDER THRESHOLDS AT DOORS AND WHERE THRESHOLDS DO NOT OCCUR, AT CENTER OF DOORS.
- CONTINUE 1/2" GYP. BD. BEHIND ALL WALL CABINETS, AND ELECTRICAL PANELS TO
- WHERE DOORS ARE LOCATED NEXT TO A WALL, THERE SHALL BE 2 1/2" MIN. CLEARANCE BETWEEN WALL FINISH SURFACE AND FACE OF DOOR IN 90 DEGREES OPEN POSITION UNLESS DETAILED OR DIMENSIONED OTHERWISE.
- DETAILS MARKED TYPICAL SHALL APPLY IN ALL CASES UNLESS SPECIFICALLY DETAILED OTHERWISE. WHERE NO DETAIL IS SHOWN, CONSTRUCTION SHALL BE AS SHOWN FOR OTHER SIMILAR WORK.
- DO NOT SCALE DRAWINGS AT THE JOB SITE.
- ALL GLAZING SUBJECT TO IMPACT SHALL BE 1/4" TEMPERED GLASS.
- SEPARATE PERMIT (S) ARE REQUIRED FOR ELECTRICAL, PLUMBING AND MECHANICAL. PERMITS MUST BE OBTAINED BY LICENSED CONTRACTORS.
- PLANS SHALL CONFORM TO 2001 CBC, CMC, CPC, CEC AND ALL APPLICABLE CITY OF INGLEWOOD ORDINANCES
- ALL ENTRY DOORS TO DWELLING UNITS OR CLOSET ROOMS SHALL BE ARRANGED SO THAT THE OCCUPANT HAS A VIEW OF AREA IMMEDIATELY OUTSIDE THE DOOR WITHOUT OPENING THE DOOR, SUCH VIEW MAY BE PROVIDED BY A DOOR VIEWER, THOUGH WINDOWS LOCATED IN THE VICINITY OF THE DOOR OR THOUGH VIEW PORTS. 91.6706
- WOOD PANEL DOORS MUST HAVE PANELS AT LEAST 9/16 IN. THICK. SHAPED PORTIONS NOT LESS THAN 1/4 IN. THICK AND INDIVIDUAL PANELS MUST BE NO MORE THAN 300 SQ. IN. MILLIONS SHALL BE CONSIDERED A PART OF ADJACENT PANELS EXCEPT MULLIONS NOT OVER 18 INCHES LONG MAY HAVE AN OVERALL WIDTH OF NOT LESS THAN 2 INCHES. STILES AND RAILS SHALL BE OF SOLIDS LUMBER IN THICKNESS WITH OVERALL DIMENSIONS OF NOT LESS THAN 1 3/8 INCHES AND 3 INCHES IN WIDTH. 91.6709.1 ITEM 2
- ANY RELEASE FOR METAL BARS, GRILLS, GRATES OR SIMILAR DEVICES CONSTRUCTED TO PRECLUDE HUMAN ENTRY THAT ARE INSTALLED SHALL BE LOCATED ON THE INSIDE OF THE ADJACENT ROOM AND AT LEAST 24 INCHES FROM THE CLOSET OPENING THROUGH SUCH METAL BARS, GRILLS, GRATES OR SIMILAR DEVICES THAT EXCEEDS TWO INCHES IN ANY DIMENSION. 91.6715.4

## STANDARD SOUND RATED PARTITION ASSEMBLIES

- THE TYPE AND SPACING OF RESILIENT CHANNELS AND CHIPS AND THE ATTACHMENT OF GYPSUM BOARD OR LATH SHALL BE AS REQUIRED FOR FIRE RATINGS
- THE MINERAL FIBER INSULATION SHALL HAVE A THERMAL RESISTANCE R VALUE OF 11 OR GREATER AS DETERMINED BY FEDERAL SPECIFICATION RR-1-521B
- NO TEST ON FILE TO JUSTIFY AN STC 50 WITH ONE 5/8" TYPE "X" GYPSUM BOARD EACH SIDE

## SOUND RATED PARTITIONS AND FLOOR-CEILING CONSTRUCTION

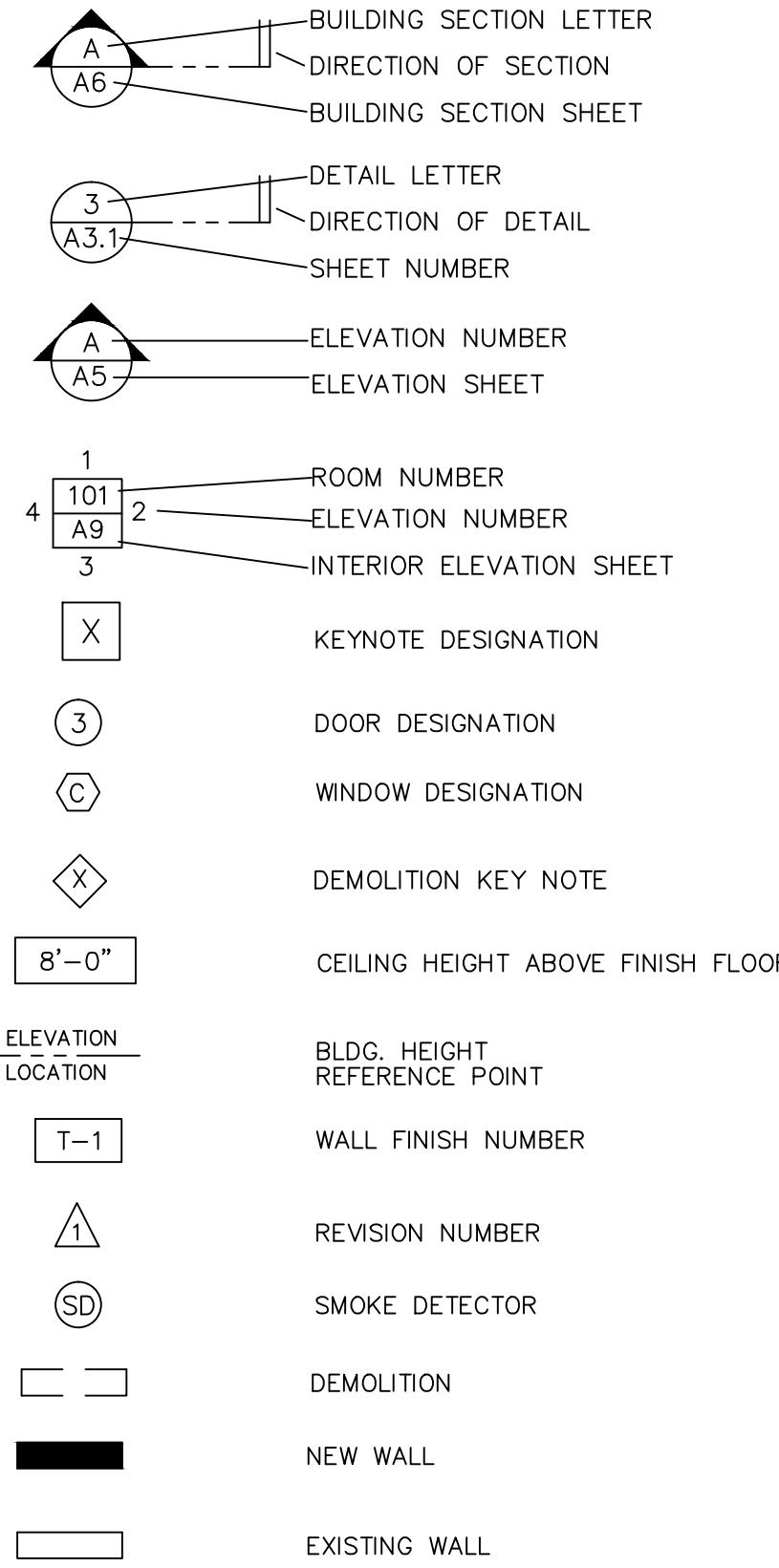
- ALL PENETRATIONS INTO SOUND RATED PARTITIONS OR FLOOR-CEILING ASSEMBLIES SHALL BE SEALED, LINED OR INSULATED WITH AN APPROVED PERMANENT RESILIENT SEALANT.
- ALL RIGID CONDUITS, DUCTS, PLUMBING PIPES, APPLIANCE VENTS LOCATED IN SOUND RATED ASSEMBLIES SHALL BE ISOLATED FROM THE BUILDING CONSTRUCTION BY MEANS OF RESILIENT SLEEVES, MOUNTS OR MINIMUM 1/4" THICK APPROVED RESILIENT MATERIAL.
- AN APPROVED PERMANENT AND RESILIENT ACOUSTICAL SEALANT SHALL BE PROVIDED ALONG THE JOINT BETWEEN THE FLOOR AND THE SEPARATION WALLS.
- METAL VENTILATING AND CONDITIONED AIR DUCTS LOCATED IN SOUND RATED ASSEMBLIES SHALL BE LINED (EXCEPTION: DUCTS SERVING ONLY EXIT WAYS, KITCHEN COOKING FACILITIES, AND BATHROOMS NEED NOT BE LINED.)
- MINERAL FIBER INSULATION SHALL BE INSTALLED IN JOIST SPACES WHENEVER A PLUMBING PIPING, OR DUCT PENETRATES A FLOOR-CEILING ASSEMBLY OR WHERE SUCH UNIT PASSES THROUGH THE PLANE OF THE FLOOR-CEILING ASSEMBLY FROM WITHIN A WALL. THE INSULATION SHALL BE INSTALLED TO A POINT 12" BEYOND THE PIPE OR DUCT. THIS REQUIREMENT IS NOT APPLICABLE TO FIRE SPRINKLER PIPE, GAS LINE OR ELECTRICAL CONDUIT.
- ELECTRICAL OUTLET BOXES IN OPPOSITE FACES OF SEPARATION WALLS SHALL BE SEPARATED HORIZONTALLY BY 24" AND NOTE THAT BACK AND SIDES OF BOXES SHALL BE SEALED WITH 1/8" RESILIENT AND BACKED BY A MINIMUM OF 2" THICK MINERAL FIBER INSULATION.
- NO WALL FURNACE SHALL BE INSTALLED IN SOUND RATED PARTITIONS.
- NO ELECTRICAL PANEL SHALL BE INSTALLED IN SOUND RATED PARTITIONS.

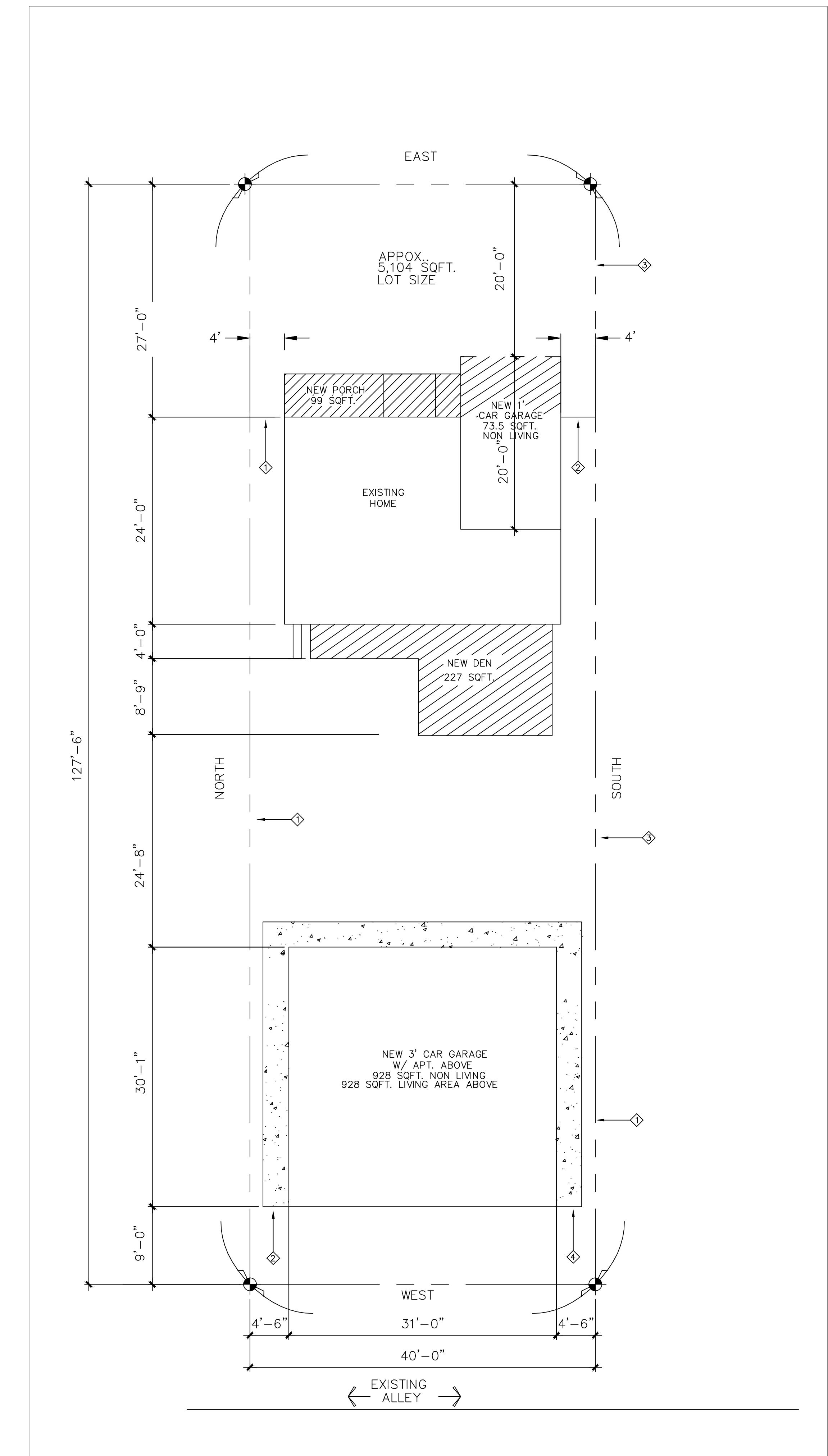
## ABBREVIATIONS

A.B.	ANCHOR BOLT	M.T.	METAL THRESHOLD
ABV	ABOVE	N.I.C.	NOT IN CONTRACT
A.C.T.	ACOUSTICAL CEILING TILE	N.O.	NUMBER
ADJ.	ADJUSTABLE, ADJACENT	N.T.S.	NOT TO SCALE
A.F.F.	ABOVE FINISH FLOOR	O	OWNER
A.C.	AIR CONDITIONING	OFF.	OFFICE
ANOD.	ANODIZED	O.C.	ON CENTER
ALUM/AL ALUMINUM	ALUM/AL ALUMINUM	OFCI	OWNER FURNISHED
APPROX.	APPROXIMATE	CONT'R	INSTALLED
BD.	BOARD	OPN'G.	OPENING
BM.	BEAM	OPP.	OPPOSITE
BLK.	BLOCK	O.A.	OVERALL
BLK'G.	BLOCKING	O.A.H.	OVERALL HEIGHT
BOT.	BOTTOM	O.H.	OVERHEAD
BLDG.	BUILDING	P.C.C.	PORTLAND CEMENT CONC.
B.N.	BOUNDARY NAIL	P.G.	PAINT GRADE
CAB.	CABINET	PR.	PAIR
CLG.	CEILING	PNL.	PANEL
CEM.	CEMENT	PART.	PARTITION
C.F.	CURB FACE	PERF.	PERFORATION
C.	CENTERLINE	PLAS.	PLASTER
C.T.	CERAMIC TILE	PTDF.	PRESSURE TREATED
CLR.	CLEAR	PLYWD.	PLYWOOD
COL.	COLUMN	PROP.	PROPERTY
C.M.U.	CONCRETE MASONRY UNIT	P.L.	PROPERTY LINE
CONC.	CONCRETE	P.V.C.	POLY VINYL CHLORIDE
CONST.	CONSTRUCTION	R.	RISER
CONT.	CONTINUOUS	REFR.	REFRIGERATOR
C.J.	CONTRACTION OR	R.S.	REMOTE SENSOR
CONTR.	CONTROL JOINT	REINF.	REINFORCING
CORR.	CONTRACTOR	REQ'D.	REQUIRED
CTRD.	CORRIDOR	RET.	RETURN
DP.	CENTERED	R.A.	RETURN AIR
DET.	DETAILED	REV.	REVERSE
DIAG.	DIAGONAL	RCP.	REFLECTED CEILING
DIA.	DIA METER	R.D.	ROOF DRAIN
DIM.	DIMENSION	ROOF'G.	ROOFING
DR.	DOOR	R.M.	ROOM
DBL.	DOUBLE	R.O.	ROUGH OPENING
DN.	DOWN	S.E.	SATIN ENAMEL
D.S.	DIRECTIONAL SIGN,	SCHED.	SCHEDULE
DWG.	DOWNSPOUT	SECT.	SECTION
DRAWING	DRAWING	S.G.E.	SEMI-GLOSS ENAMEL
EA.	EACH	SHT'G.	SHETHING
E.S.	EACH SIDE	SHT.	SHET
E.I.F.S.	EXTERIOR INSULATION & FINISH SYSTEM	S.C.R.	SILICONE CONTROL
ELEC.	ELECTRICAL	SIM.	SIMILAR
E.P.	ELECTRICAL PANEL	SK.	SINK
ELEV.	ELEVATION (GRADE)	S.D.	SOAP DISPENSER
E.N.	ELEVATION (BLDG)	SOL.	SOLID
ENCL.	ENCLOSURE	SPECS.	SPECIFICATIONS
EQ.	EQUAL	SQ.	SQUARE
EQUIP.	EQUIPMENT	S.S.	S/S STAINLESS STEEL
EXH.	EXHAUST	STD.	STANDARD
EXIST.	EXISTING	STL.	STEEL
E.J.	EXPANSION JOINT	STOR.	STORAGE
EXP.	EXPOSED; EXPANSION	ST.	STREET; STRAIN
EXT.	EXTERIOR	STRUCT.	STRUCTURAL
FIN.	FINISH	SUSP.	SUSPEND; SUSPENDED
F.R.P.	FIBERGLASS REINFORCED PANEL	SW.	SWITCH
F.F.	FINISH FLOOR	SYS.	SYSTEM
F.E.	FIRE EXTINGUISHER	TEL.	TELEPHONE
F.E.C.	FIRE EXTINGUISHER CABINET	THRM.	THERMOSTAT
F.P.	FIRE PROOF	THK.	THICK
FLASH.	FLASHING	THRU.	THROUGH
FLR.	FLOOR	TOIL.	TOILET
F.D.	FLOOR DRAIN	T.O.C.	TOP OF CURB
F.S.	FLOOR SINK	T.O.P.	TOP OF ROOF
FTG.	FOOTING	T.O.P.	TOP OF PARAPET
FDN.	FOUNDATION	T.S.	TUBE STEEL
F.O.F.	FACE OF FINISH	T.O.W.	TOP OF WALL
GA.	GAUGE	T.S.B.	TOP SET BASE
G.C.	GENERAL CONTRACTOR	T.	TREAD
GEN.	GENERAL	T.S.	TUBULAR STEEL
G.I.	GALVANIZED IRON	TYP.	TYPICAL
GR.	GRASS; GLAZING; GLAZED	U.L.	UNDERWRITING
GYP.	GYPSUM	UNFIN.	UNFINISHED
H.W.R.	HARDWARE	U.O.N.	UNLESS OTHERWISE
H.D.	HUB DRAIN	NOTED	
H.M.	HOLLOW METAL	VENT.	VENTILATE; VENTILATION
HORIZ.	HORIZONTAL	VEST.	VESTIBULE
H.P.	HIGH POINT	V.W.C.	VINYL WALL COVERING
HT.	HEIGHT	W.C.	WATERCLOSEST
I/F.	INTERFACE	W.P.	WATERPROOF
INS.	INSULATE; INSULATION	W.W.F.	WELDED WIRE FABRIC
INT.	INTERIOR	W.	WIDE; WIDTH
JNT.	JOINT	W/	WITH
JST.	JOIST	W/O	WITHOUT
LAM.	LAMINATE; LAMINATED	WD.	WOOD
L.P.	LOW POINT; LAMINATED PLASTIC	W.I.C.	WALK-IN COOLER
LTG.	LIGHTING	W.I.F.	WALK-IN FREEZER
MFR.	MANUFACTURER		
MAT'L.	MATERIAL		
MAX.	MAXIMUM		
MECH.	MECHANICAL		
MEMB.	MEMBRANE		
MET/MTL	METAL		
M.L.	METAL LATH		
MIN.	MINIMUM		
MISC.	MISCELLANEOUS		
MLDG.	MOULDING		

## ABBREVIATIONS

## SYMBOLS





PROPOSED NEW HARD SCAPE PLAN

N.T.S.  
N

SCALE: 1/8" = 1'-0"

CONTRACTOR TO VERIFY  
ALL DIMENSIONS

KEY NOTES

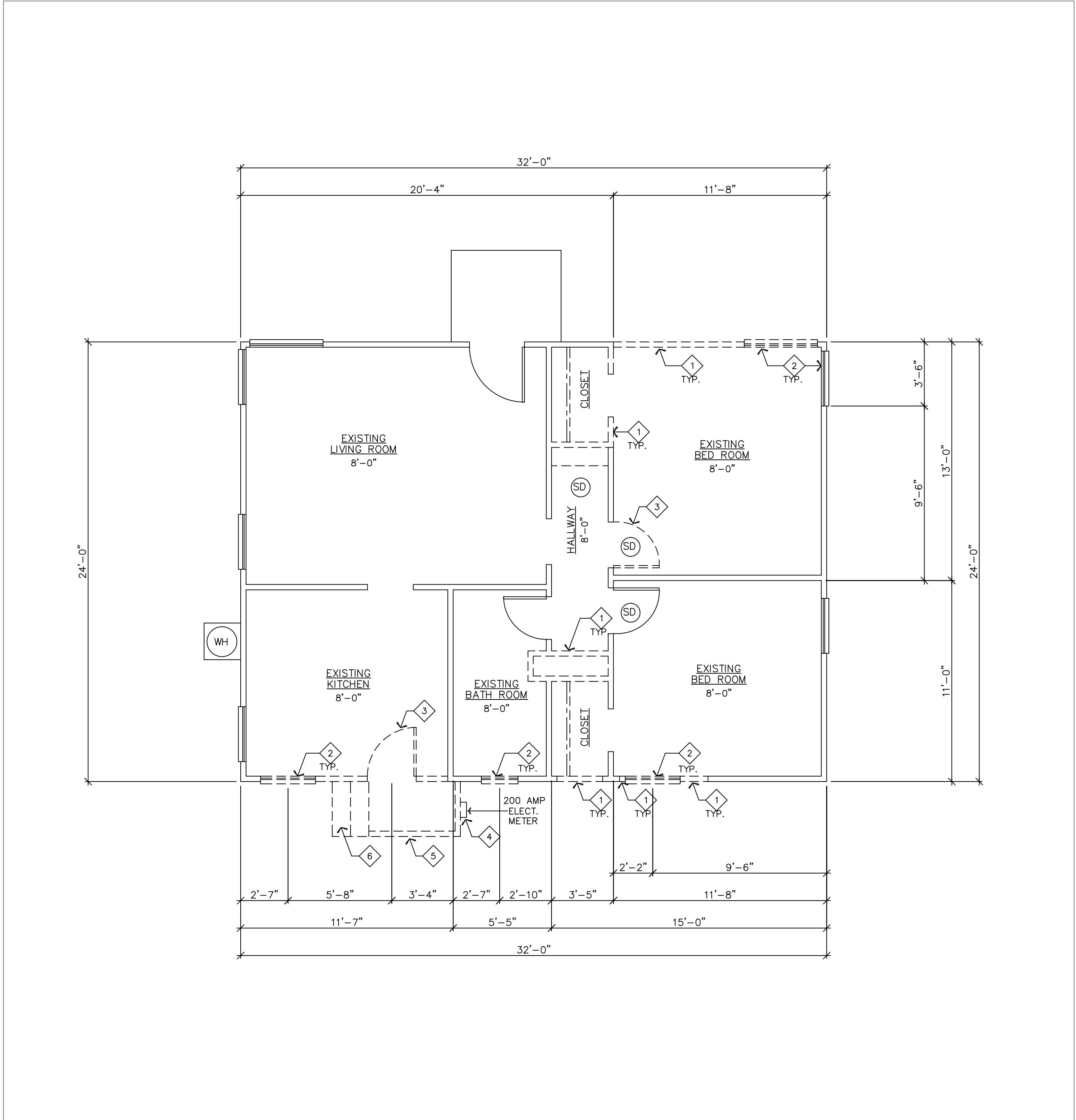
- 1 NEW DOG EAR FENCE 5' HIGH
- 2 NEW DOG EAR GATE 5' HIGH
- 3 EXISTING BLOCK WALL 5' HIGH
- 4 EXISTING DOG EAR GATE 5' HIGH

PLANS PREPARED BY:  
LUCKY MILLS  
18923 YUKON AVE.  
TORRANCE, CA 90504  
(626) 392-8623

CLIENT NAME  
Mr. Reginald Mc Nutly  
3347 Brayton Ave.  
Signal Hill, Ca. 90755

SHEET NAME  
PROPOSED NEW HARD SCAPE PLAN  
PROPOSED NEW HARD SCAPE PLAN

REVISIONS		
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# DEMOLITION PLAN

N.T.S.  
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CONTRACTOR TO VERIFY  
ALL DIMENSIONS

SCALE: 1/4" = 1'-0"

## DEMOLITION KEY NOTES

- 1 EXISTING WALLS TO BE REMOVED
- 2 EXISTING WINDOWS TO BE REMOVED
- 3 EXISTING DOORS TO BE REMOVED
- 4 EXISTING ELECTRICAL PANEL TO BE RELOCATED
- 5 EXISTING PONY WALL TO BE REMOVED
- 6 EXISTING CONCRETE STAIRS TO BE REMOVED

## DEMOLITION NOTES

- A. PRIOR TO STARTING DEMOLITION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS AND APPROVALS. NO DEMOLITION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.
- B. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE REQUIREMENTS AND STANDARDS OF THE LOCAL GOVERNING AUTHORITIES.
- C. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT ALL NOISE AND DUST CONTROL REQUIREMENTS ARE IN COMPLIANCE WITH LOCAL ORDINANCES.

PLANS PREPARED BY :  
LUCKY MILLS  
18923 YUKON AVE.  
TORRANCE, CA 90504  
(626) 392-8623

CLIENT NAME \_\_\_\_\_

**SHEET NAME** \_\_\_\_\_

**PROPOSED DEMOLITION PLAN**

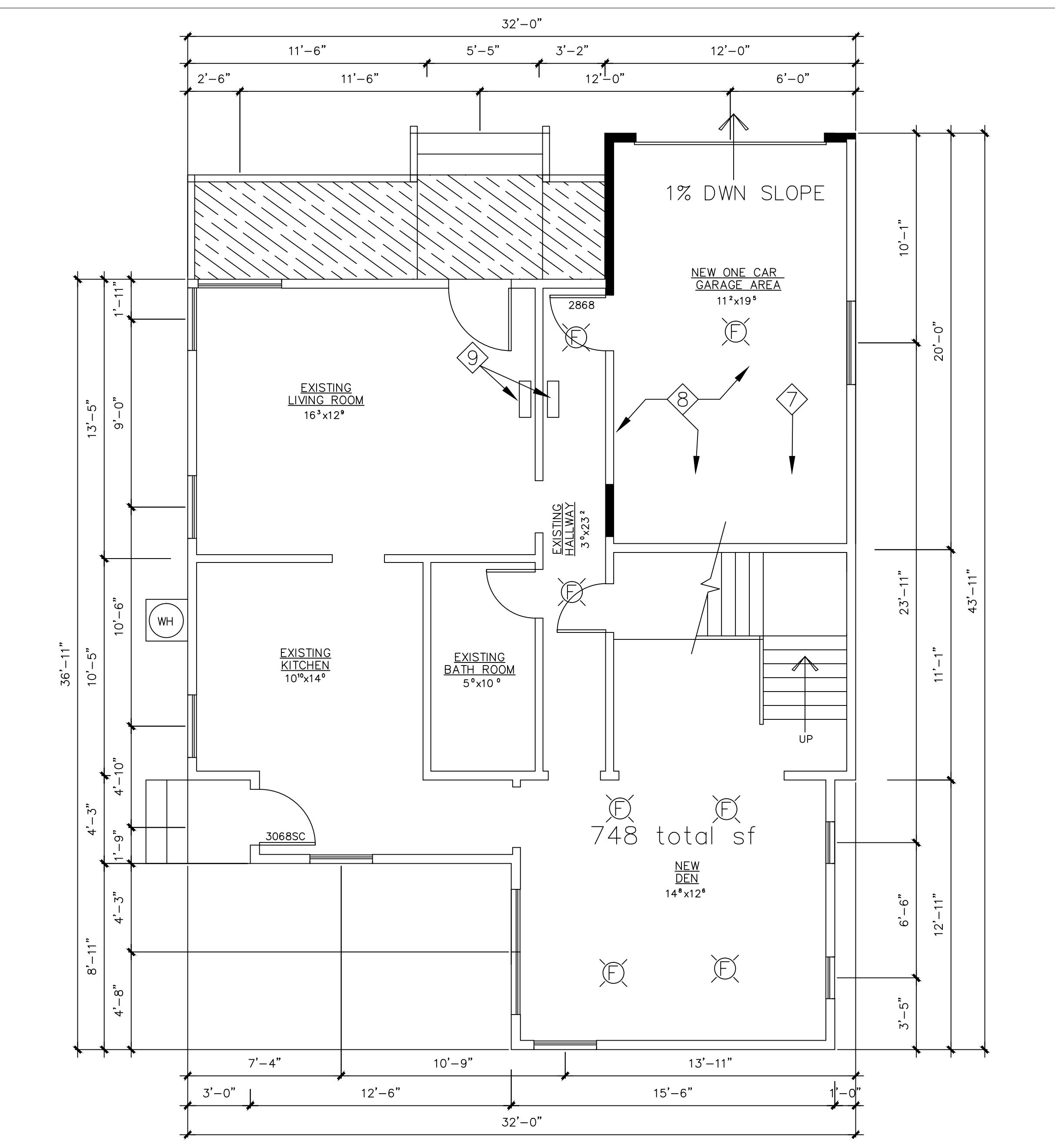
BUILDING TYPE  
3 BEDROOM  
HOME  
WITH GARAGE  
ISSUE DATE

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SHEET NUMBER

A 4

REV. DATE: 09/30/11

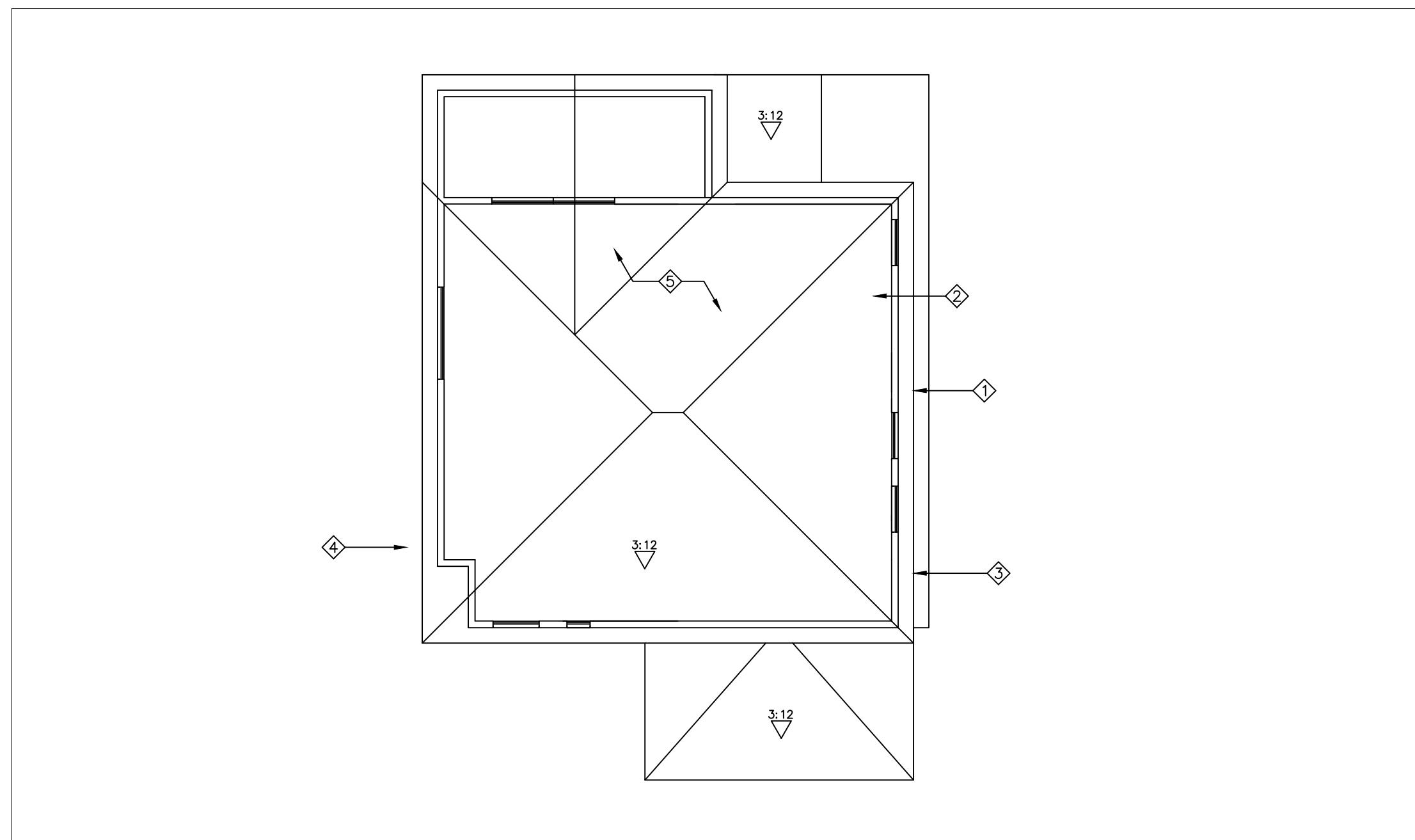


## FIRST FLOOR

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SCALE: 1/4" = 1'-0"

CONTRACTOR TO VERIFY  
ALL DIMENSIONS

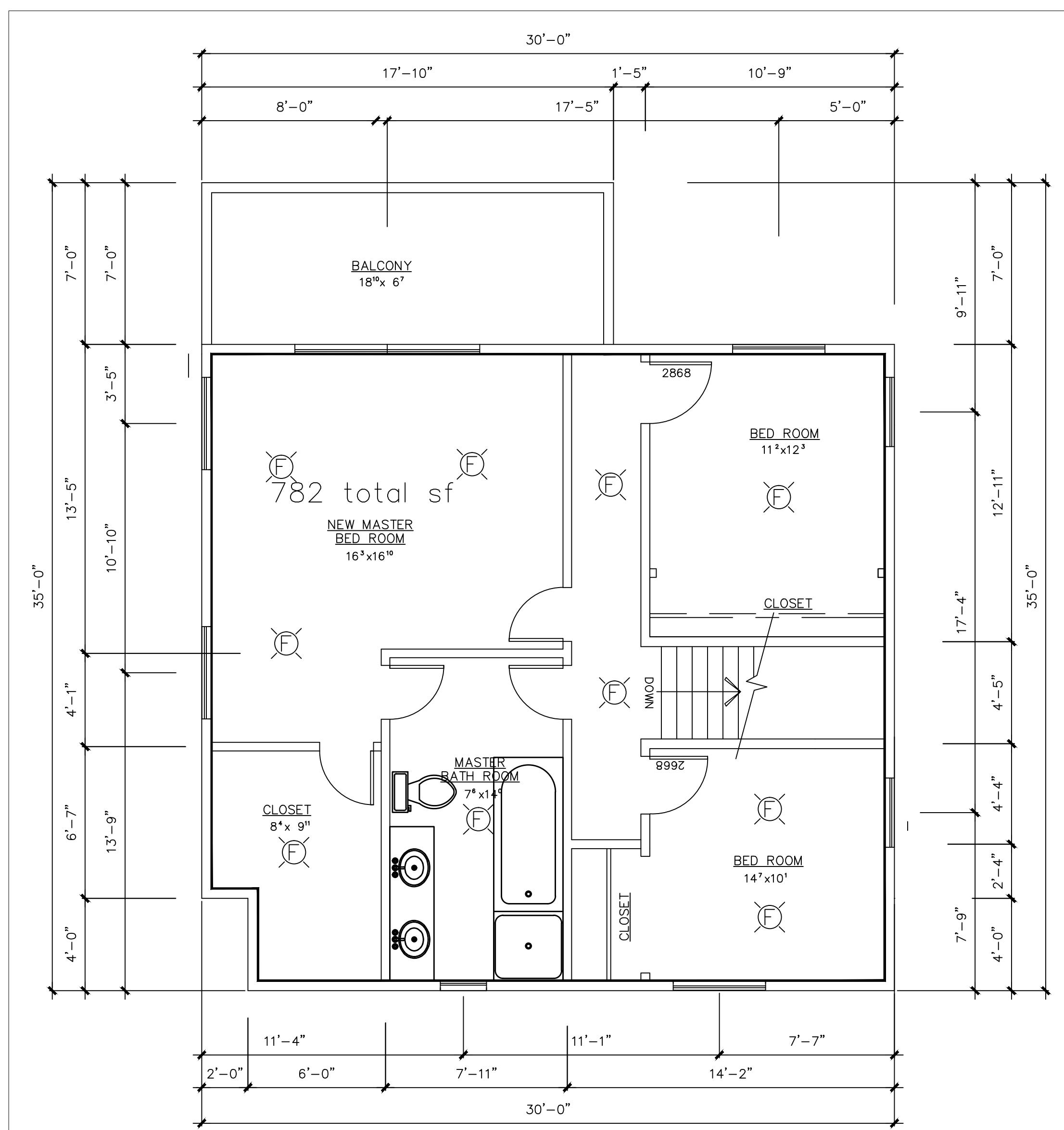


# PROPOSED ROOF PLAN

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SCALE: 1/8" = 1'-0"



## PROPOSED SECOND FLOOR

N.T.S.  
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SCALE: 1/4" = 1'-0"

## FLOORPLAN KEY NOTES

- 7 PROPOSED NEW 18" DEEP STORAGE CABINET
- 8 1/2" GYPBOARD AT GARAGE SIDE WALLS AND CEILING
- 9 1-3/8" THICK SOLID CORE, SELF CLOSING, SELF LATCHING.
- 8 EXISTING ELECT. SUBPANEL RELOCATE OUTSIDE NORTH WALL OF NEW MASTER BEDROOM - READILY ACCESS.
- 9 EXISTING FLOOR FURNACE (DUAL) 50k btu
- SD ALL SMOKE DETECTYORS HARDWIRED W/BATTERY BACKUP, INTERCONNECTED. MAY BE BATTERY POWERED AT EXISTING AREAS
- CM CARBON MONOXIDE ALARM SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING, SHALL BE EQUIPPED WITH BATTERY BACKUP AND INTER-CONNECTED.

## ELECTRICAL NOTES

1. ALL 120v BRANCH CIRCUITS SUPPLYING OUTLETS IN CLOSETS, HALLWAYS, BEDROOMS AND OTHER HABITAL ROOMS (EXCEPT KITCHEN) SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER (AFCI)
2. ALL RECEPTACLE OUTLETS SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES.

RECESSED EXHAUST FAN/FLOURESCENT LIGHT  
COMBINATION  
DEMO WALLS  
EXISTING WALLS  
NEW WALLS

3. ALL BRANCH CIRCUITS THAT SUPPLY 125-volts, SINGLE PHASE 15 OR 20 AMPERE RECEPTACLE OUTLETS INSTALLED IN DWELLING UNIT BEDROOMS AND OTHER HABITABLE ROOM SHALL BE PROTECTED BY ARC-FAULT CIRCUIT INTERRUPTER(S). (PER 1999 NEC 210-12)

4. MECHANICAL, ELECTRICAL AND PLUMBING SYSTEM ARE SHOWN FOR INTENT ONLY. THESE SYSTEMS SHALL BE ENGINEERED BY OTHERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND PLACEMENT.

5. BATHROOM BRANCH CIRCUITS REQUIRED. THE BATHROOM RECEPTACLES(S) REQUIRED IN SECTION 210-52(d) MUST BE SUPPLIED BY A 20 AMP CIRCUIT THAT DOES NOT SUPPLY ANY OTHER LOADS.

6. REQUIRED FLUORESCENT LIGHTS SHALL NOT BE SCREW IN TYPE,

7. INCANDESCENT LIGHTING FIXTURES RECESSED INTO INSULATED CEILINGS MUST BE APPROVED FOR ZERO-CLEARANCE INSULATION COVER (I.C.) BY U.L. OR OTHER TESTING LAB RECOGNIZED BY I.C.B.O. (SECTION 150(k)(4)).

8. INCANDESCENT AND FLUORESCENT FIXTURES ARE NOT TO BE SWITCHED TOGETHER

9. FIXTURES SHALL NOT CONTAIN MEDIUM-BASE INCANDESCENT LAMP SOCKETS.

10. PROVIDE AFCI (ARC-FAULT CIRCUIT INTERRUPTER) RECEPTACLES PER NEC SECTION 210-12 IN ALL DWELLING UNIT BEDROOMS AND OTHER HABITABLE ROOMS.

11. LIGHT FIXTURES IN CLOTHES CLOSETS TO COMPLY WITH N.E.C. SECTION 410-8.

12. ALL RECEPTACLES OUTLETS SHALL BE TAMPER-RESISTANT RECEPTACLES PER CEC SECTION 406.11

13. F.A.R. = 5.104 \* .49 = 2.501 SQ.FT.

DOWN STAIRS	=	748 SQ.FT.
UP STAIRS	=	782 SQ.FT.
BACK HOUSE	=	931 SQ.FT.
TOTAL	=	2 461 SQ.FT.

## ROOF KEY NOTES

- 1 LINE OF ROOF
- 2 LINE OF WALL BELOW
- 3 GUTTERS (LOCATION TO BE VERIFIED BY INSTALLER)
- 4 2X8 FASCIA
- 5 ROOF COVERING (COMP. SHINGLE CLASS "B" ROOFING)
- 6 24" HALF ROUND DORMER VENT

PLANS PREPARED BY :  
LUCKY MILLS  
18923 YUKON AVE.  
TORRANCE, CA 90504  
(626) 392-8623

CLIENT NAME

---

Mr. Reginald Mc Nutly  
3347 Brayton Ave.  
Signal Hill, Ca. 90755

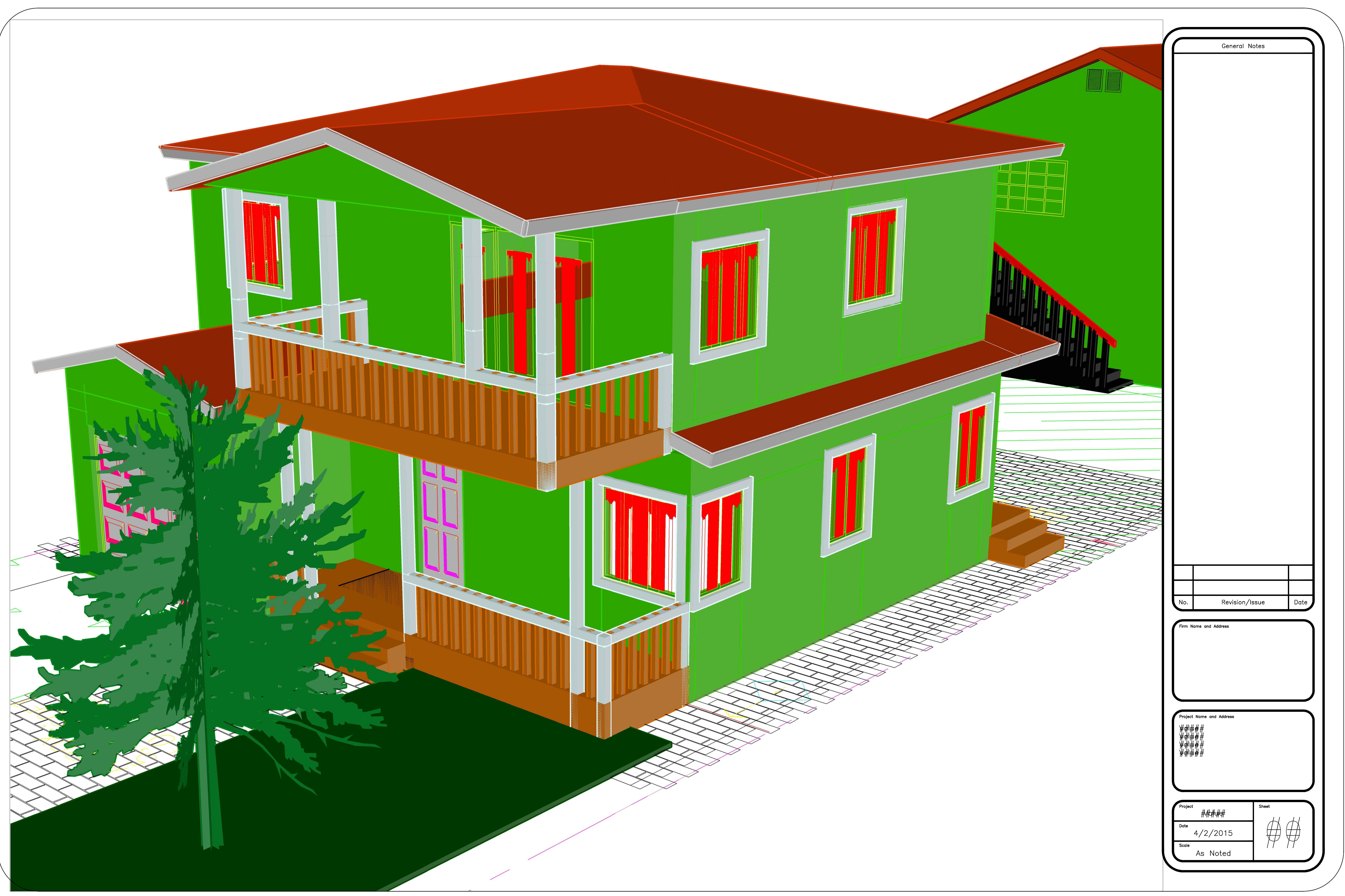
PROPOSED NEW FLOOR PLAN W/ NEW ROOF PLAN  
SHEET NAME

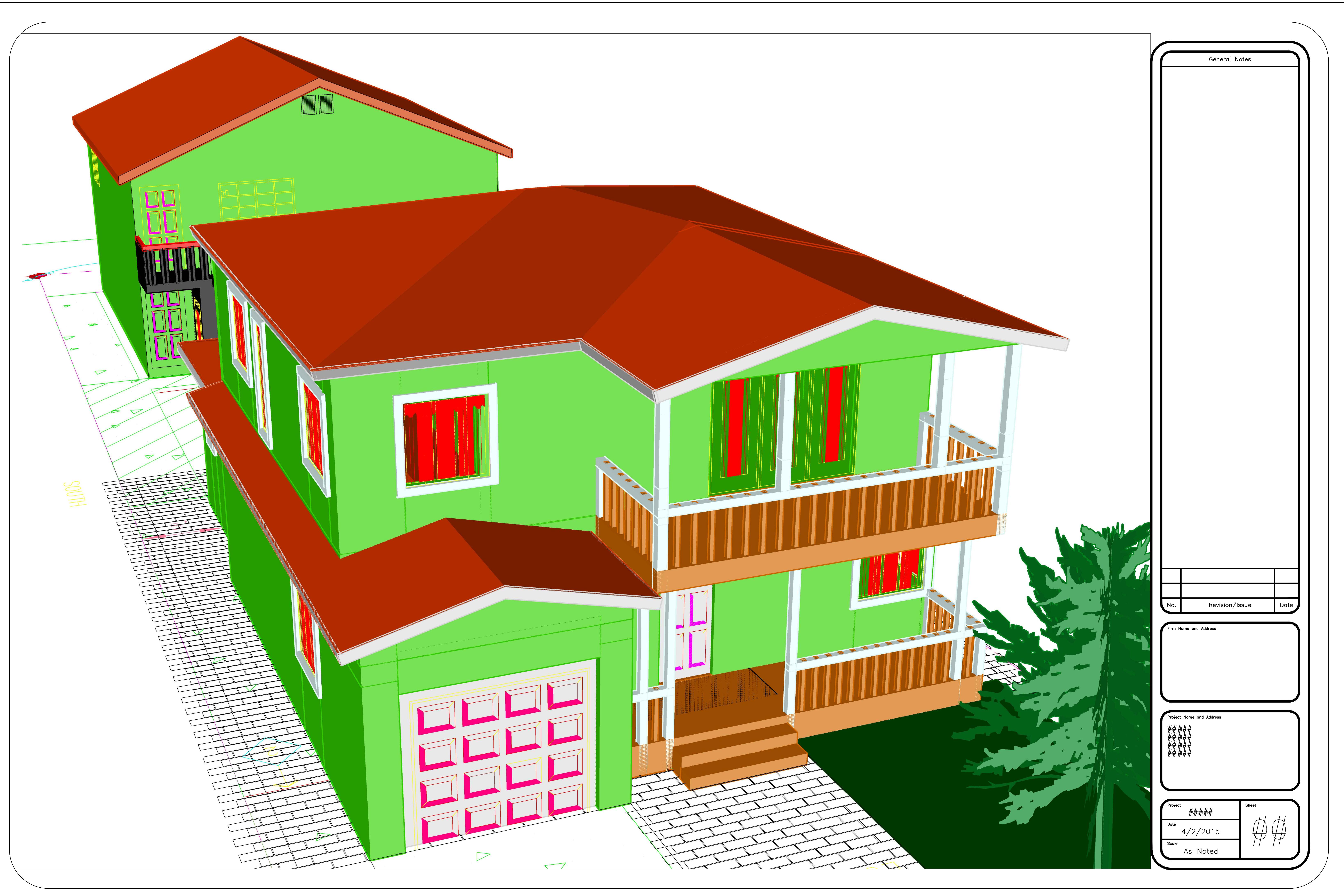
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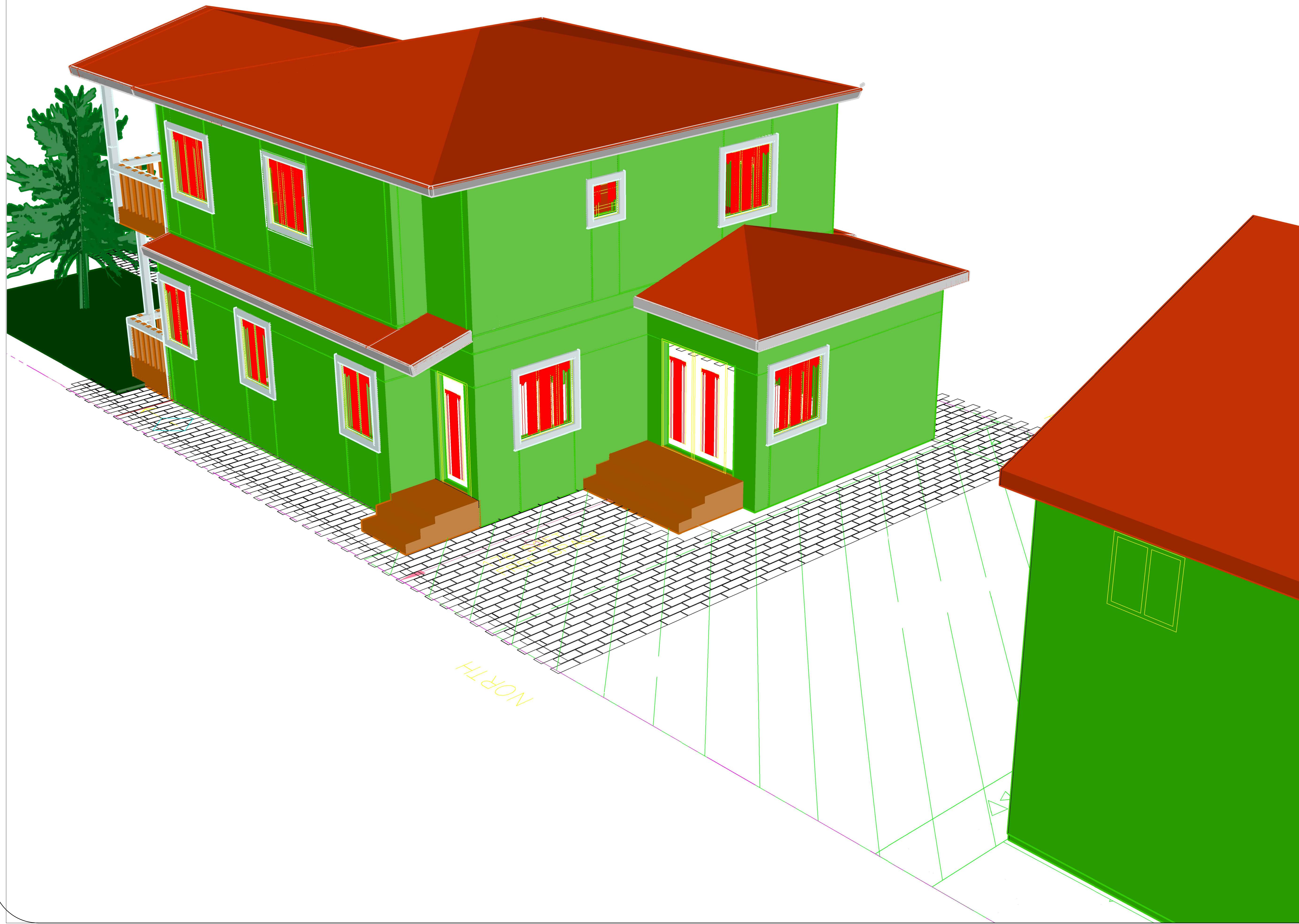
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## General Notes

Project

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Date

Project

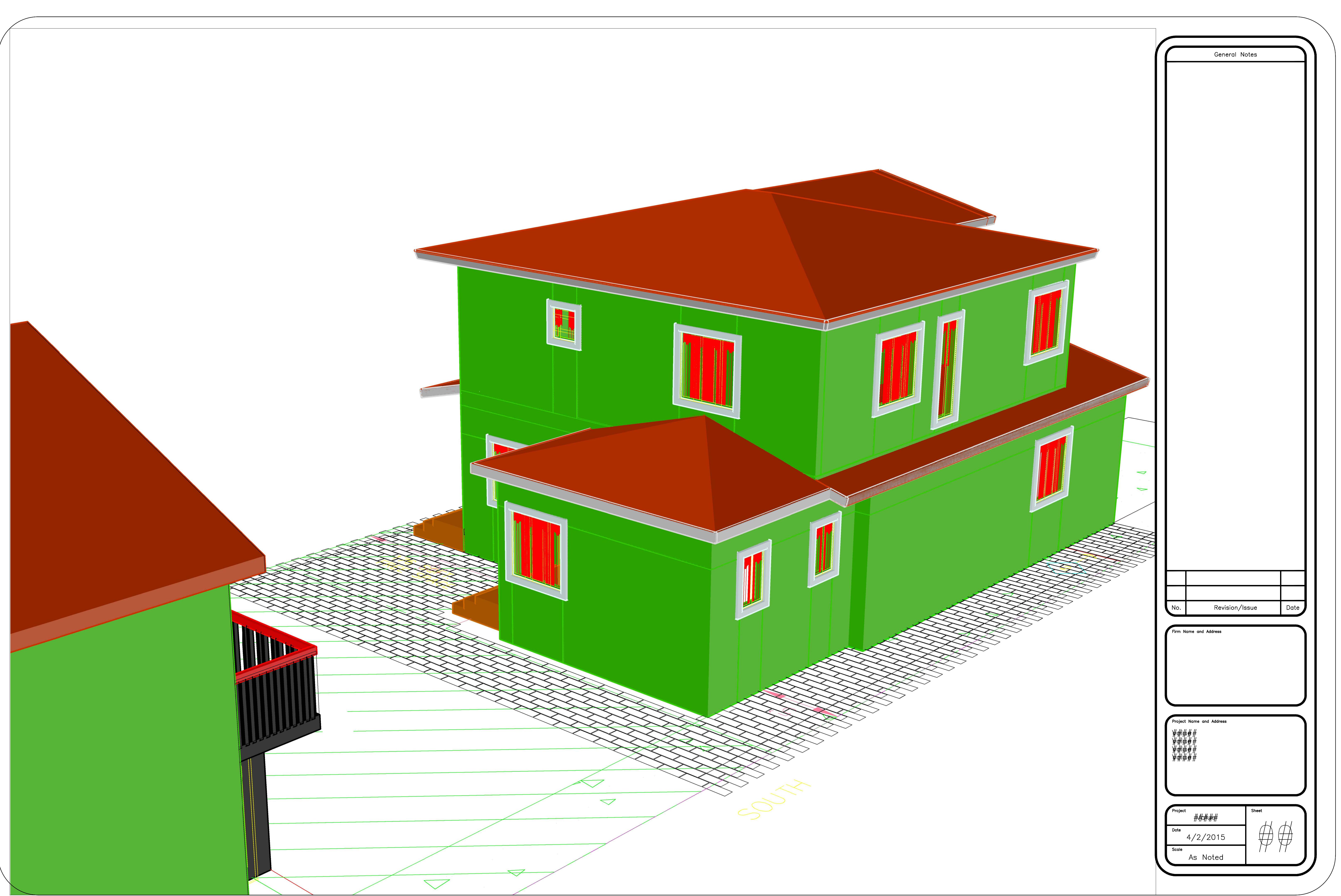
Date

4/2/2015

Scale

As Noted

Sheet





**2**



Amendment to Title 16  
Oil Code

## CITY OF SIGNAL HILL

---

2175 Cherry Avenue ♦ Signal Hill, CA 90755-3799

### PROCEDURES RELATIVE TO PUBLIC HEARINGS/WORKSHOPS

1. At the request of the Mayor/Chair, the City Clerk/Secretary reports on the Form of Notice given:
  - a. Notice was published in the *Signal Tribune* newspaper per Government Code §65091(a)(4) on April 3, 2015.
  - b. Notice was posted in accordance with Signal Hill Municipal Code Section 1.08.010 on April 3, 2015.
2. Mayor/Chair asks for a staff report, which shall be included in written materials presented to the City Council/Commission so that they can be received into evidence by formal motion.

