INLAND FOUNDATION ENGINEERING, INC.
Consulting Geotechnical Engineers and Geologists
www.inlandfoundation.com
P.O. Box 937, San Jacinto, California 92581

June 14, 2018
Project No. C522-001

Attention: John Kiley, Vice President
CAMFIELD ESPLANADE, LLC
8895 Research Drive
Irvine, California 92618

Re: Geotechnical and Geologic Review
Existing Commercial Building Site
1091 Esplanade Avenue
San Jacinto, California

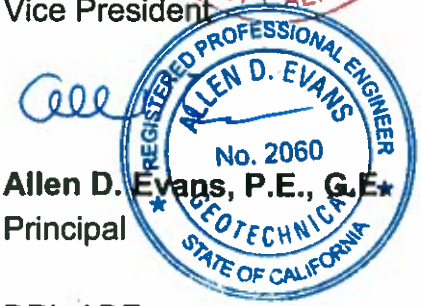
Dear Mr. Kiley:

Inland Foundation Engineering, Inc. is pleased to submit this geotechnical and geologic review report for the referenced project.

We appreciate the opportunity to be of service to you on this project. If you have any questions, please contact our office.

Respectfully,
INLAND FOUNDATION ENGINEERING, INC.

Daniel R. Lind, P.G., C.E.G.
Vice President

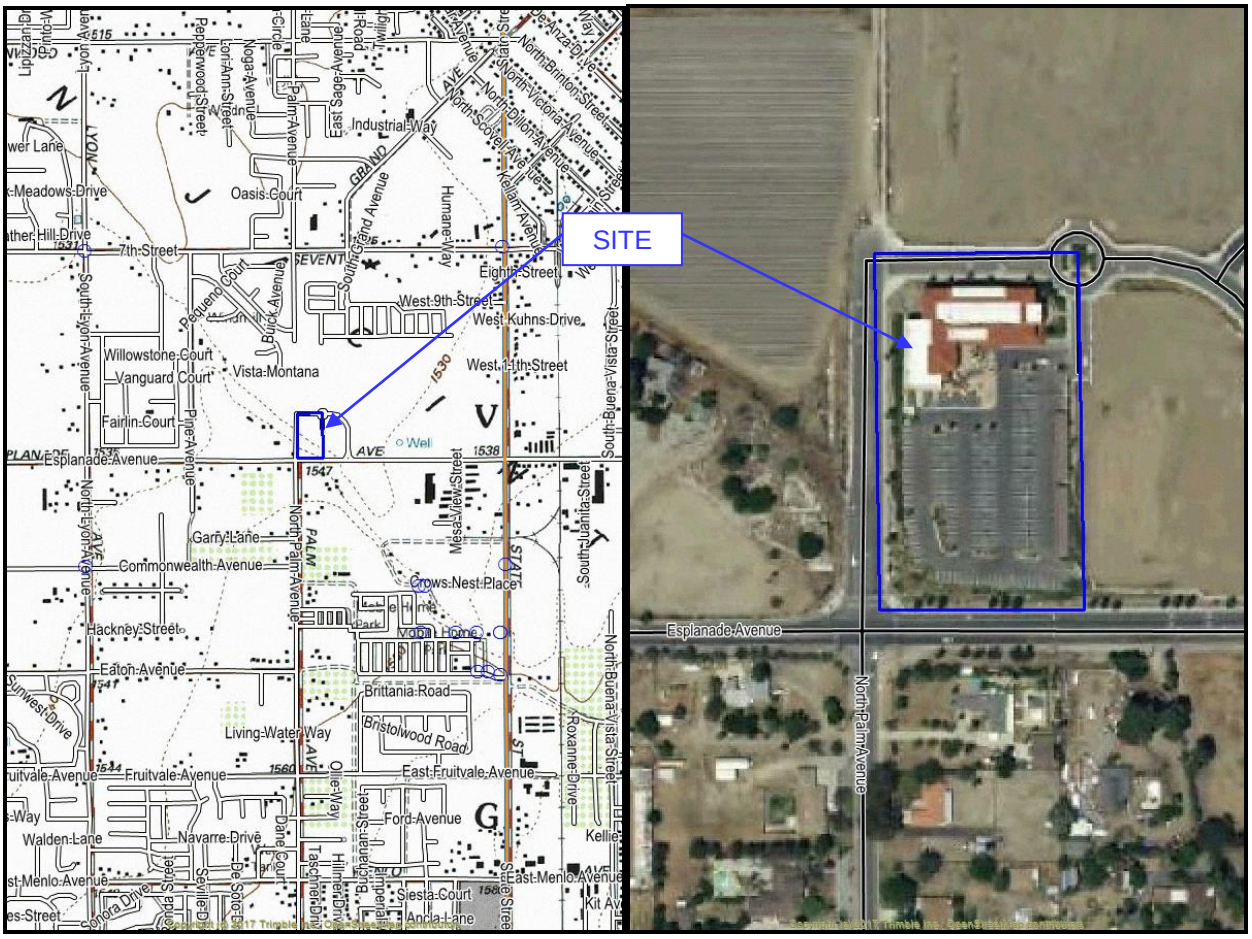


Allen D. Evans, P.E., G.E.
Principal

DRL:ADE:es
Addressee (1)

INTRODUCTION

Inland Foundation Engineering, Inc. (IFE) is pleased to submit this summary of our geotechnical and geologic review of an existing commercial development located at 1091 Esplanade Avenue in the City of San Jacinto, California. The existing commercial structure is located northeast of and adjacent to the intersection of Esplanade Avenue and Palm Avenue as shown below.



U.S.G.S. Topographic Map, San Jacinto 7.5' Quadrangle and Aerial Photograph (2016)

BACKGROUND

Inland Foundation Engineering, Inc. was retained in 2005 to conduct a geologic fault investigation, a preliminary geotechnical investigation, and a Phase I Environmental Site Assessment, for the proposed development on the site. At that time, the planned development was intended as a proposed senior apartment facility.

From 2007 through 2008, IFE provided geotechnical observation and testing services during rough grading, fine grading and construction of on-site utility laterals and pavement. IFE also provided observation and testing services during construction of off-site improvements, including dry utilities. Other services provided included materials testing and inspection during construction of the existing two story structure. At that time, the intended use of the facility under construction was for medical offices.

In preparing this report, we performed a review of published and unpublished reports and data in our project files that included, but were not limited to:

- A report entitled “Geologic/ Fault Evaluation, Proposed Residential/Commercial Development, 21± Acres, Assessor’s Parcel Nos. 435-190-010 and 435-190-039, City of San Jacinto, Riverside County, California”, dated June 25, 2005.

- A report entitled “Phase I Environmental Site Assessment, San Jacinto Parkside Senior Apartments and Office Buildings, Esplanade Avenue, San Jacinto, California”, dated June 30, 2005.

- A report entitled “Preliminary Geotechnical Investigation, Proposed Residential/ Commercial Development, 21± Acres, Assessor’s Parcel Nos. 435-190-010 and 435-190-039, City of San Jacinto, Riverside County, California”, dated August 10, 2005.

- A report entitled “Compaction Testing during Grading, Parkside Medical – Building No. 1, San Jacinto, California”, dated November 16, 2007.

Due to non-payment for the services provided, numerous final geotechnical observation and testing reports were not issued. These include reports for on- and off-site improvements for street and storm drain improvements, in addition to reports for testing performed on-site during fine-grading, utility installation and paving.

CURRENT PROJECT STATUS

The existing two-story structure was constructed during the approximate period of June 2007 to June 2008. The project was designed and constructed to comply with the requirements of the 2001 California Building Code, which was the controlling building code in effect at the time.

The existing two-story tilt-up concrete structure occupies approximately 19,000 square feet (in plan view). The developed portion of the site that is addressed in this review occupies approximately four acres.

The structure is supported by a combination of isolated square and continuous wall type foundations. Existing site improvements consist of the existing structure, a paved parking lot and landscaping. We understand that the existing building has never been occupied since its construction.

The existing building is being considered for use as a charter school. We understand the structure is not subject to the State of California Division of the State Architect (DSA) or California Geologic Survey (CGS) requirements for school projects.

SCOPE OF SERVICE

Our scope of service for this review included the following:

- Review of available published and unpublished reports in our files that pertain to the project.
- Geologic and engineering site reconnaissance to observe and evaluate existing conditions. No subsurface exploration or testing was conducted.
- Evaluation of existing data relative to the 2001 CBC and the standard of practice at the time of construction.
- Preparation of this report that summarizes our findings and presents our opinion(s) regarding the suitability of the site and associated off-site improvements for the planned use at the time of construction.

Our current review and evaluation was limited to the existing **developed facilities** as outlined on the above location map. Our scope of service did not include any discussion or recommendations for new construction on the site. Our evaluation was limited to the geologic and geotechnical conditions at the site based on previous exploration and testing by IFE, and the building code and standard of care at the time the services were conducted.

The following sections present a discussion of site conditions documented at the time the previous studies were conducted. A summary of the project geotechnical design parameters and a discussion of the testing and observation during construction are also presented.

PRE-DEVELOPMENT SITE CONDITIONS

The project site is located in the southwesterly portion of Section 34, Township 4 South, Range 1 West, San Bernardino Base and Meridian. The site is located northeast of and adjacent to the intersection of Esplanade Avenue and Palm Avenue in the City of San Jacinto, California. The project site is bounded to the south by Esplanade Avenue, to the east by Valley Wide Recreational Park, to the north by a drainage channel, and to the west by residences and vacant land.

At the time of the initial evaluation of the site in 2005, the project site consisted of vacant land. A mobile home park was present to the north of the drainage channel. Single-family residences were present to the south of Esplanade Avenue.

The topography is relatively planar. The southwest portion of the site slopes slightly to the northeast, representing the Casa Loma fault scarp. Vegetation on the site consisted of a heavy growth of seasonal weeds and grasses.

Evidence of underground water lines owned by Eastern Municipal Water District was observed in an easement along the western boundary of the site.

GEOLOGIC SETTING

The subject site is situated within a natural geomorphic province in southwestern California known as the Peninsular Ranges, which is characterized by steep, elongated ranges and valleys that trend northwesterly. This province is believed to have originated as a thick accumulation of predominantly marine sedimentary and volcanic rocks during the late Paleozoic and early Mesozoic (pre-batholithic rocks). Following this accumulation, in mid-Cretaceous time, the province underwent a pronounced episode of mountain building. The accumulated rocks were then complexly metamorphosed and intruded by igneous rocks, known locally as the Southern California Batholith. A period of erosion followed the mountain building, and during the late Cretaceous and Cenozoic time, sedimentary and subordinate volcanic rocks were deposited upon the eroded surfaces of the batholithic and pre-batholithic rocks (post-batholithic rocks).

More specifically, the site is situated along the northeastern portion of the Perris Block (which is a sub-structural block of the Peninsular Ranges), an eroded mass of Cretaceous and older crystalline rock. Thin sedimentary and volcanic units mantle the bedrock in a few places with alluvial deposits filling in the lower valley areas. The Perris Block, approximately 20 miles by 50 miles in extent, is bounded by the San Jacinto Fault Zone to the northeast, the Elsinore Fault Zone to the southwest, the Cucamonga Fault to the northwest, and to the southeast by the fringes of the Temecula basin where the boundary is ill-defined. The Perris Block has had a complex history, apparently undergoing relative vertical land movements of several thousand feet in response to movement on the Elsinore and San Jacinto Fault Zones. These movements of the geologic past, in conjunction with the semi-arid climate and the weathering resistance of the rock, are responsible for the formation and preservation of ancient, generally flat-lying erosion surfaces now present at various elevations that give this region its unique geologic character.

Locally the study area is included within a substructural unit of the Perris Block known as the San Jacinto Valley. This valley is essentially a deep alluvial filled graben formed by the structural movements of the San Jacinto Fault Zone locally. According to Dibblee (1971, 1982, and 2003), the subject site is shown to be underlain by Quaternary alluvial deposits comprised predominantly of unconsolidated alluvial sand and clay of valley areas. The alluvial deposits have principally originated as outwash from Bautista Wash to the southeast, the San Jacinto River to the north, and other lesser tributaries (IFE, 2005).

FAULTING AND SEISMICITY

The southwesterly portion of the site is located within a State of California "Alquist-Priolo Earthquake Fault Zone" for fault rupture hazard associated with the Casa Loma Fault (San Jacinto Fault Zone). The purpose for this zone is to prohibit the location of structures for human occupancy (defined as 2,000 man hours per year) across traces of active faults and to thereby mitigate the hazard of surface fault rupture. The Casa Loma Fault is locally considered to be the southern splay of the San Jacinto Valley segment of the San Jacinto Fault Zone. The San Jacinto Fault is considered to be one of the major splays of the San Andreas Fault system and is considered to be the most seismically active faults in southern California (Sharp, 1967). The tectonics and structure of the San Jacinto Fault Zone are very complex; it is composed of numerous faults that are discontinuous and/or "en-echelon" in nature. The San Jacinto Fault (San Jacinto Valley Segment) is a right-lateral, strike-slip fault, approximately 42 kilometers in length, with an estimated maximum moment magnitude (M_w) earthquake of M_w6.9 and an associated slip-rate of 12.0 ±6.0 mm/year (IFE, 2005). It should be recognized that any area close to major fault zones could be subject to "new faulting" (Collins, 1990) during severe seismic events.

IFE conduced a subsurface geologic fault investigation on the site in 2005. The intent of this investigation was to identify the presence of active faults on the site, by means of subsurface exploration, in order to establish any necessary corresponding restricted building zones, where warranted. The report was prepared utilizing the suggested "Guidelines for Evaluating the Hazard of Surface Fault Rupture" (California Division of Mines and Geology, Note 49) and "Guidelines to Geologic/Seismic Reports" (California Division of Mines and Geology, Note 43). In addition, the “Technical Guidelines for Review of Geotechnical and Geologic Reports (Fault Hazard Reports, Part III),” prepared by the Riverside County Building and Safety Department (1998) was also utilized for the study.

The referenced geologic/fault evaluation report indicates that active faulting was locally observed within exploratory trenches excavated within the southwestern portion of the site. Therefore, a Restricted-Use Zone for human occupancy structures was established.

The following paragraphs present a summary of the 2005 geologic/fault evaluation report findings.

Photogeology: A detailed examination of stereo pairs of aerial photographs was utilized to assess the local and regional geologic and geomorphic characteristics with respect to the site and vicinity. Eight sets of vertical black and white aerial photographs were examined that were taken between the years of 1949 to 2000, at different scales (see References for a listing).

A northwesterly trending tonal lineation was noted within the southwestern portion of the site. The mapped fault along the southern property boundary appeared to correspond with a prominent geomorphic escarpment, as observed at the site and as noted in the referenced photographs. This photolineation is generally coincident with the mapped trace of the Casa Loma Fault. The aerial photograph review also revealed tonal differences noted between the northerly and southerly portions of the site. This appeared to be related to moisture/vegetation

differences and agricultural disturbance. The subsurface trenching crossed this tonal boundary, revealing no evidence of faulting in this area.

Field Reconnaissance: Surficial field reconnaissance performed during the investigation revealed a distinct geomorphic scarp feature suggestive of faulting along the southwest portion of the site. No other surficial geomorphic features or indications of fault-related features were observed within the property boundaries; however, a northwest trending fracture within the asphalt concrete on Esplanade Avenue was observed near the base of the scarp south of and adjacent to the site. The site was vacant at the time of the field study. A dense growth of seasonal weeds was present.