In addition, the staff report shall include the following:

- a. Summarize the resolution/ordinance;
- b. The specific location of the property, and/or use, the surrounding properties;
- c. The criteria of the Code which applies to the pending application; and
- d. The recommendation of the Council/Commission and/or other legislative body of the City and staff recommendation.

3. Mayor/Chair declares the public hearing open.
4. Mayor/Chair invites those persons who are in favor of the application to speak.
5. Mayor/Chair invites those persons who are in opposition to the application to speak.
6. Applicant or their representative is provided a brief rebuttal period.
7. Mayor/Chair declares the public hearing closed.
8. Discussion by Council/Commission only.
9. City Attorney reads title of resolutions and/or ordinances.
10. City Clerk/Secretary conducts Roll Call vote.



## CITY OF SIGNAL HILL

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2175 Cherry Avenue ♦ Signal Hill, CA 90755-3799

April 14, 2015

### **AGENDA ITEM**

**TO:** HONORABLE CHAIR  
AND MEMBERS OF THE PLANNING COMMISSION

**FROM:** COLLEEN DOAN  
ASSOCIATE PLANNER

**SUBJECT:** PUBLIC HEARING - MUNICIPAL CODE AMENDMENT TO TITLE 16  
ENTITLED "OIL CODE" AND CHAPTER 20.52 ENTITLED "SITE PLAN  
AND DESIGN REVIEW" ESTABLISHING REGULATIONS TO ALLOW  
DEVELOPMENT ON TOP OF AND IN CLOSE PROXIMITY TO  
ABANDONED WELLS AND REVISING METHANE ASSESSMENT AND  
MITIGATION PROCEDURES

### **Summary:**

The Planning Commission will consider an amendment to the Signal Hill Municipal Code establishing regulations for development on properties with abandoned wells, adding site restoration requirements for well abandonments, revising methane assessment and mitigation procedures for all development and updating the standards and procedures for well surveys, leak testing and venting. The amendment maintains the existing regulations for active wells, idle wells and oil production operations. An equivalency standard is added and new regulations related to the City's land use authority regarding development over and in close proximity to abandoned wells. Currently, the Oil Code does not allow development over abandoned wells or if wells are not reasonably accessible for a maintenance rig. Without the amendment, development on properties with abandoned wells is constrained and some properties may be undevelopable.

The Commission will also consider the associated Negative Declaration. An Initial Study was prepared by the City's environmental consultant and is currently being circulated by the State Clearinghouse for a 30 day public comment period.

**Recommendations:**

- 1) Waive further reading and adopt the following resolution, entitled:

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF SIGNAL HILL, CALIFORNIA, RECOMMENDING CITY COUNCIL ADOPTION OF NEGATIVE DECLARATION 04/03/15(1), RELATIVE TO ORDINANCE AMENDMENT 15-01

- 2) Waive further reading and adopt the following resolution, entitled:

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF SIGNAL HILL, RECOMMENDING CITY COUNCIL APPROVAL OF ORDINANCE AMENDMENT 15-01, AMENDING TITLE 16 ENTITLED "OIL CODE" AND CHAPTER 20.52 ENTITLED "SITE PLAN AND DESIGN REVIEW" ESTABLISHING REGULATIONS TO ALLOW DEVELOPMENT ON TOP OF AND IN CLOSE PROXIMITY TO ABANDONED WELLS AND REVISING METHANE ASSESSMENT AND MITIGATION PROCEDURES AND SITE RESTORATION STANDARDS

**Background:**

In 1990, the City adopted its comprehensive Oil Code. At that time, Chapter 16.24 required that prior to issuance of building or grading permits, property owners or developers must provide the City with a California Department of Conservation Division of Oil Gas and Geothermal Resources (DOGGR) certification, verifying that previous oil well abandonments are satisfactory, or that wells have been reabandoned to current DOGGR standards or to the DOGGR equivalency standard. The DOGGR equivalency standard recognized the complexity of the well reabandonment process based on well conditions such as:

- location, age and depth
- number, location and condition of casings
- number, location and condition of plugs
- well obstructions or "junk in the hole"
- historic co-mingling of hydrocarbon zones

In November 2010, DOGGR changed their well certification program to eliminate the equivalency standard with no prior notice to the City, property owners, or developers. The abrupt change to what had been a 22-year program created uncertainty for local agencies and the development community.

On August 16, 2011, the City Council unanimously adopted Interim Urgency Ordinance for the allowed maximum term of 45 days. The ordinance allowed limited opportunities to develop on properties with abandoned wells while the City conducted special studies in order to adopt a comprehensive amendment to the City's Oil Code. During this period, no permits could be issued for structures located on top of abandoned wells, or for abandoned wells lacking access for a maintenance rig (in close proximity). The interim ordinance allowed development provided:

- Development did not occur over abandoned wells;
- Certain setbacks from structures were maintained to preserve full access to abandoned wells if maintenance was necessary;
- Developers were required to survey, leak test and vent abandoned wells prior to submitting projects for Planning Commission review (this was required early in the design process to avoid changes to the site plan due to well location or conditions); and
- Developers were required to record a covenant, in a form approved by the City Attorney, disclosing the abandonment conditions and indemnifying the City for issuing permits.

Owners of leaking wells are required to apply to DOGGR for the agency's reabandonment permit. Developers are not required to reabandon wells which do not leak and where full access was provided.

On September 27, 2011, the Council conducted a public hearing to consider extending the Interim Urgency Ordinance for the allowed period of 10 months and 15 days. The Council voted 5-0 to extend the interim ordinance. The new expiration date was August 16, 2012.

On August 6, 2012, the Council conducted a public hearing to consider a one year extension for the Interim Urgency Ordinance. At that time, staff demonstrated that progress had been made on the technical studies being conducted by two City consultants with expertise in water quality and petroleum engineering, but additional time was necessary to complete the comprehensive reports. The Council voted 5-0 to extend the interim ordinance for one year. The new expiration date was August 16, 2013.

On August 20, 2013, the Oil Code Ordinance Amendment was adopted, the amendment prohibited development over or in close proximity to abandoned wells and continued the requirements for surveys, methane leak testing and venting prior to submittal for site plan and design review. Due to pending completion of the comprehensive technical reports and environmental analysis, the Code continued to prohibit development over or in close proximity to abandoned wells.

On October 7, 2014, with the water quality and well abandonment reports complete, the City Council held a public hearing and authorized SESPE Consulting, Inc. to prepare

the environmental document for the Oil Code Amendment in compliance with the California Environmental Quality Act (CEQA).

**Analysis:**

**Ordinance Amendment**

The ordinance amendment focuses on the City's land use authority regarding development over and in close proximity to abandoned wells. The City has always had the land use authority over above ground development. However, in past practices DOGGR made a well abandonment determination. The City used DOGGR's determination to make decisions related to development over abandoned oil wells. The new regulations will allow development on properties which under the current Code are undevelopable. Standards and procedures for the development over abandoned oil wells have been established in the amendment. The amendment maintains the existing regulations for active wells, idle wells and oil production operations. In addition, DOGGR will maintain authority over well abandonment procedures and below ground activities.

The majority of changes in the ordinance amendment are within Chapter 16.24. The most important revision is the establishment of City's well abandonment equivalency standard. Now, developers will have the option to develop over or within close proximity to abandoned wells, if they can demonstrate that the well meets or will be reabandoned to meet the City's equivalency standard. The standard was developed by the City's petroleum engineer following thorough technical analysis of local well abandonments with the overarching goal of protecting the public health, safety and welfare. The standard assures the integrity of the well casing and that the abandonment is adequate to prevent hydrocarbons from reaching the surface.

Other changes in this section include relocating previously combined items with differing standards such as well abandonments, idle wells, DOGGR's authority, the City's development decisions and methane testing and assessments out of a single section and into separate sections. In addition, the amendment adds site restoration requirements for well abandonments, revises methane assessment and mitigation procedures for all development and updates the standards and procedures for well surveys, leak testing and venting. All the proposed amendments are summarized in the attached summary document (Attachment A).

Highlights of the new Code sections and changes to Title 16 are provided as follows:

1. **Title 16:** Revised from "Oil Code" to "Oil and Gas Code."
2. **Chapter 16.04: General Provisions – Summary of changes:**
  - Adds site restoration and facilities removal to the Purpose section.
  - Adds an Applicability section that reiterates DOGGR's authority.
  - Adds a well permit requirement for new operators.

- Adds the duty of the City Petroleum Engineer to verify the Equivalency Standard for abandoned wells.
- No changes to Sections 16.04.030 and 16.04.050 through 16.04.130.

**3. Chapter 16.08: Definitions – Summary of changes:**

- Copies the existing definition for “Area of Development.” into Chapter 16.08 and clarifies that the Area never extends beyond the property line.
- Excludes drinking water wells from the “Drill or drilling” definition.
- No changes to Sections 16.08.10 through 16.08.40, 16.08.50 through 16.08.140 and 16.08.160 through 16.08.370.

**4. Chapter 16.12: Annual and Idle Well Permits – Summary of changes:**

- Adds a requirement to provide evidence of performance bonds, liability insurance and indemnification when initial well permits are requested and upon annual renewal.
- No changes to Sections 16.12.010 through 16.12.040 and 16.12.070 through 16.12.250.

**5. Chapter 16.16: Drilling Standards - No changes**

**6. Chapter 16.20: Operating and Safety Standards - No changes**

**7. Chapter 16.22: Idle Wells – Summary of changes**

- Relocates idle well requirements from the existing Chapter 16.24, to a *new* Chapter 16.22 with minor edits to reference section numbers.

**8. Chapter 16.23: Abandonment of Wells – Summary of changes:**

- Relocates well abandonment requirements from the existing Chapter 16.24, to a *new* Chapter 16.23.
- Reiterates DOGGR authority over well abandonment procedures.
- References Section 16.24, the City’s abandonment permit and restoration standards.

**9. Chapter 16.24: Development Standards for Properties Containing Abandoned Wells – Summary of changes:**

- Relocates the standard for Area of Development to a new section.
- Deletes sections related to required abandonment and idle wells that have been relocated to *new* Sections 16.22 and 16.23.
- Adds prerequisite to site plan and design review standards for development of properties with abandoned wells including survey, leak testing and well access.
- Adds a requirement for a Well Abandonment Report including an Equivalency Standard Assessment Report and procedures for review.
- Adds a City Abandonment and Restoration Permit.
- Adds an Equivalency Standard and procedures for the City’s determination to develop over and in close proximity to abandoned wells.
- Adds methane assessment and mitigation standards for all development properties.
- Adds Restoration Standards for the City’s Abandonment Permit.

**10. Chapter 16.25: Storage Facilities - No changes**

**11. Chapter 16.32: Pipelines - No changes**

## 12. Chapter 20.52: Site Plan and Design Review

- Adds the data and exhibits required in Chapter 16.24 to the application submission requirements.
- Add the requirement for a letter of intent for methane assessment and mitigation.
- Adds a condition of approval for site plan and design review that the property owner record indemnification CC&Rs.

### Comprehensive Technical Reports

The Oil Code Amendment is based on the technical reports. The following summarizes the well abandonment equivalency standard and groundwater quality reports:

*Well Abandonment Equivalency Standard* - The City's petroleum engineer consultant, Evans & Walker, conducted an extensive analysis of drilling and historic well abandonments and reabandonments in the Long Beach oil and gas field (the Field). The purpose of the analysis was to develop an abandonment equivalency standard for inclusion in the City's Municipal Code. Developers will have the option to develop over or within close proximity to abandoned wells, if they can demonstrate that the well meets or will be reabandoned to meet the City's equivalency standard. The overarching goal of the standard was to insure that the integrity of the abandonment is sufficient to maintain protection of the public health, safety and welfare following development.

The DOGGR website indicates there have been 2,196 wells abandoned in the Long Beach Field over time. The analysis included a review of well data, such as wellbore diagrams and well history, obtained from DOGGR for 472 wells in addition to the development project files provided by the City and Signal Hill Petroleum, Inc. The review concluded that 404 of the reviewed wells were abandoned and an in depth analysis of the integrity of the well abandonments was conducted. An analysis of the composition of the 404 wells was also conducted to ensure that it was a representative subset of all of the wells in the field. In addition, a statistical validity analysis indicates that the 404 wells analyzed from the 2,196 abandonments in the Field was a statistically valid subset.

Following development of a City equivalency standard, an additional set of analyses were conducted to determine if there were other correlation factors such as operator of record and year of abandonment that could assist in determining the integrity of a well abandonment. Also, an analysis was conducted on 60 of the 404 abandoned wells to determine common traits. Finally, a hypothetical application of the equivalency standard to existing abandoned wells resulted in a refinement of the recommended standard. The report executive summary is attached (Attachment B).

*Impacts of Oil Field Operations on Groundwater Quality* – The City's water quality consultant, Flow Science, Inc., conducted an extensive water quality analysis to evaluate the potential impacts of oil field operations on groundwater quality in the Signal

Hill-Long Beach area. Flow Science reviewed information on subsurface geology, including the locations of drinking water aquifers and hydrocarbon production zones. The report found that in the Signal Hill area, drinking water aquifers typically occur well above hydrocarbon zones and the aquifers are generally separated by layers of low permeability. While historic over-pumping of groundwater has resulted in some seawater intrusion in portions of the region, seawater intrusion barriers and spreading grounds are minimizing future impacts. In addition, an analysis of the level of the base of fresh water (BFW) in the area was conducted because changes in the level over time could potentially indicate changes in groundwater quality. The analysis found that the BFW had not changed over decades of time.

An analysis of the oil/gas recovery technique used in the Signal Hill area called waterflood was also conducted. DOGGR establishes limits and monitoring requirements for waterflood operations throughout California. DOGGR requires that injection pressures in waterflood operations be maintained below the fracture pressure of the formation and DOGGR requires pressure levels be confirmed in the field. In summary, the water quality report concludes that the subsurface operations within the Signal Hill-Long Beach area to date have had "little impact" on water quality within drinking water aquifers. The report executive summary is attached (Attachment C).

### Environmental Analysis

The City's environmental consultant, SESPE Consulting, Inc., conducted an environmental analysis and prepared and Initial Study with a Negative Declaration in accordance with the CEQA guidelines. Using the CEQA environmental checklist, the comprehensive technical studies on water quality and well abandonments and forty-five additional references, including the California Department of Conservation, the State Department of Toxic Substances Control, the South Coast Air Quality Management District, the U.S. Fish and Wildlife Service and the City of Signal Hill General Plan, 18 environmental categories were analyzed for potentially significant impacts from the Oil Code Amendment. The environmental analysis is required to consider potential individual and cumulative impacts. The Negative Declaration determination was based on findings that potential impacts to the environment from the Oil Code Amendment were either less than significant or would have no impact. The Initial Study is attached to the Negative Declaration Resolution.

Approved:

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Scott Charney

Attachments

**Summary  
Oil and Gas Ordinance Amendment  
Title 16, Signal Hill Municipal Code**

**The Amendment contains the following *additions, revisions, relocations and/or deletions* to the City's current Oil Code in *italics*:**

1. **Title:** Revised from "Oil Code" to "Oil and Gas Code."

Title 16 Chapters:

- 16.04 General Provisions - See *text additions/edits herein*
- 16.08 Definitions - See *definition additions herein*
- 16.12 Permits and Bonds - See *text additions herein*
- 16.16 Drilling Standards - *No changes*
- 16.20 Operating and Safety Standards - *No changes*
- 16.22 Idle Wells - See *relocated section herein*
- 16.23 Abandonment of Wells - See *relocated section and text additions herein*
- 16.24 Development Standards for Properties Containing Abandoned Wells – See *all new section additions herein*
- 16.25 Storage Facilities - *No changes*
- 16.32 Pipelines - *No changes*

2. **Chapter 16.04: General Provisions – Summary of changes**

- Adds site restoration and facilities removal to the Purpose.
- Adds an Applicability section that reiterates DOGGR's authority.
- Adds a well permit requirement for new operators.
- Adds the duty of the City Petroleum Engineer to verify the Equivalency Standard for abandoned wells.
- No changes to Sections 16.040.030 and 16.040.050 through 16.040.130.

**Section 16.04.020 Purpose.**

It is the intent and purpose of this title to regulate the drilling for production, processing, storage, and transport by pipeline of petroleum and other hydrocarbon substances, *timely and proper well abandonment and well site restoration and removal of oil and gas related facilities, reclamation and remediation of host sites and final disposition of pipelines in compliance with applicable laws and permits* so that these activities may be conducted in conformance with federal, state, and local requirements, and to mitigate the impact of oil-related activities on urban development.

To accomplish this purpose, the regulations outlined in this title are determined to be necessary for the preservation of the public health, safety, and general welfare.

**Section 16.04.025 Code Applicability.**

*This ordinance, insofar as it regulates petroleum operations also regulated by the California Department of Conservation, Division of Oil, Gas, and*

Geothermal Resources (DOGGR), is intended to supplement such state regulations and to be in furtherance and support thereof. In all cases where there is conflict with state laws or regulations, such state laws or regulations shall prevail over any contradictory provisions, or contradictory prohibitions or requirements, made pursuant to this ordinance.

Section 16.04.040 Administration.

B. It shall be the duty of the City's Petroleum Engineer to verify that well abandonments meet the City's equivalency standard for abandonment.

Section 16.04.070 Notices.

C. Change of operator. The operator shall submit to the Oil Services Coordinator a copy of DOGGR report of property/well transfer/acquisition within thirty days after sale, assignment, transfer, conveyance, or exchange. A change of operator will require that a new permit be issued within thirty days after the sale, assignment, transfer, conveyance or exchange and a prorated annual fee shall be paid for any well required to have a permit in accordance with Chapter 16.12 of the Signal Hill Municipal Code.

**3. Chapter 16.08: Definitions – Summary of changes**

- Copies the existing definition for "Area of Development." into Chapter 16.08 and clarifies that the Area does not extend beyond the property line.
- Excludes drinking water wells from the "Drill or drilling" definition.
- No changes to Sections 16.08.10 through 16.08.40, 16.08.50 through 16.08.140 and 16.08.160 through 16.08.370.

Section 16.08.045 Area of Development.

A. In the case where a structure or structures is/are proposed on a vacant parcel, or in the case where subdivision of a parcel is proposed, or in the case of a phased development proposed to occur on several parcels in phases, the "Area of Development" is the entire proposed site, including the entire area of each and every parcel involved. For purposes of this chapter, this area shall also be referred to as the "Site," *but in no case shall include area outside the property boundaries.*

B. In the case of an addition to an existing structure, or construction of new structures on a parcel with existing structures, the "Area of Development" is (i) the portion of the Site which is within, or within ten (10) feet of, the area disturbed for grading as shown on a preliminary grading plan; or (ii) the portion of the Site lying under or within ten (10) feet of any addition or new structure built as a part of the project where no grading plan is required.

Section 16.08.150 Drill or Drilling.

"Drill" or "drilling" means to dig or bore a well for the purpose of exploring for, developing, or producing oil, water, gas, or other hydrocarbons; or for the purpose of injecting water, steam, or other fluid or substance into the earth, *but excluding any well drilled solely for the production of drinking water.*

#### 4. Chapter 16.12: Annual and Idle Well Permits – Summary of changes

- Adds a requirement to provide evidence of performance bonds, liability insurance and indemnification when initial well permits are requested and upon annual renewal.
- No changes to Sections 16.12.010 through 16.12.040 and 16.12.070 through 16.12.250.

##### Section 16.12.050 Annual Well Permit.

*C. That evidence also be provided of performance bonds, pursuant to Section 16.12.090, liability insurance, pursuant to Section 16.12.240, and indemnification pursuant to section 16.12.250.*

##### Section 16.12.060 Idle Well Permit.

*B. That evidence also be provided of performance bonds, pursuant to Section 16.12.090, liability insurance, pursuant to Section 16.12.240, and indemnification pursuant to Section 16.12.250.*

#### 5. Chapter 16.22: Idle Wells – Summary of changes

- Relocates idle well requirements from the existing Chapter 16.24, to a new Chapter 16.22 with minor edits to reference section numbers.

#### *Chapter 16.22*

#### *IDLE WELLS*

##### Sections:

- 16.22.010 Idle well - Determination.
- 16.22.020 Idle well - Notice.
- 16.22.030 Idle well - Abandonment.

##### 16.22.010 Idle Well Determination.

A well shall be deemed to be an idle well if the well does not produce an average of two barrels of oil per day or one hundred cubic feet of gas per day for a continuous six months period during any consecutive five-year period prior to or after January 1, 1991, except that an active water injection well shall not be classified as an idle well.

##### 16.22.020 Idle Well Notice.

A. Whenever a well is an idle well, as defined in Section 16.22.010, the Oil Services Coordinator or his designee shall send notice thereof by certified mail to:

1. The surface owner, mineral owner, and lessee of land on which the well is located as shown on the last equalized assessment of the City;
2. The permittee or operator of the well as indicated on either the records of DOGGR or the records of the City.

B. The notice shall include the name and location of the well in question.

C. The Building Department shall maintain a list of idle wells located within the City.

**16.22.030 Idle Well Abandonment.**

A. Whenever a well is an idle well and the notice has been given, pursuant to Section 16.22.020, the permittee, operator, or other responsible party shall cause the well to be abandoned or reabandoned within three months; or

1. Repair and reactivate the well as a pumping well or injector well; or

2. Obtain an annual idle well permit.

B. Failure to obtain an annual idle well permit, abandon or repair and reactivate an idle well shall be conclusive evidence of desertion of the well permitting the Oil Services Coordinator, his designee, and DOGGR to cause the well to be abandoned. Said wells shall also be deemed a public nuisance.

**6. Chapter 16.23: Abandonment of Wells – Summary of changes**

- Relocates well abandonment requirements from the existing Chapter 16.24, to a new Chapter 16.23.
- Reiterates DOGGR authority over well abandonment procedures.
- References Section 16.24, the City's abandonment permit and restoration standards.

*Chapter 16.23*  
**ABANDONMENT OF WELLS**

Sections:

16.23.010 Required abandonment.  
16.23.020 Abandonment permit.

**16.23.010 Required Abandonment.**

Permittee operator or other responsible party shall abandon or reabandon a well in accordance with requirements of DOGGR and this chapter when any of the following conditions exist:

A. Upon final and permanent cessation of all operations on any well;

B. Upon the revocation, expiration, or failure to obtain or to maintain in full force and effect permits required under provisions of this title;

C. Upon order of DOGGR;

D. A leaking well exists within the Area of Development after having been tested pursuant to Section 16.24.040. The Area of Development for purposes of this subdivision shall be as defined in Section 16.24.010;

E. The well has been determined to be an idle well pursuant to Section 16.22.010 and the operator has decided to abandon the well.

**16.23.020 Abandonment Permit.**

A. Prior to commencement of abandonment or reabandonment, pursuant to Section 16.23.010, the permittee or other responsible party shall:

1. Provide a copy of the DOGGR approval to abandon said well;

2. Obtain a City issued abandonment permit from the Oil Services Coordinator. No person shall abandon or reabandon a well without first obtaining a City issued abandonment permit pursuant to Section 16.24.060.

**7. Chapter 16.24: Development Standards for Properties with Abandoned Wells – Summary of changes**

- Relocates the standard for Area of Development to a new section.
- Deletes sections related to required abandonment and idle wells that have been relocated to new Sections 16.22 and 16.23.
- Adds prerequisite standards related to development of properties with abandoned wells including survey, leak testing and well access.
- Adds a requirement for a Well Abandonment Report and review including abandonment to the City Equivalency Standard Assessment Report.
- Adds a standard for the City's determination to develop over and in close proximity to abandoned wells.
- Adds methane assessment and mitigation standards for all development properties.
- Adds restoration standards to the City abandonment permit.

Chapter 16.24  
DEVELOPMENT STANDARDS FOR PROPERTIES CONTAINING  
ABANDONED WELLS

Sections:

- 16.24.010 Area of Development.
- 16.24.020 Prerequisites to Site Plan and Design Review.
- 16.24.030 Well Discovery.
- 16.24.040 Leak Testing.
- 16.24.050 Well Access Exhibit.
- 16.24.060 Well Abandonment Report.
- 16.24.070 Abandonment Equivalency Standard.
- 16.24.080 Methane Assessment and Mitigation Standards.
- 16.24.090 Abandonment and Restoration Standards.

**16.24.010 Area of Development.**

A. In the case where a structure or structures is/are proposed on a vacant parcel, or in the case where subdivision of a parcel is proposed, or in the case of a phased development proposed to occur on several parcels in phases, the "Area of Development" is the entire proposed site, including the entire area of each and every parcel involved. For purposes of this chapter, this area shall also be referred to as the "Site," but in no case shall include area outside the property boundaries.

B. In the case of an addition to an existing structure, or construction of new structures on a parcel with existing structures, the "Area of Development" is (i) the portion of the Site which is within, or within ten (10) feet of, the area disturbed for grading as shown on a preliminary grading plan; or (ii) the portion of the Site lying under or within ten (10) feet of any addition or new structure built as a part of the project where no grading plan is required.

**16.24.020 Prerequisites to Site Plan and Design Review.**

A. For properties with abandoned wells, the City shall not deem any site plan and design review application complete pursuant to Chapter 20.52 until well discovery, leak testing, a well access exhibit, and the well abandonment report have been approved pursuant to Sections 16.24.030 through 16.24.060.

B. A fee shall be required for all permits and inspections, pursuant to Sections 16.24.030 through 16.24.060, in an amount established by City Council resolution.

C. Associated project review time shall be deducted from the project deposit at the established hourly billing rate.

**16.24.030 Well Discovery.**

A. Well Discovery Permit. A Well Discovery Permit, issued by the Oil Services Coordinator, shall be required prior to any site work or excavation. The permit shall establish the procedures for identification of the physical location and excavation of abandoned wells on the Site.

B. Notice. Prior to issuance of a Well Discovery Permit, the City shall prepare a notice to be mailed to all property owners within a one-hundred foot radius of the boundary of the subject property as shown on the last equalized assessment roll (unless the project entitlement requires an additional radii).

C. Survey of Wells. The owner or other responsible party shall submit a licensed survey of all wells within the Area of Development. The survey shall locate all active, idle and abandoned wells to ascertain their locations and document the depth of the well surface plate from the existing grade, or in the case of pending new development, the proposed depth. The well(s) shall be plotted on the site plan and include the NAD 83 well location or equivalent.

D. A.L.T.A. and Development Survey. The owner or other responsible party shall have an American Land Title Association (A.L.T.A.) survey of the Area of Development prepared including all culture.

**16.24.040 Leak Testing.**

A. Leak Testing Permit. A Leak Testing Permit shall be issued by the Oil Services Coordinator for all abandoned wells located within the Area of Development. Wells shall be tested for gas leakage and visually inspected for oil leakage.

B. Leak Testing of Wells. A leak test shall be completed utilizing a "GT-43" gas detection meter, or one of comparable quality approved in advance by the Oil Services Coordinator, and shall be conducted by a state licensed geotechnical or civil engineer or state registered environmental assessor, class II, or

other as determined necessary by the Oil Services Coordinator. *Following all testing and inspection, the test area shall be returned to its previous state and fencing may be required around the area, or the entire site, to the satisfaction of the Oil Services Coordinator.*

C. *Observation Report.* The Oil Services Coordinator shall observe the leak test and prepare a Leak Test Observation Report documenting the date, time and summary of the testing and confirmation that venting material installation has been completed as described in Section G below and to the satisfaction of the Oil Services Coordinator.

D. *Leak Testing Report.* A Leak Test Report shall be prepared by a state licensed geotechnical or civil engineer or state registered environmental assessor, class II, and shall be submitted to the City for review and approval by the Oil Services Coordinator. A well shall be considered leaking if the leak test report indicates the meter read is greater than 500 parts per million.

E. *Leaking Wells.* If wells are found to be leaking they shall be abandoned pursuant to Sections 16.23.010 and 16.23.020.

F. *Retesting.* An approved Leak Test Report is only valid for 24 months from City acceptance. If a building permit has not been issued by this time, retesting is required. Following all testing and inspection, the test area shall be returned to its previous state and fencing may be required around the area or the entire site to the satisfaction of the Oil Services Coordinator.

G. *Venting.* Following leak testing, vent risers and vent cones shall be installed. Cone and riser materials, design and installation shall be observed and inspected and approved by the Oil Services Coordinator and shall be in compliance with the recommendations contained in the Leak Test Report.

#### 16.24.050 Well Access Exhibit.

A. *The Well Access Exhibit shall be prepared by the applicant and submitted to the Oil Services Coordinator. The exhibit shall illustrate whether or not access is provided to abandoned wells using the City's close proximity standard which depicts the DOGGR access recommendation. The close proximity standard is on file in the Community Development Department and publicly available (Exhibit A). The Oil Services Coordinator may approve alternative measures that maintain access to wells.*

B. *The Well Access Exhibit shall include all active, idle and abandoned wells, the proposed site plan, well discovery survey data pursuant to Section 16.24.030 and the location and use of all structures within 100 feet of the boundaries of the subject property. Each abandoned well shall be marked on the exhibit as one of the following:*

1. *"Access provided" for wells meeting the close proximity standard, or not proposed to be built over.*
2. *"No access" for wells with improvements proposed over, or in close proximity to the well.*

16.24.060 Well Abandonment Report.

A. A Well Abandonment Report shall be required for all abandoned wells marked as "no access" on the Well Access Exhibit and shall be submitted to the Oil Services Coordinator for review.

B. All abandonments and reabandonments, including wells not requiring a Well Abandonment Report, shall require a City Abandonment and Restoration Permit issued by the Oil Services Coordinator pursuant to Section 16.24.090.

C. The Well Abandonment Report shall include the following:

1. A statement of intent describing the purpose for the abandonment such as pending property sale, development, or redevelopment of all or a portion of the site for a use other than a petroleum operation and a proposed schedule for abandonment, demolition and development or restoration of the property. The statement shall include intent regarding the disposition of utilities that served the oil and gas operations, including fire protection, power, sewage disposal, transportation, and water, as well as the name, address, and contact information for the permittee, and the address and a general description of the current land use of the subject property.

2. All data, reports and exhibits associated with the survey, leak test and well access pursuant to Sections 16.24.030, 16.24.040 and 16.24.050.

3. An Equivalency Standard Assessment Report prepared by the applicant's registered petroleum engineer and submitted for review by the City's Petroleum Engineer. The report shall include an assessment which is based on the DOGGR well bore data and well history including all correspondence with DOGGR regarding all abandonment proceedings. The assessment shall state whether each well meets, or does not meet, the City's equivalency standard pursuant to Section 16.24.070.

a. If a well is determined not to meet the City's equivalency standard, a Reabandonment Plan shall be submitted to the Oil Services Coordinator and shall include a copy of the DOGGR well bore data, well history and an assessment statement that the reabandonment is likely to meet the City's equivalency standard pursuant to Section 16.24.070.

b. If the well is determined to meet the City's equivalency standard the applicant shall submit the DOGGR documentation used to make the determination, including a copy of the DOGGR well bore data, well history and DOGGR confirmation of completion of the abandonment work.

4. An Abandonment Activities Plan that details the estimated hours of operation, number of workers, structures proposed for decommissioning, projected method and routes of transporting equipment, structures, and estimated debris from the property to the place of disposition as well as the number of trips required, and an estimated schedule for completion of the work.

5. A Waste Management Plan that details methods to maximize recycling and minimize wastes.

6. An Ongoing Development Plan that details any existing structures, roadways, and other improvements on the property proposed to be retained to support other existing or proposed uses of the property following abandonment of the oil or gas operations.

7. A Restoration Plan pursuant to Section 16.24.090 that details grading, drainage and measures proposed to prevent or reduce nuisance effects (e.g., dust, fumes, glare, noise, odor, smoke, traffic congestion, vibration) and to prevent danger to life and property, including a list of any other permits, as may be required for restoration pursuant to Title 15 of the City code.

8. Any other information deemed reasonably necessary by the Oil Services Coordinator to address site-specific factors.

D. The City's Petroleum Engineer shall review the Equivalency Standard Assessment Report and provide an assessment letter and a recommendation to the Oil Services Coordinator confirming whether the wells meet, do not meet, or if a Reabandonment Plan is required, are likely to meet the City's equivalency standard pursuant to Section 16.24.070.

E. Following receipt of the assessment letter from the City's Petroleum Engineer, the Oil Services Coordinator shall prepare a summary report for the well assessments and, for each well marked "no access" on the Well Access Exhibit, providing one of the following determinations:

1. For wells that meet the City's equivalency standard, a finding that "no additional work is required" shall be made and a determination that the project may proceed with site plan and design review pursuant to Chapter 20.52.

2. For wells that do not meet the City's equivalency standard, but are confirmed as likely to meet the standard, the Oil Services Coordinator shall make a finding that reabandonment shall proceed and shall issue a permit for proposed well abandonments pursuant to Section 16.24.090. Following completion of reabandonments the property owner or responsible party shall submit well bore data and well history, including all correspondence with DOGGR regarding abandonment proceedings and any field changes with an assessment from the applicant's petroleum engineer that the abandonment meets the City's equivalency standard. The Oil Services Coordinator shall make a finding that the abandonment meets the City's equivalency standard and that "no additional work is required" and the project may proceed with site plan and design review pursuant to Chapter 20.52.

3. If the applicant does not wish to complete the abandonments for wells qualified as described in Section 2 above, the Oil Services Coordinator shall make a finding that an "at risk" letter is required. The letter from the applicant shall acknowledge that the success or failure to complete well abandonments in compliance with the City's equivalency standard will determine whether wells may be built over or in close proximity to. Further, the letter shall state that it is understood that failure to abandon wells to the City's equivalency standard will prohibit development over or in close proximity to the wells resulting in revisions to the site plan and potentially additional site plan and design review pursuant to Chapter 20.52. Following receipt of the "at risk" letter, the Oil Services Coordinator shall make a finding that "reabandonment work is required and an 'at risk' letter has been provided" and the project may proceed with site plan and design review pursuant to Chapter 20.52. A required condition of approval for site plan and design review will be that:

4. City Abandonment and Restoration Permit. All abandonments and reabandonments shall require a City Abandonment and Restoration Permit issued by the Oil Services Coordinator pursuant to Section 16.24.090.

a. *Field Modifications. It is the obligation of the property owner or responsible party to notify the Oil Services Coordinator prior to any changes made in the field to the abandonment plan. The applicant's petroleum engineer shall provide a revised assessment report with a determination that the final abandonment with intended field changes meets, or does not meet the City's equivalency standard.*

b. *Verification of Abandonment. Following completion of any abandonment work, the applicant shall submit all available DOGGR well bore data and well history including all correspondence with DOGGR regarding abandonment proceedings and any field changes from the initial abandonment plan with an assessment from the applicant's petroleum engineer that each well meets, or does not meet, the City's equivalency standard pursuant to Section 16.24.070. The Oil Services Coordinator shall verify that abandonments for wells proposed to be built over or marked as "no access" pursuant to Section 16.24.050(B), meet the City's equivalency standard prior to issuing a final of the permit. Any well that does not meet the standard shall not be built over or in close proximity to "Improvements" pursuant to Section 16.24.070.*

**16.24.070 Abandonment Equivalency Standard.**

A. *Improvements proposed over or within close proximity to abandoned wells, shall not be permitted unless the Oil Services Coordinator has determined that the well has been abandoned to the City's equivalency standard.*

1. *Improvements are considered permanent structures or other construction that would be difficult or expensive to demolish should the abandoned or reabandoned well leak oil or gas in the future.*

2. *Pervious improvements, such as landscaping and parking areas with adequate landscape buffers, may be located on top of a previously abandoned or reabandoned well which has passed the leak test pursuant to Section 16.24.020.*

B. *Equivalency Standard. The following equivalency standard shall be required for construction of improvements over abandoned wells or within close proximity of abandoned wells pursuant to Section 16.24.050(B):*

1. *A cement plug located at the depth of the last zone produced from the well. All perforations shall be plugged with cement, and the plug shall extend at least 100 feet above the top of a landed liner, the uppermost perforations, the casing cementing point, the water shut-off holes, or the oil or gas zone, whichever is higher. If wellbore conditions prevent placement of the plug at the depth of the last zone produced from the well, approximately 100 feet of cement shall be placed inside and outside of the casing above (but as close as possible to) the last zone produced from the well.*

2. *A cement plug located at the depth of the base of the fresh water zone in the well. If there is cement behind the casing across the fresh-saltwater interface, a 100 foot cement plug shall be placed inside the casing across the interface. If the top of the cement behind the casing is below the top of the highest saltwater sands, squeeze-cementing shall be required through perforations to protect the freshwater deposits. In addition, a 100 foot cement plug shall be placed inside the casing across the fresh-saltwater interface. If wellbore conditions prevent placement of*

*the plug at the depth of the base of the fresh water zone in the well, approximately 100 feet of cement shall be placed inside and outside of the casing above (but as close as possible to) the base of the fresh water zone in the well. This plug is to be separate and apart from the plug referenced in (1).*

3. *A cement plug located at the surface. The hole and all annuli shall be plugged at the surface with at least a 25 foot cement plug.*

4. *The intent of these plugs is to ensure that the abandonment is adequate to prevent hydrocarbons from reaching the surface. As an example, one continuous plug that significantly exceeds 100 feet located below the surface plug could be adequate to meet (1) and (2). Also, one plug that meets either (1) or (2) and a surface plug that significantly exceeds 100 feet could be found to prevent hydrocarbons from reaching the surface.*

5. *The City's consulting petroleum engineer shall determine if these conditions have been met and the abandonment is adequate to prevent hydrocarbons from reaching the surface of the well. The determination shall be based on, at a minimum, a review of a history of all work performed on the well and a detailed wellbore diagram showing the current condition of the well. The well bore diagram shall include details on:*

- a. *Hole size.*
- b. *Casing and liner specifications and setting depths.*
- c. *All cementing operations.*
- d. *Depths of various hydrocarbon zones.*
- e. *Any other data required to analyze the current conditions of the well including casing recovery operations and the presence of junk in the hole.*

**16.24.080 Methane Assessment and Mitigation Standards.**

A. *The Area of Development on all properties in the City, whether or not they contain abandoned wells, shall be tested for methane gas prior to issuance of construction or development permits unless otherwise approved by the Oil Services Coordinator. In no case shall methane testing of the property be conducted less than 30 days after site disturbance.*

B. *A Methane Site Test Permit is required on all development sites where construction permits are required, whether or not there are wells located within the Area of Development. No methane tests shall be conducted without a permit issued by the Oil Services Coordinator.*

C. *A Site Methane Assessment is required for any property proposed for development. The assessment shall be conducted to the satisfaction of the Oil Services Coordinator and in accordance with the Methane Assessment Minimum Requirements Standard on file in the Community Development Department and publicly available. The assessment report shall be signed and stamped by a State of California registered geologist and submitted for review to the Oil Services Coordinator prior to any mitigation activity, if required, on the property. Methane assessment shall be conducted no less than 30 days following any soils disturbance on the site (Exhibit B).*

*D. If the methane site assessment requires mitigation, a Methane Mitigation Plan shall be prepared and submitted for review and approval by the Oil Services Coordinator prior to commencement of any mitigation work on site.*

*E. For properties subject to site plan and design review, pursuant to Chapter 20.52, if the applicant does not wish to complete the methane assessment and mitigation, if required prior to site plan and design review, the Oil Services Coordinator shall require that a letter of intent be submitted by the applicant stating their intent to conduct the property methane assessment and submit a mitigation plan, if required, as a condition of the site plan and design review.*

**16.24.090 Abandonment and Restoration Standards.**

*A well abandonment and restoration permit shall be required for all properties in the City where a well abandonment permit is required whether or not the property is to be developed following the abandonment, or if development is proposed on a property with abandoned wells and a Well Abandonment Report is not required pursuant to Section 16.24060. The permit shall be issued following approval of the prerequisites to site plan and design review pursuant to Section 16.24.020.*

A. A well shall be considered properly abandoned for purposes of this chapter after restoration of the drill site or oil operation site and subsurface thereof to its original condition, as nearly as practical, and in conformity with the following requirements:

1. *A copy of the abandonment plan submitted to DOGGR and DOGGR and authorization to abandon, reabandon or remediate the well is provided.*

2. All equipment and surface installations used in connection with the well which are not necessary as determined by the Oil Services Coordinator for the operation or maintenance of other wells of operator or permittee on the drill or operation site shall be removed from the premises.

3. The premises, all sumps, cellars, and ditches which are not necessary for the operation or maintenance of other wells of operator or permittee on the site shall be cleaned out and all oil, oil residue, drilling fluid, and rubbish shall be removed or bioremediated to reduce hydrocarbons to standards acceptable to federal, state, or local agencies. All sumps, cellars, and ditches shall be leveled or filled. Where such sumps, cellars, and ditches are lined with concrete, permittee or operator shall cause the walls and bottoms to be broken up and all concrete shall be removed.

4. The premises shall be cleaned and graded and left in a clean and neat condition free of oil, rotary mud, oil-soaked earth, asphalt, tar, concrete, litter, and debris and any facilities to remain shall be painted and maintained reasonably free of rust, oil, or stains, to the satisfaction of the Oil Services Coordinator.

5. *NPDES standards for stormwater run-off and dust and erosion mitigation measures shall be complied with, to the satisfaction of the City Engineer and the Oil Services Coordinator.*

6. All public streets, alleys, sidewalks, curbs and gutters, and other places constituting public property which may have been disturbed or damaged in connection with any operation, including operations for the abandonment of the well, shall be cleaned, and, except for ordinary wear and tear, shall be repaired and restored to substantially the same condition thereof as the same existed at the time of issuance

of the permit, or at the time operations were first commenced in connection with the drilling, operation, or maintenance of the well.

B. Prior to issuance of any certificate of occupancy for developments constructed over abandoned wells, or for abandoned wells marked "no access" pursuant to Section 16.24.050(B), the property owner shall record a declaration of covenants, conditions and restrictions (CC&Rs), in a form subject to the review and approval of the City Attorney, putting future owners and occupants on notice of the following: the existence of abandoned wells on the site; that the wells within the Area of Development have been leak tested and found not to leak; description of any methane mitigation measures employed; disclosure that access to these wells has been provided to address the fact that they may leak in the future causing potential harm; acknowledgment that the state may order the reabandonment of any well should it leak in the future; acknowledgment that the state does not recommend building over wells; and releasing and indemnifying the City for issuing project permits.

C. DOGGR Authority. Nothing herein is intended to displace any authority of DOGGR under Chapters 2, 3 and 4 of Division 2 of Title 14 of the California Code of Regulations or set aside or annul any action of DOGGR pursuant to its authority. However, these provisions shall control the development of property where DOGGR merely makes advisory recommendations beyond the agency's statutory authority.

D. Grandfathering. This section shall not apply to any project which has been approved by the City or its constituent boards, commissions or officials prior to the date of the adoption of this section, so long as such approvals remain valid. The required approvals include a valid approval from DOGGR, but if such approvals have expired, the project shall be governed by this section. Any application for discretionary land use development entitlements under Chapter 20.52 of the Municipal Code which is being processed shall be subject to the requirements hereof.

## **8. Site Plan and Design Review: 20.52 – Summary of Changes**

- Adds sections requiring that prerequisite review items pursuant to Section 16.24.020 be included in the site plan and design review application for properties with abandoned wells.
- Adds the requirement for a letter of intent for applicants wishing to conduct the property methane assessment and mitigation, if required after site plan and design review, as a condition of site plan and design review.
- Adds a condition of approval under site plan design review that CC&Rs be recorded prior to issuance of a certificate of occupancy for properties with abandoned wells.

### 20.52.030 Review Procedures.

B. *Prerequisites to Review. For properties with abandoned wells, prior to filing a formal application for site plan and design review, applicants must complete the prerequisite requirements pursuant to Section 16.24.020 and the Oil Services Coordinator shall submit a summary report pursuant to Section 16.24.060, including provision of an "at risk" letter if the intent is not to complete well abandonments prior to site plan and design review. The letter shall acknowledge that*

*the success or failure to complete well abandonments in compliance with the City's equivalency standard will determine whether wells may be built over or in close proximity to as indicated on the Well Access Exhibit marked "no access", pursuant to Section 16.24.050(B). Further, the letter shall state that it is understood that failure to abandon wells to the City's equivalency standard will prohibit development over or in close proximity to the wells resulting in revisions to the site plan and potentially additional site plan and design review pursuant to Chapter 20.52.*

**20.52.040 Application and Submission of Site Plan.**

B.

*p. All abandoned wells and all accompanying information, as required by Sections 16.24.020 through 16.24.060.*

*q. A letter of intent to conduct a property methane assessment and submit a mitigation plan pursuant to Section 16.24.080(E).*

**20.52.050 Findings and Standard of Review.**

21. All Oil and Gas Code development standards contained in Chapter 16.24 are met, and a condition of approval has been added that prior to issuance of any certificate of occupancy for developments constructed over or in close proximity to abandoned wells, the property owner shall record a declaration of CC&Rs, in a form subject to the review and approval of the City Attorney, putting future owners and occupants on notice of the following: the existence of abandoned wells on the site; that the wells within the Area of Development have been leak tested and found not to leak; description of any methane mitigation measures employed; disclosure that access to these wells has been provided to address the fact that they may leak in the future causing potential harm; acknowledgment that the state may order the reabandonment of any well should it leak in the future; acknowledgment that the state does not recommend building over wells; and releasing and indemnifying the City for issuing project permits.

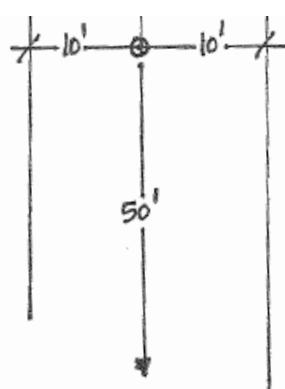
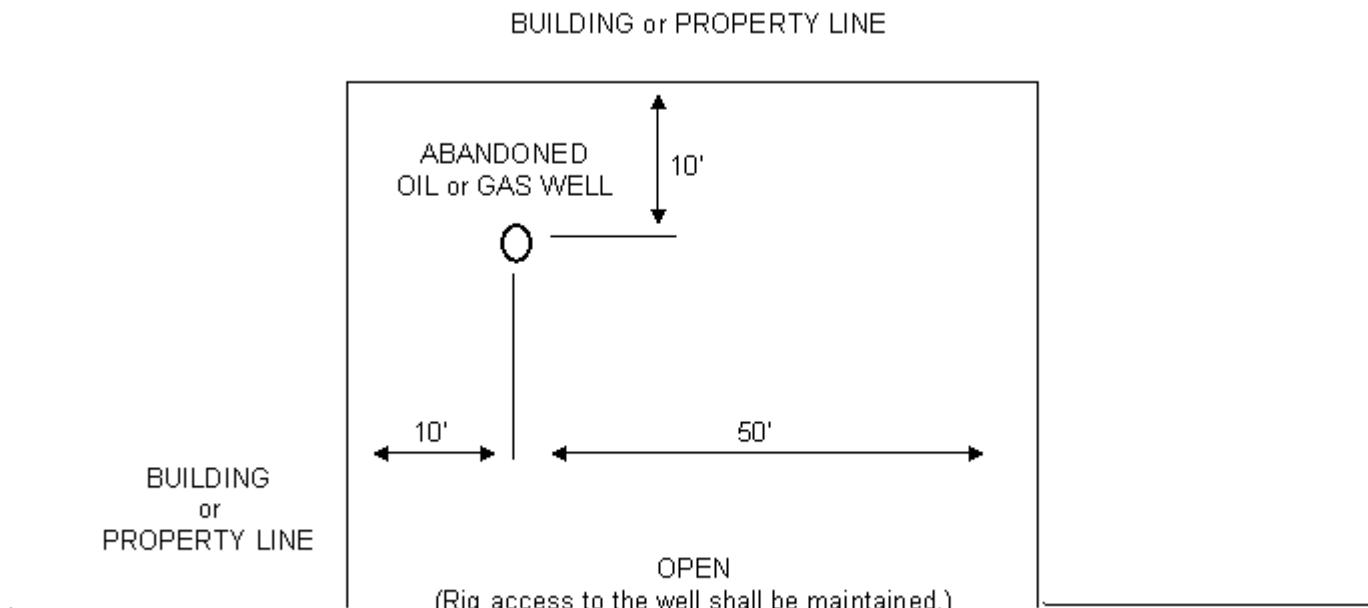


## CITY OF SIGNAL HILL

2175 Cherry Avenue ♦ Signal Hill, CA 90755-3799

### CITY OF SIGNAL HILL ACCESS STANDARD CLOSE PROXIMITY SPECIFICATIONS

"Close proximity" to a well may be generally described as being within ten feet from the property line and/or any structure to the well. The distance may be measured from the center of the well extending out to the side of the property line and/or structure. To be considered not in close proximity to a well, two adjacent sides should be free of structures or property lines for no less than ten feet, with the third side free for no less than 50 feet to allow room for equipment required for reabandonment operations. The fourth side should remain open to the well for vehicle and/or rig access to the well (see figure below).





## CITY OF SIGNAL HILL

2175 Cherry Avenue ♦ Signal Hill, CA 90755-3799

### METHANE ASSESSMENT MINIMUM REQUIREMENTS

Per City of LADBS "Site Testing Standards for Methane" (P/BC 2002-101, November 30, 2004):

- Schedule methane assessment a minimum of either 30 days prior to or after site grading or soil disturbance such as (but not limited to) daylighting oil wells
- Conduct shallow soil gas tests, not less than 4-feet bgs, one shallow soil gas probe location per 10,000 square feet, or portion thereof, of site area, with a minimum of two shallow soil gas probe locations
- The results of the shallow soil gas test will identify areas where high methane gas may be found and where the deep nested probe sets shall be located
- Collect a minimum of two samples at multiple depths and at least one multiple depth (nested) deep probe set per 20,000 square feet or portion thereof. The probe sets shall consist of three probes installed at 5-feet, 10-feet and 20-feet below the elevation of the lowest building slab or footing and a minimum of 12-inches above groundwater
- Two sequential soil gas measurements shall be taken with a minimum 24-hour interval following placement of the nested probe sets
- Locations of soil gas probes for methane assessment should be placed where greatest concentrations of methane are likely to be found, such as (but not limited to) adjacent to previously abandoned oil wells and/or underground piping runs, oil wells sumps, oil well cellars, dry holes, injection wells, etc.
- Submit soil gas samples to a certified laboratory with the greatest field detection of methane
- Measure pressure within the soil gas probes
- Measure barometric pressure on the day of assessment

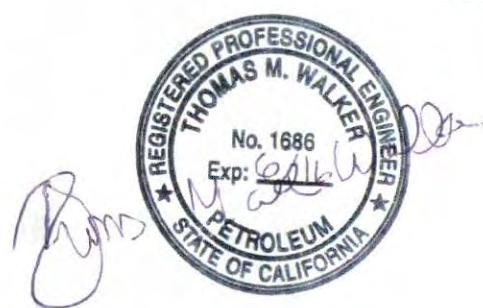
### METHANE MITIGATION SYSTEM PER LA CITY DBS STANDARDS

Per City of LADBS Ordinance No. 175790, specifically, but not limited to Table 71, Minimum Methane Mitigation Requirements shall be implemented in conjunction with the results of the methane assessment conducted pursuant to the City of LADBS Site Testing Standards for Methane (referenced above).

The methane mitigation system site plans shall contain the locations of the previously abandoned oil wells (if any), the building footprint(s), the square footage of the building(s) in addition to design detail of the proposed methane mitigation system including but not limited to: type of subslab barrier, trench dam detail, conduit seal detail, wellhead vent detail, vent riser detail, venting plan, gravel blanket thickness, sand pack, vapor lock, membrane boot, membrane lap joint, membrane termination, footings, warning signage, and smoke testing specifications.

# Well Abandonment Equivalency Standard

Prepared for  
City of Signal Hill



Prepared By  
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October 7, 2014

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## Executive Summary

Oil was discovered in the City of Signal Hill in 1921 with the drilling of the Alamitos 1. This well was the first of approximately 2,500 wells drilled in the Long Beach field. The Long Beach field includes all wells within the City of Signal Hill plus additional wells drilled in the portions of the City of Long Beach that are adjacent to the City of Signal Hill. Abandonment of oil wells in the field began shortly after the field was discovered. As of June 2014, approximately 2,196 of these wells have been abandoned and / or re-abandoned. Abandonment of oil wells is overseen by the California Department of Conservation – Division of Oil, Gas and Geothermal Resources (DOGGR). The abandonment regulations enforced by the DOGGR have changed numerous times since the initial development of the Long Beach field. Due to these changes, wells considered properly abandoned in early years of activity in the Long Beach Field do not meet current abandonment regulations.

The combination of dropping oil prices and increasing land prices in the mid 1980's led to an increase in surface development on top of previously abandoned oil wells in the Los Angeles Basin. The DOGGR provided a process known as the Construction Site Review (CSR) in 1989 to allow for the orderly redevelopment of properties containing oil wells. The City of Signal Hill updated its Oil Code in 1990 to incorporate the DOGGR CSR process. The combination of the 1989 DOGGR CSR process and the 1990 update to the City Oil Code allowed for development of properties within the City that contained abandoned oil wells.

The DOGGR suspended the CSR process in District 1, which includes the Long Beach Field, in 2011. The DOGGR now issues a Well Review Letter that typically states that (i) the abandoned wells in a project area do not meet the DOGGR interpretation of current abandonment regulations; (ii) dangerous issues may be associated with development near oil and gas wells (iii) abandonment of wells to current or equivalent standards will not guarantee that they will not leak in the future; (iv) access should be maintained to all wells; but if access cannot be maintained, alternatives should be considered to development on the project; and (v) the comments by the DOGGR are merely advisory to the City. The City believes that implementation of the City's Oil Code requiring DOGGR certification as to any abandonment or re-abandonment of wells on a development site would render any property with abandoned or re-abandoned oil wells undevelopable given the 2011 action taken by the DOGGR. Based on the foregoing significant changes in the DOGGR policy, the City of Signal Hill retained Evans & Walker to generate well abandonment standards (equivalency standards) to be used in the review of wells on a development site.

## Recommended Equivalency Standard

Evans & Walker developed a proposed equivalency standard for inclusion in the City Municipal Code (Chapter 16 – Oil Code). This equivalency standard was based on a review of existing well abandonments and re-abandonments in the City of Signal Hill. Information on these well

abandonments was obtained from the City of Signal Hill, Signal Hill Petroleum, and the DOGGR. Evans & Walker proposes that; at a minimum; an abandoned well shall have the following:

- a) A cement plug located at the depth of the last zone produced from the well. All perforations shall be plugged with cement, and the plug shall extend at least 100 feet above the top of a landed liner, the uppermost perforations, the casing cementing point, the water shut-off holes, or the oil or gas zone, whichever is higher. If wellbore conditions prevent placement of the plug at the depth of the last zone produced from the well, approximately 100' of cement shall be placed inside and outside of the casing above (but as close as possible to) the last zone produced from the well.
- b) A cement plug located at the depth of the base of the fresh water zone in the well. If there is cement behind the casing across the fresh-saltwater interface, a 100 foot cement plug shall be placed inside the casing across the interface. If the top of the cement behind the casing is below the top of the highest saltwater sands, squeeze-cementing shall be required through perforations to protect the freshwater deposits. In addition, a 100 foot cement plug shall be placed inside the casing across the fresh-saltwater interface. If wellbore conditions prevent placement of the plug at the depth of the base of the fresh water zone in the well, approximately 100' of cement shall be placed inside and outside of the casing above (but as close as possible to) the base of the fresh water zone in the well. This plug is to be separate and apart from the plug referenced in (a).
- c) A cement plug located at the surface. The hole and all annuli shall be plugged at the surface with at least a 25 foot cement plug.

The intent of these plugs is to ensure that the abandonment is adequate to prevent hydrocarbons from reaching the surface. One continuous plug that significantly exceeds 100 feet located below the surface plug could be adequate to meet (a) and (b). Also, one plug that meets either (a) or (b) and a surface plug that significantly exceeds 100 feet could be found to prevent hydrocarbons from reaching the surface.

The city's consulting petroleum engineer / geologist will determine if these conditions have been met (the abandonment is adequate to prevent hydrocarbons from reaching the surface via said well). This determination shall be based on (at a minimum) a review of a history of all work performed on the well; and a detailed wellbore diagram showing the current condition of the well. The wellbore diagram should include details on: (a) hole size; (b) casing and liner specifications and setting depths; (c) all cementing operations; (d) depths of the various hydrocarbon zones; (e) and other data required to analyze the current condition of the well (including casing recovery operations and the presence of junk in the hole).

It should be noted that the above described equivalency standard applies to an analysis of an abandoned (or reabandoned) well, and are not designed to replace the DOGGR abandonment regulations. An operator that desires to abandon (or reabandon) a well must still follow the DOGGR abandonment regulations.

## **Evaluation of Existing Well Abandonments in the Long Beach Field**

### **Background and Methodology**

Evans and Walker was approached in early 2012 to address a draft Scope of Work designed to provide information to the City of Signal Hill relative to existing well abandonments in the Long Beach Field. The original Scope of Work was fairly broad, and was designed to provide guidance needed by the City to craft an update to the Oil Code. An update of the Oil Code was necessitated due to changes in the California Division of Oil, Gas and Geothermal Resources' (DOGGR) interpretation of the DOGGR's role in development of parcels impacted by oil and gas wells.

The DOGGR web site indicates that there have been 2,196 wells abandoned in the Long Beach field. The final draft Scope of Work presented by Evans & Walker therefore required a substantial amount of well abandonment review work, and the cost of this review work greatly exceeded the funds budgeted for the Scope of Work. Evans & Walker worked closely with the City of Signal Hill and with Signal Hill Petroleum to identify alternate means of obtaining the required well abandonment information. The three parties were successful in sourcing much of the required data from recent development work completed or contemplated in the City. Each of these development projects included a review of the current condition of the wells within the boundary of the project.

Data was obtained on a total of 472 wells. Data for these wells, including the wellbore diagram and / or portions of the well history, were obtained from the DOGGR in addition to the development project files of the City of Signal Hill and Signal Hill Petroleum. Evans and Walker reviewed this data, and found that 56 of these wells were active and 12 of them were idle, yielding a total of 404 abandoned wells for which data was available (see Exhibit 1 and Volumes I through 8 of the Appendix).

## Review and Results

The wellbore diagram and / or well history of these 404 wells were reviewed to obtain information on abandonment of these wells, including data on three of the required abandonment plugs: (1) the plug at the Upper Hydrocarbon Zone (UHZ), (2) the plug at the Base of the Fresh Water (BFW), and (3) the surface plug. The relative location of these three plugs is shown in Exhibit 2. The information gathered from this review is shown in Table 1.

Data on the UHZ, BFW and surface plugs was analyzed to determine the status of these three plugs. The plugs were classified as either adequate (acceptable) or inadequate (unacceptable). The UHZ plug and BFW plugs had to have 100' of cement inside and outside of the casing at the appropriate depth to be classified as adequate (acceptable). The surface plug had to have 25' of cement inside and outside of the casing at the surface to be classified as adequate (acceptable). Only 11% of the 404 wells were found to have an adequate UHZ plug, 51% of the wells were found to have an adequate BFW plug, while 73% of the wells were found to have an adequate surface plug. Overall, only 7% of the wells were found to have an adequate UHZ, BFW and surface plug. The results of this analysis are also shown in Table 1, and are shown graphically in Exhibit 3.

### **Validation of Review**

Evans and Walker reviewed the composition of this subset of 404 abandoned wells to ensure that the subset was representative of all 2,196 wells abandoned in the field. This review included: (1) an analysis of the final abandonment date of the wells to confirm that the group included abandonments from all decades of operation of the field; (2) an analysis of the location of the wells to confirm that the group included abandonments from all geographic areas of the field; (3) confirmation that 404 wells represent a statistically valid subset out of a total of 2,196 wells; and (4) research into the operator of record of the 2,196 abandonments completed in the Long Beach field to determine if there was a need to ensure that the subgroup of 404 wells was representative of the various companies that have operated wells in the Long Beach field.

### **Analysis by Date**

The subset of 404 wells for which sufficient data existed to analyze their abandonments included wells abandoned from the 1920's through the present (see Exhibit 4). Note that 5 of the 404 wells reviewed did not include enough data to determine the date on which they were abandoned. The field was discovered in 1919, thus there were no abandonments prior to the 1920's and little abandonment work during that decade. The number of abandonments grew slowly each decade until the 1970's. The late 1960's and early 1970's represent the time period during which the field was unitized into the Signal Hill Central Unit, Signal Hill East Unit and Signal Hill West Unit. Many wells were abandoned in the 1970's as a result of secondary recovery / waterflooding associated with the formation of the units. A run up in oil prices in the early 1980's, and the subsequent crash in prices in the mid to late 1980's likely played a large role in the reduction of well abandonments during this period. Finally, the 1990's – 2000's saw a significant increase in well abandonments / reabandonments associated with development projects undertaken in the City. It should also be noted that the date used in this Exhibit reflects the final abandonment / reabandonment date. The distribution of abandonment dates seen in Exhibit 4 appears to be very reasonable given the history of the Long Beach field.

### **Analysis by Location**

The subset of 404 wells appears to represent wells from all portions of the Long Beach field within the City of Signal Hill with the exception of the area bounded by Cherry – Willow – Orange – Spring Streets (see Exhibit 5). None of the development projects for which data was available were conducted in this area. It is the opinion of Evans & Walker that the exclusion of wells from this area does not significantly impact the validity of this study.

### **Statistically Valid Subset**

The City's initial petroleum consultant (Scott McGurk) calculated 369 as a representative number of wells to be sampled for the review based on assumptions shown below.

"There are 1847 abandoned wells in the Long Beach Field according to DOGGR records. A statistically valid subset of that population would be 325 abandoned wells, giving a 95% confidence limit and 5% precision and 0.5 variance. To be on the safe side,

a subset population of 369 abandoned wells (every 5th well of the 1847 total population)" (p.11 in McGurk's 2011 proposal)

McGurk's calculation was based on assumptions of a normal distribution, a confidence level at 95%<sup>[1]</sup>, the level of precision<sup>[2]</sup> at 5%, and a variance of 0.5 (which is the most conservatively assumed variance) and a total number of 1847 wells. Changing the input to 2,196 wells (the actual number of abandoned wells) and incorporating a finite population correction yields a sample size of 328 wells (see Table 2). The subset of 404 wells is therefore a statistically valid subset out of a total of 2,196 wells. The City's current petroleum and groundwater consultants concur with this analysis.

### **Operator of Record**

Evans & Walker also reviewed data on the operator of record of the 2,196 abandonments completed in the Long Beach. The results of this review are shown in Exhibit 6. A major finding of this review is not shown in Exhibit 6. This finding is that the operator of record is not necessarily the entity that made the decisions regarding the final abandonment of the well. One example of this relates to the wells Signal Hill Petroleum re-abandoned in the 1990's and 2000's. The operator of record with the DOGGR remained the operator of record at the time that the well was originally abandoned (i.e. NOT Signal Hill Petroleum), even though Signal Hill Petroleum directed and likely paid for these re-abandonments. A more meaningful predictor of abandonment condition would be a comparison of abandonment condition by the entity directing the abandonment or re-abandonment. This information is not readily available, and would require a detailed (and very time consuming and costly) review of the abandonment permit for each and every previously abandoned well in the field.

Information on the operator of record of the 404 abandonments reviewed as a part of this study is shown in Exhibit 7. Signal Hill Petroleum, the largest operator in the Long Beach Field, is the operator of record of 101 of these abandonments. CalResources (formerly Shell) with 93 abandonments, Chevron (formerly Texaco) with 41 abandonments and Arco Western with 23 abandonments are the next three individual operators of record shown in Exhibit 7. These three operators were the initial operators of the three units within the Long Beach Field. Our position that this subset of abandoned wells is representative of the 2,196 wells abandoned in the field is supported by the fact that these four operators are the current operator and the initial operators of the three units in the field support.

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<sup>[1]</sup> If we calculate the percentage of wells that are properly abandoned over all 1847 wells within the City, this true percentage would be located within the range of two standard deviations from a mean of sampled wells at 95% chance.

<sup>[2]</sup> "The level of precision, sometime called sampling error, is the range in which the true value of the population is estimated to be. This range is often expressed in percentage points in the same way that results for political campaign polls are reported by the media.

### **Analysis of Results**

As stated earlier, only 11% of the 404 wells were found to have an adequate UHZ plug, 51% of the wells were found to have an adequate BFW plug, and 73% of the wells were found to have an adequate surface plug. These results were then broken down by abandonment / reabandonment date to determine if there is a correlation between date of abandonment and condition of abandonment. This breakdown (shown in Exhibits 8, 9 and 10) revealed that there are no perfect predictors of when wells should be re-abandoned. There was, however, a noticeable improvement in the condition of abandonments after the 1970's.

Additional analysis was made in an effort to see if there is a correlation between operator of record and condition of abandonment and both operator of record and date of abandonment / reabandonment and condition of abandonment. Exhibit 11 shows the correlation between operator of record and condition of the UHZ plugs. Exhibits 12 – 17 show the correlation between date of abandonment / reabandonment and condition of the UHZ plugs. Exhibit 18 shows the correlation between operator of record and condition of the BFW plugs. Exhibits 19 – 24 show the correlation between date of abandonment / reabandonment and condition of the BFW plugs. Exhibit 25 shows the correlation between operator of record and condition of the UHZ plugs. Exhibits 26 – 31 show the correlation between date of abandonment / reabandonment and condition of the UHZ plugs. These breakdowns confirm that there are no perfect predictors of when wells should be re-abandoned. There was, however, a noticeable improvement in the condition of abandonments after the 1970's. This information could be used by a developer to get a basic understanding of the potential for well re-abandonment work, but should not be used to draw definitive conclusions on the need (or lack of a need) to reabandon a well.

### Refinement of Analysis – Wells under Buildings or Very Difficult to Access

As mentioned earlier in this report, the abandonment data used in this analysis of 404 wells was primarily sourced from recent development work completed or contemplated in the City. Information provided by Signal Hill Petroleum indicates that 60 of the 404 wells are located either under new buildings or were rendered inaccessible or very difficult to access by construction of these new buildings. The condition of the UHZ, BFW and surface plugs for these 60 wells was analyzed to provide insight into the decision to allow construction on top of these wells.

Only 7% (4) of this group of 60 wells were found to have an adequate UHZ plug, 92% (55) of the wells were found to have an adequate BFW plug, and 98% (58) of the wells were found to have an adequate surface plug. The results of this analysis are also shown in Table 3, and are shown graphically in Exhibit 32.

All or relevant portions of the well files on the 5 wells with inadequate BFW plugs and the 2 wells with inadequate surface plugs were obtained to clarify the condition of these plugs. These wells include the following:

Well Name	API Number	Inadequate Plug – Comment
SHCU 39A-1	0403708891	BFW – competent plug above producing horizon
LB4A	0403709340	BFW – no BFW plug present
SHEU 105	0403711027	BFW – BFW straddled by two competent plugs
Andrews 1	0403711039	BFW – no BFW plug present
Hart 1	0403711818	BFW- competent plug placed ~400' above BFW
SHCU 39-11	0403708437	Surface – annular cement missing, DOGGR approved
Jones 1	0403710086	Surface – annular cement missing, DOGGR approved

#### UHZ Plugs

Only 7% of the 60 wells that are located under recently constructed buildings (or were rendered very difficult to access by construction of these buildings) have adequate UHZ plugs. This is similar to the 11% of wells in the set of 404 reviewed wells that have an adequate BFW plug.

#### BFW Plugs

Three of the five wells with inadequate BFW plugs appear to have a plug at an alternate location that could have been deemed “equivalent” to the BFW plug. Assuming that these wells do have equivalent BFW plugs brings the percentage of wells with adequate or equivalent BFW plugs from 92% to 98%, which is significantly higher than the 51% of wells in the set of 404 reviewed wells that have an adequate BFW plug.

#### ***SHCU 39A-1***

The SHCU 39A-1 didn't have a BFW plug, but does have more than 100' of cement inside and outside of the casing above the hydrocarbon bearing zone produced from the well. This plug should ensure that no fluid moves up to the BFW or to the surface plug.

#### ***LB 4A***

The LB 4A was originally abandoned in 1923, and the data on the condition of the plugs in the well is difficult to interpret. The well has a plug at approximately 940', but the records are incomplete as to the thickness of this plug and do not prove that there is adequate cement behind pipe at that depth. The well does have a thick plug at the surface, however. The lower plug should prevent fluid from moving up to the surface plug.

#### ***SHEU 105***

The BFW in the SHEU 105 was straddled by two competent plugs, effectively protecting the BFW and ensuring that no fluid could move up the hole to the surface plug.

#### ***Andrews 1***

The Andrews 1 didn't have a BFW plug, but does have about 70' of cement inside and outside of the casing above the hydrocarbon bearing zone produced from the well. This plug should minimize the chance of fluid moving up to the surface plug. The well file does not include documentation of cement behind the two strings of casing located at the BFW.

#### ***Hart 1***

The Hart 1 had a BFW plug located approximately 400' above the BFW, again ensuring that no fluid could move up hole to the surface plug.

#### ***Surface Plugs***

Both the SHCU 39-11 and the Jones 1 have adequate cement inside the casing at the surface plug, but neither well has documented evidence of cement behind pipe at the surface. A thorough review of the well files found that the DOGGR had witnessed and approved of the top plug in these two wells. These approvals indicate that the existing surface plugs meet the intent of the abandonment regulations. Assuming that these wells do have equivalent surface plugs brings the percentage of wells with adequate or equivalent BFW plugs from 98% to 100%, which is significantly higher than the 73% of wells in the set of 404 reviewed wells that have an adequate surface plug.

### Common Traits (Equivalent Standards)

All seven of the above mentioned wells had one trait in common: each had an adequate cement plug across the hydrocarbon producing interval. This plug had to have 100' of cement inside and outside of the casing at or just above the depth of the last productive zone completed in the well to be classified as adequate (acceptable). An additional review of all 60 wells that are located under buildings (or were rendered very difficult to access by construction of these buildings) found that 57 had adequate plugs at or above the depth of the last productive zone. The three wells that didn't include these plugs were never produced.

Given this fact, Evans & Walker recommends that; at a minimum; an abandoned well shall have the following:

- a) A cement plug located at the depth of the last zone produced from the well. All perforations shall be plugged with cement, and the plug shall extend at least 100 feet above the top of a landed liner, the uppermost perforations, the casing cementing point, the water shut-off holes, or the oil or gas zone, whichever is higher. If wellbore conditions prevent placement of the plug at the depth of the last zone produced from the well, approximately 100' of cement shall be placed inside and outside of the casing above (but as close as possible to) the last zone produced from the well.
- b) A cement plug located at the depth of the base of the fresh water zone in the well. If there is cement behind the casing across the fresh-saltwater interface, a 100 foot cement plug shall be placed inside the casing across the interface. If the top of the cement behind the casing is below the top of the highest saltwater sands, squeeze-cementing shall be required through perforations to protect the freshwater deposits. In addition, a 100 foot cement plug shall be placed inside the casing across the fresh-saltwater interface. If wellbore conditions prevent placement of the plug at the depth of the base of the fresh water zone in the well, approximately 100' of cement shall be placed inside and outside of the casing above (but as close as possible to) the base of the fresh water zone in the well. This plug is to be separate and apart from the plug referenced in (a).
- c) A cement plug located at the surface. The hole and all annuli shall be plugged at the surface with at least a 25 foot cement plug.

The intent of these plugs is to ensure that the abandonment is adequate to prevent hydrocarbons from reaching the surface. One continuous plug that significantly exceeds 100 feet located below the surface plug could be adequate to meet (a) and (b). Also, one plug that meets either (a) or (b) and a surface plug that significantly exceeds 100 feet could be found to prevent hydrocarbons from reaching the surface.

### Review of Equivalency Standards in Existing Developments

As previously mentioned, much of the well abandonment data was sourced from recent development work completed or contemplated in the City. The eleven developments that have been completed contained a total of 152 abandoned wells. These well abandonments were compared to the current DOGGR standards and to the proposed equivalency standards. As seen in Exhibit 33, a majority of the abandonments in each development do not meet current DOGGR abandonment standards. Exhibit 34 shows that a majority of the abandonments in each development meet the equivalency standard. Exhibit 35 reflects the percentage of wells that meet the current DOGGR standards along with the percentage of wells that meet the proposed equivalency standards.

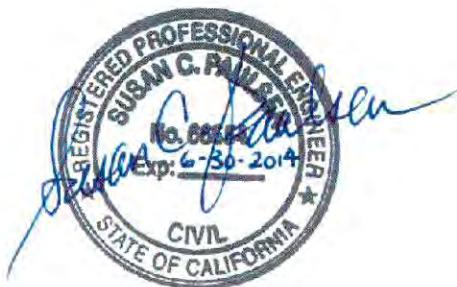
Overall, only 7% of these 152 wells meet the current DOGGR standards, while 78% of these same wells meet the equivalency standards. 63 of the 152 wells (41% of the wells) were rendered inaccessible by completion of the developments. All of these 63 wells appear to meet the equivalency standard. 25 of these 63 wells rendered inaccessible were re-abandoned, while 28 of the 89 wells that remain accessible were re-abandoned. Summary data on these 11 developments is shown in Table 4.

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# IMPACTS OF OIL FIELD OPERATIONS ON GROUNDWATER QUALITY IN SIGNAL HILL-LONG BEACH AREA

Prepared for  
City of Signal Hill



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## EXECUTIVE SUMMARY

The City of Signal Hill retained Flow Science Incorporated (Flow Science) to evaluate the potential impacts of oil field operations on groundwater quality in the Signal Hill-Long Beach area. Flow Science conducted its review using information from public sources (e.g., drinking water quality information, public reports on subsurface geology) and information provided by Signal Hill Petroleum, Inc. (SHP) (e.g., well logs from oil wells in the field, information on waterflood operations).

Flow Science reviewed information on subsurface geology, including the locations of drinking water aquifers and hydrocarbon production zones; information on water quality in drinking water aquifers; and information related to oil field operations and the potential of those operations to impact groundwater quality. Flow Science's review was limited to groundwater quality; Flow Science did not review information related to surface hazards, surface operations to support oil production, protection of hydrocarbon zones, or other potential areas of interest.

The Los Angeles (LA) Basin includes over 30 mapped oil fields and 9,700 oil/gas wells. The subsurface geology is complex, and the aquifer zones and hydrocarbon zones within the LA Basin are highly folded and faulted. Thus, the depth of drinking water aquifers and hydrocarbon zones is variable and depends on one's location within the basin. In the Signal Hill area, drinking water aquifers typically occur within the top 1400 ft or less below ground surface (bgs), while hydrocarbon zones within the Long Beach Field typically occur below this level and may extend to a depth of a few miles bgs. Drinking water aquifers are generally separated from hydrocarbon zones by layers of low permeability. Low permeability layers also exist between drinking water aquifers ("aquitards") and between hydrocarbon zones at different depths. In addition, oil/gas wells are constructed with solid casings that extend through drinking water aquifers; oil/gas wells are not screened or perforated in drinking water zones. Drinking water wells typically terminate well above hydrocarbon zones.

The City of Signal Hill and the surrounding area overlie two main groundwater basins: the West Coast Basin and the Central Basin. These two basins are separated by the Newport-Inglewood Fault Zone, a geologic structural feature that partially restricts groundwater flow. Historical over-pumping of groundwater has resulted in seawater intrusion, primarily in the West Coast Basin, and seawater intrusion barriers and spreading grounds are being operated to minimize additional future impacts.

Multiple Superfund sites are located throughout the LA Basin, but these sites are located far from the Signal Hill-Long Beach area and do not currently affect groundwater quality in the Signal Hill-Long Beach area. The Signal Hill-Long Beach area, however, has been impacted by numerous contamination events and subsequent cleanups.

Contamination from these local events appears to have been limited to soil and to shallow aquifers that are not used for drinking water production.

Flow Science reviewed data from groundwater samples collected from both monitoring and production wells to characterize groundwater quality. These data demonstrate that constituent concentrations in groundwater production zones have, to date, been below applicable regulatory thresholds, with the exception of total dissolved solids (TDS) and chloride primarily in the West Coast Basin, where seawater intrusion has resulted in exceedances of California's Secondary Maximum Contaminant Levels (MCLs). Water level data collected by the Water Replenishment District of Southern California (WRD) indicate that, except in Central Basin recharge areas located six or more miles from Signal Hill, groundwater levels in the West Coast and Central Basins are below sea level. Together with local stakeholders, the WRD is currently undertaking the development of Salt and Nutrient Management Plans to minimize seawater intrusion and consequent chloride and TDS impacts in groundwater.

The "base of freshwater" (BFW) is a term used to describe the level below which salinity rises to relatively high levels and to distinguish between more saline water (such as exists within hydrocarbon zones) and fresher groundwater overlying saline waters. Because changes in the base of freshwater could potentially indicate changes in groundwater quality, Flow Science reviewed well logs provided by SHP that show the location of the BFW within the Signal Hill-Long Beach area. Flow Science's review of well logs from pairs of wells located near each other but logged decades apart shows that the BFW does not appear to have changed significantly over time. As shown by one pair of wells separated by a fault, the depth to the BFW can vary significantly across faults and other discontinuities within the area.

SHP employs an oil/gas production technique known as waterflood to enhance oil recovery within the Long Beach Oil Field. Waterflood involves the use of wells to inject fluid (primarily water with minor concentrations of additives) into the oil/gas reservoir to re-pressurize the sandstone and flush oil into recovery (extraction) wells. The California Department of Conservation Division of Oil and Gas and Geothermal Resources (DOGGR) establishes limits and monitoring requirements for waterflood operations within California. For example, DOGGR requires that injection pressures in waterflood operations be maintained below the fracture pressure of the formation; this fracture pressure was established for the Long Beach field decades ago by DOGGR and is now required to be confirmed in the field using step-rate tests. DOGGR also requires monitoring on a regular basis to confirm the mechanical integrity of oil well casings and the tubing and packers used in waterflood operations. Flow Science reviewed limited waterflood well and test information, which was characterized by SHP as representative of its waterflood operations, which SHP states are conducted consistent with DOGGR's requirements. Even though a companion analysis by Thomas Walker showed that an estimated 46% of the wells in the field do not have adequate BFW plugs, based on the

information reviewed by Flow Science, we conclude that the potential impacts of historical waterflood operations on drinking water aquifers are limited.

In summary and as detailed in this report, Flow Science concludes that subsurface operations within the Signal Hill-Long Beach area to date have little impact on water quality within drinking water aquifers.

**Disclaimer:** Flow Science analyses focused on potential impacts from past and current subsurface oil field operations on groundwater quality. Our analyses do not address issues that may result from future operations. The potential groundwater impacts from future oil field operations and above-surface operations (e.g., pipeline management) should be addressed in the future via tasks related to the development of a conditional use permit (CUP).

## INTRODUCTION

The City of Signal Hill retained Flow Science Incorporated (Flow Science) to evaluate the potential impacts of oil field operations on groundwater quality in the Signal Hill-Long Beach area. Flow Science reviewed general information and data on subsurface conditions within the area to evaluate whether or not oil field operations are likely to have impacted water quality in drinking water aquifers. Flow Science also reviewed information on the location of the “base of freshwater” in the area as one potential measure of changes in groundwater quality that could result from oil field operations. Finally, Flow Science reviewed information provided by Signal Hill Petroleum, Inc. (SHP) to evaluate waterflood operations and the potential impacts of waterflood operations on groundwater quality. Results of the review are summarized in this report, which organized into several major sections, including an executive summary and detailed sections describing the analysis of the subsurface geology, water quality within drinking water aquifers, the base of freshwater, and the potential for waterflood operations to affect water quality within overlying drinking water aquifers.

## GENERAL INFORMATION ON SUBSURFACE IN THE LOS ANGELES BASIN

Oil fields are located throughout the Los Angeles Basin (the LA Basin), and oil/gas wells and water wells are frequently located near one another (**Figure 1**). Over 30 mapped oil fields and 9,700 oil/gas wells exist in the LA Basin (Parker 2013). As shown in **Figure 1**, oil/gas wells are located exclusively within oil fields, often at a very high density. Water wells, by contrast, are typically spaced farther apart and are generally not located within the areas with the highest densities of oil/gas wells.

As shown in **Figure 2**, which presents a large-scale cross-section of the subsurface geology in the Los Angeles Basin area, hydrocarbon zones (shown in brown and grey tones) typically occur at greater depths than fresh water aquifers (shown in yellow). In fact, it is rare for maps to show both hydrocarbon zones and aquifer production zones in detail; although oil/gas wells penetrate through the upper strata that contain drinking water aquifers, oil/gas wells are not screened or perforated in drinking water zones. Drinking water wells typically terminate well above hydrocarbon zones. Even the vocabulary used to describe oil field operations differs from that used in the context of drinking water aquifers and water wells.

**RESOLUTION NO. \_\_\_\_\_**

**A RESOLUTION OF THE PLANNING COMMISSION OF  
THE CITY OF SIGNAL HILL, CALIFORNIA,  
RECOMMENDING CITY COUNCIL ADOPTION OF  
NEGATIVE DECLARATION 04/03/15(1), RELATIVE TO  
ORDINANCE AMENDMENT 15-01**

**WHEREAS**, the City of Signal Hill, California has prepared a Negative Declaration related to the Ordinance Amendment 15-01 amending Title 16 entitled "Oil Code" and Chapter 20.52 entitled "Site Plan and Design Review" of the Signal Hill Municipal Code; and

**WHEREAS**, the amendments will establish regulations to allow development on top of and in close proximity to abandoned wells, revise methane assessment and mitigation procedures and establish site restoration standards; and

**WHEREAS**, the proposed oil code amendment provides an improved health and safety benefit to the public, in that it adopted standards that are more stringent than those in the City's existing oil code and establishes development standards for development on top of and in close proximity to abandoned wells; and

**WHEREAS**, technical reports have been completed and the petroleum report found that past abandonment practices under the DOGGR equivalency standard were safe and responsible and the water study found no indications of impacts to water quality from historic oil operations and a City equivalency standard for well abandonments has been developed that is consistent with the past DOGGR equivalency standard and the standard allows the City to make a land use determination for development over or in close proximity to abandoned wells; and

**WHEREAS**, given the legacy of oil operations in and around the City, methane assessment and mitigation standards will now be required for all properties with

proposed development and City well abandonment permits will include site restoration standards; and

**WHEREAS**, the Ordinance Amendment does not amend the City's existing regulations for active wells, idle wells and oil production operations; and

**WHEREAS**, pursuant to Guidelines for the Implementation of the California Environmental Quality Act, an Initial Study relative to the proposed project reveals that no substantial evidence exists that the Ordinance Amendment 15-01 may have a significant effect on the environment; and

**WHEREAS**, Negative Declaration 04/03/15(1) was prepared indicating that the project would have a less than significant environmental impact; and

**WHEREAS**, on April 3, 2015, a Notice of Intent to adopt the Initial Study and proposed Negative Declaration 04/03/15(1) was published in the Signal Tribune newspaper in accordance with Government Code § 65091(a)(4) and was posted in accordance with Signal Hill Municipal Code Section 1.08.010; and

**WHEREAS**, on April 3, 2015, a Notice of Completion was sent to the State Clearinghouse a division of the Governor's Office of Planning and Research for distribution to State agencies pursuant to Guidelines for the Implementation of the California Environmental Quality Act; and

**WHEREAS**, on April 3, 2015, a Notice of Completion was posted with Los Angeles County Clerk Recorder Office pursuant to Guidelines for the Implementation of the California Environmental Quality Act; and

**WHEREAS**, Negative Declaration 04/03/15(1) and associated documents were made available for public review for the thirty day public comment period; and

**WHEREAS**, on April 3, 2015, notice of a Planning Commission public hearing regarding the associated Ordinance Amendment 15-01 and Negative Declaration 04/03/015(1) was published in the Signal Tribune newspaper in accordance with Government Code § 65091(a)(4) and was posted in accordance with Signal Hill Municipal Code Section 1.08.010; and

**WHEREAS**, on April 14, 2015, the Planning Commission held a public hearing and all persons were given an opportunity to comment on the and associated documents; and

**WHEREAS**, the City has incorporate all comments received and responses thereto.

**NOW, THEREFORE, BE IT RESOLVED**, that the Planning Commission of the City of Signal Hill, California, has considered the public comments and finds as follows:

1. The Initial Study prepared for the proposed Ordinance Amendment identified no potentially significant effects on the environment with the implementation of mitigation measures; and
2. The associated Ordinance Amendment is consistent with the Signal Hill General Plan and the Zoning Ordinance.

**NOW, THEREFORE, BE IT FURTHER RESOLVED**, that the Planning Commission hereby recommends City Council adoption of Negative Declaration 04/03/15(1) attached hereto as Attachment A.

**PASSED, APPROVED AND ADOPTED** at a regular meeting of the Planning Commission of the City of Signal Hill, California held on the 14<sup>th</sup> day of April, 2015.

---

TOM BENSON  
CHAIR

ATTEST:

---

SCOTT CHARNEY  
COMMISSION SECRETARY

STATE OF CALIFORNIA        )  
COUNTY OF LOS ANGELES ) ss.  
CITY OF SIGNAL HILL        )

I, SCOTT CHARNEY, Secretary for the Planning Commission of the City of Signal Hill, California, do hereby certify that Resolution No. \_\_\_\_\_ was adopted at a regular meeting of the Planning Commission of the City of Signal Hill on the 14<sup>th</sup> day of April, 2015 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

---

SCOTT CHARNEY  
COMMISSION SECRETARY

**CEQA INITIAL STUDY**  
**SIGNAL HILL OIL CODE AMENDMENT**

*Prepared for:*



**City of Signal Hill**  
**Community Development Department**  
2175 Cherry Avenue  
Signal Hill, California 90755

*Prepared by:*



**SESPE Consulting, Inc.**  
5920 Friars Road, Suite 103  
San Diego, California 92108

**April 2015**

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## Appendices

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- Appendix B: Impacts of Oilfield Operations on Groundwater Quality in Signal Hill-Long Beach Area
- Appendix C: Well Abandonment Equivalency Standard
- Appendix D: Richard C. Manuel Opinion, Oil Well Consultant
- Appendix E: Mearns Consulting Opinion, Environmental Consultant
- Appendix F: State Code Sections

## Section 1: Introduction

The City of Signal Hill (City) proposes to amend the Signal Hill Oil Code (Oil Code). The organization of this document is according to the following sections:

- Section 1: Introduction
- Section 2: Project Background and Context
- Section 3: Project Description
- Section 4: Environmental Evaluation
- Section 5: References
- Section 6: Glossary

### 1.1 Intended Use of this Document

This Initial Study serves as an information document for applicable public-agency decision makers and interested members of the public regarding the objectives and components of the proposed Signal Hill Oil Code amendment (Project). Section 15365 of the State CEQA Guidelines (Guidelines) defines an Initial Study as a preliminary analysis prepared by a Lead Agency to determine whether an Environmental Impact Report (EIR), Negative Declaration, or Mitigated Negative Declaration must be prepared, or when known in advance that an EIR is required, to identify significant environmental effects for detailed analysis.

The Initial Study has been prepared in accordance with the following:

- California Environmental Quality Act (CEQA) (Public Resources Code §21000 et seq) and
- State CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3).

This Initial Study and supporting technical appendices may be inspected between the hours of 7:30 a.m. to 5:30 p.m., Monday through Thursdays, and 7:30 a.m. to 4:30 p.m., Fridays, in the Community Development Department at Signal Hill City Hall located at 2175 Cherry Avenue. City Hall is located at the southwest corner of Cherry Avenue and East Hill Street. Refer to Sections 1.2.2 and 1.2.3 below.

### 1.2 Environmental Checklist Form

Appendix G of the Guidelines provides a sample form for providing content for preparing initial studies. This section incorporates the suggested content from this Environmental Checklist Form. Section 2 provides a description of the Project's background and context, Section 3 contains a detailed description of the project, and Section 4 contains the environmental analysis.

#### 1.2.1 Project Title

The project title is the Signal Hill Oil Code Amendment.

#### 1.2.2 Lead Agency Name and Address

City of Signal Hill  
Community Development Department  
2175 Cherry Avenue  
Signal Hill, California 90755-3799

### 1.2.3 Contact Persons, Telephone Number, and Emails

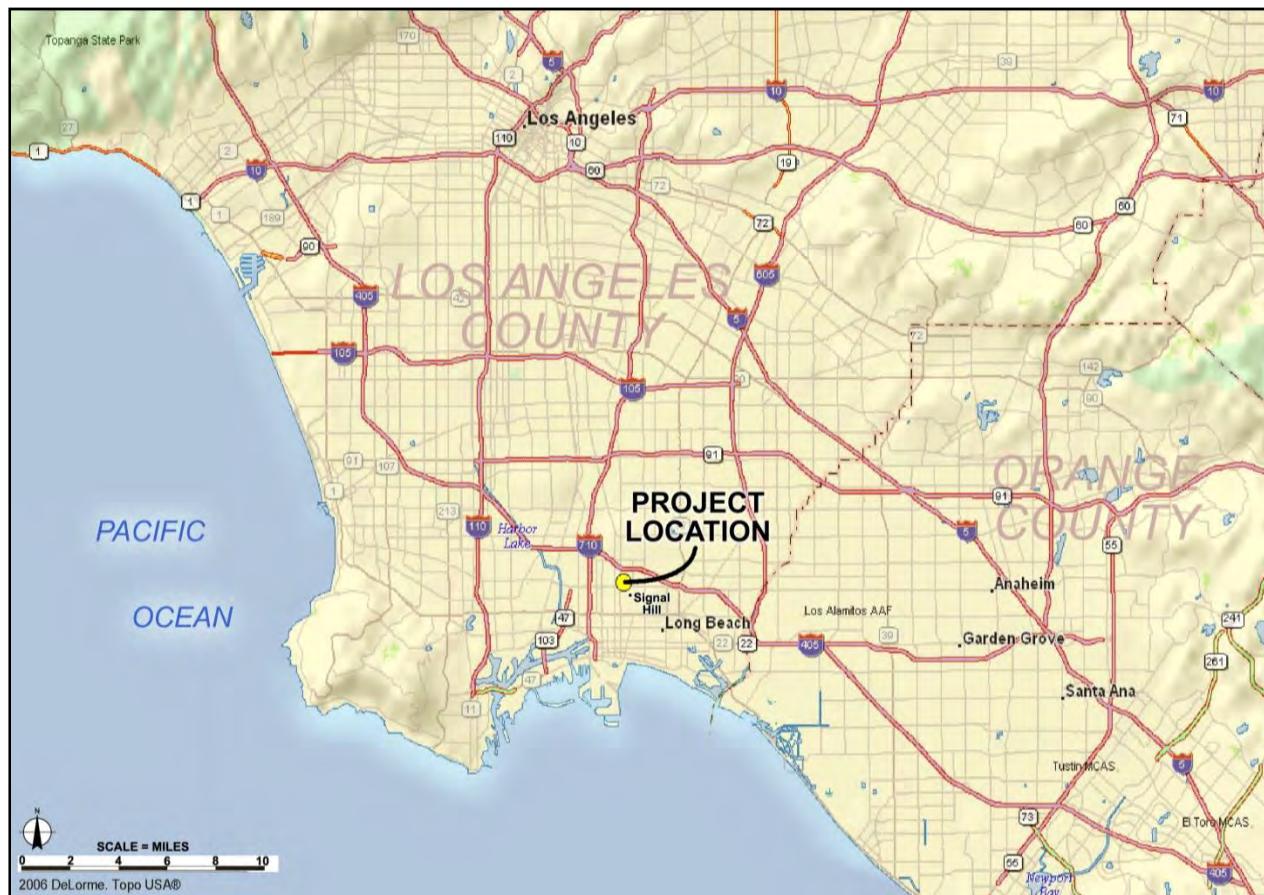
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Community Development Department main telephone: 562.989.7340

The Project would apply to any property containing an abandoned well or any property proposed for development within the entire City. The City is located in the greater Los Angeles region and within Los Angeles County. The Los Angeles–Orange county boundary is located approximately four miles to the east. The incorporated City of Long Beach surrounds the City. Other nearby incorporated cities include Los Angeles, Seal Beach, Carson, and Lakewood. Figure 1 identifies the Regional Location of the City.

**Figure 1: State and Regional Geographic Location**



#### **1.2.4 Project Sponsor's Name and Address**

City of Signal Hill  
Community Development Department  
2175 Cherry Avenue  
Signal Hill, California 90755-3799

#### **1.2.5 General Plan Designation - Existing**

Properties subject to the Project would represent different General Plan land use designations. Provided below are the City's General Plan land use designations with their respective map code symbol numbers in parentheses. These designations correspond to Figure No. 3 in the Land Use Element:

- Low Density Residential (1.1)
- Medium Density Residential (1.2)
- High Density Residential (1.3)
- Very High Density Residential (1.4)
- Town Center (3.1)
- Commercial General (3.2)
- Commercial Office (3.3)
- Commercial Industrial (3.4)
- Light Industrial (4.1)
- General Industrial (4.2)
- Public Institutional (PI and 4.1)
- Open Space (Park/Trail) (OS)

#### **1.2.6 Zoning - Existing**

Properties subject to the Project would represent different zoning districts identified in the City Zoning Ordinance. Provided below are the zoning districts with their respective names in parentheses:

- RL (Residential Low Density)
- RLM-1 (Residential Low/Medium-1)
- RLM-2 (Residential Low/Medium-2)
- RH (Residential High Density)
- CG (Commercial General)
- CTC (Commercial Town Center)
- CO (Commercial Office)
- CI (Commercial Industrial)
- CR (Commercial Residential)
- LI (Light Industrial)
- GI (General Industrial)
- SP-1 (Town Center specific plan district)
- SP-2 (Hilltop Specific Plan District)
- SP-3 (Town Center West specific Plan District)
- PD-2 (Planned Development Area 2)
- OS (Open Space District)
- Specific Plans (SP) 4 through 20

#### **1.2.7 Description of Project**

The purpose of the Project is to amend the City's Oil Code (Title 16 of the Municipal Code) pertaining to regulations and standards for abandoned oil and gas wells. In addition, minor "clean up" text revisions are proposed for Chapters 16.08 and 16.16 of the Oil Code and Chapter 20.52 of the Zoning Code. Refer to Section 3 of this document for a complete project description.

#### **1.2.8 Surrounding Land Uses and Setting**

The incorporated City of Long Beach surrounds the City. A mixture of residential, commercial, and industrial land uses characterize the surrounding land uses. The San Diego Freeway (I-405) bisects the northwest portion of the City and the Long Beach Airport is located in close proximity to the northern City boundary. The Long Beach Municipal Cemetery and Sunnyside Cemetery is adjacent to the City in the northwest. The Los Angeles River is located approximately 1.5 miles to the west. The Port of Los Angeles and Port of Long Beach complex is located approximately five miles to the southwest.

### 1.2.9 Other Public Agencies Whose Approval is Required

Table 1 below provides a summary of public agency recommendations and approvals that are associated with the Project.

**Table 1: Public Agency Approvals**

Agency	Permit or Approval
City of Signal Hill Planning Commission	Review of CEQA document and Ordinance Amendment
	Recommendation to City Council
City of Signal Hill City Council	Approval of CEQA document
	Adoption of Amended Oil and Gas Code

Source: City of Signal Hill, Community Development Department.

### 1.3 Environmental Factors Potentially Affected

Checkmarks beside any of the environmental factors listed below in Table 2 indicate at least one environmental factor that is potentially significant. Unchecked boxes indicate that none of the environmental factors are significantly affected based on the environmental evaluation in Section 4 of this document. Following each topical environmental factor is the section number of this document where the topical environmental factor is evaluated.

**Table 2: Environmental Factors Potentially Affected**

<input type="checkbox"/> Aesthetics <i>Section 3.1</i>	<input type="checkbox"/> Greenhouse Gas Emissions <i>Section 3.7</i>	<input type="checkbox"/> Population and Housing <i>Section 3.13</i>
<input type="checkbox"/> Agriculture and Forestry Resources <i>Section 3.2</i>	<input type="checkbox"/> Hazards and Hazardous Materials <i>Section 3.8</i>	<input type="checkbox"/> Public Services <i>Section 3.14</i>
<input type="checkbox"/> Air Quality <i>Section 3.3</i>	<input type="checkbox"/> Hydrology and Water Quality <i>Section 3.9</i>	<input type="checkbox"/> Recreation <i>Section 3.15</i>
<input type="checkbox"/> Biological Resources <i>Section 3.4</i>	<input type="checkbox"/> Land Use and Planning <i>Section 3.10</i>	<input type="checkbox"/> Transportation and Traffic <i>Section 3.16</i>
<input type="checkbox"/> Cultural Resources <i>Section 3.5</i>	<input type="checkbox"/> Mineral Resources <i>Section 3.11</i>	<input type="checkbox"/> Utilities and Service Systems <i>Section 3.17</i>
<input type="checkbox"/> Geology and Soils <i>Section 3.6</i>	<input type="checkbox"/> Noise <i>Section 3.12</i>	<input type="checkbox"/> Mandatory Findings of Significance <i>Section 3.18</i>

## 1.5 Environmental Determination

Based on the Environmental Evaluation conducted in Section 4, the following table identifies the environmental determination.