Subsurface Trenching: Three exploratory trenches, totaling 785 feet in length, were excavated to an average depth of 17± feet. These trenches were excavated in a general northeast-southwest direction, as normal as possible to the delineated Earthquake Fault Zone trend. The trenches revealed that the entire ground surface (12-18± inches) is disturbed by discing/plowing. Beneath the disturbed surficial sediments were unconsolidated Holocene age alluvial deposits comprised of interbedded fine to coarse-grained sands and silty sands, fine to coarse grained sands, and fine to medium-grained silty sands that are relatively flat-lying. Interbedded thin lenses of sandy silt and clayey silt were observed throughout the section. Stream channel incisions were observed locally within the trench exposures. Some of the individual lithologic layers were massive in appearance and others well-bedded. Overall, the sediments were stratified in a generally horizontal orientation.

Of particular note were the distinct sand beds that average 5 to 8± inches in thickness. These layers created very good “marker-beds” that distinctly displayed offsets produced by faulting, as they were generally horizontal in nature and were mostly continuous throughout the trenches. Graphic geologic logs were prepared at a scale of one inch equals ten feet (horizontal and vertical) that depicted the conditions and structure of the earth materials encountered locally. This scale was deemed appropriate for this project due to the uniform and continuous lithologic features exposed along the southeastern trench wall.

Relative Age Dating: As mapped by Dibblee (2003), the site is shown to be underlain by Holocene age alluvial sediments. Observations of the diagnostic morphologic characteristics indicate that the sediments encountered are Holocene in age. In addition, IFE performed a fault investigation approximately 1.2 miles southeast of the site along the Casa Loma Fault in 2003, wherein detrital carbon was collected within a silt lens at a depth of 11± feet. That sample yielded a calibrated age of 4,490 ±40 years BP (before present). The subject site displayed similar lithologic features and characteristics and, therefore, the sediments at the site were expected to be of the similar age as the sediments dated to the southwest. No major time period gaps or shifts are expected between the two sites. Subsurface trenching into older sediments (late Pleistocene) was generally not considered feasible at the site due to the depth of the anticipated older contact (greater than 27 feet based on an assumed sedimentary depositional rate locally of 0.0025± ft/year, per Carbon-14 test results) and the loose, caving nature of the overlying sediments. Using this depositional rate, the bottoms of the trenches excavated at the site were estimated to have exposed sediments with ages on the order of

6,000 years BP, assuming that the rate of deposition has been constant at the site during the past 11,000 years.

Faulting: An active fault zone was encountered during the subsurface trenching, being along the southwestern portion of the site, which corresponds with the known location of the main Casa Loma Fault. The fault zone encountered is coincident with the mapped fault trace as well as with the geomorphic expression of the escarpment. Previous fault studies by Lewis Lohr & Associates (1993 and 2000) and Lawson & Associates (2002), identified the Casa Loma Fault Zone on adjacent and nearby parcels to the west and northwest of the site. The IFE investigation indicated that the main fault zone on the subject property is located approximately 30 feet downslope of the top of the geographic expression of the escarpment. Several en-echelon fault strands were encountered as far as 175 feet (±) downslope of the top of the geographic expression of the escarpment. Several of the faults encountered displaced sediments up to the plow zone. Some of the fault strands juxtaposed entirely different sediment lithology with no apparent layer matches, with other strands showing relative minor displacements.

The fault zone was staked and then surveyed by the project civil engineering firm for documentation purposes. No other evidence of active faulting was observed within the limits of the trenching. Other than the fault zone encountered as previously discussed, no evidence of active faulting was observed within the trench excavations.

Restricted-Use Zone / Buildable-Use Area: Along the southwestern portion of the subject site where active faulting was encountered, a Restricted-Use Zone for human occupancy structures was established. As recommended by the State of California, a 50-foot wide building setback should be used from the edge of an active fault for habitable structures (defined as 2,000 person hours per year). The Restricted-Use Zone was shown on the Geologic Map in the report and is delineated by the Building Setback Lines. The limits of the "Building Setback Line", and conversely the "Restricted-Use Zone", were established by survey of the fault location and trench ends as previously discussed.

Seismicity: The primary geologic hazard within the buildable-use portion of the site was evaluated to be that of ground shaking. Moderate to severe ground shaking could be anticipated during the life of the proposed residential development. Ground shaking from earthquakes accounts for nearly all earthquake losses. IFE recommended that all structures be designed to at least meet the current California Building Code provisions in the latest CBC edition (2001); however, it was noted that the building code is described as a minimum design condition and is often the maximum level to which structures are designed. Structures that are built to minimum code are designed to remain standing after an earthquake in order for occupants to safely evacuate, but then may have to ultimately be demolished (Larson and Slosson, 1992).

It is the responsibility of both the property owner and project structural engineer to determine the risk factors with respect to using CBC minimum design values for the subject project. The previously-outlined CBC seismic classifications and data were provided for use by the project structural engineer, to aid in evaluating design criteria, if needed. This information was intended

to be used to help select the appropriate seismic acceleration and velocity design coefficients and factors, as outlined in the California Building Code (CBC, 2001).

Secondary Seismic Hazards: Based on the 2005 report, there appears to be a potential for ground rupture at the site, within the "Restricted-Use Zone," along with the possibility of seismically-induced settlement across the entire site. There did not appear to be any other permanent or transient secondary seismic hazards that would affect the proposed residential development. Mitigation for ground rupture at the site was accomplished by the creation of the designated "Restricted-Use Zone." The report recommended that the potential for seismically-induced settlement be properly evaluated during future geotechnical studies, with mitigation measures to be provided at that time, if warranted.

SITE SOIL CONDITIONS

The referenced 2005 geotechnical investigation indicated that the site is underlain by alluvial deposits in a loose to medium dense condition. The native alluvial soils were described as sands, silty and clayey sands and fine-grained deposits. Within the exploratory borings, the relative compaction of the relatively undisturbed native soil ranged from 74 to over 90 percent. The average relative compaction of the soil within the upper ten feet was approximately 83 percent, with a statistical uncertainty of approximately 5 percent.

Laboratory testing indicated some native soils within the zone of influence to the proposed development were moderately plastic and assumed to be expansive. Expansion indices of 49 and 55 were indicated by the laboratory testing. Plasticity indices within the upper fifteen feet ranged from 2 to 5.

Consolidation testing indicated that the soil was slightly compressible and normally to slightly over-consolidated. This testing indicated that the soil is not subject to saturation collapse.

Analytical testing indicated that the concentration of sulfates in the soil may range from less than 0.001 to 0.003 percent, which is considered to be negligible with respect to sulfate attack on concrete. Chloride concentrations were less than 500 parts per million. The soil was neutral to slightly alkaline with pH values of 7.0 to 7.5. Saturated resistivities ranged from 3500 to 9600 ohm-cm.

Groundwater was not encountered during the geotechnical investigation. A groundwater level of 150 feet was assumed in the analyses.

GEOTECHNICAL DESIGN PARAMETERS

The primary issues requiring mitigation were related to non-uniform soil consistencies and potentially loose and disturbed soils near the surface of the site. As indicated in the 2005 geotechnical investigation report, these items could result in intolerable settlements if not mitigated by removing and recompacting the soil. In addition, expansive soils were encountered.

The presence of active faulting on the southwest portion of the site effected the establishment of a building setback zone as described in the report of that study. The close proximity to active faulting also effected the ground-shaking parameters provided in the geotechnical report.

The following paragraphs present the recommended design criteria from the 2005 geotechnical investigation report.

Seismic Design Parameters: The exploratory borings for the geotechnical investigation were advanced to depths of up to 50 feet. On the basis of Standard Penetration Testing (SPT), the Soil Profile Type was assumed to be S_D for the purpose of developing seismic design criteria in accordance with the 2001 California Building Code.

On the bases of the subsurface conditions and local fault characteristics, the 2001 California Building Code provided the following seismic design parameters:

CBC-Chap.16 Table No.	Seismic Parameter	Recommended Value
16-I	Seismic Zone Factor Z	0.40
16-J	Soil Profile Type	S_D
16-Q	Seismic Coefficient C_a	0.57
16-R	Seismic Coefficient C_v	1.02
16-S	Near Source Factor N_a	1.3
16-T	Near Source Factor N_v	1.6
16-U	Seismic Source Type	B

It was noted that these provisions were intended to be the minimum design condition and are often used as the maximum level to which structures are designed. The minimum code criteria are designed to allow occupants to safely evacuate a structure after an earthquake. The structure may no longer be safe for inhabitants and may ultimately have to be demolished.

Foundation Design: The results of the investigation indicated that either continuous wall or isolated square footings, supported upon properly recompacted native materials, may be expected to provide satisfactory support for the proposed structure. All footings were recommended to be underlain by properly compacted fill, as described in the Site Grading Section of the report.

Footings were recommended to have a minimum width of twelve inches and to be founded a minimum of twelve inches beneath the lowest adjacent final grade. Foundations supporting two floors were recommended to have a minimum width of fifteen inches and be supported a minimum of eighteen inches beneath the lowest adjacent final grade. For design, IFE recommended an allowable soil bearing capacity of 1,250 pounds per square foot.

The recommendations made in the preceding paragraph were based on the assumption that all footings would be supported upon properly compacted soil. All grading was to be performed under the testing and inspection of the Soil Engineer or his representative. Prior to the placement of concrete, it was recommended that the footing excavations be inspected in order to verify that they extended into satisfactory soil and were free of loose and disturbed materials. The report recommended that if concrete were to be placed on dry absorptive soil in hot and dry weather, the soil be dampened but not to a point that there is freestanding water prior to placement. It was also recommended that the formwork and reinforcement be dampened.

Settlements of properly designed and constructed footings were expected to be within tolerable limits for the proposed structure. Both continuous wall and isolated square footings carrying the design loads within the limits of the allowable bearing capacity were expected to experience a maximum settlement of one inch. Differential settlements of the proposed structure were expected to be less than one-half inch vertical over 20 feet horizontal.

Lateral Design: The allowable bearing capacity provided in the preceding section was for the total of dead and frequently applied live loads. This may have been increased by 33 percent to provide for lateral loads of short duration such as those caused by wind or seismic forces.

Resistance to lateral loads was to be provided by a combination of friction acting at the base of the slab or foundation and passive earth pressure. A coefficient of friction of 0.35 between soil and concrete was recommended for use with dead load forces only. A passive earth pressure of 215 pounds per square foot, per foot of depth, was recommended for the sides of footings poured against recompacted or dense native material. The report recommended that passive earth pressure be ignored within the upper one foot, except where confined, as beneath a floor slab, for example.

Seismically-Induced Settlement: The analysis for seismically induced settlement was based upon Tokamatsu and Seed (1984). The corrections for Fines Content (FC) were based upon Seed et al (1985) for the “triggering” analysis. The seismic parameters included a horizontal acceleration of 0.89g and a modal Magnitude of 6.75 based upon a hazard deaggregation analysis. The results indicated total estimated settlements of slightly less than two inches due to seismic shaking. Conservatively, the differential settlement due to a seismic event was expected to be less than 1.5 inches vertical over forty feet horizontal.

Liquefaction Mitigation: Liquefaction is a phenomenon where soil temporarily loses strength due to cyclic stresses such as those caused by an earthquake. The primary effects of liquefaction are loss of support of the foundation, sand boils, lateral spreading and seismically induced settlement. Liquefaction is generally considered a hazard in relatively loose sandy soils with the groundwater table within fifty feet of the surface. Groundwater was not encountered within the upper fifty feet and was not expected to occur within the upper 150 feet. Therefore, a liquefaction analysis was not conducted.

Trench Wall Stability: Significant caving did not occur within the exploratory borings. The report recommended that all excavations be configured in accordance with the requirements of CalOSHA and that the soils be classified as Type C. The classification of the soil and the

shoring and/or slope configuration were expected to vary and to be the responsibility of the contractor on the basis of the trench depth and the soil encountered. The report recommended that the contractor have a "competent person" on-site for the purpose of assuring safety within and about all construction excavations.

Retaining Walls: The geotechnical report recommended that retaining walls that may be necessary during construction and/or landscaping be designed for an active earth pressure equivalent to that exerted by a fluid weighing not less than that shown in the following table:

Surface slope of retained material Horizontal:Vertical	If clean sand and/or gravel with $\phi = 38°$ is used to backfill	If native soils are used to backfill
Level	30	40
2 to 1	43	61

The report also recommended that, "Any applicable construction and seismic surcharges should be added to the above pressures. At least 12 inches of granular material should be used in the backfill behind the walls and water pressure should not be permitted to build up behind retaining walls. The upper 12 to 18 inches of the backfill should consist of soil having a low permeability (less than 10^{-6} cm/sec). All backfill shall be non-expansive. A subdrain should be constructed along the base of the backfill."

Concrete Slabs-on-Grade: The report recommended that concrete slabs-on-grade have a minimum thickness of four inches and be underlain by a minimum compacted fill thickness of 12 inches, placed as described in the Site Grading Section of the report.

The report recommended that it be assumed that the soils under the slab will likely become saturated during the life of the structure. Moisture will also be emitted from the concrete mixture as it cures. Flooring manufacturers may have specific requirements related to emission rates from concrete that should be achieved prior to the placement of flooring. Typically, these range from 0.3 to 0.5 pounds of water per 1000 square feet per 24-hour period. The emission rates are measured using an approximate 72-hour test procedure. The drying time of the concrete may be reduced using a lower water-cement ratio such as 0.5 or 0.45. The use of fly ash may enhance workability of the mix and reduce the alkali content within the slab. The use of a chemical membrane or curing compound may increase the drying time. Other suitable curing methods are available. The curing process is important in reducing plastic shrinkage cracking and should not be overlooked or eliminated to reduce dry times.

Where slabs are to receive moisture sensitive floor coverings, the use of a vapor retarder was recommended. There are various products manufactured for this purpose. At the time of the report, ASTM provided a standard water vapor permeance of 0.3 perms. Such materials would allow up to 18 gallons of water per week in a 50,000 square foot area. Therefore, it should be understood that these materials are not vapor "barriers". Some flooring applications may

require more effective barriers. Therefore, the selection of a vapor barrier should be based upon the type of flooring material and is not considered to be a geotechnical engineering design parameter.

Vapor retarders should have a minimum thickness of 10-mil unless otherwise specified. It is possible that the retarders will be exposed to equipment loads such as ready-mix trucks, buggies, laser screeds, etc. In such cases, the thickness should be increased to at least 15-mil. The concrete may be placed directly upon the vapor retarder but should be designed with reinforcement to offset additional curling stresses. Seams and holes made for underground utilities should be properly sealed per the recommendations of the manufacturer.

The vapor retarder recommended in the preceding paragraphs is a common method of reducing the migration of moisture through the slab. It will not prevent all moisture migration through the slab nor will it prohibit the formation of mold or other moisture related problems. For moisture sensitive floor coverings, an expert in that field should be consulted to properly design a moisture barrier suitable for the specific application.

It was recommended that if concrete is to be placed on a dry absorptive subgrade in hot and dry weather, the subgrade should be dampened but not to a point that there is freestanding water prior to placement. The formwork and reinforcement should also be dampened.

The report indicated that shrinkage of concrete should be anticipated. This will result in cracks in all concrete slabs-on-grade. Shrinkage cracks may be directed to saw-cut "control joints" spaced on the basis of slab thickness and reinforcement. A level subgrade is also an important element in achieving some “control” in the locations of shrinkage cracks. Control joints should be cut immediately following the finishing process and prior to the placement of the curing cover or membrane. Control joints that are cut on the day following the concrete placement are generally ineffective. The placement of reinforcing steel will help in reducing crack width and propagation as-well-as providing for an increase in the control joint spacing. The use of welded wire mesh has typically been observed to be of limited value due to difficulties and lack of care in maintaining the level of the steel in the concrete during placement. The addition of water to the mix to enhance placement and workability frequently results in an excessive water-cement ratio that weakens the concrete, increases drying times and results more cracking due to concrete shrinkage during the initial cure.