**Table 3: Environmental Determination**

I find that the proposed project COULD NOT have a significant effect on the environment, and a <b>NEGATIVE DECLARATION</b> will be prepared.	<input checked="" type="checkbox"/>
I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A <b>MITIGATED NEGATIVE DECLARATION</b> will be prepared.	<input type="checkbox"/>
I find that the proposed project MAY have a significant effect on the environment, and an <b>ENVIRONMENTAL IMPACT REPORT</b> is required.	<input type="checkbox"/>
I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An <b>ENVIRONMENTAL IMPACT REPORT</b> is required, but it must analyze only the effects that remain to be addressed.	<input type="checkbox"/>
I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier <b>ENVIRONMENTAL IMPACT REPORT</b> or <b>NEGATIVE DECLARATION</b> pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier <b>ENVIRONMENTAL IMPACT REPORT</b> or <b>NEGATIVE DECLARATION</b> , including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.	<input type="checkbox"/>



April 2, 2015

Signature

Date

Scott Charney, Community Development Director  
City of Signal Hill

## Section 2: Project Background and Context

### Introduction

The purpose of this section is to provide a Project background and current context of the Project. This section includes the following sections:

- Section 2.1 Background and Context
- Section 2.2 Interim Regulations
- Section 2.3 Professional Opinions and Specialized Technical Studies

### 2.1 Background and Context

Oil was discovered in 1919 in the Long Beach Oil Field. The Long Beach Oil Field, termed a “mega-giant” field was originally estimated to hold approximately three billion barrels of oil. The area soon became one of the largest active oil fields in the world with more than one billion barrels of oil recovered from discovery through the present. Approximately 2,900 wells have been drilled in the Long Beach Oil Field of which approximately 1,719 are located within the City. Approximately 421 active oil or gas wells are located within the City.<sup>1</sup> The wells were not distributed evenly but concentrated in certain areas of the City. To illustrate the density of the number of wells to entire City area (2.19 sq mi), had the wells been evenly distributed, there would have been a ratio of 1.2 wells per acre.<sup>2</sup>

The City has no record of methane or fluids leaking from abandoned or re-abandoned wells. In addition, the City’s records indicate that no wells have been improperly abandoned since 1965.<sup>3</sup>

**State Well Regulations** – Throughout the last approximately 95 years, well abandonments and re-abandonments were completed without formal standards or, beginning in the 1920s, to varying State standards. Between the 1920s and 1989, drilling and abandonment standards improved in response to technological advances, understanding of geology, and refinement of best practices in controlling methane and oil leaks. In 1989, the Division of Oil, Gas and Geothermal resources (DOGGR) developed the Construction Site Plan Review Program (CSPRP) to assist local permitting agencies in identifying and reviewing the status of abandoned wells on sites proposed for development. Today, DOGGR is charged with implementing applicable portions of the Public Resources Code and California Code of Regulations, which addresses abandoning wells (refer to Section 4.03).

**City’s 1990 Oil Well Regulations** –In 1990, the City convened an Oil Code Committee to initiate a comprehensive update to the 1962 Oil Code.<sup>4</sup> The 1990 Oil Code regulated the following: drilling of new wells, re-drilling of existing wells and abandoning wells; waterflood injection; location of drill sites; noise standards; surface mitigation measure recommendations; methane gas venting; property maintenance; landscaping; development constraints; and, vehicular access for oil field equipment.

Most significantly and unlike other jurisdictions in the region, the City relied exclusively upon the DOGGR’s CSPRP process and subsequent receipt of the associated standard certification letter to

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<sup>1</sup> The number of wells that the City holds permits for that are considered active includes idle wells. Therefore, active wells includes both producing wells and idle wells.

<sup>2</sup> This ratio is provided only for illustrative purposes. Beginning in 1931, laws were enacted requiring wells to be spaced a minimum of 150 feet apart. However, these laws do not apply to oil fields discovered prior to August 1931.

<sup>3</sup> City of Signal Hill, Staff Report for Ordinance No. 2011-08-1430, August 16, 2011 and General Plan Safety Element, p. S-14.

<sup>4</sup> The first Signal Hill Oil Code was originally adopted in 1942 and significantly revised in 1964.

determine that a well had been abandoned to DOGGR's current or their equivalent standards and therefore did not pose a threat to the public health, safety, and general welfare.<sup>5</sup> Based on this, the City issued development permits allowing improvements over or in close proximity to an abandoned well consistent with the requirements of the Oil Code (§16.24.040(A) and Zoning Code (§20.52.040(B)(1)(p))).<sup>6</sup> Close proximity was established by DOGGR and meant closer than the minimum distance from three directions that a drill maintenance rig required to access a well should it become necessary. Refer to Appendix A, Attachment A for a graphical depiction of this standard. Additionally, in the State District that the City was located, (District 1), DOGGR performed the leak tests on the wells and affixed a certification stamp to the site plans and review form (OG190). Copies were provided to the City and applicant with a copy retained with DOGGR's files.

The City prepared an Initial Study pursuant to the requirements of CEQA and adopted a negative declaration prior to approving the 1990 amendment that determined no significant impacts to the environment would occur. (Resolution No. 40-08-4099).

**Construction Site Plan Review Program** – As noted above, the Oil Code required developers or property owners intending to develop, to first obtain written approval (i.e., certification letter and stamped site plans) from DOGGR documenting compliance with the provisions of the CSPRP prior to issuance of a grading, building permit, or development permit whichever should occur first in the City's entitlement process. The only reference in the Oil Code for the City's land use decision and local permitting was DOGGR's CSPRP procedures of leak testing and providing the certification letter. The certification letter was typically issued on a more timely basis than DOGGR's OG159 form which was DOGGR's official final report in their permitting process and determination that a well was abandoned properly.

The CSPRP procedures were consistent with the California Laws for Conservation of Petroleum and Gas which stated in Public Resources Code Section 3208.1 that in order to prevent as far as possible damage to life, health and property, the operator responsible for abandoning deserted wells shall be responsible for the re-abandonment except when the supervisor finds that the operator plugged and abandoned the well in conformance with the standards of DOGGR, in effect at the time of the abandonment. In addition, that the well in its current condition presents no immediate danger to life, health and property but requires additional work solely because the owner of the property on which the well is located proposes construction on the property that would prevent or impede access to the well for the purposes of remedying a currently perceived future problem.

**DOGGR's Equivalent Standard** – The CSPRP and the associated certification letter identified two standards for abandonment certification. The first was called the current standard and the second was called their equivalent standard. DOGGR would issue the certification letter stating that the well was properly abandoned if the abandonment met either of these two standards. The equivalent standard recognized that the conditions of abandoned wells in the field often meant that alternative methods of re-abandonment were necessary. The overarching goal of the CSPRP was the protection of the public health, safety and welfare. The formulation of the equivalent standard was based on direction from DOGGR field representatives who acknowledged that conditions in the field routinely rendered it

<sup>5</sup> The reference to public health, safety, and general welfare is part of the overarching purpose of the 1990 Oil Code as codified in Section 16.24.020.

<sup>6</sup> The DOGGR certification letter did not explicitly state nor give assent to the City that developing over or in close proximity to abandoned wells was acceptable because DOGGR does not possess police powers over land use and is therefore unable to regulate land development.

impossible to obtain the exact CSPRP abandonment standards on particular wells and that alternate methods of re-abandonment were safe and necessary.

**DOGGR's Change to the CSPRP** – In 2010, DOGGR abruptly changed the CSPRP, and discontinued the process of providing a certification letter along with the option of an equivalent standard for well abandonments. In addition, DOGGR discontinued conducting the leak testing that had been the practice in District 1. Because of the City's Oil Code strict reliance upon the DOGGR certification process and the subsequent certification letter, the City was left with an obsolete Oil Code with respect to the determination to build over an abandoned well, because no alternate procedure was in place. This created an extreme hardship for the City in that no development permits could be issued for properties with abandoned wells until the Oil Code was amended. Initial research indicated that very few abandoned wells throughout the City that had been built over with DOGGR approval and very few abandoned wells on future development properties would meet the DOGGR standard without the overlay of the equivalent standard option.

In order to replace the previous DOGGR certification letter with a safe and responsible City standard, the City would need to conduct special technical studies on past and present oil operations, which would mean collection, collation and analysis of thousands of documents dating back nearly two decades. Refer to Section 2.3 for a discussion of the specialized studies. This created an immediate and extreme hardship for the City given the legacy of oil production and the historic number of wells in the City because most properties available for development also contained abandoned wells. The time and resources necessary to proceed with the establishment of a City equivalent standard would be considerable.

## 2.2 Interim Regulations

### 2.2.1 City of Signal Hill 2011 Interim Regulations

In 2011, the City responded to the abrupt change to the DOGGR CSPRP by adopting Interim Regulations (Ordinance No. 2011-08-1430) for property containing abandoned wells. These regulations prohibited development over or in close proximity to abandoned wells pending completion of specialized technical studies and additional research that would provide pertinent data on how to ultimately amend the Oil Code. These Interim Regulations were to remain in effect until specialized studies on water quality, oil operations and abandonment procedures were completed, and a City well abandonment Equivalency Standard was created that would allow for development to occur over and in close proximity to abandoned wells.

In addition, this ordinance authorized the preparation of a comprehensive *Well Abandonment Standards Technical Study*. Once completed, this study along with the *Impacts of Oilfield Operations on Groundwater Quality Study*, would provide a basis for the future comprehensive Oil Code amendment. This future amendment would include a replacement to the former DOGGR equivalent abandonment standard with the City Equivalency Standard for determining whether wells could be built over or within close proximity. Refer to Section 2.3 below for a description of these two studies.

The City determined that the adoption of the 2011 Interim Regulations was exempt from CEQA. This determination was supported by the following: 1) this ordinance authorized the undertaking of feasibility and planning studies; and 2) any development which may occur pursuant to the Interim Regulations would not be approved until a complete environmental evaluation of the proposed project

has occurred. The City further determined this was activity taken to maintain, restore, enhance, or protect the environment and therefore categorically exempt from CEQA according to Section 15308. This determination was supported by the following: 1) the Interim Regulations are more stringent than the current standards imposed; 2) the Interim Regulations addresses the proper handling of the re-abandonment of well standards as a result of the DOGGR policy changes; and, 3) there is an immediate threat to public health, safety or welfare because the current Oil Code did not sufficiently address the lack of guidance created by recent DOGGR policy changes and DOGGR is not leak testing wells.

### **2.2.2 City of Signal Hill 2012 Interim Regulations**

In 2012, the City adopted Ordinance No. 2012-08-1449 extending the 2011 Interim Regulations and added the following development standard:

- (e) A methane assessment report is to be required and shall be prepared per the City of Los Angeles DBS "Site Testing Standards for Methane" ((P/BC 2002-101, November 30, 2004).

As with the 2011 Interim Regulations, the 2012 Interim Regulations were to remain in effect until specialized studies on water quality, oil operations and abandonment procedures were completed, and a City well abandonment Equivalency Standard was to allow development to occur over and in close proximity to abandoned wells.

The City determined that the adoption of the 2012 Interim Regulations was exempt from CEQA. This determination was supported by the following: 1) this ordinance authorized the undertaking of feasibility and planning studies; and 2) any development which may occur pursuant to the Interim Regulations would not be approved until a complete environmental evaluation of the proposed project has occurred. This Ordinance is therefore exempt from CEQA pursuant to Section 15061. The City further determined this was activity taken to maintain, restore, enhance, or protect the environment and therefore categorically exempt from CEQA according to Section 15308. This determination was supported by the following: 1) the Interim Regulations are more stringent than the current standards imposed; 2) the Interim Regulations addresses the proper handling of the re-abandonment of well standards as a result of the DOGGR policy changes; and, 3) there is an immediate threat to public health, safety or welfare because the current Oil Code did not sufficiently address the lack of guidance created by recent DOGGR policy changes and DOGGR is not leak testing wells.

### **2.2.3 City of Signal Hill 2013 Regulations**

On August 20, 2013, the City adopted regulations (Ordinance No. 2013-07-1459) that became effective on September 18, 2013. This ordinance essentially adopted the 2011 Interim Regulations and 2012 Interim Regulations with additional regulations pertaining to development proximate to abandoned wells, abandoned well site surveys, and methane leak testing and venting.

Because the 2013 Regulations adopted the 2011 Interim Regulations and the 2012 Interim Regulations, the professional opinion provided by the City's Oil Well Consultant, Mr. Manuel remains applicable to the 2013 Regulations. Refer to Section 2.3.1 below.

Like the 2011 and 2012 Interim Regulations, the 2013 Regulations prohibit development over or in close proximity to abandoned wells. The City policy requiring methane assessment and mitigation was added to require all abandoned wells be leak tested. In addition, a methane assessment report and mitigation plans for all development sites were included as a City requirement and generally follow the City of Los Angeles Department of Building and Safety "Site Testing Standards for Methane (City of Los Angeles

Ordinance No. 175790). The assessment report is required to be signed and stamped by a State of California registered geologist and submitted for review to the City Building Official prior to development. The 2013 Regulations will remain in effect until specialized studies on water quality, oil operations and abandonment procedures are completed, and a City well abandonment Equivalency Standard has been created that will allow for development to occur over and in close proximity to abandoned wells.

Specifically, this ordinance amended the following Oil Code sections:

- Section 16.24.010 – Required Abandonment
- Section 16.24.020 – Development Standards for Properties Containing Abandoned Oil Wells
- Section 16.24.040 – Methane Testing and Venting

Development can proceed on properties where abandoned wells are accessible in accordance with DOGGR's access standards. Refer to Appendix A, Attachment A for a graphical depiction of this standard. Developers or property owners proposing development would not be required to re-abandon wells that do not leak and for which access is provided. The ordinance allows the City to approve minor deviations to the full access standards when appropriate.

The City determined that the adoption of the 2013 Regulations was exempt from CEQA. This determination was supported by the following: 1) this ordinance accommodates the completion of ongoing technical studies; and 2) any development which may occur pursuant to the Regulations would not be approved until a complete environmental evaluation of the proposed project has occurred.

The City further determined this was activity taken to maintain, restore, enhance, or protect the environment and therefore categorically exempt from CEQA according to Section 15308. This determination was supported by the following: 1) the Regulations are more stringent than the previous standards imposed, 2) the Regulations addresses the proper handling of the abandonment or re-abandonment of wells for development near but not over buildings and includes an abandoned well survey, site plan requirements, methane leak testing, venting and access in lieu of requirements from DOGGR; and, 3) there is an immediate threat to public health, safety or welfare under the previous Oil Code because it did not sufficiently address the lack of guidance created by recent DOGGR policy changes.

## **2.3 Professional Opinions and Specialized Technical Studies**

The City Council authorized the preparation of two specialized technical studies for use as the basis for amending the Oil Code and establishing the standards for the City's Equivalency Standard and sought professional opinions from two consultants.

### **2.3.1 Professional Opinions**

In 2011, the City retained Richard C. Manuel, Oil Well Consultant, to provide an expert opinion regarding the adequacy of the 2011 Interim Regulations. A copy of this opinion is located in Appendix D. This opinion evaluated the proposed 2011 Interim Regulations to determine if the regulations and standards contained therein were sufficient to allow development to continue pending completion of specialized studies and completion of a comprehensive amendment to the Oil Code. In addition, this evaluation compared the 2011 Interim Regulations to the changed CSPRP. This opinion concluded the 2011 Interim Regulations were safe, extremely conservative and were more stringent than the regulations and standards contained in the changed CSPRP.

In December 2014, the City retained Susan Mearns, Environmental Consultant at Mearns Consulting, to provide an expert opinion regarding the sufficiency of the existing passive methane system for new development or to determine if active systems should be required. A copy of this opinion is located in Appendix E. This letter evaluated the existing regulations pertaining to passive methane venting systems to determine if they were sufficient for new development or if active methane systems should be required. Methane is an asphyxiant and potentially explosive when the following conditions are present: accumulation in a confined space; under pressure in the confined space; and, an ignition source is present.

The following active methane systems were evaluated to determine if they should be required for new development: alarm system; de-watering system; gas detection system; mechanical ventilation and extraction system; and, pressure sensor system. The conclusion was requiring these systems for new development would not be necessary. The Long Beach Oil Field is depressurized. The lack of pressurization combined with the existing methane systems and Title 24 building code requirements, methane would be inhibited from accumulating in confined spaces. Moreover, implementing the active systems would be deemed impractical due to the required operation and testing by untrained property owners.

The opinion concluded that existing City methane system requirements are comprehensive and specific to the characteristics of the Long Beach Oil Field.

Preparation of these studies and opinions are categorically exempt from the provisions of CEQA according to Section 15306 of the Guidelines. This exemption class consists of basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource. These may be strictly for information gathering purposes, or as part of a study leading to an action, which a public agency has not yet approved, adopted, or funded.

### **2.3.2 Impacts of Oil Field Operations on Groundwater Quality Study**

In February 2014, Flow Science Incorporated completed the *Impacts of Oilfield Operations on Groundwater Quality in Signal Hill-Long Beach Area* study to determine the potential impacts on groundwater quality from current and past subsurface oil field operations. This opinion is located in Appendix B. Specifically, this study accomplished the following:

- Identified the purpose of a base of freshwater plug;
- Identified the percentage of abandoned oil wells in Signal Hill that have base of freshwater plugs (based on the Well Abandonment Equivalency Standard study and described below in Section 2.3.3);
- Identified historical changes in water quality and quantity;
- Evaluated historical use of base of freshwater plugs by local operators (based on the Well Abandonment Equivalency Standard study and described below in Section 2.3.3);
- Qualitatively assessed groundwater contamination from subsurface oil field standard practices;
- Analyzed potential impacts of waterflood operations on groundwater quality; and,
- Analyzed potential impacts of historical abandoned oil wells and closure practices on groundwater quality.

**Summary of Conclusions:**

Subsurface operations within the Long Beach Oil Field area to date have had little impact on water quality within drinking water aquifers. Surface operations and water handling procedures were not evaluated in this study. The study evaluated past (historical) operations and is not applicable to future operations, particularly if oil field practices change in the future. Individual conclusions are presented below.

**Groundwater Quality in the Los Angeles Basin** – Groundwater quality in deep drinking water aquifers (i.e., production zones) in the Coastal Los Angeles Basin was examined in a 2006 study conducted by the California State Water Resources Control Board in collaboration with the U.S. Geological Survey (USGS) and the Lawrence Livermore National Laboratory as part of the Priority Basin Project of the Groundwater Ambient Monitoring and Assessment Program. The results from this regional-scale assessment (which did not evaluate groundwater quality within the City specifically) indicate that although saline infiltration was observed in a portion of aquifers examined, no widespread or dangerous contamination occurred in the primary drinking water aquifers across the Coastal Los Angeles Basin.

**Central and West Coast Basin Groundwater Contamination Forum** – Although no specific program exists to monitor oil field operations on groundwater in the greater Los Angeles Basin, the Water Replenishment District of Southern California, (WRD) has been monitoring groundwater quality at its monitoring wells. The WRD established the Forum in order to facilitate data sharing and the investigation and cleanup of sites where groundwater was contaminated. The WRD developed a list of high-priority contaminated groundwater sites based on criteria such as a distance to the nearest drinking water well, the depth to shallowest water supply aquifer beneath the site, the concentration of contaminants detected in groundwater beneath the site, the fate and transport of contaminants, and the presence of contamination in nearby drinking water wells. All of the high priority contaminated groundwater sites are located outside of the Project Site.

**Cleanup Sites in the Signal Hill-Long Beach Area** – Shallow groundwater contamination can occur from a range of activities, including spills from commercial and industrial activities, and leaks from underground tanks. Numerous contamination events, typically associated with commercial and industrial facilities, and leaking underground storage tanks, and subsequent cleanups occurred in the Signal Hill-Long Beach Area prior to 2012. Results indicate contamination appears to have been limited to soil and shallow subsurface areas and did not reach deep aquifers that are sources of drinking water supply.

**Water Quality in Production Wells in the Signal Hill-Long Beach Area** – Annual water quality reports indicate that constituent levels are either below applicable regulatory thresholds or below detection limits (i.e., non-detects).

**Water Quality in Monitoring Wells** – Information reviewed to date indicates that, with the exception of total dissolved solids (TDS) and chloride likely from seawater intrusion, groundwater quality in drinking water producing aquifers in the Signal Hill-Long Beach area meets applicable regulatory thresholds and does not appear to have been influenced in any significant way by subsurface oil field operations.

**Change in the Base of Freshwater Area** – Historical operations have not caused significant changes in the base of freshwater over time.

**Waterflood Operations within the Long Beach Oil Field** – Waterflood operations operate below the maximum allowable injection pressures in conformance with the California Code of Regulations (14 CCR §1724.10(i)) and no hydraulic fracturing (“fracking”) occurs in the field. Because of these practices and limits on injection pressures, the Flow Science study concluded that waterflood operations, as currently conducted, have little potential to adversely impact water quality in overlying drinking water aquifers. The Flow Science Study did not evaluate water handling procedures or other surface activities associated with oil field operations.

**Status of Abandoned Oil Wells within the Long Beach Oil Field** – The Flow Science Study indicates that subsurface oil field operations conducted in the field to date have not had a significant impact on the water quality within overlying drinking water aquifers, in spite of the fact that many abandoned wells within the field lack an adequate plug at the Base of Freshwater (BFW).

### **2.3.3 Well Abandonment Equivalency Standard Study**

In October 2014, Evans & Walker Consulting Petroleum Engineers completed the *Well Abandonment Equivalency Standard Study*. This study is located in Appendix C. The purpose of this study was to determine the details of past well abandonment practices and determine whether they are considered safe and responsible in light of current standards. The details and determination would be used to establish a City Equivalency Standard to act as a replacement for the changed DOGGR procedures under the CSPRP. The Equivalency Standard would be the basis for a determination by the City as to whether development could safely occur over or in close proximity to abandoned wells.

Specifically, this study accomplished the following:

- Provided high-level information on the Long Beach Oil Field;
- Described the CSPRP employed by DOGGR’s District 1;
- Provided a high-level review of the DOGGR’s current interpretation of well abandonment regulations;
- Obtained information on 404 abandoned wells in the Long Beach Oil Field;
- Reviewed the location and date of 404 abandoned wells to ensure that the group was a representative sample of the Long Beach field;
- Compared the results of the well abandonment reviews to the DOGGR’s current interpretation of well abandonment regulations;
- Reviewed recent well abandonments on developed properties; and,
- Developed a City Equivalency Standard based on the work completed in the study.

#### **Summary of Conclusions:**

**Well Data** – Of the 2,196 abandoned wells in the Long Beach Oil Field, data was obtained on 404 wells that had been abandoned or re-abandoned. Data included wellbore diagrams, well history, or both, including the presence or absence and condition of the following plugs typically used in well abandonments: the plug at the Upper Hydrocarbon Zone (UHZ), the plug at the BFW, and the surface plug.

**Validity of Data** – The 404 abandoned wells for which sufficient data existed to analyze their abandonments included wells abandoned beginning in the 1920’s through the present. The subset of 404 abandoned wells represents wells from all portions of the Long Beach field within the City and is

a statistically valid subset out of a total of 2,196 abandoned wells for analysis in developing a City Equivalency Standard.

This report establishes a statistical basis for the recommended City Equivalency Standard and provides a standard for the City to use to make a determination as to whether structures can be developed over or in close proximity to abandoned wells.

**Plug Adequacy** – Only 11 percent of the 404 abandoned wells were found to have an adequate UHZ plug, 51 percent of the abandoned wells were found to have an adequate BFW plug, and 73 percent of the abandoned wells were found to have an adequate surface plug.

**Operator of Record** – Data on who the operator of record was at the time of the abandonment was analyzed for the 2,196 abandonments, to determine the significance of the correlation between the operator of record and the quality of the abandonment. No correlation was found due to the fact that the operator of record is not necessarily the decision maker as to the methods used to abandon the well.

**Date of Abandonment** - The records for these abandoned wells were evaluated by the abandonment/re-abandonment date to determine if there is a correlation between date of abandonment and condition of abandonment. It was determined that generally, wells abandoned after the 1970s were much improved over earlier abandonments.

**Refinement of Analysis** – The condition of the UHZ, BFW and surface plugs for 60 of the 404 abandoned wells analyzed were either located under buildings or rendered inaccessible by current development and were further analyzed to determine whether the plugs met the DOGGR standards. The results of the analysis were that abandoned wells approved by DOGGR prior to their revising the District 1 CSPRP often had BFW and surface plugs in alternate but equivalent locations and therefore met the discontinued DOGGR equivalent standard.

**Recommended City Equivalency Standard** – The report established a statistical basis for the recommended City Equivalency Standard for well abandonments and provides a standard for the City to use when making a determination as to whether development can occur over or in close proximity to abandoned wells. The recommendation finds that the City's Equivalency Standard is equivalent to the discontinued DOGGR equivalent standard and further that it is both safe and responsible.

## Section 3: Project Description

### Introduction

The purpose of this section is to describe the characteristics of the Project. This section includes the following sections:

- Section 3.1 Project Objectives
- Section 3.2 Project Characteristics
- Section 3.3 Project Phasing
- Section 3.4 Public Agency Approvals
- Section 3.5 Related Projects

### 3.1 Project Objectives

Following are the objectives of amending the Oil Code.

- OBJ-1 Relocate Oil Code chapters for clarity and usability.
- OBJ-2 Maintain consistency with DOGGR's existing statutory authority regarding well abandonments, operations and conditions underground and in determining whether oil wells should be abandoned or re-abandoned.
- OBJ-3 Revise development standards for properties containing abandoned wells by adding a City Equivalency Standard to the Oil Code that would allow improvements to be located over and in close proximity to abandoned wells.
- OBJ-4 Establish prerequisites to Site Plan Design Review for development on properties with abandoned wells.
- OBJ-5 Require a well abandonment plan that meets the City's Equivalency Standard.
- OBJ-6 Require methane testing on any property proposed for development whether or not abandoned wells are present on the site.
- OBJ-7 Reference pertinent sections of Title 16 in Chapter 20-52: Site Plan and Design Review.

### 3.2 Project Characteristics

The Project would amend the Oil Code by relocating existing text without changing any regulations or standards, adding minor text revisions to Oil Code Text and Zoning Code text that do not revise any regulations or standards, and amendments that add and modify regulations and standards.

Refer to Table 4 below for a summary of the proposed amendments. Appendix A contains the proposed amendments.

**Table 4: Summary of Proposed Amendments**

Location	Summary of Amendments
Title	Revised from "Oil Code" to "Oil and Gas Code."
Chapter 16.04: General Provisions	<ul style="list-style-type: none"> <li>• Adds site restoration and facilities removal to the Purpose.</li> <li>• Adds an Applicability Section that reiterates DOGGR's authority.</li> <li>• Adds a well permit requirement for new operators.</li> <li>• Adds the duty of the City Petroleum Engineer to verify the Equivalency Standard for abandoned wells.</li> <li>• <i>No changes to Sections 16.040.030 and 16.040.050 through 16.040.130.</i></li> </ul>
Chapter 16.08: Definitions	<ul style="list-style-type: none"> <li>• Adds a definition for "Area of Development."</li> <li>• Excludes drinking water wells from the Drill or drilling definition.</li> <li>• <i>No changes to Sections 16.08.10 through 16.08.40, 16.08.50 through 16.08.140 and 16.08.160 through 16.08.370.</i></li> </ul>
Chapter 16.12: Annual and Idle Well Permits	<ul style="list-style-type: none"> <li>• Adds a requirement to provide evidence of performance bonds, liability insurance and indemnification when initial well permits are requested and upon annual renewal.</li> <li>• <i>No changes to Sections 16.12.010 through 16.12.040 and 16.12.070 through 16.12.250.</i></li> </ul>
Chapter 16.22: Idle Wells	<ul style="list-style-type: none"> <li>• Relocates idle well requirements from the existing Chapter 16.24, Abandonment of Wells and Idle Wells to a new Chapter 16.22 with minor edits to reference section numbers.</li> </ul>
Chapter 16.23: Abandonment of Wells	<ul style="list-style-type: none"> <li>• Relocates well abandonment requirements from the existing Chapter 16.24, to a new Chapter 16.23.</li> <li>• Reiterates DOGGR authority over well abandonment procedures.</li> <li>• References Section 16.24, the City's abandonment permit and restoration standards.</li> </ul>
Chapter 16.24: Development Standards for Properties with Abandoned Wells - Summary of changes	<ul style="list-style-type: none"> <li>• Deletes sections related to required abandonment and idle wells that have been relocated to Sections 16.22 and 16.23.</li> <li>• Adds prerequisite standards related to development of properties with abandoned wells including survey, leak testing and methane mitigation.</li> <li>• Adds a requirement for a Well Abandonment Report.</li> <li>• Adds a well Equivalency Standard Assessment Report.</li> <li>• Adds a standard for the City's determination to develop over and in close proximity to abandoned wells.</li> </ul>
Site Plan and Design Review (Zoning Ordinance)	<ul style="list-style-type: none"> <li>• Adds sections requiring that prerequisite review items be included in the site plan and design review application for properties with abandoned wells.</li> <li>• Adds the requirement for a letter of intent for property methane assessment.</li> <li>• Adds a condition of approval under site plan design review that CC&amp;Rs be recorded prior to issuance of a certificate of occupancy for properties with abandoned wells.</li> </ul>
Source: City of Signal Hill, Community Development Department.	

### **3.3 Project Phasing**

Phasing of the Project considers the planning, implementation, and operational phases as described individually below.

Planning Phase – The planning phase of the Project occurred between the change of the CSPRP in 2010 and when the City enacted the interim regulations in August 2011. The specialized technical studies commenced in 2011 and were completed in 2014 (refer to Section 2.3 above).

Implementation Phase – Should the City approve the Project, the Oil Code text amendment would become effective 30 days after the second reading before the City Council. This action is anticipated in 2015.

Construction Phase – Because no development or improvements are associated with or required by the Project, there is no construction phase (refer to Section 4.01).

Operational Phase – The Project does not propose any development that would result in a traditional operational phase (i.e., on-going operations) or have subsequent phases or stages. In addition, despite the change of the CSPRP, well abandonment and re-abandonment are still authorized and regulated by DOGGR (refer to Section 4.03).

### **3.4 Public Agency Approvals**

Following the completion of the mandatory public review period, the proposed Oil Code amendment would be scheduled for a public hearing before the City Council. No other agency approvals are required. The Planning Commission will review the proposed 2015 Amended Oil Code and this document, and provide a recommendation to the City Council.

### **3.5 Related Projects**

Related projects provide details on projects that are related to the Project that when combined with the Project, have a potential to result in cumulative impacts. The City is aware of two related projects. Refer to Section 4.18(b) for a discussion of the potential cumulative impacts.

#### **1. Consolidated Drilling and Oil Production Site Conditional Use Permit**

The City Community Development Department is aware that the existing Consolidated Drilling and Oil Production Site conditional use permit is operating on a 30-month extension that will expire in July 2017 and may be expanded to include additional drill sites.

#### **2. Crescent Square Residential Development**

The City is currently processing an application for approval of the Crescent Square project that is proposing to build 25 three-story detached single-family dwellings on approximately 3.18 acres at the northeast corner of Walnut Avenue and Crescent Heights Street.

## Section 4: Environmental Evaluation

### 4.0 Introduction

Adopting and amending ordinances are included within the definition of a project as an activity directly undertaken by any public agency.<sup>7</sup> Guidelines Section 15378(a)(1) defines a project as the following:

Project means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and that is any of the following: (1) An activity directly undertaken by any public agency including but not limited to public works construction and related activities clearing or grading of land, improvements to existing public structures, enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code Sections 65100–65700.

Further, the Project is deemed a discretionary project (Guidelines §15357) and therefore requires potential environmental impacts to be evaluated prior to the City taking action. Guidelines Section 15357 defines a discretionary project as the following:

Discretionary project means a project which requires the exercise of judgment or deliberation when the public agency or body decides to approve or disapprove a particular activity, as distinguished from situations where the public agency or body merely has to determine whether there has been conformity with applicable statutes, ordinances, or regulations.

Contrasted to discretionary projects are ministerial actions where there is no discretionary exercise of judgment or deliberation. Guidelines Section 15369 defines a ministerial action as the following:

Ministerial describes a governmental decision involving little or no personal judgment by the public official as to the wisdom or manner of carrying out the project. The public official merely applies the law to the facts as presented but uses no special discretion or judgment in reaching a decision. A ministerial decision involves only the use of fixed standards or objective measurements, and the public official cannot use personal, subjective judgment in deciding whether or how the project should be carried out.

This section evaluates the potential impacts to the environment that would result should the City decide to approve and implement the Project. This section evaluates each of 17 topical environmental factors contained in the Guidelines as revised by the California Natural Resources Agency in 2010.<sup>8</sup> Sections 4.1 through 4.17 evaluate the topical environmental factors listed below. Section 4.18 evaluates the required Mandatory Findings of Significance. Following each topical environmental factor is the section number where the factor is evaluated.

- Aesthetics (4.1)
- Agriculture and Forestry Resources (4.2)
- Air Quality (4.3)
- Biological Resources (4.4)
- Land Use and Planning (4.10)
- Mineral Resources (4.11)
- Noise (4.12)
- Population and Housing (4.13)

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<sup>7</sup> Guide to the California Environmental Quality Act, Solano Press, Remy et al., 11<sup>th</sup> Ed., p. 941.

<sup>8</sup> In 2010, the California Natural Resources Agency completed a comprehensive revision to the State CEQA Guidelines, which modified several of the topical environmental issue areas.

- Cultural Resources (4.5)
- Geology and Soils (4.6)
- Greenhouse Gas Emissions (4.7)
- Hazards and Hazardous Materials (4.8)
- Hydrology and Water Quality (4.9)
- Public Services (4.14)
- Recreation (4.15)
- Transportation and Traffic (4.16)
- Utilities and Service Systems (4.17)

## 4.01 Impact Evaluation Methodology

### Changes Not Evaluated

The Project also includes adding a new definition and minor text revisions necessary to maintain consistency with the proposed changes to the regulations and standards. These minor revisions are “clean-up” revisions that do not amend any regulations or standards, or their interpretation.

**Construction Impacts** – The Guidelines require evaluation of construction impacts. These impacts are typically associated with a construction phase and generally considered short-term and temporary. Because the Project does not include any development or improvements there would not be a construction phase and evaluation of these potential impacts; therefore, they are excluded from the environmental analysis.<sup>9</sup>

**Indirect Impacts** – This evaluation excludes potential indirect or secondary impacts to the environment which are caused by a project and are later in time and farther removed in distance, but are still reasonably foreseeable (Guidelines §15358(a)(2)). As with direct primary physical impacts, indirect secondary impacts must be related to a physical change in the environment. For a project to have indirect or secondary physical impacts to the environment it 1) must be a reasonably foreseeable consequence of the initial project and 2) the future action or consequence will be significant in that it will likely change the scope or nature of the initial project or its environmental effects.<sup>10</sup>

**Off-Site Features** – The Guidelines require evaluation of off-site features that are necessary to implement a project, which are typically associated with infrastructure or other physical improvements. Because the Project is limited to existing wells there would not be any off-site features. Therefore, the need to analyze impacts associated with off-site features would not occur.

Because there is no future phase or stage of the Project to be evaluated, the scope of the Project or its environmental effects would not occur (refer to Section 3.3). In addition, the Project adds an additional level of environmental protection by requiring methane testing on any site proposed to obtain a development permit or building permit and adds a City Equivalency Standard to the Oil Code that equals the level of environmental protection of the former DOGGR standard.

### Changes Evaluated

Each of the topical environmental issues evaluates the potential direct physical impacts to the environmental resources during the operational phase of the Project (refer to Section 3.3 for a discussion of the operational phase).

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<sup>9</sup> City of Signal Hill, Community Development Department, December 2014.

<sup>10</sup> Laurel Heights Improvement Association of San Francisco v. The Regents of the University of California, Supreme Court of California, Case No. S001922.

**Direct Primary Physical Impacts** – Direct or primary impacts<sup>11</sup> are those which are caused by a project that occur and at the same time and place (Guidelines §15358(a)(1)). Moreover, the effects to be analyzed must be related to a physical change in the environment (Guidelines §15358(b)).

Project implementation would incorporate applicable portions of the proposed amended Oil Code text into the City's existing development and building permit process, and well abandonment process (hereinafter, entitlement process). The entitlement process also incorporates DOGGR's existing authority pertaining to potential well re-abandonments and depth of a well below final grade as described below in Section 4.03. Project implementation would continue the City's policy that well abandonments and re-abandonments are ministerial actions.<sup>12</sup> Future entitlements would merely incorporate these new requirements and standards as mandatory obligations requiring implementation. Therefore, the proposed amendments to the regulations and standards summarized in Table No. 4 and provided in Appendix A are the sole focus of the environmental evaluation to determine if any direct physical changes to the environment would occur and the level of significance.

Mandatory obligations are requirements and standards that must be implemented. For example, any well that would be subject to abandonment or re-abandonment is obligated (i.e., required) to obtain a well abandonment permit in accordance with the amended Oil and Gas Code.

#### **Thresholds of Significance**

Thresholds of significance are identifiable quantitative, qualitative or a performance level of a particular environmental effect. Non-compliance with a threshold means the effect will normally be determined to be significant and, conversely, compliance with a threshold means the effect will normally be less than significant (Guidelines §15064.7). The City has adopted thresholds of significance pertaining to traffic and noise. Refer to Sections 4.12 and 4.16, respectively. With the exception of the aforementioned thresholds, the City relies upon the questions located in Appendix G of the Guidelines to determine a level of significance.<sup>13</sup>

## **4.02 Environmental Baseline**

To adequately determine the significance of a potential environmental impact, the environmental baseline must be established. Guidelines Section 15125(a) states in pertinent part that the environmental setting will normally constitute the baseline physical conditions by which a lead agency will determine if an impact is significant.

In March 2010, the California Supreme Court unanimously decided the *Communities for a Better Environment v. South Coast Air Quality Management District* (Case No. S161190). This case established that the existing physical conditions and regulations must serve as the environmental baseline for new projects consistent with Guidelines Section 15125(a). This case also confirmed that lead agencies retain discretion regarding how to define existing conditions that constitute the environmental baseline for CEQA analysis.

The environmental and regulatory setting described below represent the resources potentially impacted by implementing the Project.

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<sup>11</sup> The terms "effects" and "impacts" as used in the State CEQA Guidelines are synonymous (§15358).

<sup>12</sup> City of Signal Hill, Community Development Department, January 2015, deems this activity to be a Ministerial Action.

<sup>13</sup> The City of Signal Hill, Community Development Department, December 2014.

## 4.03 Regulatory Setting

The regulatory setting includes the City Oil Code, City Zoning Code, and DOGGR regulations. Each is discussed below.

**Signal Hill Oil Code** – The regulatory baseline is the 1990 Oil Code incorporating the amendments as set forth in City Ordinance No. 2013-07-1459 adopted on August 20, 2013 as an ordinance that became effective on September 18, 2013.

**Signal Hill Zoning Code** – The regulatory baseline is the Zoning Code incorporating the amendments to Chapter 20.52: SITE PLAN AND DESIGN REVIEW also set forth in City Ordinance No. 2013-07-1459 discussed above. The Zoning Code was last amended on October 16, 2014.

**Department of Oil, Gas and Geothermal Resources** – The regulatory baseline are applicable portions of following State codes. Following are brief synopses of the applicable code sections. The complete text of these codes are provided in Appendix F.

Public Resources Code Section 3208.1: DOGGR may order the re-abandonment of any previously abandoned well if there is reason to question the integrity of the previous abandonment.<sup>14</sup>

Public Resources Code Section 3255: DOGGR may order the re-abandonment of any previously abandoned well that poses a danger to life, health, or natural resources.

California Code of Regulations Title 14, Section 1723.5: DOGGR regulates the depth of the top of the casing of a well below final grade.

The following DOGGR forms would be used:

OG 108: Notice of Intent to Abandon Well – Oil and Gas

An OG 108 form is filed prior to initiating the abandonment process and contains a detailed work program.

OG 159: Report of Well Abandonment or Re-abandonment

An OG 159 is submitted following completion of all abandonment or re-abandonment of a well. This report states that all of DOGGR's requirements have been fulfilled. Should a well be unable to be plugged to current standards or equivalent, then a modified OG 159 would be prepared stating that DOGGR does not recommend improvements be located over a well without further consideration.

## 4.04 Environmental Setting

Section 15360 of the Guidelines defines the environment as follows:

Environment means the physical conditions which exist within the area which will be affected by a Project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. The area involved shall be the area in which significant

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<sup>14</sup> The change of the CSPRP does not invalidate or restrict in any manner the authority granted to DOGGR by this code section. Refer to the discussion in Section 2.1.

effects would occur either directly or indirectly as a result of the project. The “environment” includes both natural and man-made conditions.

The descriptions of the environmental conditions within the Project Site that could be affected by the Project are included within each of the topical environmental issue factors (Sections 4.1 through 4.17).

## 4.1 Aesthetics

Threshold of Significance	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response to a - d):** The view from the hilltop area is a valued public resource that must be preserved for the benefit of the community. The Hilltop Area Specific Plan recognizes the importance of preserving the public view and prohibits the construction of new dwellings that may interrupt the current unobstructed views from the Hilltop, Sunset View or Discovery Well Parks. The City has designated a series of roadways at higher elevations as a scenic route. This scenic route uses the existing street system and provides a link between the Crescent Heights Historic District and the Alamitos 1 Well, a State Historical Monument, located at the northeast corner of Temple and Hill Streets. The Land Use Element of the City General Plan identifies views from the “Hilltop Area” as a scenic vista. The “Hilltop Area” is centered on the intersection of Skyline Drive and Hill Avenue. The City has established policies related to the preservation of views from this area.

The Project Site is not located within or adjacent to a State-designed or State-eligible scenic highway. The closest segment of Pacific Coast Highway containing the State-eligible scenic highway designation is the junction of SR-1 and SR-19 approximately one-half mile east of the nearest boundary to the Project Site. The nearest State-designed scenic highway is the junction of State Route 2 and State Route 210 located approximately 27 miles north of the nearest boundary to the Project Site.

Significant development has occurred in previous decades transforming the City from an industrial character to primarily a residential community with light industrial, retail services, and oil field service companies. Signal Hill's land use pattern is well established and it is not anticipated to change over time. New development is generally limited to undeveloped parcels.

**Conclusion:**

The proposed amended regulations and standards, summarized in Table 4 in Section 3 and detailed in Appendix A, would be applied as mandatory obligations to potential, future existing well abandonments, and methane site testing for any site proposed for development according to the provisions of the City's entitlement process. The existing mandatory obligation in Oil Code Section 16.12.120 and Section 16.24.030(A) to obtain a well abandonment permit and DOGGR's statutory requirements would remain applicable.

Because the proposed text amendments would only apply to existing wells and no development or structures are proposed that would otherwise have a potential to create impacts, the thresholds of significance listed above associated with Aesthetics would not be affected. Therefore, no impacts to (a) scenic vistas, (b) scenic highways, (c) visual character, or (d) light and glare would result from implementing the Project.

## 4.2 Agriculture and Forestry Resources

Threshold of Significance	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Would the project result in loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response to a - e):** The Project Site is outside the survey area of the State of California, Department of Conservation's (DOC) Farmland Mapping and Monitoring Program (FMMP). The DOC identifies the Project Site as Non-Enrolled Land, defined as land not enrolled in a Williamson Act contract, land not mapped by the FMMP, and land characterized as urban and built-up, or water.

The Project Site does not contain any zoning districts pertaining to agriculture. The DOC does not identify any Williamson Act contracts within the Project Site.

Public Resources Code section 12220(g) defines forest land as:

"Forest land" is land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.

Public Resources Code section 12220(g) defines timberland as:

"Timberland" means land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis.

**Conclusion:** The Project Site does not contain any Farmland, Williamson Act contracts, forest land or land zoned for Timberland. For this reason, Project implementation would not have any potential to affect any of thresholds of significance listed above and no direct impacts to Agriculture and Forestry Resources would occur.

## 4.3 Air Quality

Threshold of Significance	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Would the project expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Would the project create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response to a - e):** The Project Site is located within the boundaries of the South Coast Air Basin (SCAB) as determined by the California Air Resources Board (CARB) and within the jurisdictional boundaries of the South Coast Air Quality Management District (SCAQMD). The SCAB includes all of Los Angeles County and the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties.

Terrain and geographical location determine climate in the SCAB. Rainfall averages approximately 12 inches per year. Annual average temperatures range between the 60- to 70 degrees Fahrenheit. The SCAB experiences light average wind speeds, which results in the slow dilution of air contaminants. Winds along the coastal portion of the SCAB are typically onshore during daytime hours and reverse to offshore during nighttime hours. Although the SCAB is classified a semi-arid climate, air near the surface along the coastal portion is generally moist because of a shallow marine layer.

Various emission sources affect air quality in the SCAB such as mobile sources, industrial sources, etc., as well as by atmospheric conditions such as wind speed, wind direction, temperature, rainfall, etc.

Table 5 below identifies the criteria pollutants established by the CARB and the attainment status of each.

**Table 4: National Ambient Air Quality Standards Attainment Status**

Pollutant	Designation	Attainment Date
1979 1-Hour Ozone	Non-attainment (Extreme)	11/15/2010 (not attained)
1997 8-Hour Ozone	Non-attainment (Extreme)	6/15/2024
2008 8-Hour Ozone	Non-attainment (Extreme)	12/31/2032
CO	Attainment (Maintenance)	6/11/2007 (attained)
NO <sub>2</sub>	1-Hour (100 ppb) Unclassifiable/Attainment	Attained
	Annual (0.053 ppm) Attainment (Maintenance)	9/22/1998
SO <sub>2</sub>	1-Hour (75 ppb) Designations Pending	Pending
	24-Hour (0.14 ppm)	3/19/1979 (attained)
	Annual (0.03 ppm) Unclassifiable/Attainment	
PM <sub>10</sub>	Non-attainment (Serious)	12/31/2006 (redesignation request submitted)
PM <sub>2.5</sub>	24-Hour (35 µg/m <sup>3</sup> ) Nonattainment	12/14/2014
	Annual (15.0 µg/m <sup>3</sup> ) Nonattainment	4/5/2015
Lead	Nonattainment (Partial)	12/31/2015

Source: South Coast Air Quality Management District, 2012 Air Quality Management Plan, Chapter 2, Table 2-3.

**SCAQMD Air Quality Significance Thresholds** – Table 6 below provides a summary of the air quality significance thresholds used by the SCAQMD.

**Table 5: Air Quality Significance Thresholds**

Pollutant	Construction	Operation
<b>Mass Daily Thresholds</b>		
NO <sub>x</sub>	100 lbs/day	55 lbs/day
VOC (ROG)	75 lbs/day	55 lbs/day
PM <sub>10</sub>	150 lbs/day	150 lbs/day
PM <sub>2.5</sub>	55 lbs/day	55 lbs/day
SO <sub>x</sub>	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
<b>Toxic Air Contaminants</b>		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk $\geq 10$ in 1 million Cancer Burden $> 0.5$ excess cancer cases (in areas $\geq 1$ in 1 million) Chronic & Acute Hazard Index $\geq 1.0$ (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	

GHG	10,000 MT/yr CO2eq for industrial facilities
<b>Ambient Air Quality Standards for Criteria Pollutants</b>	
1O2 1-hour average annual arithmetic mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)
PM10 24-hour average annual average	10.4 µg/m <sup>3</sup> (construction)e & 2.5 µg/m <sup>3</sup> (operation) 1.0 µg/m <sup>3</sup>
PM2.5 24-hour average	10.4 µg/m <sup>3</sup> (construction)e & 2.5 µg/m <sup>3</sup> (operation)
SO2 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal – 99th percentile) 0.04 ppm (state)
Sulfate 24-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)
Lead 30-day Average Rolling 3-month average Quarterly average	1.5 µg/m <sup>3</sup> (state) 0.15 µg/m <sup>3</sup> (federal) 1.5 µg/m <sup>3</sup> (federal)
Source: South Coast Air Quality Management District, Air Quality Analysis Handbook.	

The SCAQMD considers the following to be sensitive receptors: long-term health care facilities; rehabilitation centers; convalescent centers; retirement homes; residences; schools; child care centers; and, athletic fields.

New stationary sources are required to comply with SCAQMD's Rule No. 1401, which specifies the limits for maximum individual cancer risk and non-cancer acute and Chronic Hazard Index. The significance level of in Rule No. 1401 is defined as a 70-year excess cancer risk of one per million or ten million for new stationery sources that install Toxic Best Available Control technology and shall not exceed a threshold of 1.0 for any of the receptor locations.

Projects with sensitive receptors or projects with the potential to negatively impact established levels of service need to use the California Department of Transportation's Carbon Monoxide Protocol in order to determine if the project has the potential to create a localized concentration of CO. A hot spot is a localized concentration of CO that is above the State or federal 1-hour or 8-hour ambient air standards.

SCAQMD Rule 402 identifies the following threshold of significance related to the generation of odors:

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material, which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

**Conclusion:** The proposed amended regulations and standards, summarized in Table 4 in Section 3 and detailed in Appendix A, would be applied as mandatory obligations to potential, future existing well abandonments, and methane site testing for any site proposed for development according to the provisions of the City's entitlement process. The existing mandatory obligation in Oil Code Section 16.12.120 and Section 16.24.030(A) to obtain a well abandonment permit and DOGGR's statutory requirements would remain applicable.

Because the proposed text amendments would only apply to existing wells and no development or structures are proposed that would otherwise have a potential to create impacts, the thresholds of significance listed above associated with Air Quality would not be affected. Therefore, no impacts to (a) conflicting with the SCAQMD 2012 Air Quality Management Plan, (b) violate air quality standards or contribute to a projected air quality violation, (c) cumulative increase in criteria pollutants, (d) expose sensitive receptors, or (e) create objectionable odors would result from implementing the Project.

## 4.4 Biological Resources

Threshold of Significance	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<b>f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Response to a - f):** The General Plan Environmental Resources Element describes the following plant and wildlife characteristics.

**Plant Life** – Prior to urbanization of the Project Site, the dominant plant community was coastal sage scrub (CSS). Remnants of CSS are found in open areas. The majority of CSS was converted to ruderal vegetation that are able to rapidly colonize disturbed areas. Within the Project Site, ruderal species include native plants, weedy species, Russian Thistle, broad-lobed filaree, common wild oat, short-podded mustard, and bur-clover. In addition to CSS remnants and ruderal species, ornamental landscaping is located throughout the Project Site that is associated with urban development.

**Wildlife** – Due to the urbanization of the Project Site, the majority of animals are common adaptable species. Reptile species include western fence lizard, side-blotched lizard, and southern alligator lizard. Bird species are the most common vertebrate species and include mourning dove, northern mockingbird, and house finch. Mammals include Virginia opossum, black-tailed jack rabbit, desert cottontail, California ground squirrel, and rodents.

The Environmental Resources Element did not identify any plant or wildlife species designated as rare, threatened or endangered by the U.S. Fish and Wildlife Service or expected any sensitive species to occur in the future. Subsequent to the preparation of the Environmental Resources Element, the Project Site has continued to urbanize. However, additional biological resources information has become available from development projects in the City that included site-specific biological surveys. For example, SWCA conducted a reconnaissance-level survey in 2006 for the A&A Batch Plant project. This survey identified nine special status plant species and eight special status wildlife species that have the potential to occur. Based on this, there is a potential for special status plant and wildlife species to occur in the Project Site. This potential would be determined on an individual project-by-project basis.

There are no habitat conservation plans or natural community conservation plans associated with the Project Site. The U.S. Fish and Wildlife Service National Wetlands Inventory does not identify any riparian habitat (forested/shrub or herbaceous) within the Project Site. Habitat Conservation Plans (HCPs / NCCPs) are designed to conserve and protect federally listed and unlisted species while allowing for development activities. According to the U.S. Fish and Wildlife Service, there are no habitat conservation plans or natural community conservation plans associated with the Project Site.

The U.S. Fish and Wildlife Service National Wetlands Inventory does not identify any wetlands within the Project Site.

The County of Los Angeles General Plan, Regional Wildlife Linkages map does not identify the Project Site as a regional wildlife linkage. Moreover, the City General Plan, Environmental Resource Element does not identify any wildlife linkages.

Chapter 12.05: TREE PLANTING STANDARDS of the City Municipal Code establishes standards for planting, removal, and maintenance of all street trees in accordance with the provisions of the Street Tree Master Plan.

Habitat Conservation Plans (HCPs / NCCPs) are designed to conserve and protect federally listed and unlisted species while allowing for development activities. They are developed by any non-federal landowner in cooperation with the U.S. Fish & Wildlife Service when certain project activities may result in the take of a listed species. HCPs are planning documents and required in order to be covered for take. According to the U.S. Fish and Wildlife Service, there are no habitat conservation plans or natural community conservation plans associated with the Project Site.

**Conclusion:** The proposed amended regulations and standards, summarized in Table 4 in Section 3 and detailed in Appendix A, would be applied as mandatory obligations to potential, future existing well abandonments, and methane site testing for any site proposed for development according to the provisions of the City's entitlement process. The existing mandatory obligation in Oil Code Section 16.12.120 and Section 16.24.030(A) to obtain a well abandonment permit and DOGGR's statutory requirements would remain applicable.