Expansive Soils: Testing and observations indicated that potentially expansive soils should be considered throughout the project and that expansive soil design criteria should be implemented for foundations and concrete slabs-on-grade. The following table summarizes the 2001 CBC Section 1815 criteria recommended in the referenced 2005 report.

Parameter	CBC Figure No.	Value
C_O	18-III-2	2.0
C_S	18-III-3	1.0
C_W	18-III-4	15
Effective PI	N/A	Less than 15
q_u	N/A	200 PSF
1-C	18-III-8	0.0

The recommendations for expansive soils presented above were based upon the Section 1815 of the 2001 CBC. As a minimum, the report recommended the following for conventional foundations and concrete slabs-on-grade unless otherwise indicated by structural design:

Foundations: That interior and exterior footings be founded at minimum depths of 18 inches beneath the lowest adjacent final grade and that all footings be reinforced with four No. 4 reinforcing steel bars placed two top and two bottom.

Concrete Slabs-on-Grade: That all concrete slabs-on-grade have a minimum thickness of 4 inches and be reinforced with No. 3 reinforcing steel bars 18 inches on center each way, placed at mid-depth in the slab.

Moisture Conditioning: That all areas receiving concrete slabs-on-grade have the soil moisture content brought to at least 110 percent of the optimum moisture content for a depth of at least 15 inches.

Tentative Pavement Design: That all surfaces to receive asphalt concrete paving be underlain by a minimum compacted fill thickness of 12 inches (excluding aggregate base) and that this be performed as described in the Site Grading Section of the report. The following tentative recommendations for structural street section design were provided:

Service	Asphalt Concrete Thickness (ft.)	Base Course Thickness (ft.)
Parking (Assumed TI=4.5)	0.25	0.5
Driveways and Interior Streets (Assumed TI=5.5)	0.25	0.83
Esplanade Avenue (Assume TI=9.0)	0.42	1.42

SITE GRADING RECOMMENDATIONS

The 2005 geotechnical report indicated that all grading should be performed in accordance with the applicable provisions of the 2001 California Building Code. The report included the following recommendations that were developed on the basis of the field and laboratory testing:

1. **Clearing and Grubbing:** All building, slab and pavement areas and all surfaces to receive compacted fill should be cleared of existing loose soil, vegetation, debris, and other unsuitable materials. The report recommended a minimum overexcavation of at least 36 inches to provide assurance of processing loose and disturbed soils. In addition, the backfill placed in the excavations made for the fault hazard study should be excavated in entirety and replaced as controlled compacted fill. The former trenches should be located on the grading plans and staked in the field at the commencement of site grading.

Abandoned underground utility lines should be traced out and completely removed from the site. Each end of the abandoned utility line should be securely capped at the entrance and exit to the site to prevent any water from entering the site. Soils loosened due to the removal of trees should be removed and replaced as controlled compacted fill under the direction of the Soil Engineer.

2. **Preparation of Surfaces to Receive Compacted Fill:** All surfaces to receive compacted fill shall be subjected to compaction testing prior to processing. Testing should indicate a relative compaction of at least 80 percent **and** a dry density of at least 90 pounds per cubic foot within the unprocessed native soils. If roots or other deleterious materials are encountered or if the relative compaction fails to meet the acceptance criterion, additional overexcavation will be required until satisfactory conditions are encountered. Upon approval, surfaces to receive fill shall be scarified, brought to near optimum moisture content, and compacted to a minimum of 90 percent relative compaction.

3. **Placement of Compacted Fill:** Fill materials consisting of on-site soils or approved imported granular soils, shall be spread in shallow lifts, and compacted at near optimum moisture content to a minimum of 90 percent relative compaction. Observations of the material encountered during the investigation indicate that compaction will be most readily obtained by means of heavy rubber-wheeled or kneading compactors. Some of the soils are fine-grained and will hold ponded water for a considerable period of time.

Due to precipitation at the time of the report, it was noted that the soils may be at relatively high moisture contents and will require drying back or processing in order to achieve stability prior to and during fill placement. It was recommended that this should be investigated by the grading contractor prior to the commencement of site grading.

4. **Preparation of Building Areas:** All building areas should be underlain by a minimum compacted fill thickness based upon the footing type and configuration. This assumes that the footing width is directly proportional to the applied load on the basis of the allowable soil bearing capacity provided in the report. The flowing table presents the recommended depth and extent of recompaction for continuous and isolated square footings:

Foundation Type	Depth of Recompaction below Footing	Extent of Recompaction beyond Footing Edges (ft.)
Isolated Square	One times the footing width	5
Continuous	One times the footing width	5

Footing areas should be overexcavated to the depths and extents indicated in the preceding table. This zone of recompaction should also extend a minimum of 36 inches below the existing or final ground surface, whichever is deeper. The surface of the overexcavation should then be reviewed for compliance with the criteria of Item 2 under this section. Upon approval the surface shall be scarified, brought to near optimum moisture content and compacted to a minimum of 90 percent relative compaction. An inspection should then be made by the soil engineer or his representative, in order to verify the depth of the overexcavation and the relative compaction obtained. The excavated material may then be replaced as controlled compacted fill.

5. **Preparation of Slab and Paving Areas:** During final grading and immediately prior to the placement of concrete or a base course, the report recommended that surfaces to receive asphalt concrete paving or concrete slabs-on-grade should be processed and tested to assure compaction for a depth of at least of 12 inches. This may be accomplished by a combination of overexcavation, scarification and recompaction of the surface, and replacement of the excavated material as controlled compacted fill. Compaction of the slab areas shall be to a minimum of 90 percent relative compaction. Compaction within the proposed pavement areas shall be to a minimum of 95 percent relative compaction.

6. **Utility Trench Backfill:** The report recommended that utility trench backfill consisting of the on-site soil types should be placed by mechanical compaction to a minimum of 90 percent relative compaction. Jetting of the native soils was not recommended.

7. **Testing and Inspection:** During grading tests and observations shall be performed by the soil engineer or his representative in order to verify that the grading is being performed in accordance with the project specifications. Field density testing shall be performed in accordance with the ASTM D1556-00 test method. The minimum acceptable degree of compaction shall be 90 percent of the maximum dry density as obtained by the ASTM D1557-00 test method. Where testing indicates insufficient density, additional compactive effort shall be applied until retesting indicates satisfactory compaction.

Testing was also recommended during the grading process to evaluate that the soils will not subject concrete to sulfate attack and are not corrosive. Testing of any proposed import will be necessary prior to placement on the site. Testing of on-site soils may be done on either a selective or random basis as site conditions indicate.

SITE GRADING

A report entitled “Compaction Testing during Grading, Parkside Medical – Building No. 1, San Jacinto, California”, dated November 16, 2007, prepared by Inland Foundation Engineering, Inc. was reviewed. Testing and observation during the grading for Building No. 1 (the existing structure on site) were performed from November 6 through November 13, 2007 on an intermittent basis. Grading was still in progress for other portions of the project site and some of the tests and observations made during this period included areas other than Building No. 1. The report indicates that fill depths ranging from approximately 7.5 to 13 feet are present beneath the existing structure.

The following summary is based on the 2007 site grading report:

Tests and Observations: Grading activities on the project site included removing existing fill and alluvium and placing fill for the proposed building pad. In addition, grading included the removal and replacement of backfill previously placed in the excavations made for the geologic fault hazard study on the site.

Facets of the work that IFE was involved with included documenting the depth of over-excavation, searching for old fill and loose alluvial soils as recommended in the Preliminary Geotechnical Investigation Report, and conducting compaction testing during the fill placement.

Specific recommendations that were to be implemented from the referenced Preliminary Geotechnical Investigation Report included:

- The minimum recommended depth of removal and recompaction within the building area~~s~~ was to be three feet beneath the existing surface or one (1) times the footing width beneath the footing base elevation, whichever was ~~is~~ greater. This was ~~is~~ intended to provide a means of detecting remnants of former fill, loose alluvium and related unsuitable conditions.

- All building, slab and pavement areas and all surfaces to receive compacted fill were to be cleared of existing loose soil, vegetation, debris, and other unsuitable materials. IFE recommended a minimum overexcavation of at least 36 inches to provide assurance of processing loose and disturbed soils. In addition, the backfill placed in the excavations made for the fault hazard study was to ~~should~~ be excavated in its entirety and replaced as controlled compacted fill. The former trenches were to be located on the grading plans and staked in the field at the commencement of site grading.

  Abandoned underground utility lines were to have been traced out and completely removed from the site. Each end of the abandoned utility line was to be securely capped at the entrance and exit to the site to prevent any water from entering the site. Soils loosened due to the removal of trees were to be removed and replaced as controlled compacted fill under the direction of the Soil Engineer.

- Unprocessed bottoms were to be subjected to compaction testing. Testing should have indicated a relative compaction of at least 80 percent and a dry density of at least 90 pounds per cubic foot within the unprocessed native soils. If testing indicated insufficient density, additional over-excavation was to be required.

The report indicates that observations during grading were not made on a continuous basis. The frequency of the density testing varied; at a minimum, tests were taken every 2 feet vertically throughout the fill. Field density testing was performed in accordance with the nuclear gauge method (ASTM D2922-05) and the sand cone test method (ASTM D1556-00).

Over-Excavation and Removals: Grading for this project included the removal and replacement of unsuitable soils. The criteria for determining suitability of soil for the placement

of compacted fill as described in the site grading report included over-excavating a minimum depth of thirty-six inches below the existing ground surface within the proposed building area. This removal depth was also intended to provide a means of detecting remnants of former and existing fill and related unsuitable conditions.

The site was cleared prior to IFE's arrival. During grading, demolition on the site included the removal of pre-existing fill placed in the excavations made for the fault hazard study of the site.

IFE established the criteria for determining the suitability of the native soils to be a minimum of 80 percent relative compaction and 90 pounds per cubic foot at the surface of the exposed over-excavated areas. The over-excavated areas extended a minimum of five feet outside the building lines.

Density testing indicated that the exposed native soils complied with the acceptance criteria throughout the over-excavated areas prior to recompaction and placement of the compacted fill. These results are included on the attached Summary of Field Density Testing.

Fill Placement: Surfaces to receive fill were scarified, moistened, and compacted to a minimum of 90 percent relative compaction. Fill was placed in lifts not exceeding eight inches and was compacted by means of rubber-wheeled equipment. Scrapers and water trucks were used for fill placement and compaction. The excavated on-site soils were used for fill placement.

Test Method: During grading frequent tests and observations were performed by a representative of IFE in order to verify that the grading was proceeding in accordance with the recommendations of the Preliminary Geotechnical Investigation. Field density testing was performed in accordance with the nuclear gauge method (ASTM D2922-05) and the sand cone test method (ASTM D1556-00). The minimum acceptable degree of compaction was 90 percent of the maximum dry density, which was determined in accordance with the ASTM D1557-02 test method.

Test Frequency: The test frequency was based upon elevation change (minimum vertical elevation change of 2 feet) and observations made during site grading that in IFE's opinion warranted additional testing.

Tests at Bottom of Over-excavations: Tests were taken at the bottoms of the over-excavated building areas in the unprocessed native soils to verify a minimum of 80 percent compaction and 90 pounds per cubic foot prior to processing of the bottoms. The surface of the over-excavation was then scarified, brought to near optimum moisture content and compacted to a minimum 90 percent compaction. A summary of the field test data is appended.

Failing Density Tests: Where testing indicated insufficient compaction, additional compactive effort was applied with the adjustment of moisture content where necessary until satisfactory compaction was achieved. Retests were then performed in order to verify satisfactory compaction. A summary of the field test data is appended.

Grading References: The following plans or grade references were used to determine elevations or depths for testing, removals, over-excavations, and keyways:

1. A grading plan entitled “City of San Jacinto, Parkside Medical, Precise Grading Plan for the Parkside Medical Project (West Half)” dated May 14, 2007 and prepared by CSL Engineering, Inc.

2. Grade stakes set by CSL Engineering, Inc.

Based on these reference points, the soil technician used a hand level and folding engineer’s rule to determine approximate removal depths and test elevations.

Deviations from Original Geotechnical Report: No change or deviations were made during grading that was different from the original approved Preliminary Geotechnical Investigation Report recommendations.

Test Data and Tables: The 2007 site grading report included the attached summary of density testing results. The following are included on the test summary:

- Test Number
- Test Location
- Test Elevations with respect to final grade
- Date Test Taken
- Method (with ASTM designation) of testing
- Moisture Content
- Dry Density
- Soil Type
- Relative Compaction
- Retests
- Remarks

Test Locations: The 2007 site grading report included a site plan that included the following:

- The location of all density tests taken.
- The property boundaries of the project site showing the building areas to be certified.
- Delineation of the “engineered” fill areas.
- The original topography contour lines.
- The limits and boundaries of all removals and over-excavations.
- The graded pad elevations.

Recommendations: The 2007 site grading report included the statement that the conclusions and recommendations in the geotechnical investigation report dated August 10, 2005 remained applicable. Compaction testing indicated a relative compaction of at least 90 percent within the fill materials. Based on the compaction testing, the report indicated that that the proposed building pad was suitable for the proposed construction.

ONSITE UTILITY LATERALS AND BACKFILL PLACEMENT

Compaction testing records of onsite utility trench backfill including sewer, water, gas, irrigation, and dry utilities, were reviewed. This testing was conducted during the period of December 5, 2007 through February 1, 2008.

Summaries of field density testing for the backfill of the onsite utilities tested are appended. This testing indicated that the tested backfill for the onsite utilities was compacted to a minimum of 90 percent relative compaction.

SITE PARKING LOT SUBGRADE PREPARATION, AGGREGATE BASE PLACEMENT

Compaction testing records of onsite parking lot subgrade and aggregate base were reviewed. This testing was conducted during the period of October 31, 2007 through July 1, 2008.

Summaries of field density testing for these items is appended. The testing indicated that the tested subgrade soils and aggregate base for the parking lot were compacted to City of San Jacinto requirements.

OFF-SITE IMPROVEMENTS INCLUDING TRENCH BACKFILL, STREET SUBGRADE PREPARATION, AGGREGATE BASE, CURB/GUTTER AND SIDEWALK CONSTRUCTION

Compaction testing records of off-site improvements including trench backfill, street subgrade and aggregate base, curb, gutter and sidewalk were reviewed. This testing was conducted during the period of September 30, 2008 through October 8, 2008.

Summaries of field density testing for the off-site facilities tested are appended. The testing indicated that the tested trench backfill, subgrade soil and aggregate base were compacted to City of San Jacinto requirements.

DISCUSSION OF CURRENT SITE CONDITIONS

A geotechnical engineer and engineering geologist from our office visited the site on June 4, 2018. Mr. John Kiley, representing Camfield Esplanade, LLC, was present during our site visit. Our site reconnaissance included observations of the interior and exterior of the building and parking area.

A security fence was present around the building. At the time of our visit, there was no electrical power to the building. The property had been vandalized recently, including but not limited to damage to conduits/wiring, and other metal salvaging. Damage to doors and windows has occurred due to the vandalism. The windows and openings to the building have been boarded up. Damage to roof/terrace tiles and other apparent cosmetic damage to the exterior was observed.