Because the proposed text amendments would only apply to existing wells and no development or structures are proposed that would otherwise have a potential to create impacts, the Biological Resources thresholds of significance listed above would not be affected. Therefore, no impacts would result from implementing the Project to (a) habitat modifications or special status species, (b) riparian habitat or other sensitive natural community, (c) wetlands, (d) migration and wildlife corridors, (e) local biological resource policies, or (f) Habitat Conservation Plans or Natural community conservation plans.

## 4.5 Cultural Resources

Threshold of Significance	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Would the project disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response to a - d):** Historical resources in the City include derricks and towers from the historic oil development period. The Alamitos No. 1 Discovery Well is designated a State Historical Monument. In 1985, the City commissioned a survey of historic structures located in the City that identified approximately 10 architectural styles. An additional 47 buildings were identified as being of secondary importance. Buildings in both categories could, if restored, be potential candidates for the National Register of Historic Places. There were 309 historically distinctive structures identified in this study.

The Project Site is within the ethnographically recorded territory of the Gabrielinos (or Gabrielenos), a Shoshonean-speaking group of American Indians who inhabited the area beginning approximately 500 BC and who were present in 1769 when the first Spanish land expedition passed through the area. The Gabrielinos are now known as the Gabrielinos/Tongva and continue to this day. The tribal headquarters are located in the City of Santa Monica. Direct descendants of the Gabrielinos and members of the State-recognized tribe live in the region. Members of the Gabrielinos/Tongva Tribal Nation continue the preservation of tribal customs, language and economic development.

The Spanish Mission Period occurred with the first Spanish presence in the area, approximately 1769, until 1821, when Mexico gained independence from Spain. The Mexican Rancho Period occurred from 1821–1848.

The Project Site is located at the northern end of the Peninsular Range geomorphic province, which is a northwest-southeast trending structural block that extends from the tip of Baja California to the Transverse Ranges geomorphic province and includes the Los Angeles Basin. It contains extensive pre-Cretaceous (> 65 million years ago) igneous and metamorphic rock covered by limited exposures of post-Cretaceous sedimentary deposits. These post-Cretaceous sedimentary deposits are important

Tertiary marine fossil producing deposits. The Project Site is underlain by the San Pedro Formation, undifferentiated terrace deposits and alluvium/colluvium.

The Long Beach Municipal Cemetery and the Sunnyside Cemetery is located in the City of Long Beach adjacent to the City. The Long Beach Municipal Cemetery was established in 1901 and is maintained by the City of Long Beach. The Sunnyside Cemetery was established in 1906 and is privately maintained. No known human remains are located within the Project Site.

**Conclusion:** The proposed amended regulations and standards, summarized in Table 4 in Section 3 and detailed in Appendix A, would be applied as mandatory obligations to potential, future existing well abandonments, and methane site testing for any site proposed for development according to the provisions of the City's entitlement process. The existing mandatory obligation in Oil Code Section 16.12.120 and Section 16.24.030(A) to obtain a well abandonment permit and DOGGR's statutory requirements would remain applicable.

Because the proposed text amendments would only apply to existing wells and no development or structures are proposed that would otherwise have a potential to create impacts, the Cultural Resources thresholds of significance listed above would not be affected. Therefore, no impacts to (a) to historical resources, (b) archaeological resources, (c) paleontological resources, or (d) disturbing human remains would result from implementing the Project.

## 4.6 Geology and Soils

a) Threshold of Significance	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:  i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:  ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:  iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:  iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the project result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response to a - e):** Land in the vicinity of the Project Site is composed primarily of a broad, slightly elevated marine terrace that is underlain by over 15,000 feet of stratified sedimentary rocks of marine origin. There are several significant regional faults and fault zones that do not pass through the Project Site that could have significant seismic ground shaking effects. The most prominent fault feature in this category is the San Andreas, a major strike-slip feature that passes about 44 miles northeast of the Project Site. Other major active faults in the vicinity include the Whittier-Elsinore Zone, the Sierra Madre Fault Zone, and the Norwalk Fault.

Active or potentially active faults within the Newport-Inglewood Special Studies Zone in the City include the Cherry Hill Fault, the Northeast Flank Fault, Pickler Fault and the Reservoir Hill Fault. These faults are associated with the anticline that forms Signal and Reservoir Hills. Surface expression of the faults is generally limited to weathered scarps that form the flanks of the hills. No ground displacement (surface rupture) has been observed along the faults of the Newport-Inglewood Zone in recent geologic times (last 10,000 years). Since the Newport-Inglewood Fault system is a potentially active fault trace of the San Andreas Fault, it has been designated by the Alquist-Priolo Geologic Hazards Zones Act as a Special Studies Zone. The City has established a Geologic Study Area associated with the Cherry Hill Fault.

In addition to the Geologic Study Area, the City along with the City of Long Beach commissioned a geophysical study to map subsurface strata and potential earthquake faults using acoustical wave technology.

The Safety Element of the City General Plan stated that the necessary conditions for seismically induced liquefaction and seismically induced ground settlement are not present within the Project Site and that chance for occurrence is slight. Moreover, the Seismic Hazard Zone Map – Long Beach Quadrangle indicates Liquefaction Zones occur in two small areas within the Project Site. The first area is a narrow strip along the southwest boundary of the Project Site extending approximately from East Pacific Coast Highway (SR-1) on the south and East Hill Street on the North. The second area is located in the northwest portion of the Project Site general along East 28<sup>th</sup> Street between South Atlantic Avenue and California Avenue. Refer to Section 4.8 for a discussion pertaining to emergency evacuation.

The General Plan Safety Element identifies the severe slope of the Signal Hill landform combined with potential seismic events and soil conditions represent an important public safety issue. The Seismic Hazard Zone map indicate the Signal Hill landform is susceptible to earthquake-induced landslides and hence mudflows, and in particular the north slope of Panorama Drive and south of 23<sup>rd</sup> Street and Stanley Avenue.

The historic extraction of oil within and near the Project Site resulted in land subsidence in the mid 1900's. However, re-pressurization has eliminated land subsidence in the area.

The General Plan Environmental Resources Element characterizes soils within the Project Site as silts and sands. In the Southeast Section, upper natural soils consist of fine to medium fine and silty sand generally non-expansive with isolated areas of slightly expansive, sandy clays and clayey fine sands. In the Southwest Section, upper natural soils consist of sand, very fine to fine to medium, silty sand and clayey fine to medium sand essentially non-expansive. In the West Central Section, natural soils consist of fine sands, silty sands, clayey sands and sandy clay. Soils are slightly-to-moderately expansive. In the East Central Section, upper natural soils consist of clean sands, silty sands, silts and sandy silts, and silty and sandy clays. There is a slight change in soil composition from non-expansive in the eastern portion of this area to slightly expansive in the western portion of this area. In the Northern Section, upper natural soils consist of silty clays and clayey silts. These soils are, in general, moderately expansive except in the eastern area, which is highly expansive.

**Conclusion:**

The proposed amended regulations and standards, summarized in Table 4 in Section 3 and detailed in Appendix A, would be applied as mandatory obligations to potential, future existing well abandonments, and methane site testing for any site proposed for development according to the provisions of the City's entitlement process. The existing mandatory obligation in Oil Code Section 16.12.120 and Section 16.24.030(A) to obtain a well abandonment permit and DOGGR's statutory requirements would remain applicable.

Because the proposed text amendments would only apply to existing wells and no development or structures are proposed that would otherwise have a potential to create impacts, the thresholds of significance listed above associated with Geology and Soils identified above would not be affected. Therefore, no impacts to (a) seismic events and landslides, (b) soil erosion or loss of topsoil, (c) unstable geologic unit, (d) expansive soils, or (e) poor soils for septic systems would result from implementing the Project.

## 4.7 Greenhouse Gas Emissions

Threshold of Significance	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response to a and b):** Climate change is a change in the average weather of the earth that is measured by alterations in wind patterns, storms, precipitation, and temperature. These changes are assessed using historical records of temperature changes occurring in the past, such as during previous ice ages. Many of the concerns regarding climate change use this data to extrapolate a level of statistical significance specifically focusing on temperature records from the last 150 years (the Industrial Age) that differ from previous climate changes in rate and magnitude.

In California, climate change may result in consequences such as the following:

- A reduction in the quality and supply of water to the State from the Sierra snowpack. If heat trapping emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. This can lead to challenges in securing adequate water supplies. It can also lead to a potential reduction in hydropower.
- Increased risk of large wildfires. If rain increases as temperatures rise, wildfires in the grasslands and chaparral ecosystems of southern California are estimated to increase by approximately 30 percent toward the end of the 21st century because more winter rain will stimulate the growth of more plant “fuel” available to burn in the fall. In contrast, a hotter, drier climate could promote up to 90 percent more northern California fires by the end of the century by drying out and increasing the flammability of forest vegetation.
- Reductions in the quality and quantity of certain agricultural products. The crops and products likely to be adversely affected include wine grapes, fruit, nuts, and milk.
- Exacerbation of air quality problems. If temperatures rise to the medium warming range, there could be 75 to 85 percent more days with weather conducive to ozone formation in Los Angeles and the San Joaquin Valley, relative to today’s conditions. This is more than twice the increase expected if rising temperatures remain in the lower warming range.
- A rise in sea levels resulting in the displacement of coastal businesses and residences. During the past century, sea levels along California’s coast have risen about seven inches. If heat-trapping emissions continue unabated and temperatures rise into the higher anticipated

warming range, sea level is expected to rise an additional 22 to 35 inches by the end of the century. Elevations of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.

- Damage to marine ecosystems and the natural environment.
- An increase in infections, disease, asthma, and other health-related problems.
- A decrease in the health and productivity of California's forests.

### **Greenhouse Gases**

Gases that trap heat in the atmosphere are referred to as greenhouse gases. The effect is analogous to the way a greenhouse retains heat. Common greenhouse gases include water vapor, carbon dioxide, methane, nitrous oxides, chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, ozone, and aerosols. Natural processes and human activities emit greenhouse gases. The presence of greenhouse gases in the atmosphere affects the earth's temperature. It is believed that emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

Individual greenhouse gas compounds have varying global warming potential and atmospheric lifetimes. Carbon dioxide, the reference gas for global warming potential, has a global warming potential of one. The calculation of the carbon dioxide equivalent is a consistent methodology for comparing greenhouse gas emissions since it normalizes various greenhouse gas emissions to a consistent metric. Methane's warming potential of 21 indicates that methane has a 21 times greater warming affect than carbon dioxide on a molecule per molecule basis. A carbon dioxide equivalent is the mass emissions of an individual greenhouse gas multiplied by its global warming potential.

In 2006, the State of California embraced the sustainable development ideals expressed in the "Our Common Future" report with the adoption of Assembly Bill 32 ("AB 32") - the Global Warming Solutions Act, a mandate that requires California to reduce greenhouse gas emissions to 1990 levels by 2020. The statute tasks the California Air Resources Board ("CARB") with monitoring and regulating sources of greenhouse gases. CARB has implemented an advanced set of greenhouse gas emission reduction measures or "early action" measures. In December 2007, CARB approved the 2020 emission limit of 427 million metric tons of carbon dioxide equivalent of greenhouse gases. The CARB prepared an emissions inventory and a draft Scoping Plan for meeting the requirement of reducing greenhouse gas emissions to 1990 levels which was released in 2008. The Scoping Plan is a comprehensive set of measures designed to reduce overall greenhouse gas emissions throughout the state. The Scoping Plan measures include actions in areas such as: energy efficiency, transportation, green building, recycling and waste, high speed rail, industrial emissions, agriculture, and land use planning.

Greenhouse gases as defined by AB 32 include the following gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

Greenhouse gases not defined by AB 32 include water vapor, ozone, and aerosols. Water vapor is an important component of our climate system and is not regulated. Ozone and aerosols are short-lived greenhouse gases; global warming potentials for short-lived greenhouse gases are not defined by the IPCC. Aerosols can remain suspended in the atmosphere for about a week and can warm the

atmosphere by absorbing heat and cool the atmosphere by reflecting light. Black carbon is a type of aerosol that can also cause warming from deposition on snow.

There are no adverse health effects from the concentration of greenhouse gases in the atmosphere at the current levels, with the exception of ozone and aerosols (particulate matter). At very high concentrations, carbon dioxide, methane, sulfur hexafluoride, and some chlorofluorocarbons can cause suffocation as the gases can displace oxygen.

The City has not adopted a threshold of significance pertaining to greenhouse gas emissions. Instead, the threshold of 10,000 metric tons of CO<sub>2</sub>eq per year for industrial facilities provided by South Coast Air Quality Management District (SCAQMD) is used.

As detailed in the City's Green City Report (Green City Report), the City is a participating member of the Gateway Cities Council of Governments and the Southern California Association of Government's (SCAG) Sustainable Communities Strategy (SCS) to address SB 375 to reduce greenhouse gas emissions through land use. This document does not include any policies pertaining to abandoned wells.

**Response to and b):** The Green City Report does not include any policies pertaining to abandoned wells. **Conclusion:** The proposed amended regulations and standards, summarized in Table 4 in Section 3 and detailed in Appendix A, would be applied as mandatory obligations to potential, future existing well abandonments, and methane site testing for any site proposed for development according to the provisions of the City's entitlement process. The existing mandatory obligation in Oil Code Section 16.12.120 and Section 16.24.030(A) to obtain a well abandonment permit and DOGGR's statutory requirements would remain applicable.

Because the proposed text amendments would only apply to existing wells and no development or structures are proposed that would otherwise have a potential to create impacts, the thresholds of significance listed above associated with Greenhouse Gas Emissions above would not be affected. Therefore, no impacts to (a) generating greenhouse gas emissions or exceeding SCAQMD's threshold, or (b) conflicting with an applicable plan, policy or regulation would result from implementing the Project.

## 4.8 Hazards and Hazardous Materials

Threshold of Significance	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Would the project be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<b>h) Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Response to a - h):** According to the Long Beach Certified Unified Program Agency (CUPA),<sup>15</sup> hazardous wastes are any chemical wastes that are toxic, corrosive, reactive, or ignitable, as defined by State law in California Code of Regulations. These wastes may include waste oil, waste coolant, waste parts cleaner, used oil filters and fuel filters, waste photo developer, waste printing inks, waste dry cleaning solvents, waste paint and spray booth filters. Well abandonment and re-abandonment uses materials such as Portland Cement, bentonite, berite, and up to 36 fluid drilling chemicals.

Handling and processing of these materials would be conducted in accordance with the CUPA and provisions of the City Municipal Code.

The Project Site is located within the boundaries of the Long Beach Unified School District (District). The District operates 84 public schools of which two elementary schools and one middle school is located in the Project Site. In addition to the public schools, there two private schools in the Project Site.

The Project does not involve a manufacturing process and therefore does not emit hazardous or actually hazardous materials.

According to the State Department of Toxic Substances Control's EnviroStor database that compiles data pursuant to the requirements of Government Code Section 65962.5, there is one active cleanup site in the City. This site is known as the Junipero Avenue Site and is identified in the database as ID 19340779. No wells are located on this site.

The northeasterly portion of the Project Site is in close proximity to the Long Beach Municipal Airport, a public use airport. For each of the public use airports in Los Angeles County, which includes the Long Beach Airport, the Airport Land Use Commission (ALUC) has adopted a Planning Boundary/Airport Influence Area. Within these boundaries, certain proposed local actions must be submitted to the ALUC for review. The planning boundaries delineate areas subject to noise impacts and safety hazards (height restriction areas and approach surface and runway protection zones). The Project site is outside the adopted boundary of the Planning Boundary/Airport Influence Area of the Long Beach Airport.

The Project Site is not located in the vicinity of a private airstrip. Refer to Response e) above for a discussion on impacts related to public use airports.

The State Aeronautics Act prohibits constructing any structure or permitting any natural growth of a height that would constitute a hazard to air navigation as defined in Federal Aviation Regulations Part 77 unless Caltrans issues a permit.

<sup>15</sup> Section 8.46.03 of the City Municipal Code designates the Long Beach/Signal Hill CUPA as the Certified Unified Program Agency for Signal Hill for the purpose of enforcing the requirements of Chapter 6.5 of Division 20 of the California Health and Safety Code.

The Long Beach Airport does not have an adopted airport master plan. The entire Project Site is located within two miles of the Long Beach Airport, when measured from the southerly boundary of the Planning Boundary/Airport Influence Area.

The City adopted an emergency response plan that specifies how the City responds to a major emergency. Major emergencies include major fire, earthquake, or state of war. Because no development is proposed, the potential to interfere with the emergency response plan would not occur.

Wildlands are defined by the General Plan Safety Element as a non-urban, natural area that contains uncultivated land, timber, range, watershed, brush, or grasslands.

The California Emergency Management Agency (CEMA) classifies land according to the following fire hazard severity zones: Very High, High, and Moderate. The CEMA also contains a fourth non-hazard classification for lands that are Non-Wildland/Non-urban or Not Mapped. The Project Site is not within a CEMA fire hazard severity zone.

**Conclusion:**

The proposed amended regulations and standards, summarized in Table 4 in Section 3 and detailed in Appendix A, would be applied as mandatory obligations to potential, future existing well abandonments, and methane site testing for any site proposed for development according to the provisions of the City's entitlement process. The existing mandatory obligation in Oil Code Section 16.12.120 and Section 16.24.030(A) to obtain a well abandonment permit and DOGGR's statutory requirements would remain applicable.

Because the proposed text amendments would only apply to existing wells and no development or structures are proposed that would otherwise have a potential to create impacts, the thresholds of significance listed above associated with Hazards and Hazardous Materials would not be affected. Therefore, no impacts to (a) transporting hazardous materials, (b) releasing hazardous materials into the environment, (c) emit hazardous materials near a school, (d) be located on a listed hazardous waste site, in particular, the Junipero Avenue site, (e) expose people to hazards from the Long Beach Municipal Airport, (f) expose people to hazards from a private airport, (g) conflict with an adopted emergency response plan, or (g) expose people or structures to wildland hazards would result from implementing the Project.

## 4.9 Hydrology and Water Quality

Threshold of Significance	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Would the project create or contribute runoff water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Would the project otherwise substantially degrade water quality	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

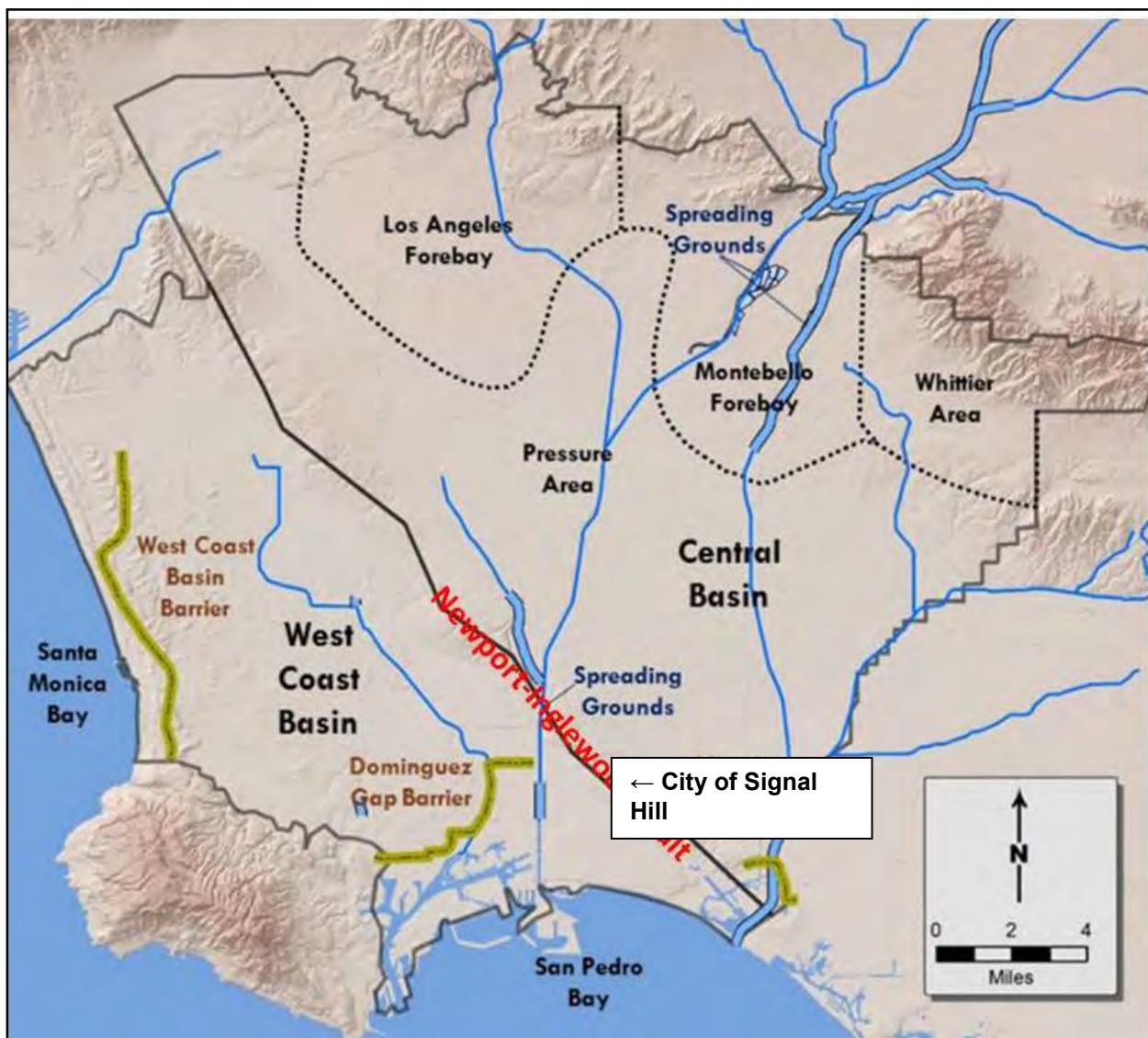
g) Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Would the project place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Would the project [be exposed to] inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response to a and f):** The California Regional Water Quality Control Board, Los Angeles Region, adopted Order No. R4-2012-0175 (NPDES Permit No. CAS004001) for the regulation of storm water and non-storm water discharges. The City is a co-permittee of this waste discharge requirement and would be required to adhere to these standards.

The City overlies two groundwater basins: the West Coast Basin and the Central Basin. These two basins are aquifer systems that, in the local area, receive relatively minimal recharge from surface water. The two basins are separated by the Newport-Inglewood Fault or Uplift, a geologic feature that partially restricts groundwater flow. Potable water within these basins is produced from deep aquifers, which include the Lynwood, Silverado, and Sunnyside aquifers.

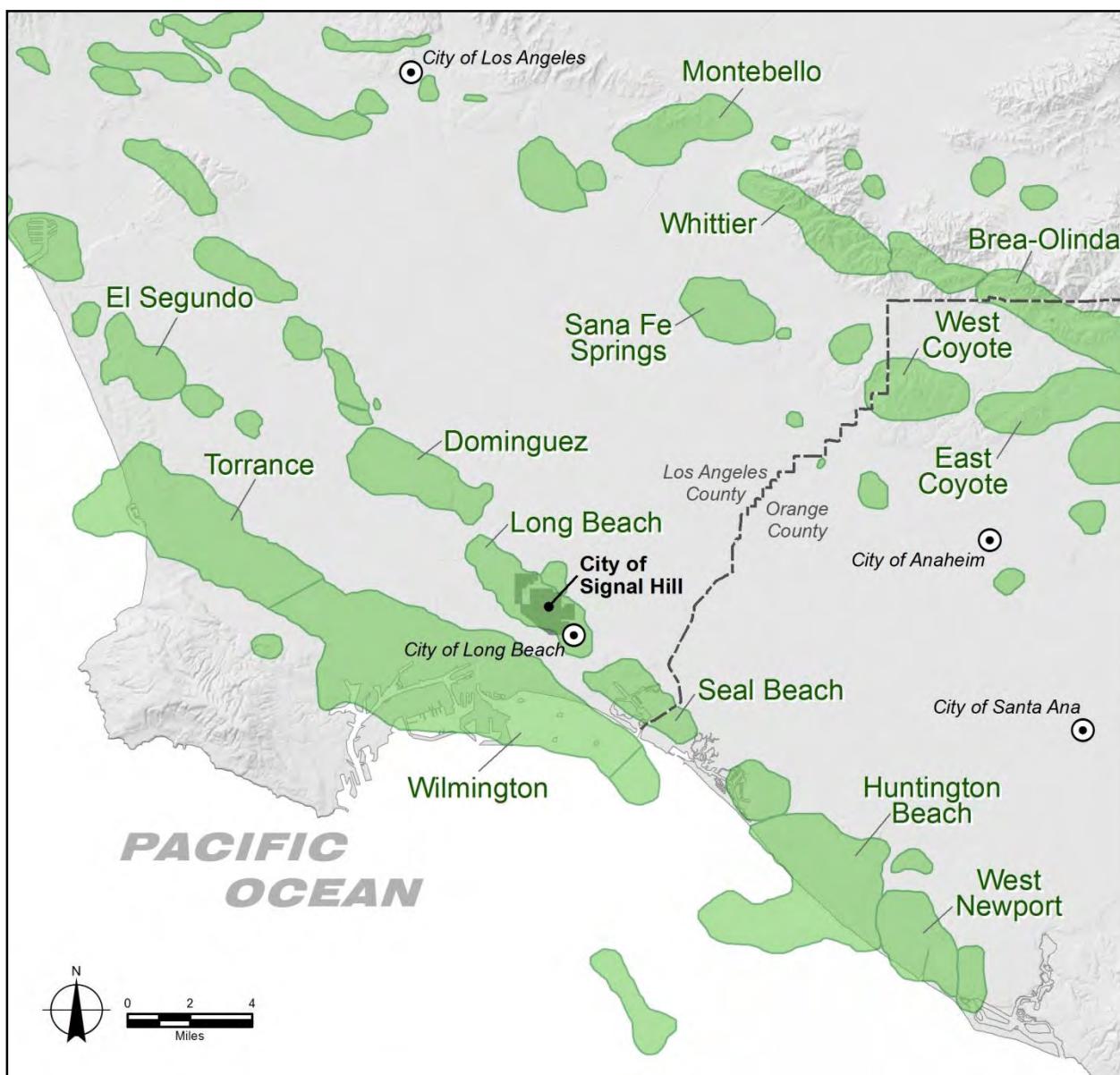
The following pollutants are commonly associated with storm water run-off: sediment; nutrients; bacteria; oxygen-demanding substances; petroleum products; heavy metals; toxic chemicals; and, floatables.

Figure 2: Groundwater Basins

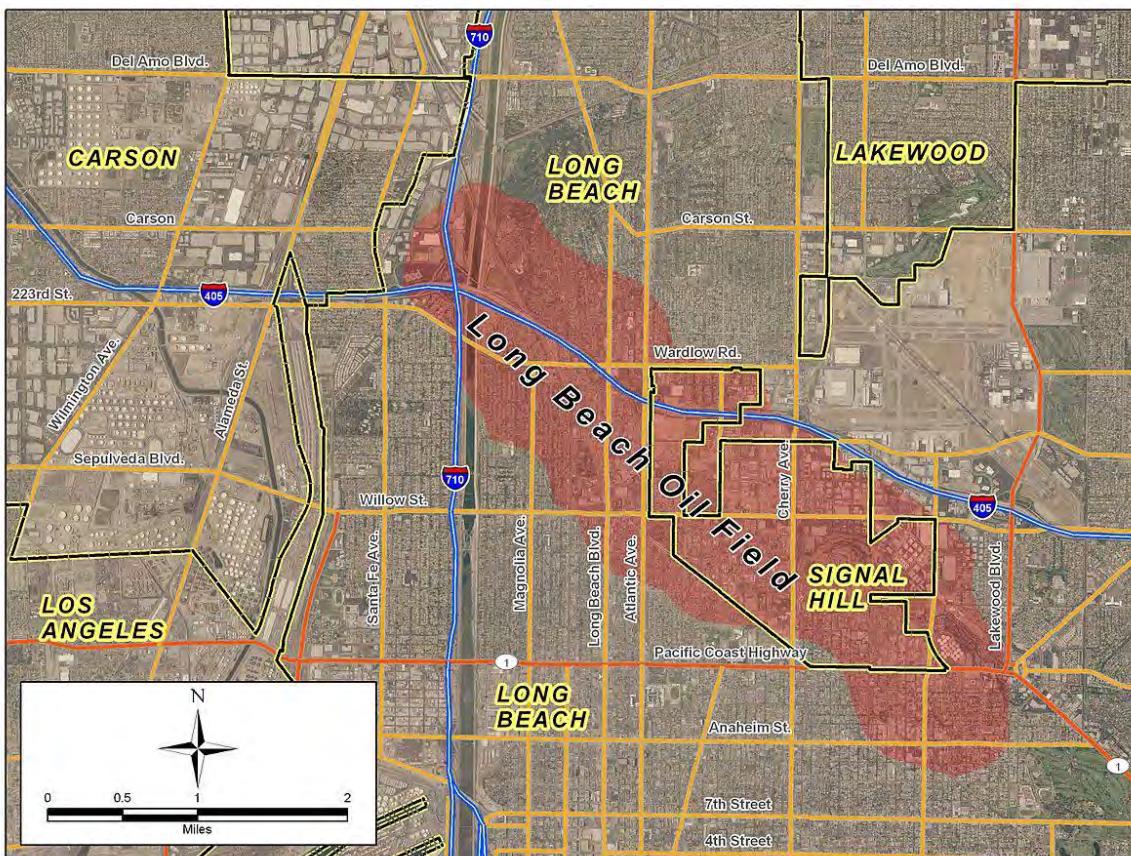


**Oil Field Location** – Within Los Angeles Basin, there are approximately 30 mapped oil fields<sup>16</sup> and additional fields that have become inactive or abandoned. The Project Site overlies a portion of the Long Beach Oil Field. Figure 3: Greater Los Angeles Basin Oil Fields provides an overview of the distribution of the oil fields.

<sup>16</sup> The number of oil fields may be reported differently among different reports depending on the report year, whether oil fields are contiguous or separate, and the geographical definition of the Los Angeles Basin. For the purposes of this document, information from the *Impacts of Oilfield Operations on Groundwater Quality in Signal Hill-Long Beach Area* (Flow Science Incorporated, 2014) is used.

**Figure 3: Greater Los Angeles Basin Oil Fields**

The Long Beach Oil Field trends in a northwest/southeast diagonal direction and is approximately five miles long and one mile wide. The field is considered a "mega-giant" field because cumulative production has exceeded one billion barrels. Figure 4: Long Beach Oil Field depicts the relationship of the Project Site to this field

**Figure 4: Long Beach Oil Field**

**Conclusion:** The Project would incorporate Proposed Text Amendments 1 through 3 into the City entitlement process. Because the proposed text amendments would only apply to existing abandoned wells and do not propose any development or structures, Project implementation would not have the potential to affect any water quality issues. Moreover, technical studies and expert opinion have been provided to demonstrate that implementing the Project's technical standards would not result in impacts and would further protect the environment, and would not have the potential to affect the issues associated with this resource. Future entitlements that require discretionary action would be required to evaluate potential impacts to this resource. Based on this, no direct impacts to water quality issues of the Hydrology and Water Quality resource would result from implementation of the Project.

The proposed amended regulations and standards, summarized in Table 4 in Section 3 and detailed in Appendix A, would be applied as mandatory obligations to potential, future existing well abandonments, and methane site testing for any site proposed for development according to the provisions of the City's entitlement process. The existing mandatory obligation in Oil Code Section 16.12.120 and Section 16.24.030(A) to obtain a well abandonment permit and DOGGR's statutory requirements would remain applicable.

Because the proposed text amendments would only apply to existing wells and no development or structures are proposed that would otherwise have a potential to create impacts, the thresholds of significance listed above associated with Hazards and Hazardous Materials would not be affected. Therefore, less than significant impacts to (a) water quality standards or waste discharge requirements or (f) otherwise substantially groundwater quality would result from implementing the Project. Moreover, technical studies and expert opinion have been provided to demonstrate that implementing the Project's technical standards would not result in impacts and would further protect the environment. Refer to Section 2.3.

**Response to b – e, g - j):** The Project does not include any development or improvements and does not require grading or other land disturbing activities.

Regional flood control for the City and all of Los Angeles County is under the jurisdiction of the Los Angeles County Flood Control District (LACFCD). The LACFCD has responsibility over the rivers, streams and washes in the County that are designated as major water courses and for establishing standards for local drainage.

The LACFCD owns and maintains three major flood control facilities in and around the Project Site for flood control. These facilities are known as the Spring Street Storm Drain, the Hamilton Bowl Detention Basin and the California Bowl Detention Basin.

According to the City Project Development Guide, the Project Site is located in Flood Zone "C", Community Number 060161 (No "parcel" number). Zone "C" identifies areas outside the 500-year flood plain. The City does not have any flood hazard areas and, therefore, does not participate in the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) program.

Multiple dams and reservoirs are located in southern Los Angeles County that would inundate areas downstream of the dams should any of the dams fail. The County of Los Angeles General Plan Dam and Reservoir Inundation Routes Policy Map indicated that the Project Site is not located within in any identified inundation areas.

The General Plan Safety Element states that tsunamis do not pose a serious threat to the Project Site. The California Geologic Survey prepared tsunami Inundation maps for the California coastline. The areal extent of the Tsunami Inundation Area and Tsunami Inundation Line do not overlie the Project Site.

Seiches are typically caused when strong winds and rapid changes in atmospheric pressure push water from one end of a body of water to the other. When the wind stops, the water rebounds to the other side of the enclosed area. The water then continues to oscillate back and forth for hours or even days. In a similar fashion, earthquakes, tsunamis, or severe storm fronts may also cause seiches along ocean shelves and ocean harbors. There are no open bodies of water within the Project Site capable of producing a seiche. The General Plan Safety Element states the potential for a seiche to occur within an enclosed water storage tank resulting from a seismic event.

**Conclusion:** The proposed amended regulations and standards, summarized in Table 4 in Section 3 and detailed in Appendix A, would be applied as mandatory obligations to potential, future existing well abandonments, and methane site testing for any site proposed for development according to the provisions of the City's entitlement process. The existing mandatory obligation in Oil Code Section

16.12.120 and Section 16.24.030(A) to obtain a well abandonment permit and DOGGR's statutory requirements would remain applicable.

Because the proposed text amendments would only apply to existing wells and no development or structures are proposed that would otherwise have a potential to create impacts, the thresholds of significance listed above associated with Hazards and Hazardous Materials would not be affected. Therefore, no impacts to (b) deleting groundwater supplies, (c) alter existing drainage patterns resulting in off-site erosion, (d) alter existing drainage patterns resulting in an increased rate of runoff, (e) exceed storm drain system capacity, (g) place housing in a flood zone, (h) place structures in a flood zone, (i) exposure from dam inundation, or (j) inundation by seiche, tsunami, or mudflow would result from implementing the Project.

## 4.10 Land Use and Planning

Threshold of Significance	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response to a):** The City's land use pattern is well established. New development is generally limited to undeveloped parcels. In addition to being an established community, the General Plan Land Use Element identifies the following established neighborhoods within the Project Site:

- North End Neighborhood
- Central Neighborhood
- West Side Neighborhood
- Civic Center Neighborhood
- Hilltop Neighborhood
- Southeast Neighborhood
- Atlantic/Spring Neighborhood

Each of the neighborhoods contains characteristics that distinguish it from the other neighborhoods. In this context, they represent established communities.

**Conclusion:** The Project does not propose any development or infrastructure that would otherwise have the potential to divide one of the established neighborhoods. Therefore, this threshold of significance listed above would not be affected and no direct impacts would result from Project implementation.

**Response to b):** Several plans have the potential to be impacted by the Project. Following are descriptions of each.

**Local Coastal Plan** – The California Coastal Commission (Commission) was established in 1972 and the California Coastal Act was adopted in 1976. The Commission, in partnership with applicable cities and counties, regulates development within the Coastal Zone through the creation of Local Coastal Plans.

**Signal Hill General Plan** – Table 6 below identifies the General Plan Land Use Element policies applicable to the Project.

**Specific Plans** – The City has adopted specific plans rather than zoning each with development standards and regulations germane to the associated geographic area. There are 40 specific plans in the City.

**Table 6: General Plan Land Use Element Policy Consistency Analysis**

Policy	Analysis
Policy 3.2 – Enhance the interface between existing and future development and oil production activities to protect the access to the resource while mitigating adverse impacts of oil field operations within an urban area.	<p><i>The Project conforms to this policy.</i></p> <p>The proposed amendment would reduce impacts associated with development located over or in close proximity to abandoned wells by requiring surveys, testing, venting, and oil rig access and by requiring methane soils testing on all properties proposed for development.</p>
Policy 3.16 – Review and revise, as necessary, the City's development standards to improve the quality of new development and protect the public health and safety.	<p><i>The Project conforms to this policy</i></p> <p>The proposed amendment would protect the public health and safety, and allow responsible development by providing regulations to allow new development over or in close proximity to abandoned wells and by improving methane assessment mitigation requirements on all properties proposed for development.</p>

Source: City of Signal Hill, Community Development Department.

**Zoning Ordinance** – The Zoning Ordinance (Municipal Code, Title 20) contains regulations applicable to the Project. Specifically, the proposed 2015 Oil Code includes amendments to Section 20.52 of the Zoning Code necessary to maintain consistency with the Proposed described in Table 4 in Section 3.

**DOGGR Regulations** – Although the CSPRP was changed in 2010 (refer to Section 2.1), DOGGR maintains authority for implementing applicable portions of the Public Resources Code and California Code of Regulations. Refer to Section 4.03 for synopses of these regulations and Appendix F for the text of these regulations.

**Conclusion:** The Project site is located outside the boundaries of the Coastal Zone. Project implementation not have the potential to conflict with the policies of the California Coastal Act or any Local Coastal Program. Therefore, this threshold of significance would not be affected and no impacts would result from Project implementation.

Project implementation would not conflict with the provisions of the Zoning Code because the minor text changes do not modify any standards or regulations, or interpretation. Refer to Section 3.2.1. Therefore, this threshold of significance listed above would not be affected and less than significant direct impacts would result from Project implementation.

The Project is consistent with and conforms to the applicable General Plan Land Use Policies identified in Table 6 above. Therefore, this threshold of significance would not be affected and less than significant direct impacts would result from Project implementation.

The Project is consistent with and does not conflict with the existing DOGGR regulations as identified in Table 4 in Section 3. Therefore, this threshold of significance less than significant would not be affected and no direct impacts would result from Project implementation.

In addition to the foregoing, the proposed amended regulations and standards, summarized in Table 4 in Section 3 and detailed in Appendix A, would be applied as mandatory obligations to potential, future existing well abandonments, and methane site testing for any site proposed for development according to the provisions of the City's entitlement process. The existing mandatory obligation in Oil Code Section 16.12.120 and Section 16.24.030(A) to obtain a well abandonment permit and DOGGR's statutory requirements would remain applicable.

**Response to c):** Refer to the discussion under Section 4.4 f).

## 4.11 Mineral Resources

Threshold of Significance	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response to a - b):** The State of California, Department of Conservation classifies and designates areas according to their potential to contain mineral resources mandated by the Surface Mining and Reclamation Act of 1975. Classification is the process of identifying lands potentially containing significant mineral deposits and designation is the formal recognition by the State Mining and Geology Board of geographic areas containing mineral deposits of Regional or Statewide Significance.

The Project Site does not contain any known mineral resources. Moreover, the Land Use Element does not contain any areas designated for sand and gravel mining.

**Conclusion:** The Project Site does not contain any known mineral resources or locally important mineral resources. For this reason, Project implementation would not have any potential to affect any of the thresholds of significance and no direct impacts to Mineral Resources would occur.

## 4.12 Noise

Threshold of Significance	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response to a - f):** Chapter 9.16.030: NOISE of the City Municipal Code identifies the following standards pertaining acceptable noise levels:

- The intensity of the noise;
- Whether the nature of the noise is usual or unusual;
- Whether the origin of the noise is natural or unnatural;
- The level and intensity of the background noise, if any;
- The proximity of the noise to residential sleeping facilities;

- The nature and zoning of the area within which the noise emanates;
- The density of the inhabitation of the area within which the noise emanates;
- The time of the day or night the noise occurs;
- The duration of the noise;
- Whether the noise is recurrent, intermittent, or constant; and,
- Whether the noise is produced by a commercial or noncommercial activity.

Well abandonment and re-abandonment activities are noisier than typical well pumping operations because the power source can be a large, portable generator powered by an internal combustion engine. Abandonment and re-abandonment activities, which is accomplished with multiple pieces of equipment working in support of the drill rig itself. The City General Plan Noise Element determined these activities can be perceived as intrusive to a radius of 150 feet from the drill rig.

The City General Plan Noise Element includes data pertaining to well re-drilling and concluded that with the implementation of the mandatory requirements noise impact would be minor. The City does not contain any standards for groundborne vibration. Therefore, indirect impacts would be less than significant because the future action would be required to comply with the mandatory requirements of the Noise Ordinance and Oil Code and would not change the scope of the Project.

The metric for measuring groundborne noise and vibration is peak ground velocity (stated in inches per second). The commonly accepted perception threshold for ground vibration is 0.01 inches per second.

Automobile traffic from Principal Arterial and Minor Arterial (major roadways) and the San Diego Freeway (I-405) are one of the major sources of noise in the Project Site. Major roadways carry significant amounts of traffic and may produce high noise levels. Collector and Local Streets carry much less traffic and generally do not exceed noise standards.

The Long Beach Airport is located in close proximity to the northern Project Site boundary. This airport, owned by the City of Long Beach, serves primarily commercial air carriers and cargo carriers, but also secondarily serves general aviation users. The Project Site is not located in the vicinity of a private airstrip.

The General Plan Noise Element identifies the California Code of Regulations, Title 21, establishes a maximum 65 dB Community noise Equivalent Level (CNEL) noise exposure level around airports for sensitive land uses such as homes, schools, hospitals, and places of worship as a threshold of significance. The 56 dB CNEL contour line does not overlie the Project Site. However, the Project Site is subject to noise from aircraft overflights.

**Conclusion:** The Project would incorporate Proposed Text Amendments 1 through 3 into the City entitlement process. Because the proposed text amendments would only apply to existing abandoned wells and do not propose any development or structures, Project implementation would not have the potential to affect any of the issues associated with Noise. Future entitlements that require discretionary action would be required to evaluate potential impacts to Noise. For example, any improvements necessary to implement proposed Text Amendment No. 1 would occur on a future, case-by-case basis related to development entitlement applications or building permits. These abandonments or re-abandonments would be required to comply with the mandatory requirements contained in Section 9.16.070 of the City Municipal Code. In addition, if any abandonment or re-abandonment would

be located within 600 feet of an occupied building, then Section 16.16.110 of the Oil Code would require soundproofing. This section pertains to servicing, reworking and re-drilling of existing abandoned wells, considered here to include abandonment and re-abandonment. This section restricts abandonment and re-abandonment activities to Monday through Friday between 7:00 a.m. and 6:00 p.m. except for industrial areas. Based on this, no direct impacts would result from implementation of the Project.

The proposed amended regulations and standards, summarized in Table 4 in Section 3 and detailed in Appendix A, would be applied as mandatory obligations to potential, future existing well abandonments, and methane site testing for any site proposed for development according to the provisions of the City's entitlement process. The existing mandatory obligation in Oil Code Section 16.12.120 and Section 16.24.030(A) to obtain a well abandonment permit and DOGGR's statutory requirements would remain applicable. In addition, these abandonments or re-abandonments would be required to comply with the mandatory requirements contained in Section 9.16.070 of the City Municipal Code and, if any abandonment or re-abandonment would be located within 600 feet of an occupied building, then Section 16.16.110 of the Oil Code would require soundproofing.

Because the proposed text amendments would only apply to existing wells and no development or structures are proposed that would otherwise have a potential to create impacts, the thresholds of significance listed above associated with Noise would not be affected. Therefore, no impacts to (a) the City's adopted noise thresholds, (b) groundborne vibration, (c) ambient noise level increases, (d) periodic or temporary noise increase, (e) noise from a public or public use airport, or (f) noise from a private aorstrip would result from implementing the Project.

## 4.13 Population and Housing

Threshold of Significance	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response to a - c):** In 2013, the City contained an estimated population of 11,129 and 4,184 households (occupied housing units). Between 2000 and 2012, the population increased by 1,796.

The Regional Housing Needs Assessment (RHNA) is mandated by State Housing Law as part of the periodic process of updating the City's Housing Element. The RHNA quantifies the need for housing during specified planning periods and assists in land use planning, prioritizing local resource allocation, and in deciding how to address identified existing and future housing needs resulting from population, employment and household growth. The Southern California Association of Governments administers the RHNA program.

The 2013-2021 City Housing Element, adopted by the City Council in February 2014 and certified by the State Department of Housing and Community Development in March 2014, identified a new housing construction need of 169 housing units.

**Conclusion:** The Project Site does not propose any development or infrastructure. For this reason, Project implementation would not have any potential to affect any of the thresholds of significance listed above and no direct impacts to Population and Housing would occur.

## 4.14 Public Services

Threshold of Significance	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
<b>a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</b>				
Fire Protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police Protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other Public Facilities - Libraries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response to a)** – The Los Angeles County Fire Department (County) provides fire protection services to the Project Site under contract with the City. County Fire Station No. 60 is located at 2300 East 27<sup>th</sup> Street.

Police services to the Project Site are provided from the City Police Department located at 2745 Walnut Avenue Street. The Police Department currently has 19 full-time sworn officers for a ratio of one officer for every 586 citizens (based on a population of 11,129 residents). The project site is located within the boundaries of the Long Beach Unified School District (District). The District operates 84 public schools of which two elementary schools and one middle school are located in the Project Site. In addition to the public schools, there are two private schools in the Project Site. Refer to Section 4.15. below for a discussion of parks. The City operates the Signal Hill Public Library located at 1770 East Hill Street and serves the Project Site.

**Conclusion:** The Project Site does not propose any development or infrastructure that would otherwise generate a demand for public services. For this reason, Project implementation would not have any potential to affect any of the thresholds of significance listed above and no direct impacts to Public Services would occur.

## 4.15 Recreation

Threshold of Significance	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response to a - b):** The City Community Services/Parks & Recreation Department operates nine park facilities in the Project Site. These facilities represent a combined 23.01 acres and provides a ratio of one park acre for every 484 residents (based on a population of 11,129 residents). In addition, the City of Long Beach operates over one-hundred public parks, of which several are in close proximity to the Project Site and likely used by City residents. In addition to established parks, school facilities allow recreational activities on their grounds on a school-by-school basis.

**Conclusion** The Project would incorporate Proposed Text Amendments 1 through 3 into the City entitlement process. Because the proposed text amendments would only apply to existing abandoned wells and do not propose any recreational facilities, Project implementation would not have the potential to affect either of these two thresholds of significance. Future entitlements that require discretionary action would be required to evaluate potential impacts to this resource. Based on this, no direct impacts to Recreation would result from implementation of the Project.

The Project Site does not propose any development that could otherwise increase a demand for recreational facilities nor include a recreational component. For this reason, Project implementation would not have any potential to affect either of the thresholds of significance listed above and no direct impacts to Recreation would occur.

## 4.16 Transportation/Traffic

Threshold of Significance	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Would the project result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance of safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response to a - f):** The General Plan Circulation Element describes Level of Service (LOS) is a qualitative measure of the effect of traffic flow factors, such as speed, delays, travel time, interruptions, freedom to maneuver, driver comfort and convenience, and indirectly, safety and operating costs. Roadway and traffic conditions, ranging from ideal to forced flow ranging from LOS A to LOS F, respectively. The County's Congestion Management Program (CMP) permits an LOS E. Both the City and City of Long Beach consider LOS D to be the lowest acceptable LOS. The General Plan Circulation Element characterizes LOS D as approaching an unstable traffic flow with long traffic delays, and defines it as the following:

This level encompasses a zone of increasing restriction-approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak hour, but enough cycles with lower demand occur to permit periodic clearance of queues, thus preventing excessive backups. Drivers frequently have to wait through more than one red signal. This level is the lower limit of acceptable operation to most drivers.

The Project Site contains a network of different classes consisting of: Interstate 405 (San Diego Freeway), Principal Arterials, Minor Arterials, Collector Streets, Local Streets, Alleys, and roadways designated as truck routes.

The Los Angeles County Regional Transportation Plan (RTP) serves as both the Federal and State required regional long-range transportation plan for the Southern California Association of Governments (SCAG) region through the year 2015 and is the guide for developing the Regional Transportation Improvement Program. The RTP links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic, and commercial limitations.

The RTP is implemented by two regularly updated documents: the Regional Transportation Improvement Plan (RTIP) also prepared by SCAG, and the Congestion Management Program (CMP), prepared for Los Angeles County by the Metropolitan Transportation Authority (Metro). The RTIP provides a detailed listing of all projects planned for implementation during the document's planning period. The document is updated every two years and has a six-year planning horizon. The CMP has a goal of relieving traffic congestion and maintaining high levels of service on roadways.

**Conclusion:** The proposed amended regulations and standards, summarized in Table 4 in Section 3 and detailed in Appendix A, would be applied as mandatory obligations to potential, future existing well abandonments, and methane site testing for any site proposed for development according to the provisions of the City's entitlement process. The existing mandatory obligation in Oil Code Section 16.12.120 and Section 16.24.030(A) to obtain a well abandonment permit and DOGGR's statutory requirements would remain applicable.

Because the proposed text amendments would only apply to existing wells and no development or structures are proposed that would otherwise have a potential to create impacts, the thresholds of significance associated with Transportation/Traffic would not be affected. Therefore, no impacts to (a) the City's adopted Level of Service threshold, (b) the County's Congestion Management Plan, (c) air traffic patterns, (d) design feature hazards, (e) inadequate emergency access, or (f) policies associated with public transit, bicycle, or pedestrian facilities would result from implementing the Project.

## 4.17 Utilities and Service Systems

Threshold of Significance	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Would the project comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response to a - g): Domestic Water** – The city's primary water supply comes from two groundwater wells located in north Long Beach. Additional water may be purchased from the Metropolitan Water District of Southern California. The City has drilled a third groundwater well centrally located within

Signal Hill and is in the process of developing plans and specifications for the necessary pumping and treatment facilities.

The City has three storage reservoirs and pumping facilities, providing water for domestic purposes and fire fighting. The Gundry reservoir and pumping facility was constructed in 1929 and has a storage capacity of 4.7 million gallons. This facility is located in the northern part of the city. Two hilltop reservoirs and pumping facilities were constructed in the late 1990s, having a combined storage capacity of 2.6 million gallons.

**Reclaimed Water** – The City of Long Beach maintains an extensive reclaimed water infrastructure. Reclaimed water is currently used to irrigate Reservoir Park, located on Wardlow Road along the city's northern boundary, and Burroughs Elementary School, also in the North End Neighborhood. The City of Signal Hill is interested in expanding the reclaimed water system to serve other parks and the hilltop area open spaces that are owned and maintained by the several homeowners associations, but the lack of pipelines limits opportunities for such expansion in the short term. Additionally, reclaimed water supplies are limited in the City of Long Beach. Other potential sources of reclaimed water include the Los Angeles County Sanitation District and the Water Replenishment District of Southern California; however, neither of these agencies currently maintains reclaimed water pipelines within Signal Hill.

**Wastewater** – Sewerage service in Signal Hill is provided by Los Angeles County Sanitation District No. 29. The City of Signal Hill previously owned and maintained the area's local and collector sewers; these have now been transferred to County Sanitation District control (a process completed in 2006). There is currently no sewer development impact fee for new development. However, property owners/developers pay for the extension of sewers to serve new development projects and pay connection fees, which are intended to cover additional costs to accommodate any increased demand created by the project.

In isolated areas, existing dwellings and businesses use septic tanks because sewer mains are not available. In 2002, the City extended sewer service to the Crescent Heights Historic District. With this sewer extension, only a small number of structures remain on septic systems. Conditions of approval for new development require that they provide sewer service.