Visual observations of the concrete floor slabs and walls of the structure did not reveal indications of apparent structural distress or damage within the building interior (other than the

vandalism damage noted above). Rectangular concrete patch areas were observed on the ground floor slab, possibly related to sewer piping. Erosional undermining of the slab was observed at several locations along the northerly exterior wall. This erosion appears to have been caused by a leaking water or sprinkler pipe. The extent of undermining is not known at this time. Following are photos showing the erosion and undermining.

The asphalt concrete parking lot located to the south of the structure has deteriorated since being constructed in 2008. Apparent shrinkage cracking was observed across most of the

parking lot with weeds growing in the cracks. Following is a photograph of the parking lot area in its current state.

CONCLUSIONS AND RECOMMENDATIONS

Based on our review of the historical information in our files, and our current site reconnaissance, the geotechnical and geologic findings in the 2005 preliminary geotechnical investigation report appear to have been applicable at the time the services were rendered and in general conformance with the 2001 California Building Code and the prevailing standard of practice at the time. Our review indicates that the site grading, backfill placement, and other geotechnical work was conducted in accordance with the recommendations of the 2005 preliminary geotechnical investigation report.

The existing building appears to be structurally sound, with no evidence of any distress or damage from ground settlement or other geotechnical causes. Exterior concrete flatwork adjacent to the building does not exhibit any indication of settlement or other geotechnical related distress. No evidence of trench backfill settlement was observed on site or off site.

We take no exception to the building's currently proposed use a charter school, based on the geotechnical and geologic site conditions as we understand them. The suitability of the structure itself for use as a charter school should be evaluated by a licensed structural engineer and/or architect.

The void below the concrete slab on the north side of the building should be traced out and filled with cement slurry or other suitable material. We can provide additional guidance in this regard if desired.

Cracks in the asphalt concrete parking lot should be cleaned out and filled with a suitable crack filler. Afterward, the entire parking lot should be surface treated with slurry seal or other suitable treatment. We can provide additional guidance in the regard also if desired.

LIMITATIONS

Our services were performed in accordance with the standard of practice exercised by other consulting geotechnical engineers and geologists practicing in the same geographic area. No warranty, express or implied, is made. Our scope of service did not include the evaluation or identification of the potential presence of hazardous materials on the site.

Should conditions be encountered at a later date or more information becomes available that appears to be different than indicated in this report, we should have the opportunity to reevaluate our conclusions and recommendations and provide appropriate mitigation measures, if warranted.

The intent of this evaluation was not to evaluate the geotechnical/ geological suitability of the site based on current (2016 California Building Code) requirements. Our evaluation was limited to the geologic and geotechnical conditions at the site at the time of design and construction, based on previous exploration and testing by Inland Foundation Engineering, Inc. and the building code and standard of care at the time the services were conducted.

REFERENCES

Avery, T.E., and Graydon, L.B., 1985, Interpretation of Aerial Photographs, MacMillan Publishing Co., New York, Fourth Edition, 554 pp.

California Division of Mines & Geology (C.D.M.G.), 1986, "Guidelines to Geologic/Seismic Reports," Note No. 42.

California Division of Mines & Geology (C.D.M.G.), 1997, Guidelines for Evaluating and Mitigating Seismic Hazards, in California C.D.M.G. Special Publication 117.

Collins, T.K., 1990, New Faulting and the Attenuation of Fault Displacement, in Bulletin of the Association of Engineering Geologists, Volume XXV, Number 1, pp. 11-22.

Dudley, Paul H., 1936, Physiographic History of a Portion of the Perris Block, Southern California, from "Journal of Geology," 1936, Volume 44, pp. 358-378.

Envicom Corporation and the County of Riverside Planning Department, 1976, Seismic Safety and Safety General Plan Elements Technical Report, County of Riverside, Volumes I and II.

Fett, John D., et al., 1967, Continuing Surface Displacements Along the Casa Loma and San Jacinto Faults, San Jacinto Valley, Riverside County, in Engineering Geology, AEG Bulletin, January 1967, Volume 4, N. 1, pp. 22-32.

Fookes, P.G., and Vaughan, P.R., 1986, A Handbook of Engineering Geomorphology, Surrey University Press, 343 pp.

Harden, J.W., 1982, A Quantitative Index of Soil Development from Field Descriptions: Examples from a Chronosequence in Central California: Geoderma, v. 28, pp. 1-28.

Hart, E.W. and Bryant, W.A., 1997, "Fault Rupture Hazard Zones in California," California Division of Mines & Geology, Special Publication 42.

Inland Foundation Engineering, Inc., 2005, Geologic/ Fault Evaluation, Proposed Residential/ Commercial Development, 21± Acres, Assessor's Parcel Nos. 435-190-010 and 435-190-039, City of San Jacinto, Riverside County, California.

Inland Foundation Engineering, Inc., 2005, Phase I Environmental Site Assessment, San Jacinto Parkside Senior Apartments and Office Buildings, Esplanade Avenue, San Jacinto, California.

Inland Foundation Engineering, Inc., 2005, Preliminary Geotechnical Investigation, Proposed Residential/Commercial Development, 21± Acres, Assessor's Parcel Nos. 435-190-010 and 435-190-039, City of San Jacinto, Riverside County, California.

Inland Foundation Engineering, Inc., 2007, Compaction Testing during Grading, Parkside Medical – Building No. 1, San Jacinto, California.

Larson, R., and Slosson, J., 1992, The Role of Seismic Hazard Evaluation in Engineering Reports, in Engineering Geology Practice in Southern California, AEG Special Publication No. 4, pp. 191-194.

Lawson & Associates, 2002, Preliminary Geotechnical Investigation and Fault Confirmation Investigation for the 64-Acre Site, Tract 30603, Located North of Esplanade Avenue and East of Lyon Avenue, City of San Jacinto, Riverside County, California, December 31, 2002, Project No. 022126-10 (County Geologic Report No. 1133).

Lohr, Lewis S., 1993, Fault Hazard Report for "Land Lying Northerly of Esplanade Avenue Between Pine and Palm Avenue, Riverside County, California", Job No. 209-90-05, July 6, 1993. (County Geologic Report No. 745).

Lohr, Lewis S., 2000, Fault Hazard Investigation for the Southwest Corner of Pine Avenue and 7th Street in the City of San Jacinto, Riverside County, California, APN 431-180-061, Job No. 247-00-12, December 3, 2000.

Sharp, Robert V., 1967, San Jacinto Fault Zone in the Peninsular Ranges of Southern California, in Geological Society of America Bulletin, V. 79, pp. 705-730, June 1967.

Shlemon, R.J., 1985, Application of Soil Stratigraphic Techniques to Engineering Geology, *in* Bulletin of the Association of Engineering Geologists, Volume XXII, No. 2, 1985, pp. 129-142.

Terra Geosciences, 2004, Geologic/Fault Evaluation, Proposed Residential Development, NW Corner of Santa Fe and Menlo Avenues, City of Hemet, Riverside County, California, Project No. 241789-1, April 5, 2004.

Woodford, A., Shelton, J., Doehring, D., and Morton, R., 1971, Pliocene-Pleistocene History of the Perris Block, Southern California, Geological Society of America Bulletin, V. 82, pp. 3421-3448, 18 Figures, December, 1971.

Working Group on California Earthquake Probabilities, 1995, Seismic Hazards in Southern California: Probable Earthquakes, 1994 to 2004, *in*, Bulletin of the Seismological Society of America, Vo. 85, No. 2, pp. 379-439, April 1995,

U.S. Department of the Interior, Bureau of Reclamation, "Engineering Geology Field Manual," undated, distributed 1989, 598 pp.

MAPS UTILIZED

California Division of Mines and Geology (C.D.M.G.), 1980, San Jacinto Earthquake Fault Zone 7-1/2' Quadrangle, Scale 1" = 2,000'.

California Geological Survey (CGS), 2010, 2010 Fault Activity Map of California, Geologic Map No. 6.

Dibblee, T.W., Jr., 1971, Regional Geological Map of San Andreas and related faults in eastern San Gabriel Mountains, San Bernardino Mountains, Western San Jacinto Mountains and Vicinity, Los Angeles, San Bernardino, and Riverside Counties, California, U.S.G.S. Open File Report 71-0088.

Dibblee, T.W., Jr., 1982, Geologic Map of the Banning 15' Quadrangle, South Coast Geological Society Map SCGS-2, Scale 1:65,000.

Dibblee, Thomas W., Jr., 2003, Geology of the San Jacinto Quadrangle, Riverside County, California, Dibblee Geologic Foundation Map 116, Scale 1:24,000.

Envicom, 1976, Hemet-San Jacinto Area, Seismic Hazards Map, Plate VIIIA, Scale 1" = 2000'.

Jennings, C.W., 1992, Preliminary Fault Activity Map of California, Scale 1:750,000, C.D.M.G. Open File Report 92-03.

Riverside County Planning Department, 1988, Seismic and Geologic Community Area Map, Sheet 124, Scale 1" = 800'.

Ziony, J.I., and Jones, L.M., 1989, Map Showing Late Quaternary Faults and 1978-1984 Seismicity of the Los Angeles Region, California, U.S.G.S. Miscellaneous Field Studies Map MF-1964.

AERIAL PHOTOGRAPHS UTILIZED

Riverside County Flood Control District, 1949, Photo Number AXM-12F-42, dated June 1, 1949.

Riverside County Flood Control District, 1962, Photo Numbers 2-234 and 2-235 Scale 1”=2,000’, dated January 29, 1962.

Riverside County Flood Control District, 1974, Photo Numbers 459, 460 and 461, Scale 1”=2,000’, dated May 24, 1974.

Riverside County Flood Control District, 1980, Photo Numbers 486 and 487, Scale 1”=2,000’, dated April 10, 1980.

Riverside County Flood Control District, 1984, Photo Numbers 1086 and 1087, Scale 1”=2,000’, dated January 25, 1984.

Riverside County Flood Control District, 1990, Photo Numbers 10-42 and 10-43, Scale 1”=1,600’, dated January 9, 1990.

Riverside County Flood Control District, 1995, Photo Numbers 10-36 and 10-37, Scale 1”=1,600’, dated January 30, 1995.

Riverside County Flood Control District, 2000, Photo Numbers 10-37 and 10-38, Scale 1”=1,600’, dated March 18, 2000.

Riverside County Flood Control District, 2005, Photo Numbers 10-37 and 10-38, Scale 1”=1,600’, dated April 20, 2005.

Riverside County Flood Control District, 2010, Photo Numbers 10-38 and 10-39, Scale 1”=1,600’, dated March 28, 2010.

2007-2008
Test Data Summary

SUMMARY OF FIELD DENSITY TESTING
DBN Parkside, LLC
Compaction Testing

Inland Foundation Engineering, Inc.

Test No.	Date	Location	Fill Depth (ft.)	Test Depth (ft.)	Moisture Content (%)	Dry Density (pcf)	Relative Compaction (%)	Soil Type	Remarks/ Retests
		SITE GRADING							
		Building 1							
**10	11-06-07	North Side, Center Footing Overex	13.0	13.0-13.5	9.6	101.7	81	1	Native
**11	11-06-07	North Side, Center Footing Overex	13.0	13.0-13.5	15.1	112.6	90	1	
**12	11-06-07	West Side, East Edge, Grade Beam	12.0	12.0-12.5	12.0	114.5	91	1	
**13	11-06-07	North Side, Center Footing Overex	13.0	11.0-11.5	13.7	110.3	91	2	
**14	11-06-07	North Side, Overex	7.5	7.5-8.0	11.7	101.2	81	1	Native
**15	11-06-07	North Side, Overex	7.5	7.5-8.0	11.4	106.8	85	1	17
**16	11-06-07	West Side, Center Footing Overex	12.0	12.0-12.5	11.1	102.8	82	1	Native
**17	11-07-07	RETEST OF TEST NO. 15	7.5	7.5-8.0	9.7	112.9	90	1	
**18	11-07-07	North Side, Center Footing Overex	13.0	9.0-9.5	13.2	110.4	91	2	
**19	11-07-07	West Side, East Edge Grade Beam	12.0	10.0-10.5	15.1	110.2	91	2	
**20	11-07-07	West Side, Center Footing Overex	12.0	12.0-12.5	13.9	116.5	93	1	
**21	11-07-07	East Edge, Grade Beam	12.0	8.0-8.5	14.9	111.6	92	2	
**22	11-07-07	Northeast Portion, South Side	7.5	7.5-8.0	13.5	117.1	93	1	
**23	11-07-07	West Side, Center Footing Overex	12.0	10.0-10.5	10.2	108.4	90	2	
**24	11-07-07	North Side, Center Footing Overex	13.0	7.0-7.5	10.8	108.9	90	2	
**25	11-07-07	West Side, Center Footing Overex	12.0	8.0-8.5	13.5	109.5	90	2	
		Geological Trench 2							
*26	11-08-07	Southwest of Building 1	15.0	15.0-15.5	14.5	109.1	90	2	
*27	11-08-07	Southwest of Building 1	15.0	13.0-13.5	9.5	108.8	90	2	
*28	11-08-07	Southwest of Building 1	15.0	11.0-11.5	9.2	109.2	90	2	
**29	11-08-07	Southwest of Building 1	15.0	9.0-9.5	15.8	110.0	91	2	
**30	11-08-07	Southwest of Building 1	15.0	7.0-7.5	14.5	111.4	92	2	
**31	11-08-07	Southwest of Building 1	15.0	5.0-5.5	14.1	111.3	92	2	
		Building 1							
**32	11-08-07	Northeast Portion, South Side	7.5	6.0-6.5	11.2	110.5	91	2	
**33	11-08-07	Northeast Portion, Center	13.0	6.0-6.5	8.8	111.4	92	2	
**34	11-08-07	Northeast Portion, Northwest	7.5	6.0-6.5	13.2	112.2	93	2	
**35	11-08-07	Soutwest Portion, Northwest	7.5	6.0-6.5	11.3	110.2	91	2	
**36	11-08-07	Southwest Portion, Center	12.0	6.0-6.5	11.1	111.4	92	2	
**37	11-08-07	Southwest Portion, Southeast	7.5	6.0-6.5	13.5	113.6	94	2	
**38	11-08-07	Northeast Portion, Northeast	7.5	4.0-4.5	16.7	111.8	92	2	
**39	11-08-07	Northeast Portion, Center	13.0	4.0-4.5	10.8	114.4	91	1	
**40	11-08-07	Northeast Portion, Southwest	7.5	4.0-4.5	13.9	113.0	93	2	
**41	11-09-07	Southwest Portion, Southwest	7.5	4.0-4.5	10.4	112.2	93	2	
**42	11-09-07	Southwest Portion, Center	12.0	4.0-4.5	9.0	117.7	94	1	
**43	11-09-07	Southwest Portion, Northeast	7.5	4.0-4.5	9.3	115.5	92	1	
**44	11-09-07	Northeast Portion, Southeast	7.5	2.0-2.5	11.3	113.6	91	1	
**45	11-09-07	Northeast Portion, Center	13.0	2.0-2.5	17.4	115.1	92	1	
**46	11-09-07	Northeast Portion, Northwest	7.5	2.0-2.5	11.2	114.0	91	1	
**47	11-09-07	Southwest Portion, Southeast	7.5	2.0-2.5	12.3	111.5	92	2	
**48	11-09-07	Southwest Portion, Center	12.0	2.0-2.5	11.7	113.8	91	1	
**49	11-09-07	Southwest Portion, Northwest	7.5	2.0-2.5	11.4	114.0	91	1	

SUMMARY OF FIELD DENSITY TESTING
DBN Parkside, LLC
Compaction Testing

Inland Foundation Engineering, Inc.