**Natural Gas** – The City of Long Beach provides natural gas service to Signal Hill and owns and maintains a network of gas mains and lines throughout the city. High-pressure gas lines serve the Lomita Gas Plants on Orange Avenue south of Spring Street, and on Willow Street near Junipero Street. The largest gas main in the City is a 20-inch pipe in Cherry Avenue. The City of Long Beach maintains a 10,000,000 cubic foot storage facility near the intersection of Junipero Street and the San Diego Freeway (1-405). Property owners/developers pay for the extension of the gas system to serve new development projects and pay connection fees, which are intended to cover additional costs to accommodate any increased demand created by the project.

**Electricity** – The Southern California Edison Company provides electrical service to the City through a system of transmission lines and electrical sub-stations.

**Storm Drains** – Signal Hill storm water runoff flows into the storm drain system owned and operated by the Los Angeles County Flood Control District. The district maintains and improves the storm drain system and property owners/developers construct new storm drain facilities in

accordance with the adopted storm drain master plan. There is currently no storm drain developer impact fee. A growing area of concern both to local and regional governments is the discharge of trash and debris and a variety of water pollutants into the storm drain system that eventually flows into and pollutes the Pacific Ocean.

The city's stormwater drains into the Pacific Ocean. Accordingly, in order to protect ocean water quality, all grading and development activities must include stormwater pollution protection as a primary consideration. Effective stormwater management will include protection measures during construction and as part of the development. The city may benefit from two major retention basins located in the vicinity of Signal Hill, Hamilton Bowl located at Walnut and 20<sup>th</sup> Street and the California Bowl located near the intersection of Orange Avenue and Spring Street. These facilities are viewed as major resources in devising solutions to storm water run-off issues including contamination and water borne trash.

According to federal flood hazard maps, the former Pacific Electric Railway right-of-way along the southerly boundary of the city may be subject to inundation during a major flood event. Localized flooding may occur in low-lying areas where there are no existing flood control facilities.

**Solid Waste Collection** – EDCO Disposal (dba Signal Hill Disposal) provides residential, commercial, and construction solid waste collection and disposal services in the City. Waste is transported to various solid waste facilities depending on the type of customer and type of load.

**Conclusion:** The proposed amended regulations and standards, summarized in Table 4 in Section 3 and detailed in Appendix A, would be applied as mandatory obligations to potential, future existing well abandonments, and methane site testing for any site proposed for development according to the provisions of the City's entitlement process. The existing mandatory obligation in Oil Code Section 16.12.120 and Section 16.24.030(A) to obtain a well abandonment permit and DOGGR's statutory requirements would remain applicable.

Because the proposed text amendments would only apply to existing wells and no development or structures are proposed that would otherwise have a potential to create impacts, the thresholds of significance listed above associated with Utilities and Service Systems would not be affected. Therefore, no impacts to (a) exceeding wastewater treatment requirements, (b) construction of new water or wastewater treatment facilities, (c) storm drainage facilities, (d) sufficiency of water supplies, (e) wastewater treatment capacity, (f) landfill capacity, or (g) compliance with solid waste regulations would result from implementing the Project.

## 4.18 Mandatory Findings of Significance

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
Conclusion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response to a):** The analysis determined that none of the thresholds of significance evaluated in Sections 4.1 through 4.17 were exceeded for direct impacts and all resulted in either a no impact conclusion or a less than significant impact conclusion; none required mitigation.

**Conclusion:** As a result, implementation of the Project would not reduce the habitat of any fish or wildlife species or cause these species to drop below a self-sustaining level. No plant or animal communities would be threatened or eliminated, or reduce their number or range. No impacts to examples of California prehistory or history would occur.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
Conclusion	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Response to b):** Cumulative impacts occur when two or more individual effects which, when combined together, are considerable or which compound or increase other environmental impacts.

**Conclusion:** Section 3.5 identified two related projects within the Project Site.

The Consolidated Drilling and Oil Production Site Conditional Use Permit project is operating on a 30-month extension that will expire in July 2017. The City does not know at this time if the Conditional Use Permit will be extended for another term or allowed to expire. The status for potentially extending this entitlement is unknown at this time and no CEQA process has commenced. The City Consolidated Drilling and Oil Production Site Conditional Use Permit does not, and may not, have any changes

to the environment. At this time, forecasting potential environmental impacts for a potential activity that may or may not become a project would not provide meaningful environmental assessment information.<sup>17</sup> Therefore, no physical changes are associated with this project.

The Crescent Square Residential Development project completed the environmental review process. In 1999, the City certified the Town Center West Environmental Impact Report (EIR), State Clearinghouse No. 96071025. Following the certification, two addendums to the EIR were prepared. First, in 2005, an addendum was prepared to assess potential significant impacts from the change from 152 senior units to 28 single-family dwelling units. The second addendum prepared in September 2014 analyzed potential impacts that would result from a new site plan with 25 single-family dwelling units. The changes analyzed in the two addendums were determined to have been fully analyzed in the EIR and resulted in less impacts than the EIR. Therefore, no new physical impacts were identified and no additional CEQA documentation was required. In addition, this project contains oil wells proposed for abandonment that were evaluated in the EIR.

The Project identified three thresholds of significance that were less than significant with the remainder of the thresholds identified as no impact. The three thresholds of significance identified as less than significant were Hydrology and Water Quality thresholds 4.19 (a) and (f), and Land Use and Planning threshold 4.10 (b). Combining these three thresholds with the related projects does not have the potential to result in any incremental impacts. As a result, direct impacts are less than cumulatively considerable and therefore less than cumulative significant, and would not result in cumulative impacts.

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
Conclusion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response to c):** The analysis determined that none of the thresholds of significance evaluated in Sections 4.1 through 4.17 were exceeded for direct impacts and all resulted in either a no impact conclusion or a less than significant impact conclusion; therefore, no mitigation measures were required.

**Conclusion:** The Project is the administration of the amended Oil Code that does not include any development or improvements that would otherwise have a potential to create impacts. As a result, implementation of the Project would not have any adverse effects on human beings.

<sup>17</sup> Refer to Guidelines' Section 15004 that discusses time pf preparation for CEQA documentation.

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## Section 6: Glossary

<b>Abandonment</b>	The permanent plugging of a well, pipeline, or other facility by removing all equipment related to the well, and includes the restoration of the drill or well operation site as required by applicable regulations.
<b>Amended Oil Code Regulations</b>	The set of well abandonment and re-abandonment regulations enacted by the City in August 2013.
<b>Area of Development</b>	Means the entire site where a structure is or structures are proposed on a vacant parcel or in the case of an addition to an existing structure, or construction of new structures on a parcel with existing structures, the Area of Development means the portion of the site within, or within 10 feet of the area disturbed for grading as shown on a preliminary grading plan.
<b>Aquifer</b>	An underground layer of water-bearing permeable rock or unconsolidated materials from which groundwater can be extracted.
<b>Barrel of Oil</b>	A unit of volume, which the American Petroleum Institute defines as equivalent to 42 U.S. gallons.
<b>Base of Freshwater</b>	Within groundwater, the zone below ground surface in which salinity rises to relatively high levels consistent with the definition of saline water. Refer to Saline Water below.
<b>Base of Freshwater Plug</b>	A cement plug within an abandoned well located at the depth of the base of the freshwater zone. The depth of this plug is determined by DOGGR.
<b>Close Proximity</b>	Close proximity meant that the abandoned well was sufficiently distant from any structures on three sides that it could be accessed by a drill maintenance rig. The standards were in accordance with DOGGR's published access standard.
<b>Disposal Well</b>	A well, often a depleted oil or gas well, into which waste fluids can be injected for safe disposal. Disposal wells typically are subject to regulatory requirements to avoid contamination of aquifers.

<b>Equivalency Standard – City Proposed Standard</b>	Well abandonment and re-abandonment standards used by the City in making a land use determination and proposed for inclusion into the amended Oil Code that meet or exceed the former DOGGR equivalent standard.
<b>Equivalent Standard – DOGGR Former Standard</b>	A former certification provided by DOGGR that well abandonments and re-abandonments that could not meet the exact standards, but were considered to be equivalently abandoned to the standards.
<b>Freshwater Zone</b>	Within groundwater, a hypothetical line demarcating the base of freshwater boundary. Refer to Base of Freshwater and Base of Freshwater Plug above.
<b>Freshwater</b>	Groundwater containing less than 1,000 milligrams per liter of dissolved solids.
<b>Groundwater</b>	Water that occurs beneath the land surface and fills the pore spaces of the alluvium, soil, or rock formation in which it is situated.
<b>Groundwater Basin</b>	An alluvial aquifer, or a stacked series of alluvial aquifers, with reasonably well defined boundaries in a lateral direction and having a definable bottom.
<b>Hydrocarbon</b>	A naturally occurring organic compound comprising hydrogen and carbon. Hydrocarbons can be as simple as methane (CH <sub>4</sub> ), but many are highly complex molecules, and can occur as gases, liquids or solids. The molecules can have this shape of chains, branching chains, rings or other structures. The most common hydrocarbons are natural gas, oil and coal. Petroleum is a complex mixture of hydrocarbons. Refer to Petroleum below.
<b>Hydrocarbon Zone</b>	A zone below ground surface capable of containing hydrocarbons. A zone is an interval or unit of rock differentiated from surrounding rocks on the basis of its fossil content or other features, such as faults or fractures.
<b>Idle Oil Well</b>	An idle well is an actively producing well that is capable of production, but is currently not producing.
<b>Injection Well</b>	A well in which fluids are injected rather than produced, the primary objective typically being to maintain reservoir pressure. Two main types of injection wells are common: gas and water.

<b>Mega-Giant Field</b>	An oil field whose cumulative production has exceeded one billion barrels or containing an ultimate recovery estimated to exceed one billion barrels.
<b>Methane Gas</b>	A colorless and odorless gas typically associated with decaying organic matter; CH <sub>4</sub> .
<b>Methane Gas Venting</b>	Gas that cannot be captured during production that is vented to reduce the risk potential from fire or explosion.
<b>Oil</b>	Crude oil, which may contain petroleum, methane gas, oxygen, nitrogen, and hydrocarbon liquids or solids.
<b>Oil Code</b>	The portion of the City Municipal Code (Title 16) whose purpose is to regulate the drilling for production, processing, and storage and transport by pipeline of petroleum and other hydrocarbon substances so that these activities may be conducted in conformance with federal, state, and local requirements, and to mitigate the impact of oil-related activities on urban development.
<b>Oil Field</b>	A geographic area containing an abundance of wells and a large deposit of oil.
<b>Oil Well</b>	A hole drilled into the earth for the purposes of exploring for and producing oil or gas.
<b>Ordinance</b>	A law passed by the Signal Hill City Council for the purposes of self-regulation.
<b>Petroleum</b>	A complex mixture of naturally occurring hydrocarbon compounds found in rock. Includes any and all hydrocarbon substances including, but not limited to crude oil, natural gas, natural gasoline, and other related substances.
<b>Project Site</b>	The boundaries that the Project would occur within. For the Project, the area within the City limits represents the Project Site.
<b>Saline Water</b>	Water containing a significant concentration of dissolved salts, typically expressed in parts per million (ppm). Slightly saline water is between 1,000 to 3,000 ppm (0.1% to 0.3%), moderately saline water is between 3,000 to 10,000 ppm (0.3% to 1.0%), and highly saline water is between 10,000 to 35,000 ppm (1.0% to 3.5%).

<b>Structure</b>	The Oil Code defines structure as “anything constructed or built, a tank, any edifice, or building of any kind, as regulated by Title 15 of this code.”
	The Zoning Code defines structure as “anything constructed or built, any edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner, which requires location on the ground, and including swimming and wading pools and patios, excepting outdoor areas such as paved areas, walks, tennis courts, and similar recreation areas.”
	The Zoning Code defines a temporary structure as “a structure which is readily movable and used or intended to be used for a period not to exceed ninety consecutive days.”
<b>Surface Mitigation</b>	Best practices recommendations from DOGGR pertaining to methane gas venting systems and methane site soil testing and mitigation.
<b>Surface Plug</b>	A cement plug within an abandoned well located at the surface.
<b>Total Dissolved Solids (TDS)</b>	A measure of the combined content of all inorganic and organic substances contained in a liquid in molecular, ionized or micro-granular (colloidal sol) suspended form.
<b>Upper Hydrocarbon Zone</b>	The uppermost (closest to the surface) zone containing hydrocarbons.
<b>Upper Hydrocarbon Zone Plug</b>	A cement plug within an abandoned well located at the depth of the uppermost hydrocarbon zone.
<b>Waterflood</b>	A method of secondary oil recovery in which water is injected into the oil reservoir formation to displace residual oil and maintain reservoir pressure. The water from injection wells physically sweeps (i.e., pushes) the displaced oil to adjacent oil production wells.

**RESOLUTION NO. \_\_\_\_\_**

**A RESOLUTION OF THE PLANNING COMMISSION OF  
THE CITY OF SIGNAL HILL, RECOMMENDING CITY  
COUNCIL APPROVAL OF ORDINANCE AMENDMENT 15-  
01, AMENDING TITLE 16 ENTITLED "OIL CODE" AND  
CHAPTER 20.52 ENTITLED "SITE PLAN AND DESIGN  
REVIEW" ESTABLISHING REGULATIONS TO ALLOW  
DEVELOPMENT ON TOP OF AND IN CLOSE PROXIMITY  
TO ABANDONED WELLS AND REVISING METHANE  
ASSESSMENT AND MITIGATION PROCEDURES AND  
SITE RESTORATION STANDARDS**

**WHEREAS**, oil was discovered in the City of Signal Hill ("City") in 1919, in the Long Beach Field, and the area soon became one of the largest active oil fields in the world with more than 1 billion barrels of oil extracted to date. Roughly 2,900 wells were drilled of which slightly more than 20% are currently active; most of the wells have been abandoned to varying State standards over the last 96 years; and

**WHEREAS**, the Division of Oil, Gas, and Geothermal Resources ("DOGGR") is the State agency that oversees the drilling, operation, maintenance, plugging, and abandonment of oil, natural gas, and geothermal wells; and prior to 2002 the agency was known as the Division of Oil and Gas (DOG); and

**WHEREAS**, since 1989 the DOG, and subsequently the DOGGR, provided a process known as the Construction Site Plan Review Program for property and well owners to abandon and reabandon wells, in order to allow for the orderly redevelopment of properties containing oil wells; and

**WHEREAS**, the Construction Site Plan Review Program included a DOGGR certification of the proposed development's site plan, a letter to the City ("Well Review Letter"), and a stamped site plan certifying that well abandonments met DOGGR standards thus allowing City approvals for structures and improvements to be constructed either adjacent to (within ten (10) feet) or on top of abandoned wells; and

**WHEREAS**, the City originally adopted regulations concerning oil wells in 1962 and after periodic updating, the City in 1990 created an Oil Code Committee and completed a comprehensive update to the Oil Code (Title 16, Chapter 24, of the SHMC, the “Oil Code”) concerning well drilling and re-drilling, water injection, drill sites, noise standards, surface mitigation measures, venting, access, property maintenance, landscaping, development constraints, and other issues; and

**WHEREAS**, Section 16.24 of the City’s Oil Code initially required developers to complete the DOGGR Construction Site Plan Review Program, obtain a Well Review Letter and stamped site plan in order to determine if any action on an abandoned well was required or obtain DOGGR “certification” that such oil wells were abandoned to current or equivalent DOGGR standards; and

**WHEREAS**, DOGGR oil well location maps are imprecise and previously abandoned wells are occasionally not easily located, the Code requires wells surveys to precisely locate wells within the Area of Development and further requires they be tested for methane gas or fluids leaks and if found to be leaking that they be reabandoned; and

**WHEREAS**, when development is proposed in close proximity to, or over abandoned oil wells rendering the wells inaccessible the well must be determined to be properly abandoned by DOGGR and the City or it must be reabandoned which can be technologically difficult and an expensive process depending on a series of factors, including collapsed well casings; and

**WHEREAS**, oil well abandonment and reabandonment processes can involve (i) trying to drill through or around collapsed casings, (ii) drilling through prior cement plugs, ( iii) removing or “fishing” for materials (“junk”) left in the well which could be equipment from prior drilling operations, materials intended to seal the well or the results of casing failures; and (iv) installing cement plugs to isolate the productive zones and a base of fresh water plug; and

**WHEREAS**, prior to 2010, the DOGGR abandonment and reabandonment standards and policies recognized the difficulties in the field that could be encountered and the need to vary the standards under certain circumstances; and the agency developed an “equivalent to current standards” finding that included installing 200 feet of cement at the clean-out depth when obstructions were encountered and a thicker surface plug from the required 25 feet to 50 feet in depth; and

**WHEREAS**, the density of oil well drilling was unregulated in the 1920’s since Signal Hill had been previously subdivided for residential town lots prior to the discovery of oil; and this lot development pattern resulted in very densely spaced wells, which average 1.2 wells per acre. However, many properties have well over the average for example, the 2.5 acre EDCO Administrative Headquarters and Truck Terminal property, located at 950 E. 27<sup>th</sup> Street has 12 abandoned oil wells; and the 3.75-acre EDCO Recycling and Solid Waste Transfer Station at 2755 California Avenue has 11 abandoned wells located on site; and

**WHEREAS**, it is readily apparent that the reabandonment of all wells on a property would be a considerable constraint to development and render the development of many properties financially infeasible and impractical unless financial assistance was made available; and

**WHEREAS**, the former Signal Hill Redevelopment Agency recognized this constraint to development and participated in abandonment and reabandonment of 94 wells since 1990 on environmentally distressed properties; and

**WHEREAS**, the former Signal Hill Redevelopment Agency, along with all State of California Redevelopment Agencies, was dissolved pursuant to ABX1 26 (The Dissolution Act) as of February 1, 2012; and

**WHEREAS**, the cost of well abandonments in recent years have varied from \$100,000 to \$800,000 per well. For example, the EDCO Recycling and Solid Waste Transfer Station project required the reabandonment of 11 wells in 2010 in order for the project to move forward at a cost of \$1,500,000; the Fresh & Easy Market

required the reabandonment of 4 wells in 2010 at a cost of \$400,000; the A&A Concrete Batch Plant required the reabandonment of 3 wells in 2008 for a cost of \$300,000; the Aragon condominium project required the reabandonment of 9 wells in 2006 at a cost of \$3,500,000 (with a single problematic well costing \$800,000); and the City Ventures condominium project required reabandonment of 4 wells in 2011 at a cost of \$950,000; and

**WHEREAS**, in the past the DOGGR engineers implemented a pragmatic policy relying on best efforts or practices and made determinations as to whether abandonment or reabandonment was safe, responsible, cost effective and practicable, and DOGGR provided an “abandoned to equivalent standards” finding; and

**WHEREAS**, in November of 2010, DOGGR terminated its 22-year policy for District One which is the City’s district, of providing an equivalency standard option in the “Construction Site Plan Review Program, and Well Review Letter,” and providing stamped site plans; and

**WHEREAS**, since 2010, DOGGR only issues “Well Status Review Letters” which could no longer be considered a “certification” within the meaning of the City’s Oil Code. The Well Status Review letters, (i) no longer provide an equivalent standard option for abandonments, (ii) state that dangerous issues may be associated with development near oil and gas wells, (iii) state that abandonment of wells to current or equivalent standards will not guarantee that they will not leak in the future, (iv) state that access should be maintained to all wells, but if access cannot be maintained, alternatives should be considered to development on the Site, and (v) state that the comments by DOGGR are merely advisory to the City; and

**WHEREAS**, DOGGR engineers were directed by the State Oil & Gas Supervisor to terminate the equivalency standard under the District One Construction Site Plan Review Program which allowed alternative but equivalent practices in how the engineers approached well abandonment and reabandonment therefore DOGGR would no longer recognize best practices, costs or practical alternative solutions when encountering certain conditions such as casing failures and “junk” in the wells; and

**WHEREAS**, the Well Status Review letter appears to be designed to protect the State from liability for any advice, and letter gives the City and the property owner no information on whether abandonment or reabandonment should be undertaken, and on how the development should be designed with respect to abandoned or reabandoned wells on the property, and indicates that DOGGR no longer serves to provide the certification contemplated by Section 16.24 of the City's Oil Code; and

**WHEREAS**, the City has substantial evidence and experience that the vast majority of wells cannot be abandoned or reabandoned to current DOGGR standards without the equivalency standard, that DOGGR's new policy does not address the practical issues of the "junk" encountered in the typical abandonment and reabandonment process, and that abandonment and reabandonment in all hydrocarbon and freshwater zones may not be cost effective or practical due to casing failures, land collapse, historic intermingling of lack of hydrocarbon zones and other extenuating factors; and

**WHEREAS**, the City believes that given the large number of abandoned wells, the many issues created by the DOGGR's new Well Status Review letter and the lack of an equivalent well abandonment finding, there is a need for technical studies to be performed to determine the proper procedures for abandonment and reabandonment operations, given the significant cost, the impracticality of the DOGGR policies and the impact on the orderly development of the community; and

**WHEREAS**, the City believes that implementation of the City's Oil Code requiring DOGGR certification as to any abandonment or reabandonment of wells on a development site would render any property with abandoned or reabandoned oil wells virtually undevelopable given DOGGR's post 2011 policy and the fact that DOGGR is no longer providing equivalent abandonment certifications; and

**WHEREAS**, based on the foregoing significant changes in DOGGR policy, the City began to undertake a comprehensive study and analysis of what standards

must be required by the City's Oil Code that would adequately address any health, safety and welfare issues related to abandonment or reabandonment of the oil wells within the City, and what role DOGGR will have in the City's new process. Once evaluated, the City intended to establish the requirements for making a land use determination as to whether development is allowed on top of or in close proximity to abandoned oil wells and codify the requirement for methane assessment and mitigation on all development sites; and

**WHEREAS**, on August 16, 2011, the City Council adopted Urgency Ordinance No. 2011-08-1430, adopting interim regulations for the development of properties with abandoned oil wells and methane testing of soils pending the completion of special studies necessitated by recent policy changes of the DOGGR concerning developing projects in close proximity to or on top of abandoned and/or reabandoned oil wells and declaring the urgency thereof; and

**WHEREAS**, on September 27, 2011, the City Council deemed that an extension of the interim regulations for the development of properties with abandoned oil wells and methane testing of soils pending the completion of special studies was needed and declared the urgency thereof; and

**WHEREAS**, staff proceeded under the previous progress report to refine the work plan for the special studies and technical report with a new petroleum consultant following the retirement of the previous petroleum consultant and to research and compile digitized data and documentation and a revised progress report was prepared for review with the cost of the various studies estimated to be \$500,000, and the City undertook meetings with the major operator of the Signal Hill portion of the Long Beach Field, Signal Hill Petroleum ("SHP") and SHP offered to provide existing reports and data to significantly reduce the cost of the studies; and

**WHEREAS**, building permits for two development projects with previously abandoned oil wells on site, near to but not under a proposed building, have been issued since the adoption of the interim ordinance (the EDCO Administrative Headquarters and Truck Terminal property, located at 950 E. 27th Street and 35

residential townhomes in Phase Two of the Pacific Walk project, located at the east side of Orizaba Avenue north of Pacific Coast Highway); and

**WHEREAS**, on August 6, 2012, at a duly noticed public hearing the City Council deemed that an extension of the interim regulations for the development of properties with abandoned oil wells and methane testing of soils was merited, pending the completion of technical studies necessary to consider appropriate amendments to the Signal Hill Municipal Code and declaring the urgency thereof, and further extended the Interim Urgency Ordinance to terminate on August 16, 2013; and

**WHEREAS**, the necessary technical studies would not be complete by August 16, 2013 and accordingly, it was necessary to amend the existing oil code and site plan requirements to add abandonment regulations and methane testing so that when the Interim Urgency Ordinance lapsed, the existing Oil Code which required DOGGR certification did not render property with abandoned oil wells undevelopable given DOGGR's policy change and because there was a threat to public health, safety and welfare under the existing Oil Code since it did not sufficiently address the lack of guidance created by recent DOGGR policy changes; and

**WHEREAS**, the proposed oil code amendment provided an improved health and safety benefit to the public in that it adopted standards that were more stringent than those in the City's existing oil code and established standards for development near previously abandoned oil wells, but not over them; and

**WHEREAS**, on July 2, 2013 and July 16, 2013, the City Council held duly noticed public hearings and all persons were given an opportunity to be heard regarding adoption of the oil code ordinance amendment and on July 16, 2013, the City Council unanimously adopted the Ordinance 2013-07-1459, the Oil Code; and

**WHEREAS**, the technical reports have been completed and the petroleum report found that past abandonment practices under the DOGGR equivalency standard were safe and responsible and the water study found no indications of impacts to water quality from historic oil operations and a City equivalency standard for well

abandonments has been developed that is consistent with the past DOGGR equivalency standard and the standard allows the City to make a land use determination for development over or in close proximity to abandoned wells; and

**WHEREAS**, given the legacy of oil operations in and around the City, methane assessment and mitigation standards will now be required for all properties with proposed development and City well abandonment permits will include site restoration standards; and

**WHEREAS**, on April 3, 2015, notice of a Planning Commission hearing was published in the Signal Tribune newspaper in accordance with Government Code § 65091(a)(4) and was posted in accordance with Signal Hill Municipal Code Section 1.08.010; and

**WHEREAS**, pursuant to Signal Hill Municipal Code, Chapter 20.86, entitled "Amendments," the subject is properly a matter for Planning Commission review and recommendation for City Council adoption; and

**WHEREAS**, an Initial Study and Negative Declaration for the Oil Code Amendment was prepared by the City's environmental consultant and circulated by the State Clearinghouse and beginning April 3, 2015, was made available for a thirty day public comment period; and

**WHEREAS**, on April 14, 2015, at a duly noticed Planning Commission public hearing, all interested persons were given an opportunity to be heard, and the Planning Commission recommended approval of Ordinance Amendment 15-01 as well as adoption of Negative Declaration 04/03/15(1) relative to Ordinance Amendment 15-01, in satisfaction of requirements of the California Environmental Quality Act; and

**WHEREAS**, the City has considered all comments received and responses thereto.

**NOW, THEREFORE, BE IT RESOLVED**, that the Planning Commission of the City of Signal Hill, California, has considered the public comments and finds as follows:

1. That Ordinance Amendment 15-01 is consistent with applicable State law.

2. That the Planning Commission has reviewed Ordinance Amendment 15-01 and found the proposed amendment to be in the best interest of the community and its health, safety and general welfare in that it is consistent with the following Goals and Policies of the Signal Hill General Plan:

**LAND USE: GOAL 3 – Assure a safe, healthy, and aesthetically pleasing community for residents and businesses.**

Policy 3.2 – Enhance the interface between existing and future development and oil production activities to protect the access to the resource while mitigating adverse impacts of oil field operations within an urban area.

Finding regarding Policy 3.2 – The ordinance amendment will reduce impacts associated with development on top of and in close proximity to abandoned oil wells by requiring adequate surveys, setbacks, testing, venting and access and by establishing a City abandonment equivalency standard for making the land use determination to develop over or in close proximity to abandoned wells and requiring methane soils testing on all properties proposed for development.

Policy 3.16 – Review and revise, as necessary, the City's development standards to improve the quality of new development and protect the public health and safety.

Finding regarding Policy 3.16 – The ordinance amendment will protect the public health and safety and allow responsible development by providing regulations to allow new development on top of and in close proximity to abandoned oil wells and by improving methane assessment and mitigation requirements on all properties proposed for development.

**ENVIRONMENTAL: GOAL 4 – manage the production of economically valuable resources in the city to achieve a balance between current market forces and long-term community values.**

Policy 4.3 - Require the restoration and reuse of land no longer necessary or economical for oil production activities.

Finding regarding Policy 4.3 – The Ordinance requires a City abandonment and restoration permit and standards that insure the site will comply with

noise, dust, stormwater, aesthetics and nuisance requirements following well abandonments.

**NOW, THEREFORE, BE IT FURTHER RESOLVED**, that the Planning Commission does hereby recommend City Council approval of Ordinance Amendment 15-01 as follows:

**Section 1.** That the title of Title 16 Oil Code be amended as follows:

Title 16 OIL **AND GAS** CODE

**Section 2.** That Chapter 16.04 GENERAL PROVISIONS be amended to modify Sections 16.04.010, 16.04.020, 16.04.040 and 16.04.070 and to add a new Section 16.04.025 to read as follows:

**Section 16.04.010 Title.**

This title shall be known and may be cited as the "City of Signal Hill Oil and Gas Code."

**Section 16.04.020, Purpose.**

It is the intent and purpose of this title to regulate the drilling for production, processing, **and storage, and transport by pipeline of petroleum and other hydrocarbon substances, timely and proper well abandonment and well site restoration and removal of oil and gas related facilities, reclamation and remediation of host sites and final disposition of pipelines in compliance with applicable laws and permits** so that these activities may be conducted in conformance with federal, state, and local requirements, and to mitigate the impact of oil-related activities on urban development .

To accomplish this purpose, the regulations outlined in this title are determined to be necessary for the preservation of the public health, safety, and general welfare.

**Section 16.04.025, Code Applicability.**

This ordinance, insofar as it regulates petroleum operations also regulated by the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR), is intended to supplement such state regulations and to be in furtherance and support thereof. In all cases where there is conflict with state laws or regulations, such state laws or regulations shall prevail over any contradictory provisions, or contradictory prohibitions or requirements, made pursuant to this ordinance.

### Section 16.04.040 Administration

A. It shall be the duty of the oil services coordinator or his duly appointed representative to enforce the provisions of this title, unless other officials are specified.

B. It shall be the duty of the City's Petroleum Engineer to verify that well abandonments meet the City's equivalency standard for abandonment.

### Section 16.040.070 Notices.

A. Notices requiring repair or corrections provided by this title shall be issued by the oil services coordinator consistent with titles 15 and 20 of the Signal Hill Municipal Code.

B. Service of Notices.

1. Every operator of any oil well shall designate an agent, who must be a resident of the state during all times he or she serves as agent, upon whom all orders and notices provided in this title may be served in person or by mail. Every operator so designating such agent shall within five days, notify the oil services coordinator in writing of any change in such agent or such mailing address unless operations within the city are discontinued.

2. Any notice served pursuant to this title shall be deemed received five days after said notice, properly addressed, is placed in the United States postal service, postage prepaid.

C. Change of operator. The operator shall submit to the Oil Services Coordinator a copy of the DOGGR report of property/well transfer/acquisition within thirty days after sale, assignment, transfer, conveyance, or exchange. A change of operator will require that a new permit be issued within thirty days after the sale, assignment, transfer, conveyance or exchange and a prorated annual fee shall be paid for any well required to have a permit in accordance with Chapter 16.12 of the Signal Hill Municipal Code.

**Section 3.** That Chapter 16.08, DEFINITIONS be amended to add Section 16.08.045 and to modify Section 16.08.150 to read as follows:

### Section 16.08.045 Area of Development.

A. In the case where a structure or structures is/are proposed on a vacant parcel, or in the case where subdivision of a parcel is proposed, or in the case of a phased development proposed to occur on several parcels in phases, the "Area of Development" is the entire proposed site, including the entire area of each and every parcel involved. For purposes of this chapter, this area shall also be referred to as the "Site," but in no case shall include area outside the property boundaries.

B. In the case of an addition to an existing structure, or construction of new structures on a parcel with existing structures, the "Area of Development" is (i) the portion of the Site which is within, or within ten (10) feet of, the area disturbed for grading as shown on a preliminary grading plan; or (ii) the portion of the Site lying under or within ten (10) feet of any addition or new structure built as a part of the project where no grading plan is required.

Section 16.08.150, Drill or Drilling.

"Drill" or "drilling" means to dig or bore a well for the purpose of exploring for, developing, or producing oil, water, gas, or other hydrocarbons; or for the purpose of injecting water, steam, or other fluid or substance into the earth, but excluding any well drilled solely for the production of drinking water.

**Section 4.** That Chapter 16.12, Permits and Bonds, be amended to modify Sections 16.12.050 and 16.12.060 to read as follows:

Section 16.12.050, Annual Well Permit.

A. On the first day of January next succeeding the issuance of a drilling permit and prior to the first day of January of each year thereafter, until the well has been abandoned, as provided in this title, an annual well permit must be obtained from the city for each well, including injection wells, whether active or inactive except for idle wells.

B. No permit shall be issued to an operator who has failed to comply with the applicable regulations of this title.

C. That evidence also be provided of performance bonds, pursuant to Section 16.12.090, liability insurance, pursuant to Section 16.12.240, and indemnification pursuant to Section 16.12.250.

Section 16.12.060, Idle Well Permit.

A. Effective January 1, 1991, no persons shall maintain an idle well within the city without obtaining an annual idle well permit from the inspector prior to the first day of January of each year.

B. That evidence also be provided of performance bonds, pursuant to Section 16.12.090, liability insurance, pursuant to Section 16.12.240, and indemnification pursuant to Section 16.12.250.

**Section 5.** That Chapter 16.22, IDLE WELLS be added to read as follows:

Chapter 16.22  
IDLE WELLS

Sections:

- 16.22.010 Idle well--Determination.
- 16.22.020 Idle well--Notice.
- 16.22.030 Idle well--Abandonment

16.22.010. Idle well – Determination.

A well shall be deemed to be an idle well if, the well does not produce an average of two barrels of oil per day or one hundred cubic feet of gas per day for a continuous six months period during any consecutive five-year period prior to or after January 1, 1991, except that an active water injection well shall not be classified as an idle well.

**16.22.020. Idle well--Notice.**

A. Whenever a well is an idle well, as defined in Section 16.22.010, the Oil Services Coordinator or his designee shall send notice thereof by registered mail to:

1. The surface owner, mineral owner, and lessee of land on which the well is located as shown on the last equalized assessment of the city;

2. The permittee or operator of the well as indicated on either the records of D.O.G. or the records of the city.

B. The notice shall include the name and location of the well in question.

C. The Building Department shall maintain a list of idle wells located within the city.

**16.22.030. Idle well--Abandonment.**

A. Whenever a well is an idle well and the notice has been given, as described in Section 16.22.020, the permittee, operator, or other responsible party shall cause the well to be abandoned or reabandoned pursuant to Section 16.24.090 within three months; or

1. Repair and reactivate the well as a pumping well or injector well; or

2. Obtain an annual idle well permit.

B. Failure to obtain an annual idle well permit, abandon or repair and reactivate an idle well shall be conclusive evidence of desertion of the well permitting the Oil Services Coordinator, his designee, and D.O.G.G.R. to cause the well to be abandoned. Said wells shall also be deemed a public nuisance.

**Section 6.** That Chapter 16.23, ABANDONMENT OF WELLS be added to read as follows:

**Chapter 16.23  
ABANDONMENT OF WELLS**

Sections:

16.23.010 Required abandonment.

16.23.020 Abandonment Permit

**16.23.010 Required abandonment.**

Permittee operator or other responsible party shall abandon or reabandon a well in accordance with requirements of DOGGR and this chapter when any of the following conditions exist:

A. Upon final and permanent cessation of all operations on any well;

B. Upon the revocation, expiration, or failure to obtain or to maintain in full force and effect permits required under provisions of this title;

C. Upon order of DOGGR

D. A leaking well exists within the Area of Development after having been tested pursuant to Section 16.24.040. The Area of Development for purposes of this subdivision shall be as defined in Section 16.24.010(A);

E. The well has been determined to be an idle well per Section 16.22.010 and the operator has decided to abandon the well.

**16.23.020 Abandonment Permit.**

A. Prior to commencement of abandonment or reabandonment, pursuant to Section 16.23.010, the permittee or other responsible party shall:

1. Provide a copy of the DOGGR approval to abandon said well;
2. Obtain a City issued abandonment permit from the Oil Services Coordinator. No person shall abandon or reabandon a well without first obtaining a City issued abandonment permit pursuant to Section 16.24.060.

**Section 7.** That Chapter 16.24 ABANDONMENT OF WELLS AND IDLE WELLS be deleted in its entirety as follows:

**Chapter 16.24**

**ABANDONMENT OF WELLS AND IDLE WELLS**

**Sections:**

16.24.010 Required abandonment.

16.24.020 Development standards for properties containing abandoned oil wells.

16.24.030 Abandonment procedures.

16.24.040 Venting.

16.24.050 Idle well- Determination.

16.24.060 Idle well- Notice.

16.24.070 Idle well- Abandonment.

**16.24.010 Required abandonment.**

Permittee operator or other responsible party shall abandon or reabandon a well in accordance with requirements of D.O.G. and this chapter when any of the following conditions exist:

A. Upon final and permanent cessation of all operations on any well;

B. Upon the revocation, expiration, or failure to obtain or to maintain in full force and effect permits required under provisions of this title;

C. Upon order of D.O.G.;

D. A leaking well exists within the Area of Development after having been tested pursuant to section 16.24.020(F). The Area of Development for purposes of this subdivision shall be as defined in section 16.24.020(A);

E. The well has been determined to be an idle well per Section 16.24.050 and the operator has decided to abandon the well.

(Ord. 2013-07-1459 § 5; Ord. 2013-07-1460 § 5; Ord. 90-08-1074 § 4 (part))

**16.24.020 Development Standards for Properties Containing Abandoned Oil Wells.**

A. Definition of Area of Development.

1. In the case where a structure or structures is/are proposed on a vacant parcel, or in the case where subdivision of a parcel is proposed, or in the case of a phased development proposed to occur on several parcels in phases, the "Area of Development" is the entire proposed site, including the entire area of each and every parcel involved. For purposes of this Chapter, this area shall also be referred to as the "Site."  
2. In the case of an addition to an existing structure, or construction of new structures on a parcel with existing structures, the "Area of Development" is (i) the portion of the Site which is within, or within ten (10) feet of, the area disturbed for grading as shown on a preliminary grading plan; or (ii) the portion of the Site lying under or within ten (10) feet of any addition or new structure built as a part of the project where no grading plan is required.

B. Site Plan Requirements. The surveyed location of each well and the DOGGR well name and number, as well as API number must be accurately plotted on the site plan required by Chapter 20.52. An OG 159 certificate, prepared and issued by the DOGGR shall be required for each active, idle or abandoned oil well on the site, or letter of equivalent abandonment signed by the city's consulting petroleum engineer to the satisfaction of the city building official. The well shall be identified with the name of the company/operator and well designation. Site plans shall indicate the site boundaries, the proposed and existing structures, existing and proposed roads and streets passing through or adjacent to the site. The site plan shall plot all existing and proposed oil field facilities (tanks, processing equipment, enclosures, pipelines, etc.) that will be operating on the site after completion of the proposed development. Any well outside the site but that reasonably may be within "close proximity" to any property line of the site shall also be plotted on the site plan to the degree of accuracy possible using DOGGR records, with the accompanying information described above. "Close proximity" shall be as defined on the DOGGR document entitled Exhibit "A," a copy of which is on file in the Community Development Department and publicly available.

C. Location of Abandoned Wells. Each owner or responsible party of property shall consult the records of DOGGR to determine the condition and location of any well within the Area of Development. The developer shall make a diligent good faith effort to investigate the Area of Development and determine the actual location of all wells and update DOGGR records accordingly.

D. Survey of Wells. The owner or responsible party shall submit a licensed survey of all wells within the Area of Development as part of the city's site plan and design review process. The survey shall locate all active, idle and abandoned wells to ascertain their locations and/or have the location of the wells surveyed by a licensed surveyor. The well(s) shall be plotted on the site plan and include the NAD 83 well location or equivalent.

E. A.L.T.A. and Development Survey. The owner or responsible party shall have an American Land Title Association (A.L.T.A.) survey of the Area of Development prepared including all culture and indicating distances from abandoned wells to the satisfaction of the city building official. In addition the owner or responsible party shall have a survey prepared indicating distances from abandoned wells to proposed development to the satisfaction of the city building official.

F. Leak Testing of Abandoned Wells.

1. All abandoned wells located within the Area of Development must be tested for gas leakage and visually inspected for oil leakage. The owner or responsible party shall apply to the city for an inspection permit to witness the testing. The leak test shall be completed utilizing a "GT-43" gas detection meter, or one of comparable quality approved in advance by the city, and shall be conducted by a state licensed geotechnical or civil engineer or state registered environmental assessor, class II, or the city building official as determined necessary by the city building official.

2. A methane assessment report is required for each tested well and shall be prepared per the City of LA DBS "Site Testing Standards for Methane" (P/BC 2002-101, November 30, 2004). A well vent and vent cone permit shall be obtained by the property owner or agent. The property owner or agent may use the city's consultant to observe the leak test or be responsible for city consultant test fees. Following testing, a well vent and vent cone shall be installed to the satisfaction of the city building official and in compliance with the recommendations contained in the methane assessment report.

3. The submitted leak test report shall be prepared by a state licensed geotechnical or civil engineer or state registered environmental assessor, class II. A well shall be considered leaking if the leak test report indicates the meter read is greater than the lower explosive limit which is hereby set at 500 parts per million.

4. An approved leak test report is only valid for 24 months from city acceptance. If a building permit has not been issued by this time, retesting is required. Following all testing and inspection, the test area shall be returned to its previous state to the satisfaction of the city building official.

#### G. Development Standards.

1. Improvements shall not be located on top of any abandoned oil well, nor within "close proximity" to any such well, whether on the site or outside the site. For any such well outside the site, no improvement may be placed in any location that creates a reasonable risk that the improvement may be within close proximity to such well based on the best available DOGGR records. This is necessary in order to provide access for a well abandonment rig should the well leak oil or gas in the future. "Improvements" are considered permanent structures or other construction that would be difficult or expensive to demolish should the abandoned or re-abandoned well leak oil or gas in the future. "Close proximity" shall be measured as described on the DOGGR document labeled "Exhibit A", which is on file in the Community Development Department and publicly available. The city may approve alternative mitigation measures that maintain access to wells. Previous improvements, such as landscaping and parking areas with adequate landscape buffers may be located on top of a previously abandoned or re-abandoned well which has passed the leak test required under this section.

2. The property owner shall record declaration of covenants, conditions and restrictions, in a form subject to the review and approval of the City Attorney, putting future owners and occupants on notice of the following: the existence of abandoned oil wells on the site; that the wells within the Area of Development have been leak tested and found not to leak; description of any methane mitigation measures employed; disclosure that access to these wells has been provided to address the fact that they may leak in the future causing potential harm; acknowledgment that the state may order the re-abandonment of any well should it leak in the future; acknowledgment that the state does not recommend building over wells; and releasing and indemnifying the city for issuing project permits.

H. DOGGR Authority. Nothing herein is intended to displace any authority of DOGGR under Chapters 2, 3 and 4 of Division 2 of Title 14 of the California Code of Regulations or set aside or annul any action of DOGGR pursuant to its authority. However, these provisions shall control the development of property where DOGGR merely makes advisory recommendations beyond the agency's statutory authority.

I. Grandfathering. This section shall not apply to any project which has been approved by the city or its constituent boards, commissions or officials prior to the date of the adoption of this section, so long as such approvals remain valid. The required approvals include a valid approval from DOGGR, but if such approvals have expired, the project shall be governed by this section. Any application for discretionary land use development entitlements under Chapter 20.52 of the Municipal Code which is being processed shall be subject to the requirements hereof.

#### 16.24.030 Abandonment procedures.

A. Prior to commencement of abandonment or reabandonment, as required by Section 16.24.010, the permittee or other responsible party shall:

1. Obtain an abandonment permit from the inspector. No person shall abandon or reabandon a well without first obtaining an abandonment permit;
2. Advise the inspector at least five days' notice of intention to abandon said well, stating the date such work will be commenced;
3. Provide the inspector a copy of D.O.G. approval to abandon said well;
4. Obtain any other permits, as may be required for restoration pursuant to Title 15 of this code;
5. Comply with neighborhood noticing requirements in accordance with Section 16.20.210.

B. A well shall be considered properly abandoned for purposes of this chapter after restoration of the drill site or oil operation site and subsurface thereof to its original condition, as nearly as practical, and in conformity with the following requirements:

1. Oil well abandonment shall be performed by oil service company contractors licensed to do business in the city.
2. All equipment and surface installations used in connection with the well which are not necessary as determined by the inspector for the operation or maintenance of other wells of operator or permittee on the drill or operation site shall be removed from the premises.
3. The premises, all sumps, cellars, and ditches which are not necessary for the operation or maintenance of other wells of operator or permittee on the site shall be cleaned out and all oil, oil residue, drilling fluid, and rubbish shall be removed or bioremediated to reduce hydrocarbons to standards acceptable to federal, state, or local agencies. All sumps, cellars, and ditches shall be leveled or filled. Where such sumps, cellars, and ditches are lined with concrete, permittee or operator shall cause the walls and bottoms to be broken up and all concrete shall be removed.
4. The premises shall be cleaned and graded and left in a clean and neat condition free of oil, rotary mud, oil-soaked earth, asphalt, tar, concrete, litter, and debris.
5. All public streets, alleys, sidewalks, curbs and gutters, and other places constituting public property which may have been disturbed or damaged in

connection with any operation, including operations for the abandonment of the well shall be cleaned, and, except for ordinary wear and tear, shall be repaired and restored to substantially the same condition thereof as the same existed at the time of issuance of the permit, or at the time operations were first commenced in connection with the drilling, operation, or maintenance of the well.

6. A copy of written approval of D.O.G. confirming compliance with all state abandonment proceedings for all abandoned facilities is furnished to the inspector.

#### 16.24.040 Venting.

In conjunction with any abandonment required by Section 16.24.010:

A. Venting shall be installed to the satisfaction of the city building official. The property owner or his or her agent shall obtain a well vent and vent cone permit for such installation.

B. Where determined necessary by the city building official, measures such as impervious foundation membranes, perforated pipe collection systems, gas detection systems, or periodic testing of such devices shall be constructed at the expense of the developer or property owner and, if applicable, shown on the approved grading or building plans.

#### 16.24.050 Idle well—Determination.

A well shall be deemed to be an idle well if the well does not produce an average of two barrels of oil per day or one hundred cubic feet of gas per day for a continuous six months period during any consecutive five-year period prior to or after January 1, 1991, except that an active water injection well shall not be classified as an idle well.

#### 16.24.060 Idle well—Notice.

A. Whenever a well is an idle well, as defined in Section 16.24.050, the inspector shall send notice thereof by registered mail to:

1. The surface owner, mineral owner, and lessee of land on which the well is located as shown on the last equalized assessment of the city;

2. The permittee or operator of the well as indicated on either the records of D.O.G. or the records of the city.

B. The notice shall include the name and location of the well in question.

C. The inspector shall maintain a list of idle wells located within the city.

#### 16.24.070 Idle well—Abandonment.

A. 1. Whenever a well is an idle well and the notice has been given, as described in Section 16.24.060, the permittee, operator, or other responsible party shall cause the well to be abandoned or reabandoned pursuant to Section 16.24.030 within three months; or

2. Repair and reactivate the well as a pumping well or injector well; or

3. Obtain an annual idle well permit.

B. Failure to obtain an annual idle well permit, abandon or repair and reactivate an idle well shall be conclusive evidence of desertion of the well permitting the inspector or the D.O.G. to cause the well to be abandoned. Said wells shall also be deemed a public nuisance.

**Section 8.** That Chapter 16.24 DEVELOPMENT STANDARDS FOR PROPERTIES CONTAINING ABANDONED WELLS be added in its entirety to read as follows:

**Chapter 16.24**  
**DEVELOPMENT STANDARDS FOR PROPERTIES CONTAINING**  
**ABANDONED WELLS**

**Sections:**

- 16.24.010 Area of development.
- 16.24.020 Prerequisites to site plan and design review.
- 16.24.030 Well discovery.
- 16.24.040 Leak testing.
- 16.24.050 Well access exhibit.
- 16.24.060 Well abandonment report.
- 16.24.070 Abandonment equivalency standard.
- 16.24.080 Methane assessment and mitigation standards.
- 16.24.090 Abandonment and restoration standards.

**16.24.010 Area of Development.**

**A. Definition of Area of Development.**

A. In the case where a structure or structures is/are proposed on a vacant parcel, or in the case where subdivision of a parcel is proposed, or in the case of a phased development proposed to occur on several parcels in phases, the "Area of Development" is the entire proposed site, including the entire area of each and every parcel involved. For purposes of this chapter, this area shall also be referred to as the "Site," but in no case shall include area outside the property boundaries.

B. In the case of an addition to an existing structure, or construction of new structures on a parcel with existing structures, the "Area of Development" is (i) the portion of the Site which is within, or within ten (10) feet of, the area disturbed for grading as shown on a preliminary grading plan; or (ii) the portion of the Site lying under or within ten (10) feet of any addition or new structure built as a part of the project where no grading plan is required.

**16.24.020 Prerequisites to Site Plan and Design Review.**

A. For properties with abandoned wells, the City shall not deem any site plan and design review application complete pursuant to Chapter 20.52 until well discovery, leak testing, a well access exhibit, and the well abandonment report have been approved pursuant to Sections 16.24.030 through 16.24.060.

B. A fee shall be required for all permits and inspections, pursuant to Sections 16.24.030 through 16.24.060, in an amount established by City Council resolution.

C. Associated project review time shall be deducted from the project deposit at the established hourly billing rate.

**16.24.030 Well Discovery.**

A. Well Discovery Permit. A Well Discovery Permit, issued by the Oil Services Coordinator, shall be required prior to any site work or excavation. The permit shall establish the procedures for identification of the physical location and excavation of abandoned wells on the Site.

B. Notice. Prior to issuance of a Well Discovery Permit, the City shall prepare a notice to be mailed to all property owners within a one-hundred foot radius of the boundary of the subject property as shown on the last equalized assessment roll (unless the project entitlement requires an additional radii).

C. Survey of Wells. The owner or other responsible party shall submit a licensed survey of all wells within the Area of Development. The survey shall locate all active, idle and abandoned wells to ascertain their locations and document the depth of the well surface plate from the existing grade, or in the case of pending new development, the proposed depth. The well(s) shall be plotted on the site plan and include the NAD 83 well location or equivalent.

D. A.L.T.A. and Development Survey. The owner or other responsible party shall have an American Land Title Association (A.L.T.A.) survey of the Area of Development prepared including all culture.

**16.24.040 Leak Testing.**

A. Leak Testing Permit. A Leak Testing Permit shall be issued by the Oil Services Coordinator for all abandoned wells located within the Area of Development. Wells shall be tested for gas leakage and visually inspected for oil leakage.

B. Leak Testing of Wells. A leak test shall be completed utilizing a "GT-43" gas detection meter, or one of comparable quality approved in advance by the Oil Services Coordinator, and shall be conducted by a state licensed geotechnical or civil engineer or state registered environmental assessor, class II, or other as determined necessary by the Oil Services Coordinator. Following all testing and inspection, the test area shall be returned to its previous state and fencing may be required around the area, or the entire site, to the satisfaction of the Oil Services Coordinator.

C. Observation Report. The Oil Services Coordinator shall observe the leak test and prepare a Leak Test Observation Report documenting the date, time and summary of the testing and confirmation that venting material installation has been completed as described in Section G below and to the satisfaction of the Oil Services Coordinator.

D. Leak Testing Report. A Leak Test Report shall be prepared by a state licensed geotechnical or civil engineer or state registered environmental assessor, class II, and shall be submitted to the City for review and approval by the Oil Services

Coordinator. A well shall be considered leaking if the leak test report indicates the meter read is greater than 500 parts per million.

E. Leaking Wells. If wells are found to be leaking they shall be abandoned pursuant to Sections 16.23.010 and 16.23.020.

F. Retesting. An approved Leak Test Report is only valid for 24 months from City acceptance. If a building permit has not been issued by this time, retesting is required. Following all testing and inspection, the test area shall be returned to its previous state and fencing may be required around the area or the entire site to the satisfaction of the Oil Services Coordinator.

G. Venting. Following leak testing, vent risers and vent cones shall be installed. Cone and riser materials, design and installation shall be observed and inspected and approved by the Oil Services Coordinator and shall be in compliance with the recommendations contained in the Leak Test Report.

#### 16.24.050 Well Access Exhibit.

A. The Well Access Exhibit shall be prepared by the applicant and submitted to the Oil Services Coordinator. The exhibit shall illustrate whether or not access is provided to abandoned wells using the City's close proximity standard which depicts the DOGGR access recommendation. The close proximity standard is on file in the Community Development Department and publicly available (Exhibit A). The Oil Services Coordinator may approve alternative measures that maintain access to wells.

B. The Well Access Exhibit shall include all active, idle and abandoned wells, the proposed site plan, well discovery survey data pursuant to Section 16.24.030 and the location and use of all structures within 100 feet of the boundaries of the subject property. Each abandoned well shall be marked on the exhibit as one of the following:

1. "Access provided" for wells meeting the close proximity standard, or not proposed to be built over.

2. "No access" for wells with improvements proposed over, or in close proximity to the well.

#### 16.24.060 Well Abandonment Report.

A. A Well Abandonment Report shall be required for all abandoned wells marked as "no access" on the Well Access Exhibit and shall be submitted to the Oil Services Coordinator for review.

B. All abandonments and reabandonments, including wells not requiring a Well Abandonment Report, shall require a City Abandonment and Restoration Permit issued by the Oil Services Coordinator pursuant to Section 16.24.090.

C. The Well Abandonment Report shall include the following:

1. A statement of intent describing the purpose for the abandonment such as pending property sale, development, or redevelopment of all or a portion of the site for a use other than a petroleum operation and a proposed schedule for abandonment, demolition and development or restoration of the property. The statement shall include intent regarding the disposition of utilities that served the oil and gas operations, including fire protection, power, sewage disposal, transportation, and

water, as well as the name, address, and contact information for the permittee, and the address and a general description of the current land use of the subject property.

2. All data, reports and exhibits associated with the survey, leak test and well access pursuant to Sections 16.24.030, 16.24.040 and 16.24.050.

3. An Equivalency Standard Assessment Report prepared by the applicant's registered petroleum engineer and submitted for review by the City's Petroleum Engineer. The report shall include an assessment which is based on the DOGGR well bore data and well history including all correspondence with DOGGR regarding all abandonment proceedings. The assessment shall state whether each well meets, or does not meet, the City's equivalency standard pursuant to Section 16.24.070.

a. If a well is determined not to meet the City's equivalency standard, a Reabandonment Plan shall be submitted to the Oil Services Coordinator and shall include a copy of the DOGGR well bore data, well history and an assessment statement that the reabandonment is likely to meet the City's equivalency standard pursuant to Section 16.24.070.

b. If the well is determined to meet the City's equivalency standard the applicant shall submit the DOGGR documentation used to make the determination, including a copy of the DOGGR well bore data, well history and DOGGR confirmation of completion of the abandonment work.

4. An Abandonment Activities Plan that details the estimated hours of operation, number of workers, structures proposed for decommissioning, projected method and routes of transporting equipment, structures, and estimated debris from the property to the place of disposition as well as the number of trips required, and an estimated schedule for completion of the work.

5. A Waste Management Plan that details methods to maximize recycling and minimize wastes.

6. An Ongoing Development Plan that details any existing structures, roadways, and other improvements on the property proposed to be retained to support other existing or proposed uses of the property following abandonment of the oil or gas operations.

7. A Restoration Plan pursuant to Section 16.24.090 that details grading, drainage and measures proposed to prevent or reduce nuisance effects (e.g., dust, fumes, glare, noise, odor, smoke, traffic congestion, vibration) and to prevent danger to life and property, including a list of any other permits, as may be required for restoration pursuant to Title 15 of the City code.

8. Any other information deemed reasonably necessary by the Oil Services Coordinator to address site-specific factors.

D. The City's Petroleum Engineer shall review the Equivalency Standard Assessment Report and provide an assessment letter and a recommendation to the Oil Services Coordinator confirming whether the wells meet, do not meet, or if a Reabandonment Plan is required, are likely to meet the City's equivalency standard pursuant to Section 16.24.070.

E. Following receipt of the assessment letter from the City's Petroleum Engineer, the Oil Services Coordinator shall prepare a summary report for the well assessments and, for each well marked "no access" on the Well Access Exhibit, providing one of the following determinations:

1. For wells that meet the City's equivalency standard, a finding that "no additional work is required" shall be made and a determination that the project may proceed with site plan and design review pursuant to Chapter 20.52.

2. For wells that do not meet the City's equivalency standard, but are confirmed as likely to meet the standard, the Oil Services Coordinator shall make a finding that reabandonment shall proceed and shall issue a permit for proposed well abandonments pursuant to Section 16.24.090. Following completion of reabandonments the property owner or responsible party shall submit well bore data and well history, including all correspondence with DOGGR regarding abandonment proceedings and any field changes with an assessment from the applicant's petroleum engineer that the abandonment meets the City's equivalency standard. The Oil Services Coordinator shall make a finding that the abandonment meets the City's equivalency standard and that "no additional work is required" and the project may proceed with site plan and design review pursuant to Chapter 20.52.

3. If the applicant does not wish to complete the abandonments for wells qualified as described in Section 2 above, the Oil Services Coordinator shall make a finding that an "at risk" letter is required. The letter from the applicant shall acknowledge that the success or failure to complete well abandonments in compliance with the City's equivalency standard will determine whether wells may be built over or in close proximity to. Further, the letter shall state that it is understood that failure to abandon wells to the City's equivalency standard will prohibit development over or in close proximity to the wells resulting in revisions to the site plan and potentially additional site plan and design review pursuant to Chapter 20.52. Following receipt of the "at risk" letter, the Oil Services Coordinator shall make a finding that "reabandonment work is required and an 'at risk' letter has been provided" and the project may proceed with site plan and design review pursuant to Chapter 20.52. A required condition of approval for site plan and design review will be that:

4. City Abandonment and Restoration Permit. All abandonments and reabandonments shall require a City Abandonment and Restoration Permit issued by the Oil Services Coordinator pursuant to Section 16.24.090.

a. Field Modifications. It is the obligation of the property owner or responsible party to notify the Oil Services Coordinator prior to any changes made in the field to the abandonment plan. The applicant's petroleum engineer shall provide a revised assessment report with a determination that the final abandonment with intended field changes meets, or does not meet the City's equivalency standard.

b. Verification of Abandonment. Following completion of any abandonment work, the applicant shall submit all available DOGGR well bore data and well history including all correspondence with DOGGR regarding abandonment proceedings and any field changes from the initial abandonment plan with an assessment from the applicant's petroleum engineer that each well meets, or does not meet, the City's equivalency standard pursuant to Section 16.24.070. The Oil Services Coordinator shall verify that abandonments for wells proposed to be built over or marked as "no access" pursuant to Section 16.24.050(B), meet the City's equivalency standard prior to issuing a final of the permit. Any well that does not meet the standard shall not be built over or in close proximity to "Improvements" pursuant to Section 16.24.070.

#### 16.24.070 Abandonment Equivalency Standard.

A. Improvements proposed over or within close proximity to abandoned wells, shall not be permitted unless the Oil Services Coordinator has determined that the well has been abandoned to the City's equivalency standard.

1. Improvements are considered permanent structures or other construction that would be difficult or expensive to demolish should the abandoned or reabandoned well leak oil or gas in the future.

2. Pervious improvements, such as landscaping and parking areas with adequate landscape buffers, may be located on top of a previously abandoned or reabandoned well which has passed the leak test pursuant to Section 16.24.020.

B. Equivalency Standard. The following equivalency standard shall be required for construction of improvements over abandoned wells or within close proximity of abandoned wells pursuant to Section 16.24.050(B):

1. A cement plug located at the depth of the last zone produced from the well. All perforations shall be plugged with cement, and the plug shall extend at least 100 feet above the top of a landed liner, the uppermost perforations, the casing cementing point, the water shut-off holes, or the oil or gas zone, whichever is higher. If wellbore conditions prevent placement of the plug at the depth of the last zone produced from the well, approximately 100 feet of cement shall be placed inside and outside of the casing above (but as close as possible to) the last zone produced from the well.

2. A cement plug located at the depth of the base of the fresh water zone in the well. If there is cement behind the casing across the fresh-saltwater interface, a 100 foot cement plug shall be placed inside the casing across the interface. If the top of the cement behind the casing is below the top of the highest saltwater sands, squeeze-cementing shall be required through perforations to protect the freshwater deposits. In addition, a 100 foot cement plug shall be placed inside the casing across the fresh-saltwater interface. If wellbore conditions prevent placement of the plug at the depth of the base of the fresh water zone in the well, approximately 100 feet of cement shall be placed inside and outside of the casing above (but as close as possible to) the base of the fresh water zone in the well. This plug is to be separate and apart from the plug referenced in (1).

3. A cement plug located at the surface. The hole and all annuli shall be plugged at the surface with at least a 25 foot cement plug.

4. The intent of these plugs is to ensure that the abandonment is adequate to prevent hydrocarbons from reaching the surface. As an example, one continuous plug that significantly exceeds 100 feet located below the surface plug could be adequate to meet (1) and (2). Also, one plug that meets either (1) or (2) and a surface plug that significantly exceeds 100 feet could be found to prevent hydrocarbons from reaching the surface.

5. The City's consulting petroleum engineer shall determine if these conditions have been met and the abandonment is adequate to prevent hydrocarbons from reaching the surface of the well. The determination shall be based on, at a minimum, a review of a history of all work performed on the well and a detailed wellbore diagram showing the current condition of the well. The well bore diagram shall included details on:

- a. Hole size.
- b. Casing and liner specifications and setting depths.

- c. All cementing operations.
- d. Depths of various hydrocarbon zones.
- e. Any other data required to analyze the current conditions of the well including casing recovery operations and the presence of junk in the hole.

#### 16.24.080 Methane Assessment and Mitigation Standards.

A. The Area of Development on all properties in the City, whether or not they contain abandoned wells, shall be tested for methane gas prior to issuance of construction or development permits unless otherwise approved by the Oil Services Coordinator. In no case shall methane testing of the property be conducted less than 30 days after site disturbance.

B. A Methane Site Test Permit is required on all development sites where construction permits are required, whether or not there are wells located within the Area of Development. No methane tests shall be conducted without a permit issued by the Oil Services Coordinator.

C. A Site Methane Assessment is required for any property proposed for development. The assessment shall be conducted to the satisfaction of the Oil Services Coordinator and in accordance with the Methane Assessment Minimum Requirements Standard on file in the Community Development Department and publicly available. The assessment report shall be signed and stamped by a State of California registered geologist and submitted for review to the Oil Services Coordinator prior to any mitigation activity, if required, on the property. Methane assessment shall be conducted no less than 30 days following any soils disturbance on the site (Exhibit B).

D. If the methane site assessment requires mitigation, a Methane Mitigation Plan shall be prepared and submitted for review and approval by the Oil Services Coordinator prior to commencement of any mitigation work on site.

E. For properties subject to site plan and design review, pursuant to Chapter 20.52, if the applicant does not wish to complete the methane assessment and mitigation, if required prior to site plan and design review, the Oil Services Coordinator shall require that a letter of intent be submitted by the applicant stating their intent to conduct the property methane assessment and submit a mitigation plan, if required, as a condition of the site plan and design review.

#### 16.24.090 Abandonment and Restoration Standards.

A well abandonment and restoration permit shall be required for all properties in the City where a well abandonment permit is required whether or not the property is to be developed following the abandonment, or if development is proposed on a property with abandoned wells and a Well Abandonment Report is not required pursuant to Section 16.24060. The permit shall be issued following approval of the prerequisites to site plan and design review pursuant to Section 16.24.020.

A. A well shall be considered properly abandoned for purposes of this chapter after restoration of the drill site or oil operation site and subsurface thereof to its original condition, as nearly as practical, and in conformity with the following requirements:

1. A copy of the abandonment plan submitted to DOGGR and DOGGR and authorization to abandon, reabandon or remediate the well is provided.

2. All equipment and surface installations used in connection with the well which are not necessary as determined by the Oil Services Coordinator for the operation or maintenance of other wells of operator or permittee on the drill or operation site shall be removed from the premises.

3. The premises, all sumps, cellars, and ditches which are not necessary for the operation or maintenance of other wells of operator or permittee on the site shall be cleaned out and all oil, oil residue, drilling fluid, and rubbish shall be removed or bioremediated to reduce hydrocarbons to standards acceptable to federal, state, or local agencies. All sumps, cellars, and ditches shall be leveled or filled. Where such sumps, cellars, and ditches are lined with concrete, permittee or operator shall cause the walls and bottoms to be broken up and all concrete shall be removed.

4. The premises shall be cleaned and graded and left in a clean and neat condition free of oil, rotary mud, oil-soaked earth, asphalt, tar, concrete, litter, and debris and any facilities to remain shall be painted and maintained reasonably free of rust, oil, or stains, to the satisfaction of the Oil Services Coordinator.

5. NPDES standards for stormwater run-off and dust and erosion mitigation measures shall be complied with, to the satisfaction of the City Engineer and the Oil Services Coordinator.

6. All public streets, alleys, sidewalks, curbs and gutters, and other places constituting public property which may have been disturbed or damaged in connection with any operation, including operations for the abandonment of the well, shall be cleaned, and, except for ordinary wear and tear, shall be repaired and restored to substantially the same condition thereof as the same existed at the time of issuance of the permit, or at the time operations were first commenced in connection with the drilling, operation, or maintenance of the well.

B. Prior to issuance of any certificate of occupancy for developments constructed over abandoned wells, or for abandoned wells marked "no access" pursuant to Section 16.24.050(B), the property owner shall record a declaration of covenants, conditions and restrictions (CC&Rs), in a form subject to the review and approval of the City Attorney, putting future owners and occupants on notice of the following: the existence of abandoned wells on the site; that the wells within the Area of Development have been leak tested and found not to leak; description of any methane mitigation measures employed; disclosure that access to these wells has been provided to address the fact that they may leak in the future causing potential harm; acknowledgment that the state may order the reabandonment of any well should it leak in the future; acknowledgment that the state does not recommend building over wells; and releasing and indemnifying the City for issuing project permits.

C. DOGGR Authority. Nothing herein is intended to displace any authority of DOGGR under Chapters 2, 3 and 4 of Division 2 of Title 14 of the California Code of Regulations or set aside or annul any action of DOGGR pursuant to its authority. However, these provisions shall control the development of property where DOGGR merely makes advisory recommendations beyond the agency's statutory authority.

D. Grandfathering. This section shall not apply to any project which has been approved by the City or its constituent boards, commissions or officials prior to the date of the adoption of this section, so long as such approvals remain valid. The required approvals include a valid approval from DOGGR, but if such approvals have expired, the project shall be governed by this section. Any application for discretionary

land use development entitlements under Chapter 20.52 of the Municipal Code which is being processed shall be subject to the requirements hereof.

**Section 9.** That Chapter 20.52, SITE PLAN AND DESIGN REVIEW DEFINITIONS be amended to modify Sections 20.52.030, 20.52.040 and 20.52.050 to read as follows:

20.52.030 Review Procedures.

A. Informal Review. Prior to filing a formal application for site plan and design review, applicants are encouraged to submit drawings to the department of planning and community development for informal review and comments. Applicants with applications subject to planning commission site plan and design review are further encouraged to schedule, through the department of planning and community development, an informal review workshop with the planning commission prior to processing a final application for site plan and design review.

B. Prerequisites to Review. For properties with abandoned wells, prior to filing a formal application for site plan and design review, applicants must complete the prerequisite requirements pursuant to Section 16.24.020 and the Oil Services Coordinator shall submit a summary report pursuant to Section 16.24.060, including provision of an “at risk” letter if the intent is not to complete well abandonments prior to site plan and design review. The letter shall acknowledge that the success or failure to complete well abandonments in compliance with the City’s equivalency standard will determine whether wells may be built over or in close proximity to as indicated on the Well Access Exhibit marked “no access”, pursuant to Section 16.24.050(B). Further, the letter shall state that it is understood that failure to abandon wells to the City’s equivalency standard will prohibit development over or in close proximity to the wells resulting in revisions to the site plan and potentially additional site plan and design review pursuant to Chapter 20.52.

B.C. Review by the Director. The site plan and design review applications set forth in this subsection shall be reviewed and approved, conditionally approved, or denied by the director of the department of planning and community development or the director's designated representative, based on findings made pursuant to Section 20.52.050 and without prior notice to the applicant. However, the applicant shall be notified in writing of the director's decision. If the director of the department of planning and community development approves a site plan or design review application under this subsection, the applicant shall be entitled to issuance of necessary permits upon compliance with all preconditions to such issuance after expiration of the appeal period as provided in subsection D of this section. The director of the department of planning and community development may refer any application made pursuant to this section to the planning commission for determination. All site plan and design review applications filed in conjunction with variance, conditional use permit, zoning ordinance amendment and tentative tract map requests will be reviewed by the planning commission. Those site plan and design review applications subject to the director's approval are as follows:

1. Construction of new buildings, additions or extensions which are ten thousand square feet or less in gross floor area in any commercial or industrial zone;

2. Construction of first story additions or extensions of five hundred square feet or less (exclusive of garages, covered or uncovered patios, balconies, and walkways, eaves for other architectural projections, and uncovered tennis courts, pools, spas, and similar recreational facilities) to an existing dwelling unit;

3. All exterior structural and physical improvements, relocations, and/or exterior alterations of or to existing buildings and structures, including physical site improvements. Physical site improvements shall include, but are not limited to, landscaping, parking and loading areas, driveways, walls, signs, fences and trash enclosures.

**C. D.** Review by the Planning Commission. The director of the department of planning and community development or the director's designated representative shall review all applications and site plans submitted pursuant to Section 20.52.040 to determine if they are complete. Except as provided in subsection B of this section, the application and accompanying drawings, if deemed complete, shall be forwarded to the planning commission for review and determination at a regularly scheduled meeting in accordance with the submittal deadlines for such meetings as posted in the department of planning and community development. The applicant shall be notified within thirty calendar days on the completeness of the application. If the application is deemed complete, notification will include the tentatively scheduled date of the formal review. If the application is deemed incomplete, notification will include a list of items necessary to complete the application, and a date by which all of the information must be submitted in order to be scheduled for the next regular hearing date. Notice of the hearing on the application for site plan or design review shall be given as provided in subsection F of this section. The planning commission shall make findings as set forth in Section 20.52.050, and based on such finds shall either approve, conditionally approve, or deny any application for site plan or design review. The planning commission may, from time to time, continue its deliberations on any application to another meeting or meetings.

**D. E.** Appeals to Planning Commission. Except as otherwise provided in subsection B of this section, the applicant or any aggrieved party may appeal to the planning commission a decision of the director of the department of planning and community development to deny or conditionally approve any application for site plan and design review by filing an appeal in writing with the director of the department of planning and community development within ten calendar days following the date of written notification to the applicant of the director's decision.

If a timely appeal is not filed, the director's decision shall be final. The planning commission shall hear the matter at their next regularly scheduled meeting at which the matter can be heard. Notice of the hearing on the application for site plan and design review shall be given as provided in subsection F of this section. The planning commission may sustain, modify, or overrule the decision of the director. In so doing, the planning commission shall make the findings and apply the standard of review contained in Section 20.52.050. The determination of the planning commission shall be final unless an appeal to the city council is timely filed.

**E. F.** Appeals to the City Council. The applicant or any aggrieved party may appeal to the city council any decision of the planning commission on an application for site plan and design review by filing an appeal in writing with the city clerk within ten calendar days of the planning commission meeting at which the matter can be heard. Notice of the hearing on the application for site plan and design review shall be given as provided in subsection F of this section. The city council may sustain,

modify, or overrule any decision of the planning commission. In so doing, the city council shall make findings and apply the standard of review set forth in Section 20.52.050. The decision of the city council shall be final.

**F.G.** Notice of the Hearing. Whenever notice of a planning commission or city council hearing on a site plan or design review application is required by this section, such notice shall be sufficient if given in writing by first class mail, at least ten days prior to the date of the hearing, to the applicant and those property owners, as shown on the last equalized assessment roll, whose property is within a one-hundred-foot radius of the boundary of the subject property. The notice shall also be published in a newspaper of general circulation at least ten days prior to the hearing.

#### 20.52.040 Application and Submission of Site Plan.

##### A. Application Requirements.

1. For review by the director of planning and community development, pursuant to Section 20.52.030, the applicant shall submit a completed site plan and design review application on a form provided by the department, four sets of site plans, and required fees.

2. For review by the planning commission, pursuant to Section 20.52.030, the applicant shall submit a completed application, and all required fees to the department of planning and community development. The applicant shall also submit twenty sets off architectural elevations, landscape and site plans, two sets of plain white gummed mailing labels with the addresses of all property owners within one hundred feet of the subject property and a radius map, clearly indicating those other properties within one hundred feet of the subject property, and any other supporting documentation such as title reports, photographs, material boards, etc., required by the department of planning and community development.

B. Required Information. The submittal shall include the following information:

1. Fully dimensioned site plan including the following:
  - a. Name, address, and phone number of applicant, property owner, and architect/designer,
  - b. The correct legal description, including the assessor's parcel number,
  - c. Lot dimensions,
  - d. All buildings and structures on site and within the public rights-of-way,
  - e. Fully dimensioned floor plans showing the proposed use of each area, and all corridors, doorways and restrooms,
  - f. Yards and spaces between buildings, including dimensions,
  - g. Walls and fences and their location, height and materials,
  - h. Off-street parking location, number of spaces and dimensions of parking area, internal circulation pattern, and type of paving,
  - i. Pedestrian, vehicular, and service access, points of ingress and egress, internal circulation,
  - j. Signs and their location, size, height, materials and lighting,
  - k. Handicapped spaces, location and ramps,
  - l. Loading location, dimensions, number of spaces and internal circulation,

m. Light location and details, hooding devices,  
n. Required street dedications, and improvements, as provided in Section 20.52.070,

o. For residential construction, a statement of intent to use dwelling units(s) as model home(s), or if no such use is intended, a statement to that effect;

p. All abandoned oil wells and all accompanying information, as required by Section 16.24.020 through 16.24.060.

q. A letter of intent to conduct a property methane assessment and submit a mitigation plan pursuant to Section 16.24.080(E).

2. A landscaping and irrigation plan showing location, spacing and size of landscape materials as they will appear after three years of growth, and a list of proposed species including the common botanical name. Street trees and existing on-site trees must also be shown and identified where necessary. Existing trees to be removed or retained shall also be shown and identified;

3. Hardline drawings of building elevations showing all sides of the proposed building(s) as they will appear upon completion, including proposed colors and materials, screening details for mechanical equipment, and building height. Elevations may be required to include graphic representation of official datum line and maximum building height and shall include human figures to indicate scale of proposed structure;

4. Drainage pattern and structures;

5. Towers, chimneys, roof structures, flagpoles, radio and television masts, all mechanical equipment external to main or accessory structures, and their location, design, site, height, materials, colors, screening, and architectural treatment;

6. Oil wells within fifty feet of subject property;

7. Detailed sign plan, indicating sign location, dimensions, materials, colors, lighting and mounting details for all signs, including directional, advertising, business and project identification signs;

8. Environmental data and supporting documentation sufficient for the director of planning and community development, as the case may be, to make adequate findings pursuant to the requirements of California Environmental Quality Act of 1970;

9. For any new development which proposes to locate any portion of any dwelling within six hundred feet of an operating oil well, injection well or any other appurtenant oil field equipment, the applicant shall, as part of the site plan and design review application, comply with all the requirements of Section 9.16.085, including preparation of a joint oil field equipment noise mitigation plan and/or a development applicant oil field equipment noise mitigation plan, and shall be required to implement the plan in conjunction with the development of the residential projects. No site plan and design review application shall be deemed complete until the plan is submitted to and approved by the director of planning.

10. In addition to the above, the planning director or planning commission may require additional information including the following:

a. Section through sites,

b. Preliminary grading plans,

c. Colored renderings and/or perspective drawings,

d. Site line drawings indicating relationship of proposed buildings and structures to existing structures on adjacent properties and to any public

street or other public areas where views may be affected. Site line drawings are to include the view of the hill from major, secondary and secondary modified streets and any other public areas, if, in the determination of the director of planning and community development, the size and/or location of such structure may affect views of or vistas to the hill,

- e. Traffic studies required if project is in traffic study area,
- f. Acoustical reports,
- g. A scale model of proposed structures which may be required to indicate structures on adjoining properties,
- h. Any other information pertinent to the application.

C. Model Homes. As a condition of site plan and design review

approval for any residential project which will include the use of model home(s), the applicant shall submit operations plans for same for review and approval by the planning commission. The planning commission may require such changes or conditions of approval for proposed operations plans as deemed necessary to protect the health and safety of the general public and of residents and occupants of structures likely to be affected by model home(s) operations, consistent with provisions of applicable city, state, and federal policies, codes, and standards.

1. Planning Commission Review. Review of model home(s) operations plans by the planning commission shall not require a public hearing, but shall be conducted at a regularly scheduled planning commission meeting. Filing deadlines for operations plans shall be the same as set forth for planning commission public hearing agenda items;

2. Submittal Requirements. The applicant shall submit ten copies of operations plans as part of the first plan check submittal subsequent to site plan and design review approval of the project by the planning commission. The operations plans shall include site plans and documentation representing the following:

- a. The location of model home(s) and the relationship of each to adjacent development and to adjoining surface streets,
- b. The location and number of proposed visitor and employee parking stalls,
- c. Proposed vehicular circulation routes to and from proposed customer parking areas, and on-site and off-site directional signs, barriers, and other devices necessary to protect and promote the safety of visitors to the sites,

d. Proposed pedestrian circulation routes between and among model homes, and between customer parking and model home(s), and directional signs, barriers, and other devices necessary to protect and promote the safety of visitors to the sites,

e. The proposed dates model home(s) would become operational and the relationship of same to the completion dates of other dwelling units within the project,

- f. Proposed days and hours of operation,
- g. The number of employees expected to be on the model home(s) site at any given time during operating hours.

D. Property within Redevelopment Agency Areas. If the application pertains to property which is located within a redevelopment project area, the application shall also include, as deemed necessary by the director of planning and community development, an explanation of how the site plan complies with the applicable redevelopment plan and regulations of the redevelopment agency.

E. Fees. The fees shall be such as the city council may by resolution establish from time to time.

20.52.050 Findings and standard of review.

A. Findings. In approving or conditionally approving a site plan and design review application, the director of planning and community development, the planning commission or city council, as the case may be, shall find that:

1. The proposed project is in conformance with the general plan, zoning ordinance, and other ordinances and regulations of the city;

2. The proposed project is in conformance with any redevelopment plan and regulations of the redevelopment agency and any executed owner's participation agreement or disposition and development agreement;

3. The following are so arranged as to avoid traffic congestion, to ensure the public health, safety, and general welfare, and to prevent adverse effect on surrounding properties:

- a. Facilities and improvements,
- b. Pedestrian and vehicular ingress, egress, and internal circulation,
- c. Setbacks,
- d. Height of buildings,
- e. Signs,
- f. Mechanical and utility service equipment,
- g. Landscaping,
- h. Grading,
- i. Lighting,
- j. Parking,
- k. Drainage,
- l. Intensity of land use;

4. The topography is suitable for the proposed site plan and the site plan, as proposed, is suitable for the use intended;

5. The proposed development provides for appropriate exterior building design and appearance consistent and complementary to present and proposed buildings and structures in the vicinity of the subject project while still providing for a variety of designs, forms and treatments.

B. Site Plan and Design Review Criteria. In reviewing any site plan or design review application pursuant to the requirements of this chapter, the director of the department of planning and community development, the planning commission, or the city council, as the case may be, shall utilize the following criteria:

1. The overall development plan integrates land with building forms and achieves architectural unity and environmental harmony within the development, consistent with the objective of emphasizing and enhancing the positive aesthetic characteristics existing, developing or to be developed in the surrounding area;

2. Structures shall be situated so as to respect and respond to the existing topography, to minimize alteration of natural land forms, to minimize disruption of desirable trees and vegetation, and to minimize interference with the privacy of and views from surrounding properties;

3. Building pads should be established and graded as near to existing topographic elevations as possible and in such manner as to blend with contours of adjoining properties and avoid abrupt transitions;

4. The size and location of proposed structures enhance, protect or minimize interference with the views of or vistas to the hill which is that area generally bounded by Willow Street on the north, 21st Street on the south, Cherry Avenue on the west and Temple Avenue on the east, from major, modified, and secondary modified streets and from any other public areas;

5. Exterior building treatments are restrained, not harsh or garish, and selected for durability, wear characteristics, ease of maintenance, and initial beauty. All exterior treatments are coordinated with regard to color, materials, architectural form and detailing to achieve design harmony and continuity. Exposed metal flashing or trim should be anodized or painted to blend with the exterior colors of the building;

6. Rooflines on a building are compatible through-out the development and with surrounding development;

7. Buildings and related outdoor spaces are designed to avoid abrupt changes in building scale. The height and bulk of buildings are in scale with surrounding sites and do not visually dominate the site or call undue attention to buildings. Structures higher than two stories emphasize horizontal, as well as vertical appearance, e.g., by the use of projection or recession of stories, balconies, horizontal fenestration, changes in roof levels or planes, landscaping or outdoor structures or detailing, to convey a more personal scale;

8. The development protects the site and surrounding properties from noise, vibration, odor, and other factors which may have an adverse effect on the environment;

9. The designs of buildings, driveways, loading facilities, parking areas, signs, landscaping, lighting and other project features are responsive both to functional requirements, such as automobile, pedestrian and bicycle circulation, and to aesthetic concerns including the visual impact on other properties and from the view of the public street;

10. The designs of accessory structures, fences and walls are harmonious with main buildings, insofar as possible, the same building materials are used on all structures on the site;

11. Proposed signs, and the materials, size, color, lettering, location and arrangement thereof, are an integrated part of and complementary to the overall design of the entire development;

12. Landscaping is incorporated in such a way as to complement the overall development, enhance visual interest and appeal, and visually integrate buildings within the natural setting. Landscaping shall include combinations of trees, shrubs, turf, and groundcover with major emphasis on utilization and retention of native species and drought tolerant plant materials suited to local climatic conditions. Landscaping in parking areas shall be located so as to provide visual relief from expanses of paved surfaces. Landscaping buffers shall be used to screen exterior trash and recycling areas, loading docks and ramps, electrical utility boxes and transformers, and fire flow valves and backflow preventers;

13. Landscape buffers should also be used, in conjunction with earthen berms, to minimize the visual impact and presence of vehicles by screening them from view to the extent feasible from both on-site and off-site vantage points;

14. Mechanical and utility service equipment is designed as part of the structure or is screened consistent with building design. Electrical transformers shall not be located in required front yard setbacks. Large vent stacks and similar features should be avoided, but if essential, are screened from view or painted to be nonreflective and

compatible with building colors. Rooftop mechanical equipment shall be screened from view of public rights-of-way or integrated into the design of the structure. Particular attention should be paid to minimizing the visual impact of rooftop equipment which may be visible from properties or rights-of-way at higher elevations;

15. Natural space-heating, cooling, ventilation and day lighting are provided, to the extent possible, through siting, building design and landscaping. Deep eaves, overhangs, canopies and other architectural features that provide shelter and shade should be encouraged;

16. Trash enclosures and truck loading areas, to the extent feasible, shall be located out of view from public rights-of-way, and shall be of appropriate size and shape to accommodate additional receptacles for recycling materials;

17. Proposed building, walkway, and parking lighting enhances building design and landscaping, as well as security and safety, and does not create glare for occupant on adjoining properties;

18. Drainage is provided so as to avoid flow onto adjacent property;

19. On new development, all utility facilities are underground;

20. Adequate provisions are made for fire safety;

21. All **Oil and Gas** Code development standards contained in Section 16.24.020 are met,

22. All zoning ordinance development standards are met.

#### 20.52.050 Findings and Standard of Review.

21. All Oil and Gas Code development standards contained in Chapter 16.24 are met, and a condition of approval has been added that prior to issuance of any certificate of occupancy for developments constructed over or in close proximity to abandoned wells, the property owner shall record a declaration of CC&Rs, in a form subject to the review and approval of the City Attorney, putting future owners and occupants on notice of the following: the existence of abandoned wells on the site; that the wells within the Area of Development have been leak tested and found not to leak; description of any methane mitigation measures employed; disclosure that access to these wells has been provided to address the fact that they may leak in the future causing potential harm; acknowledgment that the state may order the reabandonment of any well should it leak in the future; acknowledgment that the state does not recommend building over wells; and releasing and indemnifying the City for issuing project permits.

**PASSED, APPROVED AND ADOPTED** at a regular meeting of the Planning Commission of the City of Signal Hill, California, on this 14th day of April, 2015.

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TOM BENSON  
CHAIR

ATTEST:

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SCOTT CHARNEY  
COMMISSION SECRETARY

STATE OF CALIFORNIA        )  
COUNTY OF LOS ANGELES     ) ss.  
CITY OF SIGNAL HILL        )

I, Scott Charney, Secretary of the Planning Commission of the City of Signal Hill, do hereby certify that Resolution No. \_\_\_\_\_ held on the 14<sup>th</sup> day of April, 2015, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

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SCOTT CHARNEY  
COMMISSION SECRETARY



**3**



995 E. 27<sup>th</sup> Street  
Request for a Construction  
Time Limit Extension

## CITY OF SIGNAL HILL

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2175 Cherry Avenue ♦ Signal Hill, CA 90755-3799

### PROCEDURES RELATIVE TO PUBLICLY NOTICED DIRECTOR'S REPORTS

1. At the request of the Mayor/Chair, the City Clerk/Secretary reports on the Form of Notice given:
  - a. Notice was posted in accordance with Signal Hill Municipal Code Section 1.08.010 on April 3, 2015.
  - b. Mailed to property owners within a 300' radius on April 3, 2015.
2. Mayor/Chair asks for a staff report, which shall be included in written materials presented to the City Council/Commission so that they can be received into evidence by formal motion.

In addition, the staff report shall include the following:

- a. Summarize the resolution/ordinance;
- b. The specific location of the property, and/or use, the surrounding properties;
- c. The criteria of the Code which applies to the pending application; and
- d. The recommendation of the Council/Commission and/or other legislative body of the City and staff recommendation.

3. Mayor/Chair declares the public comment period open.
4. Mayor/Chair invites those persons who are in favor of the application to speak.
5. Mayor/Chair invites those persons who are in opposition to the application to speak.
6. Applicant or their representative is provided a brief rebuttal period.
7. Mayor/Chair declares the public comment period closed.
8. Discussion by Council/Commission only.
9. Commission motion and action.



## CITY OF SIGNAL HILL

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2175 Cherry Avenue ♦ Signal Hill, CA 90755-3799

April 14, 2015

### **AGENDA ITEM**

**TO: HONORABLE CHAIR  
AND MEMBERS OF THE PLANNING COMMISSION**

**FROM: COLLEEN DOAN  
ASSOCIATE PLANNER**

**SUBJECT: DIRECTOR'S REPORT – 995 E. 27<sup>TH</sup> STREET REQUEST FOR A  
CONSTRUCTION TIME LIMIT EXTENSION**

#### **Summary:**

The project manager, Tarak Mohamed, on behalf of the Long Beach Islamic Center is requesting approval of an extension to the construction time limits (CTL) that expire April 30, 2015. The request is to allow 80 additional days to complete construction of the religious facility at 995 E. 27<sup>th</sup> Street. The request for 80 days is the maximum time allowed for non-residential projects less than 10,000 square feet. This is the first of two possible extensions allowed by the CTL ordinance.

The construction time limit ordinance was established in response to concerns over delays at construction projects and to mitigate the negative impacts and nuisances associated with long running projects. Based on the project history, staff has scheduled the item for Planning Commission consideration to give the public and Commission an opportunity to comment before the Community Development Director renders a decision.

#### **Recommendations:**

- 1) Receive testimony; and
- 2) Provide comments to the Community Development Director to take into consideration when approving or denying the first extension request.

**Background:**

In May 2007, the Long Beach Islamic Center applied for a Conditional Use Permit (CUP) for a religious facility located at 995 E. 27<sup>th</sup> Street in the CG, Commercial General zoning district. The Planning Commission approved a Site Plan and Design Review (SPDR) for a 2,025 square foot religious facility and recommended City Council approval of a Negative Declaration and CUP.

In June 2007, the City Council approved a Negative Declaration and CUP for the facility.

In June 2008, the applicant requested and was granted a six-month extension for the SPDR and a two-year extension for the CUP by the Director of Community Development.

In December 2008, the Planning Commission granted an additional six-month extension for the SPDR at the request of the applicant.

In June 2009, although the applicant had completed the plan check process and had approved plans for construction, they reported that they did not have financing to begin construction, therefore the SPDR expired.

In October 2009, the applicant reapplied for a new SPDR which was granted.

In March 2010, building permits were issued, construction commenced, and tracking of the SPDR and CUP was no longer necessary as they were then tied to the life of the building permit.

In September 2010, Planning Commission authorized a revision to the exterior finish of two of the walls replacing the stucco finish with split face block.

In May 2013, construction stalled due to lack of project management and funding. Despite a letter of caution and specific direction in the field from the Building Department about items necessary to keep the building permit active, the permits expired. As a consequence, the SPDR and CUP also expired.

On June 18, 2013, in response to a series of long running construction projects in the City, the City Council adopted an ordinance establishing construction time limits for development projects. The time limits are based on project size and type and have provisions for time extensions, fees and penalties.

In June 2013, at the applicant's request staff met with the applicant to map out the steps necessary to obtain new approvals for SPDR and a CUP. The first item was to prepare a current abandoned well survey and complete the leak testing required under the newly adopted Oil Code. At that time the applicant expressed a desire to revise the floor plan. Staff informed the applicant that the revisions did not comply with the parking standards.

In August 2013, the applicant provided a well survey, conducted a methane leak test to the satisfaction of the Building Official, however, vent cones and risers were necessary to satisfy all the Oil Code requirements for abandoned wells.

On October 8, 2013, the Planning Commission conducted a public hearing for the third request for SPDR. Two members of the public spoke in favor of the project and no one spoke in opposition. With a 5-0 vote, the Planning Commission approved the SPDR and recommended City Council approve the CUP. Three new conditions were added to the SPDR as follows:

- A 540 day construction time limit under the new CTL ordinance.
- Specifications for the new fiberglass dome material.
- Current contact information for the construction Project Manager.

On October 15, 2013, the City Council conducted a public hearing and approved the second request for a CUP with a 5-0 vote.

On October 31, 2013, a building permit was renewed, marking the beginning of the CTL 540 days to completion. At that time the Building Department noted in writing the items that were necessary to complete prior to continuation of construction on the building as follows:

- Install well vent cones and vent risers on abandoned wells, with inspections.
- Install erosion control per plan with inspection.
- Install and maintain proper mesh screening on fences, with inspection.
- Rough grade site per approved plans and submit completed grading certification.
- Schedule an inspection of existing site walls and complete walls.
- An inspection by a state licensed architect or engineer and a structural observation report is required.

In addition plans were revised to meet current building code standards.

The following progress has been made on site since October 31, 2013.

- October 31, 2014, an under slab plumbing permit was issued for relocation of existing plumbing.
- November 20, 2014, the rough plumbing and electrical were completed.
- January 9, 2015, dry wall was being installed
- January 9, 2015, some finish grade work was occurring, however, the grade work was not being done per the plans and the grader did not have the plans on site.

Although in 2013, the project manager estimated one year to complete the project, progress has been slow. The owner has informally requested numerous interior and external revisions during the last 540 days. The interior revisions would not meet the City's development standards.

On January 13, 2015, during public discussion with the project manager, the Planning Commission emphasized that they did not wish to consider any changes to the approved plans, but wished the project to proceed to completion as rapidly as possible.

On February 23, 2015, a notice was sent to the project manager reminding him that there were 60 days left on the initial construction time limits and that they had two possible extensions available.

On March 11, 2015, the property manager submitted a letter requesting an 80 day CTL extension.

On March 18, 2015, a notice was sent to property owners within a 300' radius allowing 10 days to provide public comment or objection on the first request for an extension. No comments were received.

On April 3, 2015, a notice was sent to property owners within a 300' radius and posted in accordance with Signal Hill Municipal Code Section 108.010, that the Planning Commission will conduct a public meeting to consider the first request for an extension of the CTL.

### **Analysis:**

The following list includes the items completed since the Commission heard a status report at the January 2015 Commission meeting:

- Dry wall installation is complete.
- The parking lot is paved with planters and drains installed.
- Parking lot lights are being installed.

The following items remain to be completed:

- Parking lot – striping, lighting, landscaping.
- Exterior – stucco and paint, arches, columns, windows and doors.
- Interior – paint, fixtures, flooring, bathrooms.
- Utilities – Edison, water, HVAC.
- Street Improvements – Bonded.



The owner has indicated that they need the maximum extension of 80 days to complete the project. Staff requested a schedule and the applicant failed to provide it as of the date of this staff report.

### Criteria

The first extension request is considered by the Community Development Director and second requests are reviewed by the Commission. The code includes criteria for approving extensions based on a determination that the request demonstrates good cause. The following criteria are provided to assist in evaluating good cause:

- Whether substantial progress has been made.
- Whether the condition of the property presents health or safety hazards.
- Whether the site topography has created delays.
- Whether delays are due to material suppliers or labor problems.
- Whether there has been an earthquake, fire, flood, explosion, act of God, or other circumstances beyond the applicant's control.
- Whether delays are due to City or other government actions, and/or other unusual circumstances.

The project manager has stated that delays are related to revisions required by the new building code. The Building Inspector believes that it is possible to complete the project within the requested 80 days, however, a faster pace would be necessary.

Approved:

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Scott Charney



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## CITY OF SIGNAL HILL

2175 Cherry Avenue ♦ Signal Hill, CA 90755-3799

April 14, 2015

### **AGENDA ITEM**

**TO: HONORABLE CHAIR  
AND MEMBERS OF THE PLANNING COMMISSION**

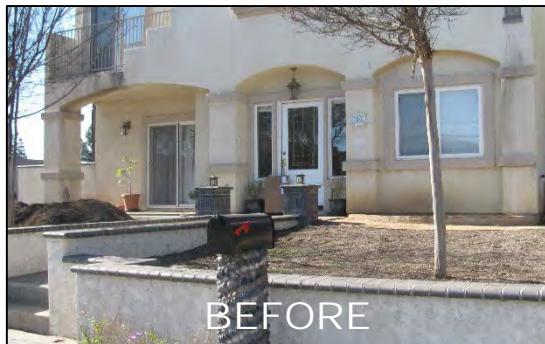
**FROM: GINNY HELLERUD  
ADMINISTRATIVE ASSISTANT**

**SUBJECT: DIRECTOR'S REPORT - BEAUTIFICATION AWARD**

### **Summary:**

Staff received two nominations for the Beautification Award:

#### **2001 Obispo Avenue**



In addition to the home's custom, handcrafted rock work on the flower bed walls and mailbox stand, the property owners of this single-family home in the Hilltop neighborhood have made significant improvements to the front yard. Their yard now showcases low maintenance and low water landscaping. New plantings include flower beds featuring a variety of succulents and cacti, drought tolerant flowers, and decorative rocks.

1127 E. 25<sup>th</sup> Street – Century Calibrating



This Signal Hill business replaced much of its turf and now features borders of turf with low maintenance plantings, mulch and decorative rock. Vines growing along the front of the building and parking lot wall softens the expanse of walls. The site is surrounded by attractive green-screen fencing and the entire site demonstrates a well maintained appearance. Best of all, there the site has its own miniature pumpjack!

**Recommendation:**

Consider any additional nominations and select recipient(s).

Approved by:

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Scott Charney



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## CITY OF SIGNAL HILL

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2175 Cherry Avenue ♦ Signal Hill, CA 90755-3799

April 14, 2015

### **AGENDA ITEM**

**TO: HONORABLE CHAIR  
AND MEMBERS OF THE PLANNING COMMISSION**

**FROM: SCOTT CHARNEY  
COMMUNITY DEVELOPMENT DIRECTOR**

**SUBJECT: MINUTES**

### **Summary:**

Attached for your review and approval are the minutes of last month's regular meeting.

### **Recommendation:**

Approve.

**A REGULAR MEETING OF THE CITY OF SIGNAL HILL  
PLANNING COMMISSION**  
**March 10, 2015**  
**7:00 P.M.**

**CALL TO ORDER**

Chair Benson called the meeting to order at 7:00 p.m.

**ROLL CALL**

The Commission Secretary conducted roll call.

Present:      Chair Tom Benson  
                 Vice-Chair Jane Fallon  
                 Commissioner Devon Austin  
                 Commissioner Shannon Murphy  
                 Commissioner Rose Richárd

Staff present:

- 1)      Community Development Director Scott Charney
- 2)      Associate Planner Colleen Doan
- 3)      Assistant Planner Selena Alanis
- 4)      Assistant City Attorney David Kwon
- 5)      Sr. Engineering Technician II Anthony Caraveo

In addition, there were 4 people in attendance.

**PLEDGE OF ALLEGIANCE**

Chair Benson led the audience in reciting the Pledge of Allegiance.

**PUBLIC BUSINESS FROM THE FLOOR**

There was no public business.

**PUBLIC WORKSHOP**

**1.      Revised Plans for Addition to Single-Family Dwelling at 3347 Brayton Avenue**

Community Development Director Scott Charney read the form of notice and Assistant Planner Selena Alanis gave the staff report.

Chair Benson asked if there were any questions from the Commission. There being no questions, Chair Benson opened the public workshop.

The following member of the public spoke regarding the project:

- 1) Reginald McNulty, owner of 3347 Brayton, spoke in support of the project, thanked the Commission and offered to answer any questions.

Commissioner Richárd asked if the colors depicted in the renderings would be those used for the home. Mr. McNulty advised the colors would be the colors depicted on the story board.

Chair Benson commented on an interior wall at the doorway to the garage. Mr. McNulty stated he had considered removing the wall but would make a final decision once the structural calculations are complete.

There being no further public testimony, Chair Benson closed the public workshop.

Vice-Chair Fallon complimented the applicant on the design of the remodel. She noted the unusual roofline, but stated the home would be an improvement to the neighborhood.

Commissioner Austin asked if part of the yard area would remain as open space. Staff advised that the yard indicated on the plan would remain.

Commissioner Richárd stated she was in favor of the project. She noted how the applicant had worked regularly with staff and wished him well on the project.

Chair Benson commented on the differences in the roof lines and design between the main residence and second unit. Commissioner Murphy asked if the roofline was due to height requirements. Staff advised they would discuss the roofline design with the applicant.

It was moved by Vice-Chair Fallon and seconded by Commissioner Richárd to schedule the project for a public hearing.

The motion carried 5/0.

## **DIRECTOR'S REPORTS**

### **2. General Plan Annual Progress Report**

Community Development Director Scott Charney, Associate Planner Colleen Doan, and Assistant Planner Selena Alanis gave the staff report.

Commissioner Austin stated that with regard to the Circulation Element and Cherry Avenue Widening project, she has only seen one sign put up to discourage non-residential drivers at Cherry Avenue and 21<sup>st</sup> Street and suggested additional signage.

Chair Benson stated that at the March 5<sup>th</sup> City Council meeting, additional signage

was discussed with the Public Works Director. Commissioners Austin and Richárd and Chair Benson had comments regarding the Circulation Element and the Cherry Avenue Widening project related to temporary cut through access in neighborhoods adjacent to Cherry Avenue. Staff advised the concern will be passed on to the Public Works Department and the Public Works Director will be invited to attend the next Commission meeting to provide an update.

Chair Benson asked if members of the public had any comments or questions. There being no public testimony, Chair Benson thanked and complimented staff on the details and effort that had been put into the Annual Progress Report. Commissioner Murphy also complimented staff on the quality of work and presentations.

It was moved by Commissioner Murphy and seconded by Commissioner Austin to recommend City Council authorization to submit the Annual Progress Report to the Governor's Office of Planning and Research and the Department of Housing and Community Development.

The motion passed 5/0.

**3. Update on Progress on the Pending Oil Code Amendment Revising Regulations for Development on Properties with Abandoned Wells and Methane Assessment and Mitigation**

Associate Planner Colleen Doan gave the staff report.

Chair Benson asked for any questions from the Commission. There being no questions, Chair Benson asked if members of the public had any questions or comments. The following member of the public spoke regarding the report:

- 1) Ashley Schaffer, Signal Hill Petroleum, thanked staff for their work on the Oil Code Amendment. She stated Signal Hill Petroleum was looking forward to having the new Oil Code in place so development can go forward.

Chair Benson asked the status of the Crescent Square development. Ms. Schaffer and staff advised that the project is still in plan check but was progressing rapidly. The developer and staff communicate regularly and the developer had expressed satisfaction with the updates.

Chair Benson asked the Commissioners if there were any additional questions.

Vice-Chair Fallon commended staff on the quality of their work on the Oil Code Amendment.

Commissioner Richárd thanked staff for their efforts and quality of work.

It was moved by Commissioner Murphy and seconded by Commissioner Richárd to receive and file the report.

The motion passed 5/0.

## **CONSENT CALENDAR**

It was moved by Commissioner Murphy and seconded by Vice-Chair Fallon to receive and file Consent Calendar Items 4 to 7.

The motion carried 5/0.

## **COMMISSION NEW BUSINESS**

Commissioner Murphy thanked staff for forwarding the Code Enforcement Report as a separate item from the Planning Commission agenda materials. Staff advised that much of the information is confidential, however, limited information that is legally permissible can be provided for requestors via a Public Records Request if desired. Commissioner Murphy also thanked staff for the update about the reformatted water bill.

Commissioner Richárd stated she had received an inquiry as to the reason there is no painted pedestrian crosswalk at Hilltop Park from Dawson across Skyline Drive. Chair Benson also gave a reminder about numerous signs in that area, some of which provide conflicting information. Staff advised they will forward the concerns to the appropriate departments.

Vice-Chair Fallon advised she will not attend the May 12, 2015 Planning Commission meeting.

Chair Benson asked for a follow up on Commissioner Austin's inquiry about parking at Gateway Center. Staff advised they have discussed parking with Signal Hill Petroleum and encouraged them to provide a sign for clarification, but none has yet been installed.

Chair Benson asked for a recap of the Costco public meeting. Staff advised that:

- 14 people attended the community meeting on 2/12/15.
- Most of the feedback received related to the gas station was positive.
- The store manager answered questions about the warehouse facility, tire center, street sweeping and landscaping.
- Costco plans to conduct outreach for disruptive activity/noise.
- Costco wants to amend their Conditional Use Permit to extend the gas station's hours to 5:00 a.m. to 10:00 p.m. Their Conditional Use Permit would be reviewed at Planning Commission and City Council public hearings.
- The traffic consultant evaluation recommended implementing a right turn only from the gas station; Costco has put out cones to help familiarize people with the upcoming change.
- City Council had directed staff to have Costco implement more permanent means of directing traffic; the store manager stated final measures would be implemented concurrent with the slurry of their parking lot on Easter weekend; in the meantime,

staff encouraged the store manager to have their personnel interact with drivers about exiting onto Cherry Avenue.

Commissioner Murphy asked about restrictions on trucks using the driveway at Willow/Junipero. Staff advised the only restriction for vehicles delivering to the facility would involve weight limits and offered to further research the issue and would request the store manager to encourage trucks to enter the parking lot via an entrance closer to the loading dock area.

Chair Benson asked about what appeared to be an illegal addition to a garage on 21<sup>st</sup> Street and about contractors who were cleaning painting equipment at another location on 21<sup>st</sup> Street. Staff advised the Building Inspector would investigate. He also asked that a water leak at 2135 Temple Avenue be inspected.

Commissioner Murphy asked the status of the space formerly leased by Radio Shack. Staff advised that there is no update about that space, however, WaBa Grill is in the process of locating to the former It's A Grind location.

Commissioner Austin asked if there were restrictions for the number of cars dealers can have. Staff advised there is no limit and that successful dealers require a robust inventory.

It was moved by Commissioner Richárd and seconded by Vice-Chair Fallon to adjourn to the next regular meeting of the Planning Commission to be held on Tuesday, April 14, 2015.

The motion carried 5/0.

Chair Benson adjourned the meeting at 8:05 p.m.

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TOM BENSON  
CHAIR

ATTEST:

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SCOTT CHARNEY  
COMMISSION SECRETARY



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## CITY OF SIGNAL HILL

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2175 Cherry Avenue ♦ Signal Hill, CA 90755-3799

April 14, 2015

### **AGENDA ITEM**

**TO: HONORABLE CHAIR  
AND MEMBERS OF THE PLANNING COMMISSION**

**FROM: SCOTT CHARNEY  
COMMUNITY DEVELOPMENT DIRECTOR**

**SUBJECT: TRAINING AVAILABLE FOR PLANNING COMMISSIONERS**

### **Summary:**

At the January 13, 2015 Planning Commission meeting, information was presented to the Commission about the League of California Cities 2015 Planning Commissioners Academy. At that time, the members of the Commission suggested that other training opportunities be presented. The American Planning Association has several webinars scheduled in the near future which may be of interest:

Planning Commissioner Ethics April 20, 2015 at 4:15 p.m. to 5:45 p.m.