Test No.	Date	Location	Fill Depth (ft.)	Test Depth (ft.)	Moisture Content (%)	Dry Density (pcf)	Relative Compaction (%)	Soil Type	Remarks/ Retests
		Geological Trench 1							
**50	11-12-07	Northeast	20.0	20.0-20.5	16.2	111.1	92	2	
**51	11-12-07	Center	20.0	20.0-20.5	16.4	109.4	90	2	
**52	11-12-07	Northeast End	20.0	18.0-18.5	13.9	110.9	92	2	
**53	11-12-07	Center	20.0	18.0-18.5	14.3	110.2	91	2	
		Building 1							
*54	11-13-07	Southwest Portion, Southwest	7.5	0.0-0.5	10.0	110.3	91	2	
*55	11-13-07	Southwest Portion, Center	12.0	0.0-0.5	9.8	109.0	90	2	
*56	11-13-07	Southwest Portion, Northeast	7.5	0.0-0.5	9.5	109.7	91	2	
*57	11-13-07	Northeast Portion, Southwest	7.5	0.0-0.5	10.5	110.1	91	2	
*58	11-13-07	Northeast Portion, Center	13.0	0.0-0.5	11.0	114.6	91	1	
*59	11-13-07	Northeast Portion, Northeast	7.5	0.0-0.5	11.5	111.1	92	2	
		Geological Trench 1							
**60	11-13-07	North End	20.0	16.0-16.5	13.0	110.7	91	2	
**61	11-13-07	Center	20.0	16.0-16.5	10.8	108.5	90	2	
**62	11-13-07	South End	20.0	20.0-20.5	8.6	109.0	90	2	
**63	11-13-07	South End	20.0	18.0-18.5	6.2	109.2	90	2	
**64	11-13-07	North End	20.0	14.0-14.5	11.8	112.3	93	2	
**65	11-13-07	Center	20.0	14.0-14.5	12.0	111.5	92	2	
**66	11-13-07	South End	20.0	16.0-16.5	7.5	108.6	90	2	
**67	11-13-07	North End	20.0	12.0-12.5	12.5	109.0	90	2	
		Geological Trench 1							
**68	11-13-07	Center	20.0	12.0-12.5	13.6	113.9	94	2	
**69	11-14-07	South End	20.0	14.0-14.5	8.7	111.5	92	2	
**70	11-14-07	Center	20.0	10.0-10.5	19.3	109.2	90	2	
**71	11-14-07	North End	20.0	10.0-10.5	18.1	111.8	#REF!	2	
**72	11-14-07	Center	20.0	8.0-8.5	18.6	109.3	90	2	
**73	11-14-07	North End	20.0	8.0-8.5	15.8	110.9	92	2	
**74	11-15-07	North End	20.0	6.0-6.5	12.3	111.2	92	2	
**75	11-15-07	Center	20.0	6.0-6.5	12.4	111.7	92	2	
		Landscape Area							
**76	11-15-07	North of Building 1	5.0	5.0-5.5	12.3	108.5	90	2	
**77	11-15-07	West of Building 1	5.0	5.0-5.5	10.0	108.7	90	2	
**78	'11-15-07	North of Building 1	5.0	3.0-3.5	13.8	109.3	90	2	
**79	11-15-07	West of Building 1	5.0	3.0-3.5	13.7	114.2	94	2	
		Parking Lot							
**80	11-15-07	East of Building 1	5.0	5.0-5.5	4.1	98.4	81	2	Native
**81	11-16-07	East of Building 1	5.0	5.0-5.5	11.3	109.9	91	2	
**82	11-16-07	North Side of Building 1	5.0	1.0-1.5	11.7	110.1	91	2	
**83	11-16-07	West Side of Building 1	5.0	1.0-1.5	10.0	109.4	90	2	
		Geological Trench 1							
**84	11-16-07	North End	20.0	4.0-4.5	11.6	111.5	92	2	
**85	11-16-07	Center	20.0	4.0-4.5	11.8	109.9	91	2	
		Parking Lot							
**86	11-16-07	East of Building 1	5.0	3.0-3.5	8.4	111.7	92	2	

Project No. D285-006

*-ASTM D1556-00 (Sand Cone)

**-ASTM D2922-05 (Nuclear Gauge)

SUMMARY OF FIELD DENSITY TESTING
DBN Parkside, LLC
Compaction Testing

Inland Foundation Engineering, Inc.

Test No.	Date	Location	Fill Depth (ft.)	Test Depth (ft.)	Moisture Content (%)	Dry Density (pcf)	Relative Compaction (%)	Soil Type	Remarks/ Retests
**87	11-19-07	East of Building 1	5.0	1.0-1.5	9.9	112.7	93	2	
		Geological Trench 1							
**88	11-19-07	South End	20.0	12.0-12.5	8.4	109.6	91	2	
		Parking Lot							
**89	11-19-07	Southeast of Building 1	6.0	6.0-6.5	16.5	102.4	85	2	
**90	11-19-07	Southeast of Building 1	6.0	6.0-6.5	9.8	109.1	90	2	
		Geological Trench 4							
**91	11-19-07	Geo Trench 4	21.0	21.0-21.5	16.1	109.9	91	2	
**92	11-19-07	Geo Trench 4	21.0	19.0-19.5	15.6	112.2	93	2	
*93	11-20-07	Geo Trench 4	21.0	17.0-17.5	11.9	111.5	92	2	
**94	11-20-07	Geo Trench 4	21.0	15.0-15.5	13.3	113.8	94	2	
**95	11-20-07	Geo Trench 4	21.0	13.0-13.5	11.4	111.4	92	2	
**96	11-20-07	Geo Trench 4	21.0	11.0-11.5	10.0	109.4	90	2	
**97	11-20-07	Geo Trench 4	21.0	9.0-9.5	10.2	111.2	92	2	
		Parking Lot							
*98	11-20-07	Southeast of Building 1	6.0	4.0-4.5	12.2	110.9	92	2	Native
		Parkside Lane							
*99	11-20-07	Station 15+50	3.0	3.0-3.5	8.1	99.2	82	2	
		Geological Trench 4							
**100	11-21-07	Geo Trench 4	21.0	7.0-7.5	10.6	112.2	93	2	
**101	11-21-07	Geo Trench 4	21.0	5.0-5.5	13.2	116.1	96	2	
		Geological Trench 3							
**102	11-21-07	Geo Trench 3	16.0	16.0-16.5	5.4	102.5	85	2	Native
*103	11-21-07	Geo Trench 3	16.0	16.0-16.5	15.6	109.5	90	2	
**104	11-21-07	Geo Trench 3	16.0	14.0-14.5	10.8	116.9	97	2	
**105	11-21-07	Geo Trench 3	16.0	12.0-12.5	7.9	109.5	90	2	
**106	11-21-07	Geo Trench 3	16.0	10.0-10.5	10.4	109.9	91	2	
**107	11-21-07	Geo Trench 3	16.0	8.0-8.5	9.6	111.2	92	2	
**108	11-21-07	Geo Trench 3	16.0	6.0-6.5	10.0	110.2	91	2	
		Geological Trench 1							
*109	11-21-07	Center	20.0	2.0-2.5	9.2	110.5	91	2	
**110	11-21-07	North End	20.0	2.0-2.5	14.8	112.6	93	2	
		Parking Lot							
**111	11-21-07	South of Building 1	7.0	7.0-7.5	15.1	109.0	90	2	
*112	11-21-07	Northwest of Building 2	3.5	3.5-4.0	6.5	100.7	83	2	
**113	11-21-07	Northwest of Building 2	3.5	3.5-4.0	13.3	109.1	90	2	
**114	11-26-07	North of Building 2	2.0	2.0-2.5	8.3	108.4	90	2	
		Geological Trench 1							
**115	11-26-07	South End	20.0	10.0-10.5	10.2	109.8	91	2	
		Parking Lot							
**116	11-26-07	South of Building 1	7.0	5.0-5.5	13.9	108.4	90	2	
**117	11-27-07	Southeast of Building 1	6.0	2.0-2.5	17.4	109.2	90	2	
**118	11-27-07	South of Building 1	7.0	3.0-3.5	13.9	113.7	94	2	

SUMMARY OF FIELD DENSITY TESTING
DBN Parkside, LLC
Compaction Testing

Inland Foundation Engineering, Inc.

Test No.	Date	Location	Fill Depth (ft.)	Test Depth (ft.)	Moisture Content (%)	Dry Density (pcf)	Relative Compaction (%)	Soil Type	Remarks/ Retests
		Geological Trench 1							
**119	11-27-07	Southeast End	20.0	8.0-8.5	17.6	112.0	93	2	
**120	11-27-07	Southeast End	20.0	6.0-6.5	13.5	111.7	92	2	
		Building 2							
L**121	11-27-07	North Portion, Native Bottom	13.0	13.0-13.5	11.8	105.3	87	2	
**122	11-27-07	South Portion, Native Bottom	13.0	13.0-13.5	11.8	103.5	86	2	
**123	11-29-07	North Portion, Native Bottom	13.0	13.0-13.5	9.4	112.7	93	2	
**124	11-29-07	South Portion, Native Bottom	13.0	13.0-13.5	6.7	115.7	96	2	
		Parking Lot							
**125	11-29-07	West of Building 2, Center	5.5	5.5-6.0	9.4	96.9	80	2	
**126	11-29-07	West of Building 2, South Portion	5.5	5.5-6.0	9.5	117.2	97	2	
**127	11-29-07	North Portion	3.5	1.5-2.0	10.9	108.4	90	2	
**128	11-29-07	Northwest of Building	3.5	1.5-2.0	10.9	108.4	90	2	
**129	12-18-07	South of Building 1	7.0	1.0-1.5	6.5	122.0	91	4	
		Geological Trench 1							
**130	12-18-07	South End	20.0	4.0-4.5	6.7	123.4	92	4	
		Parking Lot, South of Building 1							
**131	12-18-07	Center South Side Slope	10.0	4.0-4.5	7.4	121.7	90	4	
		Parking Lot, West of Building 2							
**132	12-18-07	South End	5.5	3.5-4.0	7.9	123.3	92	4	
**133	12-18-07	North End	5.5	3.5-4.0	8.4	122.0	91	4	
		Building 2							
**134	12-26-07	Center	13.0	13.0-13.5	15.4	109.3	90	2	
**135	12-26-07	Northwest Corner	15.0	15.0-15.5	15.8	108.4	90	2	
**136	12-26-07	Northwest Corner	15.0	13.0-13.5	7.5	121.4	93	5	
**137	12-26-07	South Side	13.0	11.0-11.5	8.8	118.6	91	5	
**138	12-26-07	Center	13.0	11.0-11.5	11.0	117.6	90	5	
**139	12-26-07	North Side	13.0	11.0-11.5	8.9	120.7	93	5	
**140	12-27-07	Northeast	13.0	9.0-9.5	6.0	121.1	93	5	
**141	12-27-07	Center West Side	13.0	9.0-9.5	7.2	122.7	94	5	
**142	12-27-07	Southeast	13.0	9.0-9.5	7.2	121.8	94	5	
**143	12-28-07	North End	13.0	70-7.5	8.4	120.9	93	5	
**144	12-28-07	Center	13.0	7.0-7.5	5.9	125.9	97	5	
**145	12-28-07	South End	13.0	7.0-7.5	5.5	124.9	96	5	
**146	01-02-08	North End	13.0	5.0-5.5	6.3	122.1	91	4	
**147	01-02-08	Center	13.0	5.0-5.5	7.3	121.5	90	4	
**148	01-02-08	South End	13.0	5.0-5.5	7.5	122.7	91	4	
**149	01-04-08	North Portion	13.0	3.0-3.5	8.8	121.8	91	4	
**150	01-04-08	Center Portion	13.0	3.0-3.5	5.0	124.1	92	4	
**151	01-04-08	South Portion	13.0	3.0-3.5	5.9	127.3	95	4	
		Parking Lot							
**152	01-04-08	East Side of Building 2	4.0	4.0-4.5	11.0	109.9	91	2	Native
**153	01-04-08	East Side of Building 2	4.0	4.0-4.5	12.4	109.2	90	2	

SUMMARY OF FIELD DENSITY TESTING
DBN Parkside, LLC
Compaction Testing

Inland Foundation Engineering, Inc.

Test No.	Date	Location	Fill Depth (ft.)	Test Depth (ft.)	Moisture Content (%)	Dry Density (pcf)	Relative Compaction (%)	Soil Type	Remarks/ Retests
		Building 2							
**154	01-16-08	North End	13.0	1.0-1.5	7.6	125.1	93	4	
**155	01-16-08	Center	13.0	1.0-1.5	7.0	120.5	90	4	
**156	01-16-08	South End	13.0	1.0-1.5	4.1	125.0	93	4	
		Parking Lot, South of Building 1							
**157	01-17-08	Center of South Side of Slope	10.0	2.0-2.5	11.0	112.7	93	2	
**158	01-17-08	Center of Southwest Slope	9.0	9.0-9.5	9.9	125.9	94	4	
**159	01-17-08	West Portion of South Slope	9.0	9.0-9.5	8.9	123.4	92	4	
		Southwest Fill Slope to Parking Lot							
**160	01-18-08	South Side	9.0	7.0-7.5	9.5	126.7	94	4	
**161	01-18-08	West Side	9.0	7.0-7.5	8.4	122.5	91	4	
**162	01-22-08	South Side	9.0	5.0-5.5	5.2	121.3	90	4	
**163	01-22-08	West side	9.0	5.0-5.5	5.8	121.1	90	4	
		Building 1							
*164	02-08-08	East side	5.0	0.-0.5	10.1	127.9	95	4	
*165	02-08-08	South Side	6.0	0.0-0.5	10.5	131.9	98	4	
*166	02-08-08	West Side	5.0	0.0-0.5	14.2	123.1	98	1	
		Southwest Fill Slope to Parking Lot							
**167	02-19-08	South Side	9.0	3.0-3.5	15.2	112.3	89	1	
**168	02-19-08	South Side	9.0	1.0-1.5	13.8	120.4	93	5	
		Building 2							
**169	03-27-08	North End	13.0	0.0-0.5	6.3	128.7	96	4	
**170	03-27-08	Center	13.0	0.0-0.5	6.2	127.8	95	4	
**171	03-27-08	South End	13.0	0.0-0.5	5.4	126.2	94	4	
		Parking Lot							
**172	03-27-08	East Side Building 2	4.0	2.0-2.5	7.8	124.1	92	4	
		Parking Lot, North Side Building 2							
*173	04-22-08	West Portion, South End	5.5	1.5-2.0	10.3	118.5	93	9	
*174	04-22-08	West Portion, Center	5.5	1.5-2.0	9.6	120.9	95	9	
*175	04-22-08	West Portion, North End	5.5	1.5-2.0	10.7	119.2	94	9	
*176	04-23-08	East Portion, South End	3.0	1.0-1.5	11.0	117.2	92	9	
*177	04-23-08	East Portion, Center	3.0	1.0-1.5	11.9	117.0	92	9	
*178	04-23-08	East Portion, North End	3.0	1.0-1.5	11.1	114.2	90	9	
		Southwest Fill Slope							
*179	05-15-08	South End, Processed	3.0	3.0-3.5	10.4	113.9	94	2	
		Palm Avenue, West of Building 1							
*180	05-19-08	West Portion	7.0	7.0-7.5	3.8	100.2	83	2	Native
*181	05-19-08	East Portion	7.0	7.0-7.5	4.1	103.1	85	2	Native
*182	05-20-08	East Portion, Processed	7.0	7.0-7.5	9.8	110.5	91	2	Native
*183	05-20-08	West Portion, Processed	7.0	7.0-7.5	9.4	115.7	96	2	
*184	05-20-08	East Portion	7.0	5.0-5.5	6.0	111.8	92	2	
		Southwest Fill Slope to Parking Lot							
*185	05-22-08	West Side	9.0	3.0-3.5	12.3	112.5	92	6	
		Southwest Fill on Esplanade							
*186	05-22-08	South End	3.0	1.0-1.5	13.8	115.6	94	6	

Project No. D285-006

*-ASTM D1556-00 (Sand Cone)

**-ASTM D2922-05 (Nuclear Gauge)

SUMMARY OF FIELD DENSITY TESTING
DBN Parkside, LLC
Compaction Testing

Inland Foundation Engineering, Inc.

Test No.	Date	Location	Fill Depth (ft.)	Test Depth (ft.)	Moisture Content (%)	Dry Density (pcf)	Relative Compaction (%)	Soil Type	Remarks/ Retests
		Palm Avenue, West of Building 1							
*187	05-22-08	East Portion	7.0	3.0-3.5	11.4	111.6	91	6	
*188	05-27-08	East Portion	7.0	1.0-1.5	13.4	115.3	94	6	
		Southwest Fill Slope to Parking Lot							
*189	05-27-08	West Side	9.0	1.0-1.5	13.9	113.0	92	6	
		Palm Avenue							
*190	08-07-08	Station 12+50	3.0	1.0-1.5	7.6	114.3	93	6	
*191	08-19-08	West Side, Station 11+00	0.5	0.5-1.0	13.4	109.8	91	2	
*192	08-19-08	Station 12+25, Over Existing Lines	5.5	5.5-6.0	12.7	111.7	91	6	
*193	08-19-08	West Side, Station 14+25	7.0	5.0-5.5	14.1	113.7	93	6	
*194	08-20-08	Station 12+50	5.5	3.5-4.0	8.2	124.0	94	11	
*195	08-21-08	Station 11+75, Over Existing Lines	5.5	1.5-2.0	9.0	122.3	93	11	
*196	08-21-08	West Side, Station 13+75	7.0	3.0-3.5	10.2	119.1	90	11	
*197	08-22-08	West side, Satation 14+75	7.0	1.0-1.5	7.9	123.1	93	11	
		Parking Lot, West of Building 2							
*198	11-05-08	Northwest Corner	1.0	1.0-1.5	12.1	118.2	93	9	
**199	11-05-08	Southwest Corner	1.5	1.5-2.0	10.4	118.9	94	9	
**200	11-05-08	Southeast Corner	1.5	1.5-2.0	4.4	114.2	90	9	
**201	11-05-08	Northeast Corner	0.5	0.5-1.0	4.5	113.9	90	9	
		Building 1 Elevator Shaft							
**1	3-25-08	South Side	4.0	2.0-2.5	11.9	115.6	96	2	
**2	3-25-08	North Side	4.0	0.0-0.5	8.5	117.8	97	2	
		Building 1 Stairs							
*01	6-3-08	South Side	10.0	8.0-8.5	11.6	112.9	93	2	
*02	6-4-08	South Side	10.0	8.0-8.5	12.9	111.7	92	2	
*03	6-4-08	South Side	10.0	4.0-4.5	13.3	113.5	94	2	
*04	6-4-08	South Side	10.0	2.0-2.5	12.1	110.4	91	2	
*05	6-5-08	South Side	10.0	0.0-0.5	12.7	112.3	93	2	
		ON-SITE UTILITY BACKFILL							
		SEWERLINE BACKFILL							
		Building 1, Main Line Sewer							
*01	12-05-07	Southwest Corner	4.0	2.0-2.5	13.8	109.2	90	2	
*02	12-05-07	Northwest Corner	6.0	4.0-4.5	14.5	102.4	85	2	3
*03	12-05-07	RETEST OF TEST NO. 2	6.0	4.0-4.5	12.3	109.4	90	2	
*04	12-10-07	Center of North Side	6.0	2.0-2.5	13.3	109.1	90	2	
*05	12-10-07	Center of North Side	6.0	4.0-4.5	14.9	108.6	90	2	
*06	12-11-07	North Side, 35 Feet From Wall	6.0	4.0-4.5	14.5	117.3	97	2	
*07	12-11-07	North Side, 20 Feet From Wall	7.0	2.0-2.5	11.0	123.6	98	1	
*08	12-11-07	North Side, 15 Feet From Wall	8.0	6.0-6.5	7.7	102.9	82	1	9
*09	12-11-07	RETEST OF TEST NO. 2	8.0	6.0-6.5	10.8	117.5	94	1	
*10	12-11-07	Northwest Lateral	1.5	0.0-0.5	14.6	114.7	95	2	
*11	12-11-07	Northeast Lateral	1.5	0.0-0.5	9.0	112.8	90	1	

*-ASTM D1556-00 (Sand Cone)

**-ASTM D2922-05 (Nuclear Gauge)

SUMMARY OF FIELD DENSITY TESTING
DBN Parkside, LLC
Compaction Testing

Inland Foundation Engineering, Inc.

Test No.	Date	Location	Fill Depth (ft.)	Test Depth (ft.)	Moisture Content (%)	Dry Density (pcf)	Relative Compaction (%)	Soil Type	Remarks/ Retests
		TELEPHONE LINE TRENCH BACKFILL							
		Building 1, Telephone Line							
*01	12-12-07	5 Feet From South Wall	4.0	2.0-2.5	12.3	118.0	98	2	
*02	12-13-07	15 Feet From South Wall	4.0	0.0-0.5	12.5	113.3	94	2	
		ELECTRICAL LINE TRENCH BACKFILL							
		Building 1, Parking Lot							
*01	02-21-08	2nd Row From East Edge, Center	2.0	0.0-1.0	8.5	105.7	87	2	3
*02	02-21-08	2nd Row From West Edge, North	2.0	0.0-0.5	9.2	100.7	83	2	4
*03	02-28-08	RETEST OF TEST NO. 1	2.0	0.0-0.5	10.4	118.8	98	2	
*04	02-28-08	RETEST OF TEST NO. 2	2.0	0.0-0.5	10.2	118.3	98	2	
		Building 1, North Parking Lot							
*05	03-12-08	Northeast Side of Parking Lot	2.0	0.5-1.0	11.6	111.0	92	2	
		Building 1							
*06	03-13-08	South of Southeast Corner	2.0	0.5-1.0	9.1	121.7	90	4	
*07	04-03-08	North of Northwest Corner	2.5	0.5-1.0	10.9	112.9	93	2	
*08	04-03-08	North of Northeast Corner	2.5	0.5-1.0	12.1	113.5	94	2	
*09	04-03-08	East of Northeast Corner	2.5	0.5-1.0	12.8	112.9	93	2	
*10	04-07-08	Northeast of Northwest Corner	2.0	0.5-1.0	11.7	114.0	94	2	
		Parkside Lane							
*11	05-02-08	Station 17+26	2.5	1.0-1.5	13.5	111.2	92	2	
*12	05-02-08	Station 19+65	2.5	1.0-1.5	12.4	116.3	96	2	
		East of Trash Enclosure							
*13	06-25-08	Southwest Corner of Building 1	3.0	1.0-1.5	12.2	111.0	92	2	
		South of Building 1							
**14	07-01-08	North of Gutter	1.5	0.5-1.0	11.7	111.3	92	2	
		Palm Avenue							
*15	07-02-08	Station 20+75 Crossing	3.0	1.0-1.5	13.6	111.4	91	6	
		Esplanade and Palm Avenues							
*16	07-03-08	Crossing	3.0	1.0-1.5	12.9	110.1	90	6	
		Palm Avenue							
*17	07-03-08	Station 11+50, Crossing	3.0	1.0-1.5	14.2	111.8	91	6	
*18	07-03-08	Crossing, at Parkside Lane	3.0	1.0-1.5	12.6	111.2	91	6	
		West Side of Parkside							
*19	07-03-08	60 Feet North of Esplanade	3.0	1.0-1.5	13.4	106.4	88	2	20
*20	07-07-08	RETEST OF TEST NO. 19	3.0	1.0-1.5	11.9	111.5	92	2	
*21	07-07-08	225 Feet North of Esplanade	2.5	1.0-1.5	12.4	111.0	92	2	
*22	07-07-08	West of Driveway to Park	2.5	1.0-1.5	14.1	109.2	90	2	
		Esplanade Avenue Between Palm Avenue and Parkside Lane							
*23	07-08-08	West End	3.0	1.0-1.5	9.3	117.3	90	5	
*24	07-08-08	Center	3.0	1.0-1.5	9.9	114.6	91	1	
*25	07-08-08	East End	3.0	1.0-1.5	8.1	110.6	88	1	26
*26	07-08-08	RETEST OF TEST NO. 25	3.0	1.0-1.5	8.6	114.1	91	1	
		East Side of Parkside Lane							
*27	07-09-08	Station 22+50	3.0	1.0-1.5	12.4	115.5	94	6	
*28	07-09-08	Station 20+25	5.0	3.0-3.5	10.9	111.2	91	6	

Project No. D285-006

*-ASTM D1556-00 (Sand Cone)

**-ASTM D2922-05 (Nuclear Gauge)

SUMMARY OF FIELD DENSITY TESTING
DBN Parkside, LLC
Compaction Testing

Inland Foundation Engineering, Inc.

Test No.	Date	Location	Fill Depth (ft.)	Test Depth (ft.)	Moisture Content (%)	Dry Density (pcf)	Relative Compaction (%)	Soil Type	Remarks/ Retests
		Parkside Lane North of Building 1							
*29	07-10-08	North Side of Sidewalk, West End	3.0	1.0-1.5	10.9	112.3	93	2	
*30	07-10-08	East End	3.0	1.0-1.5	11.7	111.2	92	2	
		Parkside Lane and Esplanade Avenue							
*31	07-11-08	East Side Radius	5.0	3.0-3.5	13.2	110.3	90	6	
*32	07-11-08	East Side Radius	5.0	1.0-1.5	14.0	115.0	94	6	
		IRRIGATION TRENCH BACKFILL							
		Building 1, Parking Lot							
*01	2-21-08	2nd Row From East Edge, South	2.0	0.5-1.0	11.1	117.3	90	5	
*02	2-21-08	1st Row From West Edge, Center	2.0	0.5-1.0	10.7	119.0	92	5	
		PARKING LOT SUBGRADE AND FINISH GRADE							
		South of Building 1							
**01	10-31-07	Southeast Corner	10.0	10.0-10.5	8.7	102.7	82	1	Native
**02	11-01-07	Southeast Corner	10.0	10.0-10.5	13.4	116.3	93	1	
**03	11-01-07	Center South Side Slope	10.0	10.0-10.5	7.4	114.7	91	1	
**04	11-01-07	Southeast Corner	10.0	8.0-8.5	9.3	113.9	91	1	
**05	11-01-07	Southeast Corner	10.0	8.0-8.5	9.3	113.9	91	1	
**06	11-02-07	Southeast Corner	10.0	4.0-4.5	12.1	110.6	91	2	
**07	11-02-07	Center South Side Slope	10.0	8.0-8.5	12.3	111.1	92	2	
**08	11-05-07	Southeast Corner	10.0	2.0-2.5	12.2	110.0	91	2	
**09	11-05-07	Center South Side Slope	10.0	6.0-6.5	10.2	116.4	93	1	
**01	03-06-08	North Side, North Portion	S.G.	0.0-0.5	8.7	128.4	99	5	
**02	03-06-08	South Portion	S.G.	0.0-0.5	8.7	126.2	97	5	
**03	03-06-08	Center Lane, North Portion	S.G.	0.0-0.5	8.8	124.8	96	5	
**04	03-06-08	South Portion	S.G.	0.0-0.5	7.7	124.2	96	5	
		Building 1, North Lot							
*05	03-07-08	Second Bay From East Edge	S.G.	0.5-1.0	7.0	125.3	96	5	
*06	03-07-08	First Bay from East Edge	S.G.	0.5-1.0	7.8	126.6	97	5	
		Building 1, South Lot							
*07	04-11-08	South End, West of Curb	3.0	1.0-1.5	6.8	124.3	91	3	
*08	04-11-08	South End, Second Lane, West of Curb and Gutter	S.G.	0.0-0.5	7.3	128.1	95	4	
		South of Building 1, West of Curb and Gutter							
**09	04-21-08	1st Lane, North End	F.G.	0.0-0.5	5.4	140.4	99	8	
**10	04-21-08	1st Lane, Center	F.G.	0.0-0.5	5.2	136.7	96	8	
**11	04-21-08	1st Lane, South End	F.G.	0.0-0.5	4.2	139.3	98	8	
**12	04-21-08	2nd Lane, South End	F.G.	0.0-0.5	4.0	140.6	99	8	
**13	04-21-08	2nd Lane, Center	F.G.	0.0-0.5	4.8	137.9	97	8	
**14	04-21-08	2nd Lane, North End	F.G.	0.0-0.5	5.6	137.4	97	8	
**15	04-21-08	3rd Lane, North End	F.G.	0.0-0.5	5.8	137.7	97	8	
**16	04-21-08	3rd Lane, Center	F.G.	0.0-0.5	5.9	136.4	96	8	
**17	04-21-08	3rd Lane, South End	F.G.	0.0-0.5	3.4	136.6	96	8	
**18	04-21-08	4th Lane, South End	F.G.	0.0-0.5	4.6	139.0	98	8	
**19	04-21-08	4th Lane, Center	F.G.	0.0-0.5	3.2	137.9	97	8	

SUMMARY OF FIELD DENSITY TESTING
DBN Parkside, LLC
Compaction Testing

Inland Foundation Engineering, Inc.