The Planning Office of the Future June 3, 2015 at 1:00 p.m. to 2:30 p.m.

2015 Planning Law Review June 24, 2015 at 1:00 p.m. to 2:30 p.m.

Descriptions of the webcasts are attached (Note: times listed there are Eastern time). If you would like to participate in any of the webcasts, please contact staff for registration.

### **Recommendation:**

Receive and file.



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## Webcast

# Planning Commissioner Ethics

April 20, 2015  
7:15-8:45 p.m. ET

The decisions that come out of planning commissions need to be fair, inclusive, legal, and in sync with sound planning. Meeting those standards is the responsibility of every planning commissioner and official. What are the rules and roles? How should meetings and decisions be handled? Hear from veteran planning commissioners, an attorney, and planning directors and staff who work with commissioners. They'll share best practices, lessons learned, ways to avoid legal pitfalls, and insights into creating trust and mutual respect.

Cosponsored by the Lincoln Institute of Land Policy.

### Panelists

#### **W. Shedrick Coleman**

SHEDDArchitecture  
Chatham County-Savannah Metropolitan Planning Commission  
Savannah, GA

#### **Jeanne Krikawa**

The Underhill Co.  
Seattle Planning Commission  
Land Use & Transportation Committee  
Seattle, WA

#### **Andrew Lane**

Caincross & Hempel  
Seattle

#### **Robert P. Mitchell, FAICP, moderator**

Boston, MA



American Planning Association

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## The Planning Office of the Future

June 3, 2015  
4-5:30 p.m. ET

New technologies. Evolving expectations. A variety of forces are changing the way planners work, the skills they need, even the issues they address. An APA task force recently spent a year looking into the planning office of the future. Learn about the findings and hear what practitioners have to say about recent changes, current conditions, and the shape of things to come. Whether your office is public, private, or nonprofit, change is coming. How will you respond, and how will you lead?

### Certification Maintenance

This audio/web conference has been approved for CM | 1.5



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## 2015 Planning Law Review

June 24, 2015  
4-5:30 p.m. ET

Planning feels the impact of decisions from the U.S. Supreme Court, federal district courts, and state courts. How will their rulings affect you? Get a briefing on the year's legal developments, from First Amendment issues to environmental actions, housing, and equal access. Presenters also will discuss major legislative initiatives and APA's amicus filings. Join in a lively, informative program you and your staff, colleagues, and officials won't want to miss. This program is also suitable for planning commissioners.

### Certification Maintenance

This audio/web conference has been approved for CM | 1.5



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## CITY OF SIGNAL HILL

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2175 Cherry Avenue ♦ Signal Hill, CA 90755-3799

April 14, 2015

### **AGENDA ITEM**

**TO: HONORABLE CHAIR  
AND MEMBERS OF THE PLANNING COMMISSION**

**FROM: SELENA ALANIS  
ASSISTANT PLANNER**

**SUBJECT: CITY COUNCIL FOLLOW-UP**

#### **Summary:**

Below for your review is a brief summary on the City Council's action from the previous month.

#### **Recommendation:**

Receive and file.

#### **Background and Analysis:**

- 1) At the March 17, 2015 City Council, the following items related to the Community Development Department were discussed:
  - The Council authorized submittal of the General Plan Annual Progress Report to the Governor's Office of Planning and Research and the Department of Housing and Community Development.
- 2) At the April 7, 2015 City Council meeting, the following announcements were made:
  - An open recruitment is being conducted for the Planning, Parks and Recreation, and Civil Service Commissions. The City Council will interview persons who applied for a commission appointment on Monday, May 11, 2015.

- The City Manager, Ken Farfsing will be retiring after serving Signal Hill for the last 19 years. His last day of employment will be June 30, 2015. It was recommended that the City Council interview Deputy City Manager, Charlie Honeycutt for the position of City Manager. At the conclusion of the interview the City Council will retain the options of hiring Mr. Honeycutt or conducting an outside executive recruitment for the City Manager position.

Approved by:

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Scott Charney



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## CITY OF SIGNAL HILL

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2175 Cherry Avenue ♦ Signal Hill, CA 90755-3799

April 14, 2015

### **AGENDA ITEM**

**TO: HONORABLE CHAIR  
AND MEMBERS OF THE PLANNING COMMISSION**

**FROM: SCOTT CHARNEY  
COMMUNITY DEVELOPMENT DIRECTOR**

**SUBJECT: DEVELOPMENT STATUS REPORT**

### **Summary:**

Attached for your review is the monthly Development Status Report which highlights current projects.

### **Recommendation:**

Receive and file.

**City of Signal Hill**  
**Community Development Department**  
**Development Status Report**  
**April 14, 2015**

**Residential**

<b>Address</b>	<b>Project Description</b>	<b>Application</b>	<b>REVIEW</b>			<b>SPDR</b>			<b>CTL</b>			<b>Status</b>
			<u>Director</u> <u>approval</u>	<u>PC</u> <u>approval</u>	<u>CC</u> <u>approval</u>	Expires	1 <sup>st</sup> Ext.	2 <sup>nd</sup> Ext.	Expires	1 <sup>st</sup> Ext.	2 <sup>nd</sup> Ext.	
2357 Lewis Avenue	Repairs to a fire damaged single-family dwelling  Applicant: California Construction	Administrative Review	✓	N/A	N/A	Permit Issued 2/13/15	N/A	N/A	2/8/16			Demolition of fire damage house initiated (3/15).  Demolition in process (4/15).  SA/JH
1790 E. Burnett St.	Renovation of existing house and construction of new 4-car garage with roof deck, workshop and parking court  Applicant: Gary Sevrens	Administrative Review	✓	N/A	N/A	Permit Issued 02/13/14	N/A	N/A	N/A			Approved change from cedar shingles to a composite for reduced maintenance and requested revised color scheme. A new color board and rock samples have been submitted. Installation of the rock band is underway.  Revised window design for both sides of front door is pending (9/14).  Rear grade was too steep – Grade reworked and garage foundation poured.  Framing of garage has begun (1/15). Rough plumbing, electrical and HVAC complete. Interior and exterior work ongoing (3/15).  Garage roof and interior begun (4/15).  CTD/JH

**City of Signal Hill**  
**Community Development Department**  
**Development Status Report**  
**April 14, 2015**

Residential

<u>Address</u>	<u>Project Description</u>	<u>Application</u>	<u>REVIEW</u>			<u>SPDR</u>			<u>CTL</u>			<u>Status</u>
			<u>Director approval</u>	<u>PC approval</u>	<u>CC approval</u>	<u>Expires</u>	<u>1<sup>st</sup> Ext.</u>	<u>2<sup>nd</sup> Ext.</u>	<u>Expires</u>	<u>1<sup>st</sup> Ext.</u>	<u>2<sup>nd</sup> Ext.</u>	
3240 Cerritos Ave.	New permit issued for interior drywall, plumbing and electrical for remainder of interior of existing house  Applicant: Jim Trevillyan	Administrative Review	N/A	N/A	N/A	Permit Issued 03/3/15	N/A	N/A	02/26/16			Permit issued but no progress (4/15).  JH
2311 Ocean View	Add/expand second story decks and "trainhouse" in side and rear yard of existing single-family home  Applicant: M/M Hughes	SPDR 08-05	N/A	07/14/09	N/A	Permit Issued 08/16/13	N/A	N/A	08/11/14	9/30/14	01/12/15 	The first extension granted until 9/30/14. (50 days)  A second extension granted until 1/12/15. (90 days)  A 60 day reminder notice was sent on 11/12/14 and a 30 day reminder notice on 12/12/14.  Signed off for roof and deck inspections (12/14).  An expiration notice was sent on 1/12/15.  Staff provided add'l 19 days (for days City Hall was closed) until 3/3/15 until penalties can be applied (2/15).  Estimated time to complete the exterior of the project is 70 days (5/22/15) (3/15).  Insulation, installation of windows and doors and flashing completed 4/8/15. Exterior lath is pending completion of electrical (4/15).  SA/JH

**City of Signal Hill**  
**Community Development Department**  
**Development Status Report**  
**April 14, 2015**

**Residential**

<b>Address</b>	<b>Project Description</b>	<b>Application</b>	<b>REVIEW</b>			<b>SPDR</b>			<b>CTL</b>			<b>Status</b>
			<u>Director</u> <u>approval</u>	<u>PC</u> <u>approval</u>	<u>CC</u> <u>approval</u>	Expires	1 <sup>st</sup> Ext.	2 <sup>nd</sup> Ext.	Expires	1 <sup>st</sup> Ext.	2 <sup>nd</sup> Ext.	
2799 21 <sup>st</sup> St.	A two-story 3,629 sf SFD and 3 car garage  Applicant: Vivir Properties/Silva Family	SPDR 13-05	N/A	01/14/14	N/A	Permit Issued 7/21/14	N/A	N/A	01/12/16			Rough plumbing, electrical complete (2/15). Doors and windows, stucco 2 <sup>nd</sup> coat and drywall complete (3/15).  Installing rock facade (4/15).  JH
924 E Vernon St.	Demolition of existing dwelling and detached garage for construction of a new two story 3,230 sf duplex and 4-car garage  Applicant: LLG Construction	SPDR 14-02	N/A	06/10/14	N/A	06/10/15						Applicant working with SCE and Public Works on alley improvements (10/14).  Plan submitted for 2 <sup>nd</sup> building plan check (3/15).  SA
3360 Lemon Ave.	A 1,207 sf 2 <sup>nd</sup> unit over a four-car garage at the rear of a property with a SFD  Applicant: Jason Shorrow	SPDR 14-03	N/A	07/08/14	N/A	07/08/15						SPDR approved, signed conditions received.  Plan check is complete. Applicant is preparing grading plans for submittal to Public Works and submittals for LA County Fire (3/15).  CTD

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**Residential**

<b>Address</b>	<b>Project Description</b>	<b>Application</b>	<b>REVIEW</b>			<b>SPDR</b>			<b>CTL</b>			<b>Status</b>
			<u>Director</u> <u>approval</u>	<u>PC</u> <u>approval</u>	<u>CC</u> <u>approval</u>	Expires	1 <sup>st</sup> Ext.	2 <sup>nd</sup> Ext.	Expires	1 <sup>st</sup> Ext.	2 <sup>nd</sup> Ext.	
3347 Brayton Ave.	Remodel existing SFD and new 931 sf second unit with 3-car garage (SPDR 11-03)  Revised plans for the remodel of the front SFD to include a 271 sf addition and new 1-car garage on the first floor and a 731 sf second story addition  Applicant: Reginald McNulty	SPDR 15-02	N/A	08/09/11	N/A							The applicant has completed construction on the second unit and 3-car garage.  Planning Commission workshop held on 3/10/15 for revised plans.  Planning Commission public hearing scheduled for 4/14/15.  SA
1995 St. Louis Ave.	A proposal to demolish existing dwelling and detached garage for a new two story 3,187 sf SFD with attached 3-car garage  Applicant: Seth Sor	SPDR	N/A	Required	N/A							View Notice sent on 8/4/14. Story poles installed on 8/5/14.  PC workshop 10/14/14.  Applicant revised plans (3/15).  View notice sent on 3/31/15. New story poles installed on 4/1/15.  SA

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**Residential**

<b>Address</b>	<b>Project Description</b>	<b>Application</b>	<b>REVIEW</b>			<b>SPDR</b>			<b>CTL</b>			<b>Status</b>
			<u>Director</u> <u>approval</u>	<u>PC</u> <u>approval</u>	<u>CC</u> <u>approval</u>	Expires	1 <sup>st</sup> Ext.	2 <sup>nd</sup> Ext.	Expires	1 <sup>st</sup> Ext.	2 <sup>nd</sup> Ext.	
2260 Walnut Ave.	A proposal for a new two story 1,894 sf SFD with attached 2-car garage on a vacant lot  Applicant: Santana Investors	SPDR	N/A	Required	N/A							Leak test passed, vent cone was not installed (2/15).  Staff has reviewed preliminary plans. The applicant is working on well survey and plans (4/15).  SA
2085 Freeman Ave.	A proposal for a new two story 3,746 sf SFD with attached 3-car garage on a vacant lot  Applicant: RPP Architects	SPDR	N/A	Required	N/A							Leak test passed and vent cone installed (2/15).  The applicant has submitted plans for Planning review and preliminary comments (3/15).  SA/CD
2101 Stanley Avenue	Vacant lot in Hilltop Specific Plan  Applicant: Jonathan Spano	Leak Test of Abandoned Oil Well										Leak test passed and vent cone installed (2/15).  Working on design for new single-family residence (4/15).  JH

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<b>Address</b>	<b>Project Description</b>	<b>Application</b>	<b>REVIEW</b>			<b>SPDR</b>			<b>CTL</b>			<b>Status</b>
			<u>Director</u> <u>approval</u>	<u>PC</u> <u>approval</u>	<u>CC</u> <u>approval</u>	Expires	1 <sup>st</sup> Ext.	2 <sup>nd</sup> Ext.	Expires	1 <sup>st</sup> Ext.	2 <sup>nd</sup> Ext.	
<b><u>Large Subdivisions (5 or more lots) and Multi-family Developments</u></b>												
Crescent Square	25 three-story detached single-family dwellings at the N/E corner of Walnut and Crescent Heights Street	SPDR 14-04 ZOA 14-03 VTTM 72594	N/A	8/12/14	9/2/14	08/12/15						SPDR approved on 8/12/14.  Construction pending plan check submittal and completion of the Oil Code Amendment (2/15).  Grading plan has been submitted for plan check (3/15).  CC&Rs submitted for review (4/15).  SC/SA
Walnut/ Crescent Heights St.	Applicant: SummerHill Homes/Signal Hill Petroleum											
Gundry Hill	Development of 72 multiple-family, affordable units, three and four stories in height and a community building, community garden, tot lot and courtyard with on-site management	SPDR for Administrative Review and approval by the Director of Community Development	Approved 2/18/15	N/A	N/A	N/A	N/A					Tours completed on 1/6/15 and 1/8/15.  A community meeting with the Planning Commission was held on 1/13/15.  The Disposition and Development Agreement approved by the Housing Authority on 2/17/15 (3/15).  Director approved the SPDR on 2/18/15.  California Tax Credit Allocation application submitted to the state by the applicant 3/4/15.  SC/SA
1500 E Hill St.	Applicant: Meta Housing											

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**Residential**

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			<u>Director</u> <u>approval</u>	<u>PC</u> <u>approval</u>	<u>CC</u> <u>approval</u>	Expires	1 <sup>st</sup> Ext.	2 <sup>nd</sup> Ext.	Expires	1 <sup>st</sup> Ext.	2 <sup>nd</sup> Ext.	
2599 Pacific Coast Highway	Residential SP-10 1 <sup>st</sup> concept plan had 14 attached units 2 <sup>nd</sup> concept plan had 12 attached units 3 <sup>rd</sup> concept plan had 10 detached units 4 <sup>th</sup> concept plan has 9 units	Preliminary review PC Workshop 8/14/12 PC Workshop 9/9/14 SPDR	N/A	Required	Required							Staff met w/owner who reported unsuccessful lot consolidation out-reach effort (9/12). Staff met w/applicant to review a new concept plan on 9/13. Revised design (10 detached units) more closely met the intent of SP-10. Access and guest parking revised (6/14). Commission requested design changes. Applicant's revised conceptual plans (9 units) were previewed and met most of the development standards. Due to proposed height / view policy, applicant to proceed with view analysis outreach (9/14). Revised plans submitted for conceptual review. Proposal has one less unit, setbacks now meet the code, but some buildings still exceed height limit and view policy outreach is pending. Rough grading to be submitted to review options to reduce heights (3/15). CTD
	Applicant: Mike Afiuny											

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**Residential**

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			<u>Director</u> <u>approval</u>	<u>PC</u> <u>approval</u>	<u>CC</u> <u>approval</u>	Expires	1 <sup>st</sup> Ext.	2 <sup>nd</sup> Ext.	Expires	1 <sup>st</sup> Ext.	2 <sup>nd</sup> Ext.	
1939 Temple Avenue	Potential sale of the property for development of residential homes (existing non-conforming industrial buildings on site)	Leak Test of Abandoned Oil Wells										DOGGR maps indicate 2 wells in the vicinity of the property.  Applicant is trying to locate 1 well, but has been unsuccessful to date. The remaining well is under the existing building.  Applicant is preparing to demolish the existing buildings to leak test the wells (3/15).  Consultant Mearns is not confident with effort to find first well and would like additional effort and possibly another building demolished (4/15).  JH
	Applicant: High Rhodes/Anglers											

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Commercial-Industrial

<u>Address</u>	<u>Project Description</u>	<u>Application</u>	REVIEW			SPDR/CUP			CTL			<u>Status</u>
			Director approval	PC approval	CC approval	Expires	1 <sup>st</sup> Ext.	2 <sup>nd</sup> Ext.	Expires	1 <sup>st</sup> Ext.	2 <sup>nd</sup> Ext.	
2653 Walnut Ave. 2H Construction	An approximate 8,000 sf warehouse/office building Applicant: 2H Construction	Administrative Review	✓	N/A	N/A	Permit Issued 04/13/11	N/A	N/A	Prior to CTL			Exterior complete.  Still awaiting revised TI plan and working on Public Works conditions of approval (4/15).  JH
1680 E. Hill St. AUHS	31,739 sf TI for additional classrooms Applicant: American Univ. of Health Sciences	Administrative Review	✓	N/A	N/A	Permit issued 04/17/14	N/A	N/A	01/12/15  Inspection Needed			Still no progress. Staff will follow up with applicant to verify interest in pursuing with tenant improvement (3/15).  AUHS contacted staff to advise they will begin project very soon (4/15).  JH
2701 Cherry Avenue	ADA parking lot improvements Applicant: Best Buy	Administrative Review	✓	N/A	N/A		N/A	N/A				Permit ready for issuance (3/15).  Anticipate permit purchase in May (4/15).  JH
2162 E. Willow St.	1,106 sf TI for new restaurant Applicant: WaBa Grill	Administrative Review	Required	N/A	N/A		N/A	N/A				Permit ready for issuance (4/15).  CTD/JH

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**Commercial-Industrial**

<b>Address</b>	<b>Project Description</b>	<b>Application</b>	<b>REVIEW</b>			<b>SPDR/CUP</b>			<b>CTL</b>			<b>Status</b>
			<b>Director approval</b>	<b>PC approval</b>	<b>CC approval</b>	<b>Expires</b>	<b>1<sup>st</sup> Ext.</b>	<b>2<sup>nd</sup> Ext.</b>	<b>Expires</b>	<b>1<sup>st</sup> Ext.</b>	<b>2<sup>nd</sup> Ext.</b>	
3355 Olive Avenue	Proposal for new 5,000 sf warehouse and office building  Applicant: Roger Vititow	Administrative Review	Required	N/A	N/A							Staff reviewed preliminary plans.  2 <sup>nd</sup> building plan check comments returned to applicant.  SA
3201-3225 Pacific Coast Highway  Quality Inn	Tentative Parcel Map to subdivide an existing 1.8-acre lot into two lots  Applicant: William Suh	71592, extension granted	N/A	11/08/11	N/A	11/8/13	11/8/14	11/8/15	N/A	N/A	N/A	3 <sup>rd</sup> TPM ext granted per State law. TPM valid until 11/8/15.  Property has new owner. Staff has prepared a letter to inquire about future intent for subdivision from new property owner (2/15).  CTD

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**Commercial-Industrial**

<b>Address</b>	<b>Project Description</b>	<b>Application</b>	<b>REVIEW</b>			<b>SPDR/CUP</b>			<b>CTL</b>			<b>Status</b>
			<b>Director approval</b>	<b>PC approval</b>	<b>CC approval</b>	<b>Expires</b>	<b>1<sup>st</sup> Ext.</b>	<b>2<sup>nd</sup> Ext.</b>	<b>Expires</b>	<b>1<sup>st</sup> Ext.</b>	<b>2<sup>nd</sup> Ext.</b>	
845 E. Willow St.	A 18,994 sf medical/office building	SPDR 13-02	N/A	07/09/13	N/A	Permit Issued 02/25/14	N/A	N/A	2/15/16			Conformity Report went to the Planning Commission on 12/09/14.  Parking lot asphalt complete (1/15).  Exterior steel complete. Ext. finish started (2/15).  Plans approved for redesign of front/glass curtain wall. Review of stairway plan in process. Rough plumbing and electrical complete. Stucco has begun (4/15).  JH
2H Construction	Applicant: 2H Construction											
2200 E. Willow St.	Costco Gas Station	SPDR 13-03 ZOA 13-01 CUP 13-01	N/A	08/13/13	09/03/13	Permit Issued 5/20/14	N/A	N/A	11/11/15	N/A	N/A	Request to amend CUP is expected to extend gas station hours to 5am-10pm. Amendment will require Planning Commission and City Council review (3/15).  Food Court opened 4/1/15. Parking lot slurred and striped 4/5/15.  SA/JH
Costco	Applicant: Costco											

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[Commercial-Industrial](#)

<b>Address</b>	<b>Project Description</b>	<b>Application</b>	<b>REVIEW</b>			<b>SPDR/CUP</b>			<b>CTL</b>			<b>Status</b>
			<u>Director approval</u>	<u>PC approval</u>	<u>CC approval</u>	<u>Expires</u>	<u>1<sup>st</sup> Ext.</u>	<u>2<sup>nd</sup> Ext.</u>	<u>Expires</u>	<u>1<sup>st</sup> Ext.</u>	<u>2<sup>nd</sup> Ext.</u>	
995 E. 27 <sup>th</sup> St.	A 2,205 sf religious center at the NW corner of California and 27th Street	SPDR 13-04 CUP 13-02	N/A	10/08/13	10/15/13	Permit Issued 10/31/13	N/A	N/A	4/31/15 			A representative for the applicant attended the Jan. Commission meeting to provide an update on construction. He expressed a desire to make revisions to the interior floor plan, including additional storage space in a mezzanine area, and minor exterior changes. No additional parking is provided to accommodate added floor area. The Commission recommended finishing the project as approved. The applicant is considering options. Any requested changes will be reviewed by the PC. Rough plumbing and electrical is complete.  Methane venting and drainage filtration systems are currently being installed on site. A 60 day CTL expiration letter was sent (3/15).  Dry wall is complete, parking lot paved, façade in process (4/15).  CTD/JH
LBIC Center	Applicant: Abdel Alomar											

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**Commercial-Industrial**

<b>Address</b>	<b>Project Description</b>	<b>Application</b>	<b>REVIEW</b>			<b>SPDR/CUP</b>			<b>CTL</b>			<b>Status</b>
			<b>Director approval</b>	<b>PC approval</b>	<b>CC approval</b>	<b>Expires</b>	<b>1<sup>st</sup> Ext.</b>	<b>2<sup>nd</sup> Ext.</b>	<b>Expires</b>	<b>1<sup>st</sup> Ext.</b>	<b>2<sup>nd</sup> Ext.</b>	
1660 E. Spring St.	A 77,810 sf showroom, sales, and service facility and display area for automobile sales	SPDR 14-01	N/A	4/8/14	N/A	Permit Issued 9/16/14	N/A	N/A	09/5/16			Foundation and retention basin started (10/14). Street improvements and utilities underway (11/14). Methane barrier complete (12/14).  Masonry near completion. (2/15). Slab and roof on garage completed. Showroom steel ongoing. Pouring slab in showroom (3/15).  Street improvements completed on Spring (4/15).  Conformity report for minor architectural revisions to be at an upcoming PC meeting.  JH/SA
BMW Dealership	Applicant: Sonic/BMW											
2953 Obispo Ave.	A request to allow indoor soccer as a conditionally permitted use in the City.	ZOA CUP	N/A	Required	Required							Deposit submitted to begin coordination of workshops w/HOAs (7/14).  Applicant has requested to temporarily postpone request (12/14).  Applicant intends to proceed w/CUP request but no application has been submitted to date (3/15).  CTD
Futsal Indoor Soccer	Applicant: Mike Biddle											

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**Commercial-Industrial**

<b><u>Address</u></b>	<b><u>Project Description</u></b>	<b><u>Application</u></b>	<b>REVIEW</b>			<b>SPDR/CUP</b>			<b>CTL</b>			<b><u>Status</u></b>
			<b>Director approval</b>	<b>PC approval</b>	<b>CC approval</b>	<b>Expires</b>	<b>1<sup>st</sup> Ext.</b>	<b>2<sup>nd</sup> Ext.</b>	<b>Expires</b>	<b>1<sup>st</sup> Ext.</b>	<b>2<sup>nd</sup> Ext.</b>	
2750 Signal Parkway	New freestanding carport mounted PV system  Applicant: Har-Bro Construction	Administrative Review	✓	N/A	N/A	Permit issued 2/9/15			180 days 8/8/15  CTL 8/2/16			Roughs and structural approved (4/15).  JH

**Planning Commissioner Terms**

- Terms for Commissioners Richárd and Fallon will expire on May 31, 2015. Recruitment and reapplication process currently underway.

**General Community Development Projects**

- Planning Department staff reviewed and approved 11 business licenses.
- Building Department staff issued 20 permits including 2 solar permits. The valuation of the permits is approximately \$81,000.
- Colleen Doan and Selena Alanis attended the third and fourth sessions of Signal Hill's Leadership and Management Academy.
- Community Development Director attended training by Local Agency Formation Commission: Planning and Regulating Boundaries and Service Areas of Cities and Special Districts in California
- Staff attended training for new Caselle software

**Ongoing / Upcoming Projects**

- Oil Code Amendment
- Vacant Parcel Ordinance
- Solar permitting Ordinance
- Oil Well Inspections
- Annual Inspection of Adult Oriented Businesses
- 2013 Building Code adoption
- Meeting with Mercedes Benz regarding expansion opportunities

**City of Signal Hill**  
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**Wireless Telecommunications Facilities**

<b>Address</b>	<b>Project Description</b>	<b>Application</b>	<b>REVIEW</b>			<b>SPDR</b>			<b>CTL</b>			<b>Status</b>
			<b>Director approval</b>	<b>PC approval</b>	<b>CC approval</b>	<b>Expires</b>	<b>1<sup>st</sup> Ext.</b>	<b>2<sup>nd</sup> Ext.</b>	<b>Expires</b>	<b>1<sup>st</sup> Ext.</b>	<b>2<sup>nd</sup> Ext.</b>	
2411 Skyline Dr.	A request to add 1 new Tower Dish to the Cell Tower as allowed by CUP 99-05	Administrative to modify CUP 99-05	✓	N/A	N/A	Permit Issued 10/2/14	N/A	N/A				Crown Castle has new management and is working to resolve interference issues w/ 2 residents. Plans approved and permit issued for 1 new dish for Clearwire 10/2/14.  An interference study has been completed and staff met with Crown Castle to facilitate installation of interference devices and review CUP conditions of approval (12/14).  Interference resolution and compliance with 1 CUP condition is pending (2/15).  The interference problem has been corrected and current tenants have current business licenses. An updated audit of equipment and tenant is ongoing (3/15).  CTD
		Applicant: Crown Castle										
1855 Coronado rooftop facility	Replacing 56" panel with 72" panel antennas, screen box in sector A & B will be increased by 3'	Administrative to modify CUP 08-03	✓	N/A	N/A		N/A	N/A				Plans ready for permit issuance, awaiting applicant (4/15).  SA
	Applicant: Core Dev.											

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**Wireless Telecommunications Facilities**

<b>Address</b>	<b>Project Description</b>	<b>Application</b>	<b>REVIEW</b>			<b>SPDR</b>			<b>CTL</b>			<b>Status</b>
			<b>Director approval</b>	<b>PC approval</b>	<b>CC approval</b>	<b>Expires</b>	<b>1<sup>st</sup> Ext.</b>	<b>2<sup>nd</sup> Ext.</b>	<b>Expires</b>	<b>1<sup>st</sup> Ext.</b>	<b>2<sup>nd</sup> Ext.</b>	
2766 St. Louis Dr.  T-Mobile	Relocate 3 existing panels, install 3 8' antennas and install RRUs  Applicant: Associated Land LLC	Administrative to modify CUP 00-03	✓	N/A	N/A		N/A	N/A				Plans ready for permit issuance, awaiting applicant (4/15).  SA
2201 Orange Ave.  T-Mobile on Crown Castle Mono palm	A request to add 3 new 8' panel antennas and relocate 3 existing antennas on 3 arms of the existing mono palm	Administrative to modify CUP 07-04	✓	N/A	N/A		N/A	N/A				Staff provided comments for the applicant (2/15).  CTD/JH
2875 Junipero	Remove and demolish the monopalm wireless facility	CUP 05-02 will be suspended	✓	N/A	N/A	Permit issued 2/12/15	N/A	N/A	8/11/15			Demolition Permit issued 2/12/15.  Demolition completed (4/15).
2633 Cherry Avenue  AT&T	Rooftop Wireless Telecommunication Facility for AT&T  Applicant: Core Dev.	CUP	✓	Required	Required							Staff met with the applicant to review preliminary plans for the rooftop facility and suggested revisions to elevations and plans for aesthetics (5/14 and 7/14).  Applicant preparing plans and expects to resubmit (2/15).  SA



9



## CITY OF SIGNAL HILL

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2175 Cherry Avenue ♦ Signal Hill, CA 90755-3799

April 14, 2015

### **AGENDA ITEM**

**TO: HONORABLE CHAIR  
AND MEMBERS OF THE PLANNING COMMISSION**

**FROM: SCOTT CHARNEY  
COMMUNITY DEVELOPMENT DIRECTOR**

**SUBJECT: IN THE NEWS**

### **Summary:**

Articles compiled by staff that may be of interest to the Commission include:

- Homes as Inns Put New Pinch on Housing/Airbnb Listings
- Urban Land – Space and the City
- Using Accessory Dwelling Units to Bolster Affordable Housing
- New Law Strengthens Local Regulation of Massage Businesses

### **Recommendation:**

Receive and file.

# Los Angeles Times

latimes.com

WEDNESDAY, MARCH 11, 2015

\$2.00 DESIGNATED AREAS HIGHER © 2015 OCSB

## Homes as inns put new pinch on housing

BY TIM LOGAN,  
EMILY ALPERT REYES  
AND BEN POSTON

The last time he advertised one of his apartments, longtime Los Feliz landlord Andre LaFlamme got a request he'd never seen before.

A man wanted to rent LaFlamme's 245-square-foot bachelor unit with hardwood floors for \$875 a month, then list it himself on Airbnb.

"Thanks but no thanks," LaFlamme told the prospective tenant. "You've got to be kidding me."

But he understood why: More money might be made renting to tourists a few days at a time than to a local for 12 months or more.

As short-term rental websites such as Airbnb explode in popularity in Southern California, a growing number of homeowners and landlords are caving to the economics. A study released Wednesday from Los Angeles Alliance for a New Economy, a labor-backed advocacy group, estimates that more than 7,000 houses and apartments have been taken off the rental market in metro Los Angeles for use as short-term rentals. In parts of tourist-friendly neighborhoods such as Venice and Hollywood, Airbnb listings account for 4% or more of all housing units, according to a Times analysis of data from Airbnb's website.

That's worsening a housing shortage that already makes Los Angeles one of the least affordable places to rent in the country.

"In places where vacancy [See Airbnb, A11]

# Airbnb listings proliferate in tourist areas

**[Airbnb, from A1]** is already limited and rents are already squeezing people out, this is exacerbating the problem," said Roy Samaan, a policy analyst who wrote the alliance's report. "There aren't 1,000 units to give in Venice or Hollywood."

Fast-growing Airbnb and others like it say they help cash-strapped Angelenos earn a little extra money. Airbnb estimates that 82% of its 4,500 L.A. hosts are "primary residents" of the homes they list, and that nearly half use the proceeds to help pay their rent or mortgage. And the effect on the broader housing market is so small that it's all but irrelevant, said Tom Davidoff, a housing economist at the University of British Columbia whom Airbnb hired to study its impact.

"Over the lifetime of a lease, rents maybe go up 1.5%," he said. "That's peanuts relative to the increases we've seen in housing costs in a lot of places."

But there are growing signs of professionalization of the short-term rental world, from property-manager middlemen like the one who emailed LaFlamme to Airbnb "hosts" who list dozens of properties on the site. The Los Angeles Alliance study estimates that 35% of Airbnb revenue in Southern California comes from people who list more than one unit.

"I don't think anyone would begrudge someone renting out a spare bedroom," Samaan said. "But there's a whole cottage industry that's springing up around this."

City Council member Mike Bonin, whose coastal district includes Venice, and Council President Herb Wesson want to study how these rentals have affected the city. No regulations have been drafted, and Bonin said the council would seek extensive community input. Current rules bar short-term rentals in many residential areas of the city, but critics say they're rarely enforced.

As city officials craft new ones, they'll certainly be hearing from Airbnb and its allies. Last year, the company spent more than \$100,000 lobbying City Hall and released a study touting its economic impact in L.A. — more than \$200 mil-

lion in spending by guests, supporting an estimated 2,600 jobs. A group representing short-term rental hosts has made the rounds of City Council offices as well.

This industry "needs to be regulated and regulated the right way," said Sebastian de Kleer, co-founder of the Los Angeles Short Term Rental Alliance and owner of a Venice-based vacation rental company. "For a lot of people, this is a very new issue."

Neighborhood groups are sure to weigh in too, especially in Venice.

The beach neighborhood has the highest concentration of Airbnb listings in all of metro Los Angeles. Data collected by Beyond Pricing, a San Francisco-based start-up that helps short-term rental hosts optimize pricing, show that in census tracts along Venice Beach and Abbott-Kinney Boulevard, Airbnb listings accounted for 6% to 7% of all housing units — about 10 times the countywide average.

A letter last fall from the Venice Neighborhood Council to city officials estimated that the number of short-term rental listings in the area had tripled in a year, citing a "Gold Rush mentality" among investors looking for a piece of the action. That's hurting local renters, said Steve Clare, executive director of Venice Community Housing.

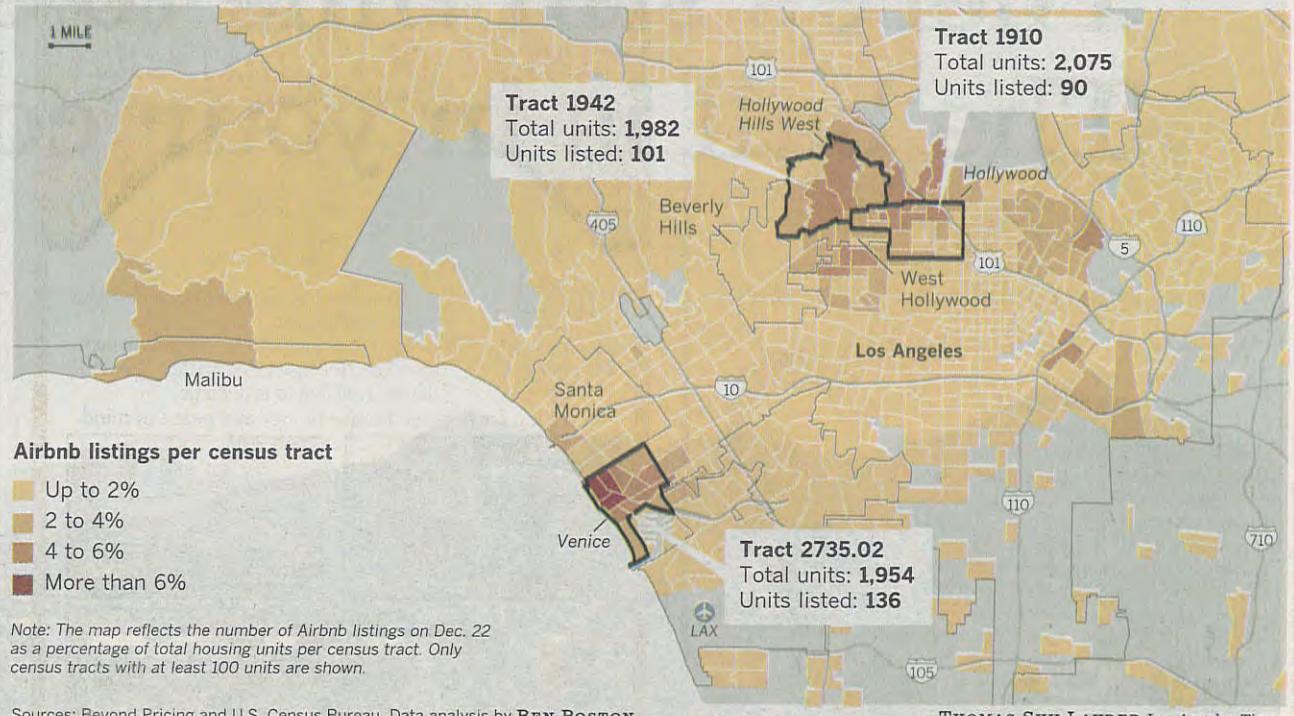
"Short-term rentals are really taking over a significant portion of the rental housing market in our community," Clare said. "It's going to further escalate rents, and take affordable housing out of Venice."

Along the Venice boardwalk, a number of apartment buildings now advertise short-term rentals, and houses on the city's famed "walk streets" routinely show up in searches on Airbnb. Even several blocks inland, at Lincoln Place Apartments — a 696-unit, newly renovated complex that includes a pool, gym and other tourist-friendly amenities — Roman Barrett recently counted more than 40 listings on Airbnb and other sites.

Barrett, who moved out over the issue, said Airbnb effectively drives up the rent. He paid \$2,700 a month for a one-bedroom; now he's looking

## Where are the short-term rentals?

About 12,700 rental units were listed on Airbnb in Los Angeles County on Dec. 22, 2014, but they were not spread out equally. In parts of Venice and Hollywood, Airbnb listings accounted for 4% or more of all housing units.



Sources: Beyond Pricing and U.S. Census Bureau. Data analysis by BEN POSTON

THOMAS SUH LAUDER Los Angeles Times



CHRISTINA HOUSE For The Times

**IN VENICE**, short-term rentals are exacerbating an already tight market, critics say. Current rules bar short-term rentals in many residential areas of the city.

farther east for something he can afford.

"It's making places like Santa Monica and Venice totally priced out. Silver Lake is impossible. I'm looking in Koreatown right now," Barrett said. "They need to make a law about this."

A new law of some sort is the goal at City Hall. New York, San Francisco and Portland, Ore., have crafted regulations to govern taxes, zoning and length of stay in short-term rentals, and Airbnb says it's glad to help in that process here.

"It's time for all of us to work together on some sensible solutions that let people share the home in which they live and contribute to their community," spokesman Christopher Nulty

said in a statement Tuesday.

Will Youngblood, the man who emailed LaFlamme about managing his apartment in Los Feliz, says he'd also appreciate clearer rules and an easier way to pay occupancy taxes.

Youngblood runs five Airbnb apartments, mostly in Hollywood. A former celebrity assistant, he's been doing this for two years; it's a full-time job. Most of Youngblood's clients own their homes but travel a lot or live elsewhere. One, he rents

and lists full time. He's been looking around for another.

"I'm honest about what I do," he said. "Some [landlords] are like, 'That's insane. No way.' Other people say, 'We'd love that.'"

If the city decides it doesn't like what he's doing, Youngblood said, he'll go do something else. But for now, he said, it's a good way to make some cash and meet interesting people.

But he won't meet LaFlamme. The longtime landlord concedes he "might be old-fashioned," but he just doesn't like the idea of strangers traipsing through his apartments. He prefers good, long-term tenants, and in L.A.'s red-hot rental market he has no problem finding them.

"I almost find it painful to rent things these days," he said. "There's so much demand and so many people who are qualified and nice people who I have to turn away."

For that apartment in Los Feliz, LaFlamme said, he found a tenant in less than 24 hours.

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Times staff writer Sandra Poindexter contributed to this report.

**Urban land**

# Space and the city

**Poor land use in the world's greatest cities carries a huge cost**

Apr 4th 2015 | From the print edition

BUY land, advised Mark Twain; they're not making it any more. In fact, land is not really scarce: the entire population of America could fit into Texas with more than an acre for each household to enjoy. What drives prices skyward is a collision between rampant demand and limited supply in the great metropolises like London, Mumbai and New York. In the past ten years real prices in Hong Kong have risen by 150%. Residential property in Mayfair, in central London, can go for as much as £55,000 (\$82,000) per square metre. A square mile of Manhattan residential property costs \$16.5 billion.



Even in these great cities the scarcity is artificial. Regulatory limits on the height and density of buildings constrain supply and inflate prices. A recent analysis by academics at the London School of Economics estimates that land-use regulations in the West End of London inflate the price of office space by about 800%; in Milan and Paris the rules push up prices by around 300%. Most of the enormous value captured by landowners exists because it is well-nigh impossible to build new offices to compete those profits away.

The costs of this misfiring property market are huge, mainly because of their effects on individuals. High housing prices force workers towards cheaper but less productive places.

According to one study, employment in the Bay Area around San Francisco would be about five times larger than it is but for tight limits on construction. Tot up these costs in lost earnings and unrealised human potential, and the figures become dizzying. Lifting all the barriers to urban growth in America could raise the country's GDP by between 6.5% and 13.5%, or by about \$1 trillion-2 trillion. It is difficult to think of many other policies that would yield anything like that.

## Metro stops

Two long-run trends have led to this fractured market. One is the revival of the city as the central cog in the global economic machine (see [article](http://www.economist.com/news/briefing/21647622-land-centre-pre-industrial-economy-has-returned-constrainton-growth) (<http://www.economist.com/news/briefing/21647622-land-centre-pre-industrial-economy-has-returned-constrainton-growth>)). In the 20th century, tumbling transport costs weakened the gravitational pull of the city; in the 21st, the digital revolution has restored it. Knowledge-intensive industries such as technology and finance thrive on the clustering of workers who share ideas and expertise. The economies and populations of metropolises like London, New York and San Francisco have rebounded as a result.

What those cities have not regained is their historical ability to stretch in order to accommodate all those who want to come. There is a good reason for that: unconstrained urban growth in the late 19th century fostered crime and disease. Hence the second trend, the proliferation of green belts and rules on zoning. Over the course of the past century land-use rules have piled up so plentifully that getting planning permission is harder than hailing a cab on a wet afternoon. London has strict rules preventing new structures blocking certain views of St Paul's Cathedral. Google's plans to build housing on its Mountain View campus in Silicon Valley are being resisted on the ground that residents might keep pets, which could harm the local owl population. Nimbyish residents of low-density districts can exploit planning rules on everything from light levels to parking spaces to block plans for construction.



## Why land has returned as a constraint on growth

(<http://www.economist.com/news/briefing/21647622-land-centre-pre-industrial-economy-has-returned-constrainton-growth>)

A good thing, too, say many. The roads and rails criss-crossing big cities already creak under the pressure of growing populations. Dampening property prices hurts one of the few routes to wealth-accumulation still available to the middle classes. A cautious approach to development is the surest way to preserve public spaces and a city's heritage: give economists their way, and they would quickly pave over Central Park.

However well these arguments go down in local planning meetings, they wilt on closer scrutiny. Home ownership is not especially egalitarian. Many households are priced out of more vibrant places. It is no coincidence that the home-ownership rate in the metropolitan area of downtrodden Detroit, at 71%, is well above the 55% in booming San Francisco. You do not need to build a forest of skyscrapers for a lot more people to make their home in big cities. San Francisco could squeeze in twice as many and remain half as dense as Manhattan.

### Property wrongs

Zoning codes were conceived as a way to balance the social good of a growing, productive city and the private costs that growth sometimes imposes. But land-use rules have evolved into something more pernicious: a mechanism through which landowners are handed both unwarranted windfalls and the means to prevent others from exercising control over their property. Even small steps to restore a healthier balance between private and public good would yield handsome returns. Policymakers should focus on two things.

First, they should ensure that city-planning decisions are made from the top down. When decisions are taken at local level, land-use rules tend to be stricter. Individual districts receive fewer of the benefits of a larger metropolitan population (jobs and taxes) than their costs (blocked views and congested streets). Moving housing-supply decisions to city level should mean that due weight is put on the benefits of growth. Any restrictions on building won by one district should be offset by increases elsewhere, so the city as a whole keeps to its development budget.

Second, governments should impose higher taxes on the value of land. In most rich countries, land-value taxes account for a small share of total revenues. Land taxes are efficient. They are difficult to dodge; you cannot stuff land into a bank-vault in Luxembourg. Whereas a high tax on property can discourage investment, a high tax on land creates an incentive to develop unused sites. Land-value taxes can also help cater for newcomers. New infrastructure raises the value of nearby land, automatically feeding through into revenues—which helps to pay for the improvements.

Neither better zoning nor land taxes are easy to impose. There are logistical hurdles, such as assessing the value of land with the property stripped out. The politics is harder still. But

politically tricky problems are ten-a-penny. Few offer the people who solve them a trillion-dollar reward.

From the print edition: Leaders



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## Using accessory dwelling units to bolster affordable housing

Posted on December 12, 2014 by Michael Ryan

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Accessory Dwelling Units, such as this one in Northern California, can provide affordable housing and rental income for homeowners. Photo via [Forbes](#).

Creating affordable rental housing in a community is often a long and arduous process. One strategy cities can use to combat this is allowing the creation of Accessory Dwelling Units (ADUs) through amended zoning codes. ADUs, also known as "granny flats," are small apartments built on a property with a preexisting home as the primary structure. Units typically function as studio apartments and tend to accommodate one or two people. ADUs can allow for seniors to age in place, provide homeowners with extra rental income, and fill a gap in affordable rental units.

An ADU can be constructed as either an interior, attached, or detached unit. Interior units are located within the primary structure, attached units are connected to the primary structure, and detached units are separate—for example, being built above a detached garage. The attached and detached units, which are visible on the exterior of the house, are typically designed to blend in with the primary structure and neighborhood architecture. Allowing for the construction of ADUs offers an alternative to rental projects that would create large and expensive buildings, altering the characteristics of a neighborhood.

Resistance to ADUs often centers around worries about overcrowding a neighborhood with an influx of renters, density, and traffic. In practice, these worries are generally unfounded, because of the practical limitations of ADUs and regulation measures passed by cities. Below are two examples of cities that have decided to allow ADUs under their zoning codes. Santa Cruz, CA has been successfully implementing ADUs for the past decade, and under the guidance of [Local Leaders Council Member Lisa Bender](#), Minneapolis recently passed an ordinance to allow ADUs.

### Santa Cruz, CA

Technically, Santa Cruz has allowed ADUs in its zoning code since 1984, but an update in the early 2000s revived the practice in the face of steep housing costs. Retirees on fixed incomes were moving out of the city, and citizens looking to rent often turned to informal arrangements in undocumented makeshift guesthouses invisible to safety authorities. The zoning code's rewrite expanded the locations in which ADUs were allowed to include all single-family residential lots greater than 5,000 square feet.

ADUs in Santa Cruz are constructed and permitted along the same standards as primary residential structures. As part of

their design, ADUs must be compatible with the primary structure, maintain the privacy of neighbors, and include an off-street parking space. The policy won the "Policies and Regulations Smart Growth Achievement Award" from the U.S. Environmental Protection Agency in 2004.

The city has tried to encourage ADUs through incentives and less restrictive regulations. Homeowners constructing ADUs have the ability to have their permit fees waived if they commit to renting their unit to low or very-low income tenants. Easing the parking requirement, which can act as a barrier to construction, is something the city is looking into to encourage construction. In the decade since the code has been rewritten, over 220 new units have been constructed compared to just 120 in the previous 20 years.

### Minneapolis, MN

On December 5, 2014, the Minneapolis City Council voted 10-1 approving an amendment to the zoning code, which would expand the ability to build ADUs from one pilot neighborhood to any lot with single or two-family homes. The amendment, introduced by Council Member Bender, will be able to address some of the housing needs in the city. "The great thing about this ordinance is that it really fits people at all ages and different life points," said Bender. "It creates more affordable rental options in the city, and rental income can help homeowners stay in their homes."

The amendment allows all three types of ADUs – internal, attached, and detached – but has regulations that mitigate impact on the neighborhood. Units cannot exceed 1,000 square feet, must be shorter than the height of the primary dwelling, the primary exterior materials of attached units must match those of the primary structure, and exterior materials of detached units must be durable. Two unique features of the amendment are a homestead regulation that requires the property owner live in the primary structure or ADU, and the omission of the parking requirement. These prevent neighborhoods from losing the social fabric of the original homeowners, and avoid the increased congestion from additional automobile traffic.

The amendment passed quickly, and with broad support, in part due to extensive public outreach and coalition building in the city.

Six public meetings were held in order to inform citizens and answer any questions or concerns they may have had. The measure was also supported by many advocacy groups. "We were able to put together a great coalition of supporters from the environmental, smart growth, preservation, and senior advocacy communities, which I think really helped build support," Bender said. She believes that the first ADU projects will come on-line in early 2015, and has city staff working to put together a manual for citizens as well as other outreach events.

ADUs are just one policy featured on the Local Leaders Council [Model Policies](#) page. The model policies are used to provide examples of thoroughly vetted policies that leaders can use as templates for legislation in their own towns. Recently, two dozen model policies were rolled out in the categories of housing, transportation, economic development, and sustainability.

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A rendering of an attached ADU. Image courtesy of City of Minneapolis.

# New Law Strengthens Local Regulation of *Massage Businesses*

by Kirstin Kolpitcke

AB 1147 (Bonilla, Chapter 406, Statutes of 2014) went into effect on Jan. 1, 2015. This legislation returned to California cities and counties the authority to adopt ordinances related to the massage therapy industry through a combination of land-use and business regulations.

Local governments regained their authority to regulate the business of massage, and a nonprofit organization remains responsible for overseeing the voluntary certification of massage professionals statewide. The duties of the California Massage Therapy Council (CAMTC) include:

- Issuing certificates to individual applicants;
- Disciplining certified massage professionals for violating the requirements of AB 1147;
- Establishing fees related to the cost of providing services;
- Protecting the public; and
- Verifying the legitimacy of massage schools.

State law originally authorized up to 20 people on the CAMTC Board of Directors at any given time — with some board members specified by statute, and others could be added through CAMTC's bylaws by appointment.

AB 1147 changed the composition of the CAMTC board. On Sept. 15, 2015,

the CAMTC Board of Directors will reconvene, and the four-year terms of 13 new members will begin. The newly configured board will include one member appointed by each of the following organizations, agencies and groups:

1. The League;
2. The California Police Chiefs Association;
3. The California State Association of Counties;
4. CAMTC, which will appoint a representative from an anti-human trafficking organization;
5. The California Community Colleges Chancellor's Office;
6. The director of the Department of Consumer Affairs, who will appoint one member of the public;
7. The California Association of Private Postsecondary Schools;
8. The American Massage Therapy Association, California Chapter. This person must be a California-certified massage therapist and California resident who has been practicing for at least three years;
9. CAMTC, which will also appoint a public health official representing a city, county, city and county, or state health department; and

10. A professional massage entity, which must have a dues-paying membership in California of at least 1,000 individuals, have been established since 2000 and have bylaws that require its members to comply with a code of ethics. This entity will appoint a certified massage therapist or massage practitioner who is a California resident and has practiced massage for at least three years prior to the appointment.

Each of these organizations and agencies may choose not to exercise its right to appoint a member to the CAMTC board.

The board will also appoint three additional members:

1. An attorney licensed by the State Bar of California, who has been practicing for at least three years and at the time of appointment represents a city in the state;
2. A massage business entity that has been operating in the state for at least three years; and
3. An individual with knowledge of the massage industry or who can bring a needed expertise to the operation of the council.

The League supported the change to CAMTC's board in an effort to promote and educate the council on a more diverse set of interests. ■

## Answers to Your Questions About AB 1147 Implementation

For answers to frequently asked questions about what the law authorizes and prohibits, read a helpful Q&A compiled by the League, the California State Association of Counties, American Planning Association and California Police Chiefs Association. You can find it — along with links to background information on this topic and other useful related resources — in the online version of this article at [www.westerncity.com](http://www.westerncity.com).



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