Test No.	Date	Location	Fill Depth (ft.)	Test Depth (ft.)	Moisture Content (%)	Dry Density (pcf)	Relative Compaction (%)	Soil Type	Remarks/ Retests
**20	04-21-08	4th Lane, North End	F.G.	0.0-0.5	5.2	137.7	97	8	
		South End of Parking Lot							
**21	04-21-08	West End	F.G.	0.0-0.5	6.7	138.8	98	8	
**22	04-21-08	Center	F.G.	0.0-0.5	6.0	137.6	97	8	
**23	04-21-08	East End	F.G.	0.0-0.5	6.3	136.7	96	8	
*24	05-14-08	Drive 80 Feet South of Circle	S.G.	0.0-0.5	8.6	128.7	99	5	
*25	06-27-08	Loading Dock	S.G.	0.0-0.5	7.9	120.2	96	1	
*26	06-30-08	Loading Dock	F.G.	0.0-0.5	6.4	138.8	98	8	
*27	06-30-08	East Side	S.G.	0.0-0.5	7.2	120.6	96	1	
*28	06-30-08	West Side	S.G.	0.0-0.5	6.8	120.3	96	1	
**29	07-01-08	Center	S.G.	0.0-0.5	7.0	118.7	95	1	
**30	07-01-08	West Side	F.G.	0.0-0.5	5.4	136.2	96	8	
**31	07-01-08	Center	F.G.	0.0-0.5	4.7	138.5	98	8	
*32	07-01-08	East Side	F.G.	0.0-0.5	3.2	135.3	95	8	
		OFF-SITE UTILITY TRENCH BACKFILL							
		DRY UTILITY BACKFILL							
		South of Esplanade, On Palm Avenue							
**01	09-30-08	15 Feet, Southeast Corner	4.0	2.0-2.5	10.4	116.5	95	6	
**02	09-30-08	15 Feet, Southwest Corner	4.0	0.0-0.5	9.9	112.5	92	6	
*03	10-01-08	20 Feet, Southwest Corner	4.0	2.0-2.5	10.7	113.0	92	6	
*04	10-01-08	20 Feet, Southwest Corner	4.0	0.0-0.5	11.5	114.3	93	6	
**05	10-03-08	40 Feet, Southwest Corner	4.0	2.0-2.5	11.5	112.1	92	6	
**06	10-03-08	40 Feet, Southwest Corner	4.0	0.0-0.5	11.2	111.1	91	6	
**07	10-03-08	60 Feet, Southeast Corner	3.0	1.0-1.5	11.6	112.6	92	6	
**08	10-03-08	60 Feet, Southeast Corner	3.0	0.0-0.5	12.7	110.1	90	6	
		STORM DRAIN BACKFILLL							
		Palm Avenue							
**01	03-10-08	24 Inch, Station 15+40	2.0	0.5-1.0	14.2	101.9	84	2	4
**02	03-11-08	36 Inch, Station 11+00	4.0	2.0-2.5	10.8	109.2	90	2	
**03	03-11-08	24 Inch, Station 13+25	1.5	0.0-0.5	11.5	110.5	91	2	
**04	03-11-08	RETEST OF TEST NO. 01	2.0	0.5-1.0	10.9	108.7	90	2	
		Parkside Lane							
**05	03-11-08	24 Inch, Station 20+00	4.5	2.5-3.0	12.9	110.5	91	2	
**06	03-11-08	24 Inch, Station 20+00	4.5	0.5-1.0	13.2	113.3	94	2	
		Palm Avenue							
*07	03-12-08	Station 17+00	2.0	0.5-1.0	12.6	110.1	91	2	
		Parkside Lane and Palm Avneue							
*08	03-12-08	Station 18+50	3.5	1.5-2.0	13.6	109.6	91	2	
		Parkside Lane							
*09	03-13-08	Station 27+00	2.0	0.0-0.5	9.3	119.5	92	4	
*10	03-13-08	Station 22+25	2.0	0.0-0.5	11.0	109.1	90	2	
*11	03-13-08	Station 23+75	2.0	0.0-0.5	10.6	110.6	91	2	
*12	03-13-08	Station 25+00	3.0	1.0-1.5	10.9	109.7	91	2	
*13	03-14-08	Station 20+50	4.5	0.5-1.0	10.0	121.0	93	4	

SUMMARY OF FIELD DENSITY TESTING
DBN Parkside, LLC
Compaction Testing

Inland Foundation Engineering, Inc.

Test No.	Date	Location	Fill Depth (ft.)	Test Depth (ft.)	Moisture Content (%)	Dry Density (pcf)	Relative Compaction (%)	Soil Type	Remarks/ Retests
*14	03-14-08	Station 20+50	4.5	0.5-1.0	11.0	110.4	91	2	
*15	03-14-08	Station 26+90	2.0	0.0-0.5	10.5	119.0	92	4	
*16	03-19-08	North End of Site, Station 23+36	2.0	0.0-0.5	9.9	116.9	93	1	
*17	03-19-08	North End of Site, Station 24+51	2.0	0.0-0.5	10.0	113.2	90	1	
*18	03-19-08	North End of Site, Station 22+43	2.0	0.0-0.5	11.3	113.0	90	1	
		East of Palm Avenue							
*19	04-03-08	Station 21+90	2.0	1.0-1.5	11.6	112.9	92	6	
*20	04-11-08	Southeast Corner of Building 1	2.0	1.0-1.5	8.4	117.3	97	2	
*21	04-25-08	Station 10+45	5.0	3.0-3.5	12.2	110.6	90	6	
*22	04-25-08	Station 10+50	5.0	1.0-1.5	12.8	112.9	92	6	
		SEWERLINE BACKFILL							
		6 Inch Sewerline							
**01	03-05-08	Parkside, Station 18+56	7.5	5.5-6.0	17.3	108.8	90	2	
**02	03-05-08	Parkside, Station 18+56	7.5	3.5-4.0	12.4	115.0	92	1	
**03	03-05-08	Parkside, Station 18+56	7.5	1.5-2.0	13.0	108.8	90	2	
		8 Inch Sewerline							
**04	03-05-08	Entrance to Park, Station 11+00	8.0	6.0-6.5	10.5	111.1	92	2	
**05	03-05-08	Entrance to Park, Station 11+00	8.0	4.0-4.5	10.4	111.2	92	2	
		6 Inch Sewerline							
**06	03-05-08	Entrance to Park, Station 8+75	8.0	6.0-6.5	13.0	117.1	93	1	
		8 Inch Sewerline							
**07	03-05-08	Entrance to Park, Station 11+00	8.0	2.0-2.5	14.0	110.8	92	2	
*08	03-06-08	Station 8+25 Near 45 degrees	8.0	4.0-4.5	10.8	108.7	90	2	
*09	03-06-08	Station 8+25 Near 45 degrees	8.0	2.0-2.5	11.5	117.7	94	1	
*10	03-06-08	Manhole No. 1	8.0	4.0-4.5	11.0	107.1	89	2	13
*11	03-06-08	Manhole No. 1	8.0	6.0-6.5	10.8	111.7	92	2	
*12	03-06-08	Station 9+10 East of Building 1	6.0	4.0-4.5	14.9	91.4	76	2	15
*13	03-06-08	RETEST OF TEST NO. 10	8.0	4.0-4.5	9.8	111.8	92	2	
*14	03-06-08	Manhole No. 1	8.0	2.0-2.5	11.2	108.7	90	2	
*15	03-06-08	RETEST OF TEST NO. 12	6.0	4.0-4.5	9.8	110.7	91	2	
		GASLINE BACKFILL							
		East of Palm Avenue							
*01	07-21-08	60 Feet North of Esplanade	3.0	1.0-1.5	12.4	111.8	91	6	
*02	07-21-08	West of Trash Enclosure	3.0	1.0-1.5	13.1	112.5	92	6	
*03	07-22-08	Station 15+00	3.0	1.0-1.5	10.9	114.5	93	6	
*04	07-22-08	Station 16+45	3.0	1.0-1.5	12.1	107.1	94	10	
*05	07-23-08	Station 17+50	3.0	1.0-1.5	15.0	110.9	91	6	
**06	07-25-08	Station 19+50	3.0	1.0-1.5	11.8	118.1	96	6	
**07	07-25-08	Station 21+50	3.0	1.0-1.5	8.2	113.2	92	6	
**08	07-25-08	Station 23+00	3.0	1.0-1.5	14.6	117.5	96	6	
		Building 1							
*09	08-25-08	10 Feet East of Stairway	2.0	1.0-1.5	11.2	111.7	92	2	
*10	08-25-08	Northeast Corner	2.0	1.0-1.5	12.7	115.7	96	2	

SUMMARY OF FIELD DENSITY TESTING
DBN Parkside, LLC
Compaction Testing

Inland Foundation Engineering, Inc.

Test No.	Date	Location	Fill Depth (ft.)	Test Depth (ft.)	Moisture Content (%)	Dry Density (pcf)	Relative Compaction (%)	Soil Type	Remarks/ Retests
		CURB - GUTTER, STREET AND SIDEWALK AREAS							
		CURB AND GUTTER							
		Building 1, South Side							
*01	02-21-08	2nd Row From Edge, Center	F.G.	0.0-0.5	9.6	114.1	88	5	3
*02	02-28-08	West Edge, Center	F.G.	0.0-0.5	9.9	119.4	92	5	12
*03	02-28-08	RETEST OF TEST NO. 1	F.G.	0.0-0.5	10.2	112.2	89	1	11
*04	02-28-08	3rd Row From East Edge, North	F.G.	0.0-0.5	10.1	123.2	95	5	
*05	02-28-08	3rd Row From East Edge, South	F.G.	0.0-0.5	8.4	123.3	95	5	
*06	02-28-08	North Side of Southern Edge	F.G.	0.0-0.5	8.4	120.6	93	5	14
*07	02-28-08	East Side of East Edge, South	F.G.	0.0-0.5	9.0	120.8	93	5	9
*08	02-28-08	2nd Row From West Edge, North	F.G.	0.0-0.5	11.6	103.9	86	2	10
*09	02-28-08	RETEST OF TEST NO. 7	F.G.	0.0-0.5	8.4	123.2	95	5	
*10	02-28-08	RETEST OF TEST NO. 8	F.G.	0.0-0.5	11.0	113.0	93	2	18
*11	02-28-08	RETEST OF TEST NO. 3	F.G.	0.0-0.5	9.1	123.4	95	5	
*12	02-28-08	RETEST OF TEST NO. 2	F.G.	0.0-0.5	8.0	123.7	95	5	
*13	02-28-08	West Edge, North	F.G.	0.0-0.5	9.4	123.7	95	5	
*14	02-29-08	RETEST OF TEST NO. 6	F.G.	0.0-0.5	9.1	126.1	97	5	
*15	02-29-08	2nd Row From West Edge	F.G.	0.0-0.5	8.8	121.1	93	5	17
*16	02-29-08	2nd Row From East Edge, North	F.G.	0.0-0.5	8.7	113.6	91	1	
*17	02-29-08	RETEST OF TEST NO. 15	F.G.	0.0-0.5	11.0	117.6	90	5	20
*18	02-29-08	RETEST OF TEST NO. 10	F.G.	0.0-0.5	9.9	124.5	96	5	
*19	02-29-08	2nd Row From East Edge, South	F.G.	0.0-0.5	9.8	118.6	91	5	25
*20	02-29-08	RETEST OF TEST NO. 17	F.G.	0.0-0.5	8.6	123.2	95	5	
*21	02-29-08	Southern Edge East	F.G.	0.0-0.5	12.8	117.8	91	5	22
*22	03-03-08	RETEST OF TEST NO. 21	F.G.	0.0-0.5	8.2	123.2	95	5	
*23	03-03-08	East Edge, North	F.G.	0.0-0.5	9.3	108.7	90	2	24
*24	03-03-08	RETEST OF TEST NO. 23	F.G.	0.0-0.5	9.1	123.3	95	5	
*25	03-03-08	RETEST OF TEST NO. 19	F.G.	0.0-0.5	8.0	125.4	96	5	
*26	03-03-08	East Edge, Center of	F.G.	0.0-0.5	8.9	123.3	95	5	
		Esplanade Avenue							
**27	03-26-08	Station 165+25	F.G.	0.0-0.5	6.9	124.6	96	5	
**28	03-26-08	Station 167+75	F.G.	0.0-0.5	11.3	120.8	96	1	
		Parkside Lane							
**29	03-26-08	Station 15+50	F.G.	0.0-0.5	8.8	116.9	97	2	
**30	03-27-08	West Side, Station 20+75	F.G.	0.0-0.5	9.7	117.2	96	6	
**31	03-27-08	West Side, Station 18+75	F.G.	0.0-0.5	8.5	104.3	85	6	32
**32	03-27-08	RETEST OF TEST NO. 31	F.G.	0.0-0.5	9.6	116.4	95	6	
**33	03-27-08	West Side, Station 17+00	F.G.	0.0-0.5	8.1	118.3	97	6	
**34	03-27-08	North Side, Station 15+30	F.G.	0.0-0.5	9.1	118.0	96	6	
**35	03-27-08	North End, Station 13+30	F.G.	0.0-0.5	10.4	111.9	91	6	36
**36	03-27-08	RETEST OF TEST NO. 35	F.G.	0.0-0.5	11.0	118.2	96	6	
**37	03-27-08	North End, Station 11+75	F.G.	0.0-0.5	9.8	118.7	95	1	
**38	03-27-08	South Side, Station 13+75	F.G.	0.0-0.5	9.9	118.7	95	1	
**39	03-27-08	East Side, Building No. 1, Station 0+15	F.G.	0.0-0.5	14.1	119.6	95	1	
**40	03-27-08	Local, Station 16+29, North Side	F.G.	0.0-0.5	9.3	111.1	92	2	41

SUMMARY OF FIELD DENSITY TESTING
DBN Parkside, LLC
Compaction Testing

Inland Foundation Engineering, Inc.

Test No.	Date	Location	Fill Depth (ft.)	Test Depth (ft.)	Moisture Content (%)	Dry Density (pcf)	Relative Compaction (%)	Soil Type	Remarks/ Retests
**41	03-27-08	RETEST OF TEST NO. 40	F.G.	0.0-0.5	8.7	117.7	97	2	
**42	03-27-08	Local, Station 16+29, South Side	F.G.	0.0-0.5	7.6	116.7	95	6	
		Esplanade Avenue							
**43	03-27-08	Station 169+00	F.G.	0.0-0.5	9.6	123.1	95	5	
**44	03-27-08	Local, Station 169+58	F.G.	0.0-0.5	9.3	124.9	96	5	
		Parkside Lane							
*45	03-28-08	East End of Site, South Side of Spandrell	S.G.	0.0-0.5	9.5	119.3	97	6	
*46	03-28-08	East End of Site, Center of Cross Gutter	S.G.	0.0-0.5	9.8	118.7	97	6	
		Driveway to Park							
*47	03-28-08	North Side Spandrel	S.G.	0.0-0.5	11.8	125.9	97	5	
*48	03-28-08	Center of Cross Gutter	S.G.	0.0-0.5	11.3	125.1	96	5	
		Cross Gutter							
*49	03-31-08	East End of Site, North End	F.G.	0.0-0.5	6.2	126.9	99	7	
*50	03-31-08	Driveway to Park South End	F.G.	0.0-0.5	6.4	126.2	98	7	
		Local							
*51	04-10-08	East of Palm Avenue, Station 21+84	F.G.	0.0-0.5	10.2	116.1	95	6	
*52	04-10-08	North of Building 1, Station 101+73	F.G.	0.0-0.5	11.9	117.8	97	2	
*53	04-10-08	West of Building 1, Station 101+73	F.G.	0.0-0.5	11.3	118.9	98	2	
*54	04-17-08	East of Southeast Corner of Building 1	F.G.	0.0-0.5	9.9	116.5	96	2	
		Parkside Lane							
*55	04-17-08	North of Building 1, Station 11+25	F.G.	0.0-0.5	6.6	116.9	97	2	
*56	04-17-08	North of Building 1, Station 12+75	F.G.	0.0-0.5	5.8	118.6	98	2	
		Radius							
*57	04-22-08	East of Northeast Corner of Building 1	F.G.	0.0-0.5	6.4	116.4	93	1	58
*58	04-23-08	RETEST OF TEST NO. 57	F.G.	0.0-0.5	5.9	119.0	95	1	
		Spandrel, Northwest Corner Building 1							
*59	04-23-08	Station 16+20	S.G.	0.0-0.5	10.8	116.6	96	2	
		Cross Gutter, Northwest Corner Building 1							
*60	04-23-08	Station 16+00	F.G.	0.0-0.5	4.8	139.0	98	8	
		Parkside Lane							
*61	04-30-08	Local, Station 16+33	F.G.	0.0-0.5	9.4	121.0	96	1	
*62	05-12-08	Station 19+25	F.G.	0.0-0.5	12.1	108.3	88	6	65
		Cross Gutter							
*63	05-12-08	Parkside and Esplanade, East Side	S.G.	0.0-0.5	9.7	117.9	96	6	
		Parkside Lane							
*64	05-13-08	Circle, North Side	F.G.	0.0-0.5	7.0	112.9	93	2	68
*65	05-13-08	RETEST OF TEST NO. 62	F.G.	0.0-0.5	11.7	116.3	95	6	
*66	05-13-08	Station 20+75	F.G.	0.0-0.5	10.9	118.2	96	6	
*67	05-13-08	Station 17+00	F.G.	0.0-0.5	11.1	121.2	99	6	
*68	05-13-08	RETEST OF TEST NO. 64	F.G.	0.0-0.5	7.6	115.1	94	6	
		Parkside Lane and Esplanade Avenue							
*69	05-14-08	East Side Spandrel	F.G.	0.0-0.5	5.9	138.1	97	8	
		East of Building 1							
*70	05-14-08	V. Gutter	S.G.	0.0-0.5	6.7	126.4	97	5	
*71	05-15-08	V. Gutter	F.G.	0.-0.5	7.9	136.7	96	8	

Project No. D285-006 *-ASTM D1556-00 (Sand Cone) **-ASTM D2922-05 (Nuclear Gauge)

SUMMARY OF FIELD DENSITY TESTING
DBN Parkside, LLC
Compaction Testing

Inland Foundation Engineering, Inc.

Test No.	Date	Location	Fill Depth (ft.)	Test Depth (ft.)	Moisture Content (%)	Dry Density (pcf)	Relative Compaction (%)	Soil Type	Remarks/ Retests
		Palm Avenue, East Side							
*72	05-28-08	Station 11+25	F.G.	0.0-0.5	13.1	116.2	95	6	
*73	05-28-08	Station 13+00	F.G.	0.0-0.5	14.2	118.0	96	6	
*74	05-28-08	Station 15+00	F.G.	0.0-0.5	13.6	118.3	97	6	
		Parkside Lane and Esplanade Avenue							
*75	05-29-08	Cross Gutter, West Side	S.G.	0.0-0.5	9.6	116.0	96	2	
*76	05-29-08	Spandrel	F.G.	0.0-0.5	6.4	140.4	99	8	
		Palm Avenue							
**77	06-19-08	Station 17+00	F.G.	0.0-0.5	6.0	117.6	96	6	
**78	06-19-08	Station 19+50	F.G.	0.0-0.5	10.3	105.2	86	6	79
**79	06-19-08	RETEST OF TEST NO. 78	F.G.	0.0-0.5	12.1	115.9	95	6	
		Building 1, South Side							
*80	06-26-08	East End	F.G.	0.0-0.5	6.1	122.2	97	1	
*81	06-26-08	West End	F.G.	0.0-0.5	5.9	121.8	97	1	
		Palm Avenue, East Side							
*82	07-14-08	Station 17+00	F.G.	0.0-0.5	11.2	116.1	95	6	
*83	07-14-08	Station 19+50	F.G.	0.0-0.5	12.0	117.9	96	6	
**84	09-05-08	Station 20+25	F.G.	0.0-0.5	11.7	110.4	96	10	
		Palm Avenue, South Side							
*85	09-08-08	Station 20+50, Spandral	S.G.	0.0-0.5	10.0	112.3	98	10	
*86	09-08-08	Station 22+45, Spandral	S.G.	0.0-0.5	9.7	109.1	95	10	
*87	09-08-08	Station 23+70	S.G.	0.0-0.5	8.0	108.8	95	10	
**88	09-09-08	Station 20+75, Cross Gutter	F.G.	0.0-0.5	3.8	139.0	98	8	
**89	09-09-08	Station 22+65, Spandral	F.G.	0.0-0.5	3.9	136.3	96	8	
		STREET SUBGRADE AND FINISH GRADE							
		Parkside Lane							
**01	04-08-08	Station 14+10	S.G.	0.0-0.5	8.9	119.2	97	6	
**02	04-08-08	Station 20+30	S.G.	0.0-0.5	6.3	105.2	86	6	8
**03	04-08-08	Station 15+50	S.G.	0.0-0.5	6.7	116.8	95	6	
**04	04-08-08	Station 17+10	S.G.	0.0-0.5	6.3	120.1	98	6	
*05	04-08-08	Station 20+00	S.G.	0.0-0.5	7.6	113.0	92	6	
**06	04-08-08	Station 20+00	S.G.	0.0-0.5	10.4	108.6	89	6	7
*07	04-09-08	RETEST OF TEST NO. 6	S.G.	0.0-0.5	8.9	113.9	93	6	9
*08	04-09-08	RETEST OF TEST NO. 2	S.G.	0.0-0.5	9.6	116.1	95	6	
*09	04-09-08	RETEST OF TEST NO. 7	S.G.	0.0-0.5	9.1	117.1	96	6	
**10	04-17-08	Station 20+50	F.G.	0.0-0.5	3.1	136.2	96	8	
**11	04-17-08	Station 18+50	F.G.	0.0-0.5	6.1	140.3	99	8	
**12	04-17-08	Station 16+50	F.G.	0.0-0.5	3.3	138.1	97	8	
**13	04-17-08	Station 14+50	F.G.	0.0-0.5	4.9	136.2	96	8	
**14	05-15-08	Station 10+75	S.G.	0.0-0.5	7.6	118.9	98	2	
**15	05-15-08	Station 12+25	S.G.	0.0-0.5	9.1	117.0	97	2	
		Crosswalk							
**16	05-15-08	East of Building 1	F.G.	0.0-0.5	9.4	122.0	97	1	
		Parkside Lane							
*17	05-16-08	Station 17+50	S.G.	0.0-0.5	10.2	114.8	95	2	

Project No. D285-006 *-ASTM D1556-00 (Sand Cone) **-ASTM D2922-05 (Nuclear Gauge)

SUMMARY OF FIELD DENSITY TESTING
DBN Parkside, LLC
Compaction Testing

Inland Foundation Engineering, Inc.

Test No.	Date	Location	Fill Depth (ft.)	Test Depth (ft.)	Moisture Content (%)	Dry Density (pcf)	Relative Compaction (%)	Soil Type	Remarks/ Retests
*18	05-16-08	Station 19+00	S.G.	0.0-0.5	10.9	117.3	97	2	
*19	05-16-08	Station 20+50	S.G.	0.0-0.5	11.2	117.0	97	2	
*20	05-19-08	West of Circle	S.G.	0.0-0.5	8.8	116.1	96	2	
*21	05-19-08	Station 20+50	F.G.	0.0-0.5	9.1	139.3	98	8	
*22	05-19-08	Station 19+00	F.G.	0.0-0.5	8.4	138.2	97	8	
*23	05-19-08	Station 17+50	F.G.	0.0-0.5	7.9	137.7	97	8	
*24	05-19-08	East of Circle	F.G.	0.0-0.5	8.7	140.3	99	8	
**25	05-20-08	80 Feet of Circle	F.G.	0.0-0.5	3.9	135.2	95	8	
**26	05-20-08	Station 12+25	F.G.	0.0-0.5	3.9	137.1	97	8	
**27	05-20-08	Station 10+25	F.G.	0.0-0.5	4.3	134.8	95	8	
		Palm Avenue							
*28	09-02-08	Station 15+50	S.G.	0.0-0.5	4.9	127.0	96	11	
*29	09-02-08	Station 13+50	S.G.	0.0-0.5	5.4	126.6	96	11	
*30	09-02-09	Station 11+50	S.G.	0.0-0.5	4.7	125.8	95	11	
		North Side of Esplanade Avenue							
**31	11-10-08	Station 164+75	S.G.	0.0-0.5	7.9	108.3	95	10	
**32	11-10-08	Station 167+00	S.G.	0.0-0.5	10.2	108.5	95	10	
**33	11-10-08	Station 169+00	S.G.	0.0-0.5	10.9	109.3	95	10	
**34	11-13-08	Park Entrance, Station 170+25	S.G.	0.0-0.5	7.7	126.5	96	11	
**35	11-14-08	Station 158+50	S.G.	0.0-0.5	3.2	113.9	90	9	37
**36	11-14-08	Station 160+00	S.G.	0.0-0.5	4.5	111.4	88	9	38
**37	11-14-08	RETEST OF TEST NO. 35	S.G.	0.0-0.5	9.0	121.5	96	9	
**38	11-14-08	RETEST OF TEST NO. 36	S.G.	0.0-0.5	9.3	120.0	95	9	
		Palm And Esplanade Avenues							
**39	11-14-08	North Side of Road	S.G.	0.0-0.5	5.5	112.0	88	9	40
**40	11-17-08	RETEST OF TEST NO. 39	S.G.	0.0-0.5	9.5	120.3	95	9	
		Esplanade Avenue							
**41	11-18-08	Station 158+00	F.G.	0.0-0.5	3.7	140.6	99	8	
**42	11-18-08	Station 160+50	F.G.	0.0-0.5	4.7	134.9	95	8	
**43	11-18-08	Station 162+50	F.G.	0.0-0.5	3.5	135.9	96	8	
		Palm Avenue							
**44	11-18-08	Station 11+00	F.G.	0.0-0.5	3.7	138.2	97	8	
**45	11-18-08	Station 13+50	F.G.	0.0-0.5	4.7	138.6	98	8	
**46	11-18-08	Station 15+50	F.G.	0.0-0.5	6.4	138.7	98	8	
		Esplanade Avenue							
**47	12-01-08	Center Lane, East Portion	S.G.	0.0-0.5	5.6	127.2	95	12	
**48	12-01-08	Center Lane, West Portion	S.G.	0.0-0.5	3.3	127.9	95	12	
**49	12-03-08	Center Median, Station 170+00	F.G.	0.0-0.5	5.2	141.2	99	8	
**50	12-03-08	Center Median, Station 168+00	F.G.	0.0-0.5	4.8	139.1	98	8	
**51	12-03-08	Center Median, Station 166+50	F.G.	0.0-0.5	4.5	141.8	99	8	
**52	12-03-08	Center Median, Station 165+50	F.G.	0.0-0.5	3.1	141.8	99	8	
**53	12-03-08	Center Median, Station 164+50	F.G.	0.0-0.5	3.5	140.4	99	8	
**54	12-03-08	Center Median, Station 163+50	F.G.	0.0-0.5	2.7	138.9	98	8	

SUMMARY OF FIELD DENSITY TESTING
DBN Parkside, LLC
Compaction Testing

Inland Foundation Engineering, Inc.

Test No.	Date	Location	Fill Depth (ft.)	Test Depth (ft.)	Moisture Content (%)	Dry Density (pcf)	Relative Compaction (%)	Soil Type	Remarks/ Retests
		SIDEWALK AREAS							
		Parkside							
*01	04-15-08	North Side, Station 11+50	F.G.	0.0-0.5	7.7	103.8	86	2	3
		Parkside, North of Handicap Ramp							
*02	04-15-08	West Side, 65 Feet North of Ramp	F.G.	0.0-0.5	7.0	106.3	88	2	6
**03	04-16-08	RETEST OF TEST NO. 1	F.G.	0.0-0.5	7.2	111.1	92	2	
**04	04-16-08	North Side, Station 13+25	F.G.	0.0-0.5	9.2	112.8	93	2	
**05	04-16-08	North Side, Station 14+00	F.G.	0.0-0.5	5.3	110.2	91	2	
**06	04-16-08	RETEST OF TEST NO. 2	F.G.	0.0-0.5	6.6	109.0	90	2	
**07	04-16-08	East Side, 50 Feet North of Ramp	F.G.	0.0-0.5	6.4	113.5	94	2	
**08	04-16-08	North Side, 75 Feet East of Ramp	F.G.	0.0-0.5	7.3	111.3	92	2	
		Parkside, South of West Drive Approach							
**09	04-17-08	Underdrain	F.G.	0.0-0.5	5.0	111.8	92	2	
		South of Drive Approach							
**10	04-17-08	Underdrain	F.G.	0.0-0.5	5.3	109.4	90	2	
		Parkside							
**11	05-20-08	West Side, Station 21+00	F.G.	0.0-0.5	5.0	105.3	87	2	23
**12	05-20-08	West Side, Station 19+00	F.G.	0.0-0.5	4.3	102.5	85	2	24
**13	05-20-08	West Side, Station 17+50	F.G.	0.0-0.5	4.4	103.6	86	2	25
**14	05-20-08	East Side, Station 20+50	F.G.	0.0-0.5	7.3	112.5	92	6	
**15	05-20-08	East Side, Station 19+00	F.G.	0.0-0.5	7.1	114.4	93	6	
**16	05-20-08	East Side, Station 17+00	F.G.	0.0-0.5	4.1	111.5	91	6	
**17	05-20-08	South Side, Station 16+75	F.G.	0.0-0.5	7.1	119.0	95	1	
**18	05-20-08	South Side, Station 15+25	F.G.	0.0-0.5	4.8	106.9	85	1	26
**19	05-20-08	South Side, Station 14+00	F.G.	0.0-0.5	4.2	105.7	84	1	27
		Esplanade Avenue							
**20	05-20-08	Station 169+50	F.G.	0.0-0.5	5.4	113.3	90	1	
**21	05-20-08	Station 167+00	F.G.	0.0-0.5	5.8	128.0	95	4	
**22	05-20-08	Station 165+50	F.G.	0.0-0.5	4.8	122.3	91	4	
*23	05-21-08	RETEST OF TEST NO. 11	F.G.	0.0-0.5	9.9	110.5	91	2	
*24	05-21-08	RETEST OF TEST NO. 12	F.G.	0.0-0.5	9.4	111.2	92	2	
*25	05-21-08	RETEST OF TEST NO. 13	F.G.	0.0-0.5	10.2	111.6	92	2	
*26	05-21-08	RETEST OF TEST NO. 18	F.G.	0.0-0.5	8.9	117.8	94	1	
*27	05-21-08	RETEST OF TEST NO. 19	F.G.	0.0-0.5	9.3	115.5	92	1	
		Parkside and Esplanade Avenue							
*28	07-15-08	West Handicap Ramp	F.G.	0.0-0.5	9.4	116.5	93	1	
		Esplanade Avenue							
*29	07-16-08	Station 165+50	F.G.	0.0-0.5	6.8	124.1	92	4	
*30	07-16-08	Station 167+00	F.G.	0.0-0.5	7.4	126.4	94	4	
*31	07-16-08	Station 169+50	F.G.	0.0-0.5	7.0	113.8	91	1	
		East Side Palm Avenue							
**32	08-05-08	Station 11+75	F.G.	0.0-0.5	4.0	116.1	91	9	
**33	08-05-08	Station 13+50	F.G.	0.0-0.5	3.5	124.0	98	9	
**34	08-05-08	Station 15+00	F.G.	0.0-0.5	3.5	118.7	93	9	
*35	08-12-08	345 Feet North of Parkside	F.G.	0.0-0.5	9.1	103.2	90	10	

Project No. D285-006

*-ASTM D1556-00 (Sand Cone)

**-ASTM D2922-05 (Nuclear Gauge)

SUMMARY OF FIELD DENSITY TESTING
DBN Parkside, LLC
Compaction Testing

Inland Foundation Engineering, Inc.

Test No.	Date	Location	Fill Depth (ft.)	Test Depth (ft.)	Moisture Content (%)	Dry Density (pcf)	Relative Compaction (%)	Soil Type	Remarks/ Retests
*36	08-12-08	95 Feet North of Parkside	F.G.	0.0-0.5	6.4	109.8	91	2	
*37	08-12-08	75 Feet North Side of Parkside	F.G.	0.0-0.5	4.1	118.2	94	1	
*38	08-12-08	110 Feet South Side of Parkside	F.G.	0.0-0.5	8.7	115.8	92	1	
		Palm and Esplanade Avenue							
*39	10-08-08	Northeast of Handicap Ramp	F.G.	0.0-0.5	9.0	110.1	90	6	